

1-6-2010

School of Natural Resources Collection Development Policy

Joan Latta Konecky

University of Nebraska - Lincoln, jkonecky1@unl.edu

Follow this and additional works at: <http://digitalcommons.unl.edu/librarycolldev>



Part of the [Library and Information Science Commons](#)

Konecky, Joan Latta, "School of Natural Resources Collection Development Policy" (2010). *Collection Development Policies -- UNL Libraries*. 47.

<http://digitalcommons.unl.edu/librarycolldev/47>

This Article is brought to you for free and open access by the Libraries at University of Nebraska-Lincoln at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Collection Development Policies -- UNL Libraries by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

School of Natural Resources Collection Development Policy

University Libraries, University of Nebraska-Lincoln

Joan Latta Konecky, School of Natural Resources Liaison Librarian, December 2009

Approved: CDC, January 6, 2010

I. GENERAL ACADEMIC PROGRAM INFORMATION

Collection Overview

The collection supports the teaching, research and service activities of the School of Natural Resources and the related research endeavors of the University of Nebraska-Lincoln community.

School of Natural Resources cooperative research is conducted with various academic units including Institute of Agriculture and Natural Resources, Department of Geosciences, Department of Civil Engineering, Department of Biological Systems Engineering, Department of Agricultural Economics, Arsenic Info System, College of Law, Public Policy Center, and Cooperative Extension.

Specific research needs are supplemented through interlibrary loan.

School of Natural Resources – History

Summary

The University of Nebraska–Lincoln’s (UNL) School of Natural Resource Sciences (SNRS) was established in 1997 as a cross-campus enterprise spanning both the Institute of Agriculture and Natural Resources (IANR) and the UNL College of Arts and Sciences (CAS). With the merger of the Conservation and Survey Division (CSD) and the Water Center in 2003, SNRS became the School of Natural Resources (SNR).

Historical Perspective

The formation of a broader natural resources unit at the University of Nebraska–Lincoln (UNL) was discussed periodically by numerous committees, subcommittees, external review teams, and task forces, beginning in 1965. Indeed, many of the units merged to form the School of Natural Resources (SNR) were included in a subcommittee report to the Board of Regents in 1980. Their recommendations included the following:

Study the feasibility and advisability of establishing a School of Natural Resources within the Institute of Agriculture and Natural Resources to include: Conservation and Survey, Meteorology and Climatology, Forestry, Fisheries and Wildlife, Arboretum, Range Management, Hydrology, Environmental Programs, and possibly the Geology Department from the College of Arts and Sciences.

After decades of discussion, debate, and recommendations, the School of Natural Resources Sciences (SNRS) was formed in 1997 by consolidation of the Department of Forestry, Fisheries and Wildlife; the Department of Agricultural Meteorology; a portion of the Conservation and Survey Division (CSD), including the Center for Advanced Land Management Information Technologies, or CALMIT; the UNL Water Center; and faculty from several other academic units, including the Department of Agronomy and Horticulture, the Department of Geosciences, and the School of Biological Sciences. The Nebraska Forest Service and the Nebraska Statewide Arboretum were identified as close affiliates of the new School.

SNRS represented a new model for academic units at UNL, because it was the first unit to be part of both the College of Arts and Sciences (CAS, located on City Campus) and the College of Agricultural Sciences and Natural Resources (CASNR), which is part of the Institute of Agriculture and Natural Resources (IANR, located on East Campus). Thus, the director of SNRS reported to four deans in two colleges, one in CAS and three in IANR (i.e., teaching, research, and extension). In addition, SNRS comprised many faculty with joint appointments in SNRS and other academic units, as well as a large number of affiliated faculty with adjunct or courtesy appointments. A major goal of the School was to enhance the professional expertise of the faculty by facilitating programmatic interactions needed to address priority needs. In addition, SNRS was designed to foster partnerships and linkages with state and federal agencies. The broad vision of SNRS is:

The School will be a nationally prominent leader in academic, research, scholarly service and outreach programs in natural resource and environmental sciences. The School will have strong scientific programs to provide understanding of complex relationships and interactions within and among natural and managed ecosystems, will provide leadership in developing outstanding academic programs in natural resources and environmental sciences, and will develop integrated strategies to affect the social and economic processes. Thus, the School will serve the academic and scientific community, government agencies, resource managers, landowners, and the general public with timely and relevant information on the use and conservation of renewable and nonrenewable natural resources and on resource management opportunities and environmental challenges, particularly those in the Great Plains. Collaboration within and among disciplines will characterize the School's programs.

Since its inception in August 1997, the School has undergone numerous important changes, including several changes in leadership. In addition, the Natural Resources Business Center (NRBC), which provided business and administrative support to SNRS (and now SNR) and its affiliates, was centralized in a new location along with SNRS administrative offices, and the Water Center was transferred back out of the School in 2001.

The School of Natural Resources was established on July 1, 2003, by the consolidation of the School of Natural Resource Sciences, Conservation and Survey Division (CSD), and the Water Center. Programmatic opportunities and enhanced service to clientele groups were key elements in the decision to create a new unit. This merger was intended to leverage a history of collaboration at a time when administrative efficiencies and limited funding issues were critical, as they remain today. Integrating CSD with SNRS and the Water Center was a logical extension of a high level of formal and informal integration already in place through SNRS, and it fulfilled most of the recommendations made in 1980. [Excerpted from the 2009 School of Natural Resources Five Year Review documents]

School of Natural Resources – Organization

“The School of Natural Resources at the University of Nebraska-Lincoln is an interdisciplinary unit devoted to the effective and appropriate management and sustainable use of natural resources through state-of-the-art research, teaching and outreach programs”.

The School of Natural Resources is organized into six different groups (not departments), called Faculty Areas:

- Applied Climate Science
- Applied Ecology

- Geography/GIScience
- Geology & Soils
- Human Dimensions
- Water

Faculty members have primary, secondary, and tertiary faculty area affiliations in these interrelated areas. The Faculty Areas are designed to maintain disciplinary strengths, but, at the same time, encourage and facilitate interdisciplinary teaching and research.

Faculty Area: Applied Climate Science

Related groups and programs: Center for Advanced Land Management and Information Technologies (CALMIT), High Plains Regional Climate Center (HPRCC), National Drought Mitigation Center (NDMC), and the Great Plains Regional Center for Global Environmental Change

Research specialties include: Carbon Sequestration, Climate Assessment, Climate Variability, Crop Simulation, Instrumentation, Micrometeorology, Remote Sensing, Severe Storms, Water Balance and Drought Monitoring, Mitigation, Planning & Policy,

Facilities and Resources: The Agrometeorology Laboratory is a field facility located at the University Agricultural Research and Development Center (ARDC) near Mead, Nebraska. The High Plains Regional Climate Center has one Automated Weather Data Network (AWDN) station located in the lab and several others within 3 miles of the lab.

Faculty Area: Applied Ecology

Related groups and programs:

- Internet Center for Wildlife Damage Management
- Nebraska Cooperative Fish & Wildlife Unit
- Nebraska Forest Service – including the Wildland Fire Protection Program
- Nebraska Games and Parks Commission
- Nebraska State Museum/ Division of Zoology
- Nebraska Statewide Arboretum
- Sandhills Task Force – environmental and economic practices in the Sandhills of Nebraska.
- Tern and Plover Conservation Partnership
- U.S. National Agroforestry Center
- Sand Hills Biocomplexity Program
- Carbon Sequestration Program – investigate the Carbon sequestration potential of major rainfed and irrigated agroecosystems in the north-central USA and understand the biophysical controls on Carbon sequestration.
- Nebraska Bird Trails
- Nebraska Reptiles & Amphibians Identification
- Wildlife Conservation
- Wildlife Damage Management

Facilities and Resources:

- Bartha Brothers Ranch - Research and demonstrations are to focus on long-term grazing management systems and the biotic and abiotic factors associated with such systems. Current

research projects focus on plant and livestock response to grazing systems as well as questions about ecosystem structure and function in the Sandhills.

- Nine Mile Prairie – Nine Mile Prairie is preserved for teaching, research, and for nature study. As one of the largest intact tracts of tallgrass prairie left in the Midwest, it serves as a nationally important outdoor laboratory for the study of biological processes in grasslands.
- Prairie Pines –an environmental refuge, enhanced arboretum, and horticultural study area in northeast Lincoln.

Research specialties include: Adaptive Management, Landscape Ecology, Population Ecology, and Ecosystem Science

Faculty Area: Geography/GIScience -- *covered by separate collection development policy*

Related groups and programs:

- Center for Advanced Land Management and Information Technologies (CALMIT)
- Nebraska GIS Council
- Association of American Geographers
- National Council for Geographic Education
- Geographic Educators of Nebraska (GEON)
- American Geographical Society
- International Geographical Union

Research specialties include: Human & Historical Geography of the Great Plains, Map Communication & Design, Remote Sensing & Geographic Information Systems (GIS), Environmental Perception & Human Behavior, Political Geography of U.S. Elections, Surficial Processes in Great Plains Landscapes, and Natural Hazards & Land Use

Faculty Area: Geology & Soils

Related groups and programs: Conservation & Survey Division (CSD)

Research specialties include: Geology, Soils, Groundwater, and Environmental Restoration

Faculty Area: Human Dimensions

Related groups and programs: Center for Advanced Land Management and Information Technologies (CALMIT), High Plains Regional Climate Center (HPRCC), National Drought Mitigation Center (NDMC), Great Plains Regional Center for Global Environmental Change, and the Water Center. Other centers at the University of Nebraska-Lincoln that offer opportunities for students in the field of human dimensions are the Center for Great Plains Studies, Center for Applied Rural Innovation, and the Public Policy Center.

Research specialties include: Agroecology, Climate Variability & Change, Water Resources, Forest Ecology, Fisheries & Wildlife, Community & Regional Planning, Environmental & Ecological Economics, and Environmental Justice, Human rights, & Law

Faculty Area: Water

Related groups and programs: Water Center, Water Resources Research Initiative, High Plains Regional Climate Center (HPRCC), National Drought Mitigation Center (NDMC), and the Center for Advanced Land Management Information Technologies (CALMIT)

Research specialties include: Aquatic Ecology & Toxicology, Groundwater & Hydrogeology, Hydrology & Water, Modeling, Water Quality & Chemistry, Watersheds / Remote Sensing / GIS, Water Resources & Climate Change, Water Availability & Conservation, and Water & Society

School of Natural Resources – Centers & Units

The School of Natural Resources contains seven different centers or units:

Center for Advanced Land Management Information Technologies (CALMIT)

The Center for Advanced Land Management Information Technologies is recognized as a center-of-excellence for education and research focused on 1) Remote Sensing, 2) Geographic Information Systems and 3) Global Positioning Systems.

Conservation and Survey Division (CSD)

The Conservation and Survey Division, the natural resource survey component of the School of Natural Resources, is a unique, multi-disciplinary research, service and data-collection organization established by state statute in 1921. The Division's mission is to investigate and record information about Nebraska's geologic history, its rock and mineral resources, the quantity and quality of its water resources, land cover and other aspects of its geography, as well as the nature, distribution and uses of its soils.

High Plains Regional Climate Center (HPRCC)

The mission of the High Plains Regional Climate Center is to increase the use and availability of climate data in the High Plains region. HPRCC personnel work closely with scientists from other regional and federal climate centers on climate services and programs and provide a regional structure for climate applications. The long-term objectives of the HPRCC are to carry out applied climate studies, develop improved climate information products, and provide climate services in the High Plains region.

Great Plains Regional Center for Global Environmental Change (GPRC)

The Great Plains Regional Center for Global Environmental Change (GPRC) is devoted to interdisciplinary research that develops quantitative information on the role of key ecosystems as sources and sinks of carbon dioxide (CO₂). Through understanding gained by such research, the GPRC will provide scientific information required for accurate prediction of future CO₂ concentrations and the climate.

National Drought Mitigation Center (NDMC)

The National Drought Mitigation Center helps people and institutions develop and implement measures to reduce societal vulnerability to drought, stressing preparedness and risk management rather than crisis management.

Nebraska Cooperative Fish & Wildlife Research Unit

The mission of the Cooperative Fish and Wildlife Research Unit Program is to 1) Train graduate students for professional careers in natural resource research and management, 2) Conduct research that will create new information useful for management of natural resources; and 3) Provide technical assistance to cooperators.

Water Center (WC)

The University of Nebraska-Lincoln Water Center implements and facilitates water and water-related research, extension, teaching and public outreach programming within the University of Nebraska system as a part of NU's Institute of Agriculture and Natural Resources and the School of Natural Resources. The Water Center includes the Water Sciences Laboratory, Water Resources Research Initiative and the annual Water Law, Policy and Science Conference.

School of Natural Resources – Cooperative Research & Collaborations

SNR has a significant and growing number of linkages through joint programs, faculty appointments and cooperative research with the College of Arts and Sciences, College of Engineering and the College of Law at the University of Nebraska–Lincoln (UNL), the College of Public Health at the University of Nebraska’s Medical Center and the University of Nebraska Public Policy Center.

SNR has collaborations with all four of the IANR research and extension centers in a variety of program areas – Northeast R&E (Norfolk), Panhandle R&E (Scottsbluff), Southeast R&E (Lincoln), and West Central R&E (North Platte). The Nebraska Forest Service is an affiliated unit within IANR and the director is a tenured faculty member in SNR.

SNR also has significant collaborations with several departments in CAS, including Geosciences, School of Biological Sciences, Department of Economics, Department of Biological Systems Engineering, Department of Civil Engineering, and the Department of Computer Science and Engineering.

Numerous faculty work closely with a wide range of federal agencies on numerous research and outreach projects, including:

- Department of Interior
 - U.S. Fish and Wildlife Service
 - U.S. Geological Survey
 - Bureau of Indian Affairs
 - Bureau of Reclamation
- U.S. Department of Agriculture
 - Cooperative State Research, Education, and Extension Service
 - Risk Management Agency
 - Natural Resources Conservation Service
 - Farm Service Agency
 - Foreign Agricultural Service
 - Agricultural Research Service
 - World Agricultural Outlook Board
- National Oceanic and Atmospheric Administration
 - Climate Prediction Center

- National Climatic Data Center
- National Weather Service
- Department of Energy
- National Aeronautical and Space Administration
- National Institutes of Health

Collaboration between SNR and state agencies is a major component of the unit's programs in research, teaching, and extension/survey. The primary collaborating agencies are:

- Nebraska Game and Parks Commission
- Nebraska Department of Natural Resources
- Nebraska Department of Environmental Quality
- Nebraska Department of Agriculture
- Nebraska Emergency Management Agency
- Nebraska GIS Council

Degrees offered:

Undergraduate degrees – The School of Natural Resources offers undergraduate degree in these majors:

- Environmental Restoration Science
- Environmental Studies, with an Emphasis in Applied Climate Science or Natural Resources
- Fisheries & Wildlife
- Grassland Ecology & Management
- Natural Resources & Environmental Economics
- Water Science
- Geography – Specializations available in Cartography, Environmental geography, Geographical information processing, Great Plains studies, Historical geography
- Integrated Studies in Natural Resources Curriculum – not a degree-granting program, it is a two-year Pre-natural Resources Program for students who are uncertain about a specific major in Natural Resources.
- Pre-Forestry – not a degree-granting program, but it prepares students for admission to colleges and universities where they can earn a four-year degree in forestry. There is a reciprocal tuition agreement with the University of Missouri-Columbia program.

Graduate degrees – The School of Natural Resources offers graduate level programs in two areas: Geography and Natural Resources. A specialization is a well-defined area of study that has been approved by the Graduate Council and will appear on the transcript with the program and major. Specializations are optional.

Natural Resources M.S. Degree Program

Minors:

- Water Resource Planning and Management
- Natural Resource Sciences

Specializations:

- Adaptive Management
- Agroforestry
- Aquatic Ecology
- Bio-Atmospheric Interactions
- Climate Assessment and Impacts
- Environmental Studies
- Geographic Information Systems
- Great Plains Studies
- Human Dimensions
- Hydrologic Sciences
- Remote Sensing
- Soil Science
- Wildlife Ecology

Natural Resources Ph.D. Degree Program

Specializations:

- Adaptive Management
- Applied Ecology
- Bio-Atmospheric Interactions
- Climate Assessment and Impacts
- Environmental Studies
- Human Dimensions
- Hydrologic Sciences
- Soil Science

Geography M.A. Degree Program

Specializations:

- Environmental Geography
- GIS/Cartography/Remote Sensing

Geography Ph.D. Degree Program

Specializations:

- Community and Regional Planning
- Environmental Geography
- GIS/Cartography/Remote Sensing

II. GEOGRAPHICAL COVERAGE

Collection development is concentrated on the Great Plains, and generally emphasizes the North American continent, however selective worldwide coverage within research levels collections are maintained to support international research and extension projects, and for other areas of major interest, such as drought mitigation, global climate & environmental change, and water studies.

III. CHRONOLOGICAL COVERAGE

The emphasis is on current material. Historical materials are not actively acquired.

IV. IMPRINT DATE

The emphasis is on current materials. Older monographs and periodicals may be accepted as gifts, and microfilm backfiles of periodicals may be acquired.

V. FORMAT/TYPE AND LEVEL OF MATERIALS

Both print and electronic resources are purchased as well as online books. Electronic formats are preferred for current periodical subscriptions. For monographic works, the format choice is based primarily on price. Electronic formats are preferred for works that will support research interest on both UNL campuses.

Materials are acquired in the form of periodicals and monographs with emphasis on periodicals. They are collected at the research level.

VI. LANGUAGES

English is the preferred language, at all levels.

V. ELECTRONIC DATABASES

The University Libraries has acquired a number of electronic databases, including some full-text, which support the School of Natural Resources and related areas: Academic Search Premier, AGRICOLA, Animal Behavior Abstracts, Biological Abstracts (BIOSIS), BioOne, CAB Abstracts, Compendex, Ecology Abstracts, Energy Citations Database, Fish and Fisheries Worldwide, GEOBASE, GeoScience World, GREENfile, JSTOR, Medline, Wildlife & Ecology Studies Worldwide, Water Resources Abstracts, Web of Science and Zoological Record , all of which are interdisciplinary databases. These databases greatly enhance the research capability and provide convenient and timely access to various resources.

VI. CLASSIFICATION AND INTENSITY LEVEL

G 70.4	Remote sensing of the environment RESEARCH	
G 156 -156.5	Ecotourism – Sustainable tourism	BASIC
GB 51-60	Physical geography	BASIC
GB 400	Geomorphology – Landforms	STUDY
GB 447-448	Climate/Environmental Geomorphology RESEARCH	
GB 651-708	Water. Hydrology and hydrography RESEARCH	
GB 980-1197.7	Groundwater and watersheds RESEARCH	
GB 1201-1399	Rivers and floods RESEARCH	
GE1-350	Environmental sciences	STUDY
GE70-90	Environmental education	STUDY
GE125	Public opinion. Environmental conditions. Environmental quality. RESEARCH	

GE140-160	Environmental indicators. Environmental degradation Environmental Conditions, Environmental Quality, Environmental RESEARCH	
GE146	Risk Assessment, Global Environmental Change Environmental disasters RESEARCH	
GE149	Global environmental change RESEARCH	
GE170-190	Environmental policy RESEARCH	
GE195-199	Environmentalism. Green movement. Sustainable living	STUDY
GE300-350	Environmental management	STUDY
GF1-900	Human ecology. Anthropogeography	STUDY
GF51	Environmental influences on humans RESEARCH	
GF71	Climatic influences on humans RESEARCH	
GF75	Human influences on the environment RESEARCH	
GV191.67.W5	Recreational aspects of wilderness areas	BASIC
HC79.E5	Environmental policy and economic development. Sustainable development STUDY	
	Including environmental economics	
HD 1690-1702	Water rights RESEARCH	
HD 1711-1741	Irrigation. Reclamation RESEARCH	
K3476-3525	Law - Public property. Public restraints on private property	BASIC
K3478	Conservation of natural resources. Interjurisdictional resources regimes	STUDY
K3488	Biodiversity conservation	STUDY
K3496	Water resources Including rivers, lakes, and watercourses	STUDY
K3498	Conservation. Water resources development and management Including water power	STUDY
K3514	Public land law	BASIC
K3516	Reclamation. Irrigation. Drainage	STUDY
K3520	National parks and monuments, including wilderness preservation and landscape protection	STUDY
K3525	Wildlife conservation. Game, bird, and fish protection	STUDY
K3525	Wildlife conservation	STUDY
K3581-3585	Environmental law. Environmental policy. Including environmental legal regimes and abatement of public nuisance	STUDY
K3884	Forest conservation	STUDY
KFN 443	Nebraska natural resources laws	STUDY
KFN 446-450	Nebraska water resource laws. Including water rights laws.	STUDY
KFN 451-455	Nebraska public land law. Including drainage and irrigation laws.	STUDY

QC 851-999	Meteorology. Climatology RESEARCH	
QC 884	Geological climate. Paleoclimatology RESEARCH	
QC 885	Atmospheric physics	STUDY
QC 981	Climatology RESEARCH	
QE 1-26	Geology RESEARCH	
QE33	Earth Sciences (Remote Sensing) RESEARCH	
QE 38	Environmental geology RESEARCH	
QH1-199.5	Natural History (General)	BASIC
QH75-89	Nature conservation. Landscape protection. Biodiversity conservation. RESEARCH	Endangered
	species and ecosystems. Habitat conservation. Ecosystem management. Conservation biology. Including natural areas, nature reserves, wilderness areas, biosphere reserves, ecological reserves, environmentally sensitive areas	
QH90.8.B56	Biological diversity. Biodiversity. Biodiversity conservation RESEARCH	
QH540-549.5	Ecology. Including Biological diversity. Biodiversity. Ecological assessment. RESEARCH	
	Restoration ecology	
RA565-600	Environmental health	STUDY
S 1-523	Agriculture (General)	BASIC
S589.7	Agricultural ecology (General)	STUDY
S589.75-589.76	Agriculture and the environment	STUDY
S590-599.9	Soils. Soil science, including soil surveys, soil chemistry, soil mineralogy, RESEARCH	
	soil structure, soil-plant relationships	
S 600	Agricultural meteorology. Crops and climate RESEARCH	
S604.5-604.64	Agricultural conservation RESEARCH	
S604.8-621.5	Melioration: Improvement, reclamation, fertilization, irrigation, etc., of lands RESEARCH	
S622-627	Soil conservation and protection RESEARCH	
S900-972.22	Conservation of natural resources, including land conservation RESEARCH	
SB1-1110	Plant culture	STUDY
SB610-615	Weeds, parasitic plants, invasive plants, etc. RESEARCH	
SB617-618	Poisonous plants	STUDY

SD391-410.9	Sylviculture	STUDY
SF84.82-85.6	Rangelands. Range management. Grazing-research RESEARCH	
SK351-579.5	Wildlife management areas RESEARCH	
TA 710	Soil mechanics	STUDY
TC 401-526	River, lake and water supply-engineering RESEARCH	
TC 801-978	Irrigation engineering and drainage	STUDY
TD169-171.8	Environmental protection RESEARCH	
TD 172-193.5	Environmental pollution RESEARCH	
TD 201-428	Water supply, pollution and reuse RESEARCH	
TD878-890	Special types of environment, including soil pollution, air pollution RESEARCH	
TD 920-930	Rural sanitary engineering and agricultural wastes	STUDY