



NATURAL RESOURCE ECOLOGY AND MANAGEMENT

what **DIRECTION** are you headed?

Program Options

Fire Ecology and Management

Developed in response to the need for fire ecology in land management, this option offers students the opportunity to accomplish specific land management objectives. The curriculum combines experience with prescribed fire plans, policy and laws, weather, equipment, conduction of burns, and post-burn mop-ups.

Fisheries and Aquatic Ecology

This option is designed for students with interest in the management of fishes. Courses offer research techniques and methodology in fisheries science, including sampling design, habitat measurements, sampling gears and abundance estimation, age and growth analysis, recreational surveys, data analysis and report writing.

Forest Management

Forest Management emphasizes the biological, political, and managerial skills needed to ensure the sustainability of the many renewable forest resources on which society depends. Successful completion of the curriculum will provide competency in the general areas of basic science, forest biology, forest mensuration, forest economics, natural resource policy, decision-making and problem solving, and communications.

Forest Resource Conservation

This option emphasizes the science-based conservation and management of forest lands, ecosystems and related natural resources. Students gain the skills that are necessary for the measurement, assessment, and valuation of natural resources and the evaluation of management strategies for forest and related wild lands.

Natural Resource Communications

This curriculum prepares students for careers in management and protection of natural resources; the study of environmental sciences; teaching, research, or other related professional activities; business or government agencies providing services related to environmental and natural resource management; and as preparation for graduate studies or for advanced professional training.

Rangeland Ecology and Management

The Range program emphasizes understanding of management of grasslands, shrublands, and forests. This includes the effects of grazing, fire, and other disturbances on biotic and abiotic processes. Students learn to integrate their knowledge of soil, water and vegetation attributes into ranching operations.

Urban and Community Forestry

The Urban and Community option produces graduates who are able to assess ecological and biological characteristics of the forest in an urban environment, the managerial and political context within which forest management takes place, as well as direct involvement in resource management or in specialized supporting roles in areas such as urban planning and environmental education.

Wildlife Ecology and Management

The Wildlife program provides insight into the biological basis for management of wildlife populations and habitats, with emphasis on current management problems. This option combines research techniques including aging and sexing, wildlife and vegetation sampling, and wildlife population and habitat analysis with the methodology of wildlife science.

Faculty & Facilities

The Department of Natural Resource Ecology and Management combines faculty in fisheries, wildlife, forestry, and rangeland ecology and management to work more effectively on projects that concern natural resources that impact Oklahomans. Students are exposed to cutting-edge research, quality instruction, and effective outreach to landowners, managers, and public agencies of Oklahoma. Internship opportunities are available.

For more information

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(405) 744-5437

Check us out on the Web at www.casnr.com

destination **CASNR**



roads TRAVELED



Natural Resource Ecology & Management Alumni Profile:

Name:

Stephanie Manes
Tulsa, Okla.

Current Occupation:

Wildlife Biologist

Stephanie's Story:

After graduating from OSU with a bachelor's degree in wildlife ecology and management, Stephanie Manes received her Master of Science graduate degree in rangeland ecology and management. Upon graduation, Stephanie got a job with the United State Fish and Wildlife Service in Tulsa, where she is a wildlife biologist. She works with private land owners to restore habitat for threatened and endangered species, and develops habitat management plans. In addition, Stephanie handles Lesser Prairie Chicken issues for the US Fish and Wildlife Service throughout their range, and consults with federal agencies on management actions that could affect wildlife.

To be successful in this position, Stephanie has had to keep her communication skills up-to-date because a large part of her job consists of interactions with biologists and landowners. They contact her for technical assistance and expertise in developing habitat restoration plans on private lands.

If you can see yourself as a future leader in the natural resource ecology management industry with a career like Stephanie's, NREM may be the major for you.

"Learning the biology is the first step. Wildlife management is all about people skills and motivating others to conserve private land and embrace a conservation ethic."

- Stephanie Manes
CASNR Graduate

which PATH are you taking?

Careers for NREM Graduates:

OKLAHOMA STATE UNIVERSITY
<http://www.okstate.edu>

Fisheries

- Aquaculturist
- Conservation officer
- Fisheries administrator/programs coordinator
- Fisheries manager
- Fisheries researcher

Forestry

- Land Management
- Land and Timber Acquisition
- Promoting the use of forest products
- Consultants, specializing in timber and land appraisals
- Industrial Research

Range

- Field botanist
- Rangeland conservationist
- Ranch manager
- Refuge/preserve manager
- Restoration ecologist

Wildlife

- Biological technician
- Conservation officer/game warden
- Wildlife biologist
- Wildlife habitat manager
- Zoo biologist

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MILE MARKERS

Enrollment:

- 175 students

Student Organizations:

- American Fisheries Society
- Forestry Club
- Society of American Foresters
- Society for Range Management (Range Club)
- The Wildlife Society

National Meetings:

Students participating in one of the NREM student clubs will have the opportunity to travel to various state, regional, or national meetings.

Opportunities:

Hands-On Field Experience
NREM students will participate in lab courses that will take advantage of OSU properties and public land to conduct field trips and labs. These field experiences increase the student's knowledge of Oklahoma's natural resources.

Travel Abroad

Honduras, Japan, Thailand, and Mexico are just some of the countries to which NREM students will be able to travel if they utilize the various programs NREM and CASNR offer.

Job Placement

NREM students enjoy placement as student summer employees, interns, and permanent positions with private, state, and federal organizations. NREM maintains a website with a listing of available undergraduate natural resource positions.

For More Information:

- nrem.okstate.edu