

FISHERIES, WILDLIFE AND CONSERVATION BIOLOGY



The FWCB major provides students with a broad science background emphasizing the biological and environmental science and other coursework needed for careers in fisheries, wildlife, conservation biology, and other natural resource and environmental careers.

CHOOSE A SPECIALIZATION IN:

FISHERIES



...prepares students who wish to pursue careers in fisheries and aquatic resource science, management, and administration; fish hatchery management; aquaculture, aquatic education, and aquatic environmental assessment. The curriculum meets the education criteria for the Certified Fisheries Professional designation established by the American Fisheries Society, the major professional organization for fisheries scientists and managers in North America.

WILDLIFE



...prepares students for careers in wildlife science, management, and administration; zoo biology; terrestrial ecology; environmental assessment; and education. With proper selection of electives, students can meet the education criteria for the Certified Wildlife Biologist designation established by the Wildlife Society, the major professional organization for wildlife scientists and managers in North America

CONSERVATION BIOLOGY



...prepares students for careers in dealing with a broad range of conservation issues in aquatic or terrestrial habitats. Positions typically focus on protection and management for biodiversity, including endangered species. Careers as environmental educators or naturalists are also options.

WHY THE U OF M?

- An interdisciplinary program gives students a well-rounded education
- Small community feel on the St. Paul campus with all the benefits of a Big Ten university
- Field courses provide hands-on experience
- Small class sizes allow access to top faculty known for their leadership in science and education
- Located in the Twin Cities with close connections to local, state, and federal agencies and natural resource industry
- Opportunities to work, study, or volunteer abroad in programs related to the major



TYPES OF CAREERS INCLUDE:

- Aquaculturist
- Aquarist
- Conservation biologist
- Conservation officer
- Ecological restoration specialist
- Environmental consultant
- Environmental planner
- Fisheries biologist
- Habitat manager
- Hatchery manager
- Invasive species control specialist
- Lake manager
- Marine biologist
- Park naturalist
- Public lands biologist
- Researcher/scientist
- Veterinarian
- Water quality
- Wetland ecologist
- Wildlife biologist
- Wildlife refuge manager
- Wildlife rehabilitator
- Veterinary technician
- Zoo educator
- Zoo keeper

TYPES OF EMPLOYERS INCLUDE:

- MN Department of Natural Resources
- Watershed District
- US Fish and Wildlife Service
- US Forest Service
- Zoos
- Environmental consulting firms
- Conservation organizations
- Nature Centers
- Water resource agencies
- Local, state and federal land agencies
- National Park Service
- Restoration firms
- Lake associations
- Natural history museums

MAJOR CURRICULUM

Students in Fisheries, Wildlife and Conservation Biology gain basic knowledge in the biological, physical and social sciences before learning to apply that knowledge to the management and conservation of fish and wildlife resources. All students in the major take courses in:

- Public speaking
- Professional writing
- Math and statistics
- Chemistry
- Biology
- Zoology
- Genetics
- Ecology
- Field methods
- Field Experience
- Natural resource economics
- Introduction to Fisheries and Wildlife

Examples of core courses for each specialization:

CONSERVATION BIOLOGY:

- Environmental conflict management, leadership and planning
- Mammalogy
- Ornithology
- Herpetology
- Ecological restoration
- Principles of conservation biology
- Analysis of populations
- Landscape ecology

FISHERIES:

- Human Dimensions of Fisheries and Wildlife
- Ichthyology
- Fish physiology and behavior
- Introduction to marine biology
- Limnology
- Analysis of populations
- Fisheries ecology and management
- Water quality and natural resources

WILDLIFE:

- Human Dimensions of Fisheries and Wildlife
- Ornithology
- Mammalogy
- Wetlands
- Principles of Wildlife Management
- Analysis of populations
- Habitats and regulation of wildlife
- GIS for natural resources



Scan to watch our video & learn more at <http://fwcb.cfans.umn.edu>