Natural Resources Management

Department Information

- **Program Director:**
  Shawn DeKeyser, Ph.D.
- **Email:**
  Edward.Dekeyser@ndsu.edu
- **Department Location:**
  School of Natural Resource Sciences, Hultz 202
- **Department Phone:**
  (701) 231-5368
- **Department Web Site:**
  [www.ndsu.edu/snrs/](http://www.ndsu.edu/snrs/)
- **Application Deadline:**
  International applications are due May 1 for fall semester and August 1 for spring and summer semesters. Domestic applicants should apply at least one month prior to the start of classes.
- **Credential Offered:**
  Ph.D., M.S., MNRM
- **English Proficiency Requirements:**
  TOEFL iBT 71, IELTS 6; Duolingo 100

Program Description

Natural Resources Management (NRM) in the School of Natural Resource Sciences prepares students for the environmental challenges of the 21st century. The Master of Natural Resources Management (MNRM), Master of Science (M.S.) and the Doctor of Philosophy (Ph.D.) NRM degrees are interdisciplinary and offer a broad, systems-based approach toward managing natural resources. NRM graduates are prepared to compete for and be productive in jobs where issues reach beyond a single discipline or subject area. They have the skills necessary to address problems from a sustainable social-ecological perspective.

Through the NRM graduate program, students gain a breadth of knowledge in relevant planning, analysis and management.

In cooperation with the following NDSU academic programs and departments, students select a curriculum and an adviser from one of these participating units:

- Agribusiness and Applied Economics
- Agricultural and Biosystems Engineering
- Biological Sciences (Botany and Zoology)
- Civil Engineering
- Communications
- Entomology
- Natural Resources Management
- Plant Sciences
- Range Sciences
- Earth and Climate Science
- Geosciences
- Soil Science
- Sociology/Anthropology/Emergency Management
- Veterinary and Microbiological Sciences

The educational objective of the NRM graduate program is to provide formal education in a chosen specialty area, introductions to other subject areas, appropriate course work in analytical methods, and research and writing experiences in the general area of natural resource management. Problem recognition, definition, analysis and resolution, along with critical thinking are the ultimate learning objectives.
Admissions Requirements

The graduate program in Natural Resources Management is open to qualified graduates of universities and colleges of recognized standing, and meet the Graduate School requirements.

Financial Assistance

Both research and teaching assistantships may be available through the participating academic units. Application for financial aid must be made directly to a department. Applicants are considered on the basis of scholarship and potential to undertake advanced study and research. Limited scholarships are available.

To qualify for the MNRM degree, the candidate must satisfactorily complete a minimum of 30 semester credits of course work in his/her selected curriculum, and an oral presentation based on an NRM topic of the candidate's choice.

To qualify for the M.S. degree, the candidate must satisfactorily complete a minimum of 30 semester units in his/her selected curriculum, an oral examination, and a thesis or comprehensive study paper.

To qualify for the Ph.D. degree, the candidate must satisfactorily complete a course of study of no less than 90 semester credits (including 30 semester credits from the M.S. degree or equivalent), both a written and an oral preliminary examination, a research-based dissertation, and an oral defense of the dissertation. In addition, the candidate presents final public seminar based on the dissertation research. For more specific information, please refer to the School of Natural Resource Sciences website.

NRM program courses are offered by NRM and the other participating academic units. These include:

- Agribusiness and Applied Economics
- Agricultural and Biosystems Engineering
- Agricultural Systems Management
- Anthropology
- Biology
- Botany
- Civil Engineering
- Communication
- Computer Science
- Economics
- Entomology
- Geosciences
- Industrial and Manufacturing Engineering
- Mathematics
- Microbiological Sciences
- Philosophy
- Plant Pathology
- Plant Sciences
- Political Science
- Range Science
- Sociology
- Soil Science
- Statistics
- Zoology

Adnan Akyuz, Ph.D.
University of Missouri-Columbia, 1994
Research Area/Activity: Applied Climatology and Microclimatology/Climate Based Agricultural Management

Francis Casey, Ph.D.
Iowa State University, 2000
Research Area/Activity: Field Oriented Soil Physics, Measurement and Prediction of Water Transfer and Chemical Transport Through Soil

Amitava Chatterjee, Ph.D.
University of Wyoming, 2007
Research Area/Activity: Soil Fertility Management, Greenhouse Gas Emissions
Larry J. Cihacek, Ph.D.
Iowa State University, 1979

Dennis Cooley, Ph.D.
University of Rochester, 1995
Research Area/Activity: Ethics (Bioethics, Environmental, Agricultural, Business, Professional, and Theoretical)

Edward (Shawn) DeKeyser, Ph.D.
North Dakota State University, 2000
Research Area/Activity: Wetland Ecology, Wetland Assessment and Monitoring, Invasive Species Ecology and Management, Native Prairie and Wetland Restoration

Tom DeSutter, Ph.D.
Kansas State University, 2004
Research Area/Activity: Trace Elements, Land Application of Byproducts, Inorganic Soil Chemistry, Soil Environmental Condition

Paulo Flores, Ph.D.
Federal University of Rio Grande do Sul, Brazil
Research Area/Activity: Precision Agriculture, Applications of UASs/Drones in Agriculture, UASs/Drone Imagery Analysis, GIS Applications for Precision Agriculture

Caley Gasch, Ph.D.
University of Wyoming, 2013
Research Area/Activity: Soil Ecology, Restoration, Reclamation, Monitoring of Degraded Soils

Benjamin Geaumont, Ph.D.
North Dakota State University, 2009
Research Area/Activity: Evaluation of Upland Bird Survival Habitat Use, Upland Game Species

Christina Hargiss, Ph.D.
North Dakota State University, 2009
Research Area/Activity: Wetland Assessment, Water Quality, Water Use, and Urban Ecosystems

Robert Hearne, Ph.D.
University of Minnesota, 1995
Research Area/Activity: Water Resources Management Institutions, Water Markets, Protected Area Management, Economic Valuation of Environmental Goods and Services

Torre Hovick, Ph.D.
Oklahoma State University, 2014
Research Area/Activity: Global change, Avian Ecology, Fire Ecology, Rangeland Management

Xinhua Jia, Ph.D.
University of Arizona, 2004
Research Area/Activity: Soil and Water Engineering, Hydrology

Chiwon W. Lee, Ph.D.
Purdue University, 1977
Research Area/Activity: Greenhouse Production, Vegetable Culture & Breeding

Wei Lin, Ph.D.
University of Buffalo, 1992
Research Area/Activity: Kinetic studies of physic-chemical and biological processes, Contaminant absorption during water and wastewater treatment, Impact of temperature on nitrification in wastewater treatment, River and lake water quality and non-point source pollution

Zhulu Lin, Ph.D.
University of Georgia, 2003
Research Area/Activity: Water and Soil Resources, Environmental Modeling

Mark Andrew Meister, Ph.D.
University of Nebraska, 1997
Research Area/Activity: Environment, Rhetoric, Weather, Farming, Food

Devan McGranahan, Ph.D.
Iowa State University, 2011
Research Area/Activity: Fire behavior and ecology, plant community ecology, fire and grazing management, and effects of global environmental change in rangeland ecosystems worldwide

Jack E. Norland, Ph.D.
North Dakota State University, 2008
Research Area/Activity: Restoration Ecology, Application of remote sensing to natural resources management, Study of natural resources management problems in a socio-ecological setting including urban systems

Deirdre Prischmann-Voldseth, Ph.D.
Washington State University, 2005
Research Area/Activity: Integrated Pest Management, Biological Control, Insect Ecology

David A. Rider, Ph.D.
Louisiana State University, 1988
Research Area/Activity: Insect Systematics

David Ripplinger, Ph.D.
North Dakota State University, 2012
Research Area/Activity: Bioproducts / Bioenergy Economics

David Roberts, Ph.D.
Oklahoma State University, 2009
Research Area/Activity: Agricultural Production Methods, Precision Agriculture Technologies, Biofuels Policy

Kevin Sedivec, Ph.D.
North Dakota State University, 1994
Research Area/Activity: Plant Community Ecology, Grazing and Wildlife Interaction, Reclamation of Energy Developed Lands, Range Nutrition, Range Monitoring

Halis Simsek, Ph.D.
North Dakota State University, 2012
Research Area/Activity: Water and Wastewater Treatment, Animal and Agricultural Waste Management

Dean D. Steele, Ph.D.
University of Minnesota, 1991
Research Area/Activity: Irrigation and Environmental Engineering

Joseph D. Zeleznik, Ph.D.
Michigan State University, 2001
Research Area/Activity: Dendrochronology of Ponderosa Pine and Bur Oak, Bur Oak Regeneration, Riparian Forest Restoration