SNR’s Fall Pep Rally:
Reflecting on the Past, Launching a New Academic Year

August 20, 2009
The Art of Juggling: Learning to Multi-task
SNR 5-year Review Update

- Videos on SNR programs and facilities.
- Availability of the 5-year review document.
  - SNR website (document, appendices and videos)
  - Sharepoint
- Comprehensive Review—team members.
  - External (6)
  - Internal (4)
SNR’s External Review Committee

Louie Tupas
Kathy Jacobs
Jerry Hatfield

Dan Brown
Ed Miles
Bill Shilts
SNR’s Review Committee

• Ron Yoder, Head, Biological Systems Engineering.

• Shelley Fuller, Department of Art and Art History. Academic Planning Committee representative.

• John Quinn, School of Natural Resources. Graduate student representative.

• Laura Snell, School of Natural Resources. Undergraduate student representative.
Review Agenda—Opportunities for Input!

- **Tuesday, September 22**
  - 8:30 a.m. Overview of Review Document/Key Issues Presented
    - Meet Members, Review Team
  - 10 a.m. to 5 p.m. Current and Emerging Issues Discussion
    - **Who should attend!**
  - 12:00-1:15 p.m. Lunch w/IANR & CAS heads and chairs, NRBC
  - 5 p.m. Reception w/SNR faculty, staff, and students
• **Wednesday, September 23**
  – 9:15 a.m. Discussion of undergraduate and graduate teaching programs and goals
  – 10:45 a.m. Discussion of research program and goals
  – 1:30 p.m. Discussion of extension, outreach, and survey programs and goals
  – 3:15 p.m. Individual time for faculty areas/groups and individuals to meet with review team.

  • Time will need to be scheduled in advance.
Review Agenda—Opportunities for Input!

**Thursday, September 24**

- 8:15 a.m. Meeting with Center Directors
  - CALMIT, NDMC, HPRCC, GPRC, Water Center, CSD, and Coop Unit
- 9:30 a.m. Individual review team members meet with Center directors and staff
- 10:45 a.m. SNR External Advisory Committee
- 11:45 a.m. Lunch—Reps. State/federal agencies
- 1:30 p.m. Meet w/SNR staff
- 2:30 p.m. Meet w/SNR undergraduate students.
- 3:15 p.m. Meet w/SNR graduate students.
Review Agenda—Opportunities for Input!

• Friday, September 25
  – 8:30 a.m. Exit report to IANR and CAS administration
  – 10:30 a.m. Exit report to SNR faculty, staff, and students
No Whining!

Whining

Conversations should be positive. Be constructive with comments and suggestions!
Expected Outcomes--Timeline

• Comprehensive review/strategic planning process outcomes
  – Internal collaborative/integrated process—builds community.
  – Provides an opportunity for unit goal setting and a roadmap for the future.
  – Storytelling: We’ll have the attention of IANR and CAS administration! Higher administration!
  – Focus shouldn’t be on new acquiring new resources from the state.

• Timeline
  – Expect a formal written report by the review team by December 1 → Unit response.
Preparation for Review Presentations

• Tuesday, September 8 (3-5 p.m.)
  – Faculty area leaders, center directors, SNR coordinators and other presenters.
    • Common approach
      – 10-15 minute introduction, discussion
    • Common Powerpoint template
    • Focus on current program status and vision for the future.
    • How can we redirect/garner new resources to achieve our goals?
Facilities Update

- Room 231—conversion from workroom to Hydrologic Information Systems (HIS lab)
  - Ayse Irmak
- Outdoor classroom
- Auditorium
  - Short term
  - Long term prospects
- Kiesselbach (Comfort and Shea)
- Natural Resources Research Annex
- Challenge—to more effectively use limited storage space.
NRBC Update: Policies and Procedures

Natural Resources Business Center Staff

• Carol Cartwright – Manager
• Pat DeStefano – Purchasing/Inventory Control
• Lois Erickson – Account Management
• Jolene Foster – Travel, Time Entry, Deposits
• Leonita Masek – Human Resources and Personnel Actions
• Barbara Pike – Purchasing Card Reconciliation
• Jerry Schluckebier – Grants Administration (Pre-Award) and Account Management
• Julie Stuckenschmidt – Account Management
NRBC Update: Policies and Procedures

Travel

• Detailed receipts are required for all food/meal expenses equal to or greater than $5.00.
• Expense reimbursement requests must be submitted no later than sixty days after the final day on which expenses were incurred.
• Each foreign receipt should be converted to U.S. dollars. Please specify the exchange rate used for these transactions.
• The employee's personnel number should be provided on all Expense Vouchers submitted for reimbursement. Do not list Social Security or NCard numbers on these forms.
• Each request must be fully itemized, including the amount, date, place, and essential character of the expense incurred.
• Travel Addendum – New form to document why original detailed receipt cannot be obtained. The form is available on SNR Website (http://snr.unl.edu/employeeinfo/forms/index-forms.asp#Travel).
NRBC Update: Policies and Procedures

Grant Administration

Pre-Award

• Remember to allow adequate lead time before due date of proposals. Contact NRBC Grants Specialist (Jerry Schluckebier) as soon as possible for assistance.

• Budget implications – Budgeting state funded salary into grant to generate salary savings. These funds will revert back to the PI for spending authority.

Post-Award

• More oversight by Sponsored Programs to ensure all expenses are being posted in a timely fashion and are allowable and allocable.

• Be pro-active with spending. Develop a plan with your reconciler.

• Match (cost share) requirements and Personnel Activity Reports (PARs).
NRBC Update: Policies and Procedures

Purchasing/Inventory

• **Service Contracts** – Must be reviewed and signed by UNL Purchasing Director.
  ➢ All contracted services that are paid on grants must have a signed contract in place.
  ➢ Other areas to consider: Rental agreements; workshop agreements; consulting agreements; etc.

• **Inventory Control**
  ➢ Report all stolen or lost equipment.
  ➢ Return all obsolete and broken equipment to UNL Inventory.

• **Purchasing Cards** – Forward all transaction vouchers and receipts to NRBC in a timely fashion.

• **Goods Receipt** – Forward all validated (signed & dated) packing slips to NRBC.
Account Management

• **Carry Forward Balances** – Make plans for expending the funds in a timely fashion. No guarantee that funds will be approved for carryforward in next FY.

• **Electronic (Green) Reporting** – Reports are provided electronically.

• **Vehicle Logs** – Timely submission to Elaine (by the 5th of the month).

• **Forward Back-up paperwork** – Field trip insurance; vehicle rental requests/confirmations; any type of invoice received.
NRBC Update: Policies and Procedures

Human Resources

• Complete Student Worker Payroll form and forward to Leo Masek (http://snr.unl.edu/employeeinfo/forms/index-forms.asp#Payroll)

• Ensure the new student worker is aware of the relevant documents needed to process payroll action (Social Security card, valid driver’s license and banking information). Non-resident alien need to bring immigration and employment authorization documentation.

• Set up an appointment with Leo Masek (2-0833) for student to do new hire paperwork.
Accomplishments, 2008-2009

• Survived the budget reduction process!
• Completed an issue-based comprehensive review and strategic planning process.
• Hired two faculty to strengthen GIS and applied climate science programs.
• Created an Extension Educator position in climate variability and change.
• Enrollment increases
  – Undergraduate/Graduate
• Merger of Geography w/SNR
Accomplishments, 2008-2009

• Created ‘faculty areas’ to facilitate interaction, integration, and communication.
• Publications
• A ‘greener’ Hardin Hall
  – Occupancy sensors
  – Recycling
  – Lab changes/fume hoods to reduce energy use
• Building Sustainable Communities Forum
  – Partnership with Mayor’s Environmental Task Force
  – Second Forum planned for October 30.
Accomplishments, 2008-2009

• SNR Funding: All Sources (2005-2009)

Total $88,809,357

- Overhead Return
- Grants & Contracts
- State Funds

2005 2006 2007 2008 2009
Accomplishments, 2008-2009

• External funding: Setting a new record?!!
Goal 1: To build greater visibility and excellence for the School of Natural Resources’ research, teaching, and outreach programs through a consistent focus on developing an integrated, systems approach to address complex natural resource, environmental, and human issues for enhancing the sustainable use of natural resources.

- Promote faculty/staff development
- Promote/enhance SNR’s disciplinary/interdisciplinary research capacity
- Promote academic excellence
- Provide leadership for UNL initiatives in climate change and water research, outreach, and education programs.
Goal 2: To develop and implement innovative extension/outreach programs that will provide timely and reliable data collection and information dissemination to SNR’s stakeholders in Nebraska and elsewhere to support science-based decisions on the use and management of natural and biological resources.

- To enhance outreach programs through better integration via CSD other programs, including centers.
- To build public/private partnerships to address needs of clientele.
Director’s Goals 2009-2010

• Goal 3: To provide fiscal and administrative leadership for SNR's research, teaching, and extension/survey programs and augment the unit's physical facilities.
  – To invest SNR’s fiscal resources on programs and activities that establish the unit as a leader in natural resources and environmental sciences.
  – To enhance interactions with SNR’s external advisory committee.
  – To enhance fund raising activities and opportunities with the NU Foundation.
SNR’s Facilities
SNR Student Services
Sue Ellen Pegg, Recruitment Coordinator

Sara Winn, Advising Coordinator
Susan Vosler, Academic Secretary
### SNR Undergraduate Statistics Fall 2009

<table>
<thead>
<tr>
<th>Degree Programs</th>
<th>2009 Totals</th>
<th>2008 Totals</th>
<th>Change from Fall 2008</th>
<th>% Change</th>
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<td>Environmental Restoration Science</td>
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<td>9</td>
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<td>91</td>
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<td>Fisheries and Wildlife</td>
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<td><strong>346</strong></td>
<td><strong>282</strong></td>
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Unofficial numbers retrieved 8/10/09
## SNR Newly Enrolled Student Comparisons (CASNR)

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<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
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Unofficial numbers retrieved 8/10/09
## SNR Graduate Statistics, Fall 2009

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<td>Human Dimensions</td>
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<td>Water</td>
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<tr>
<td>Other</td>
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<td><strong>Totals</strong></td>
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SNR Coordinators

• Matt Joeckel, Outreach Coordinator
• Mark Kuzila, Survey Coordinator
• Betty Walter-Shea, Teaching Coordinator
• Christine Steggs, Assistant to the Director
SNR Outreach:
Recent Developments and Prospectus
Outreach Seminars

Tuesday evenings, 7 p.m.

- **September 8**: “Sustainable Lincoln: Insuring a Growing and Dynamic City Today… and Tomorrow” Milo Mumgaard, J.D., City of Lincoln Mayor’s Office.
- **October 13**: “Recollections of a Nebraska Herpetologist”. Dennis Ferraro, Extension Educator, SNR/SEREC.
- **October 27**: “Wildlife Damage Management: Problems and Prospects”. Stephen Vantassel, Internet Center for Wildlife Damage Management, SNR.
- **November 10**: “Nebraska’s Gemstones – Tiny Little Treasures”. Roger Pabian, Professor Emeritus, SNR.
OUTREACH ACTIVITIES

Clinton Elementary

December, 2008
Coats for Clinton

May, 2009
Summer Fun for Clinton Kids
Survey Update

- Jessie Korus joined SNR in December 2008. Jessie brings a wealth of knowledge about groundwater in Nebraska and an excellent relationship with NRDs throughout the state. His focus is on the groundwater level program however his expertise allows him to expand his efforts across a wide area of groundwater activities.
- Water quantity related projects continue to tax the limits of the available FTE of Survey Faculty.
- Water quantity related projects are located throughout the state. Areas of major focus and grant support are in eastern and northeastern Nebraska and the Middle Niobrara River valley.
Survey Update

• Funding for the Cooperative Geologic Mapping Program continues to increase and has reached the limit of our ability to provide faculty FTE to match the USGS STATEMAP requirements.
• Survey Faculty continue to provide valuable information pertaining the mineral resources of Nebraska including sand and gravel, limestone, and uranium.
• Survey faculty have increased efforts within the USDA NRCS led cooperative soil survey program. The efforts focus on augmenting our understanding of the properties of benchmark soils in Nebraska.
• Support from clientele, led by the Nebraska Association of Resources Districts, and from the IANR administration may mean an additional 1.0 Survey FTE in the near future.
SNR Teaching: Topics

• Monthly teaching faculty meetings following SNR faculty meetings.
• Instructional Improvement Program
• Undergraduate Quantitative Assessment
• ACE Assessment
• Future of NRES 891
• Laptop computer cart
• Revision of NRES 312 – lecture and lab
SNR Policies, Procedures, & Services
SNR Website/Databases
Mark Mesarch and Jeff Nothwehr
SNR Website

• Newly redesigned website rolled out in July
  – Reorganized around SNR Faculty Areas
  – Reorganized for improving site maintenance
  – Database driven
  – Updating information
  – Adding information on research and outreach areas
    • Kudos to Geography/GIScience, Water, Undergraduate and Graduate folks
    • Room for improvement and growth
SNR Website

• New UNL Template
  – Template available/stable mid July 2009
  – Key Changes
    • Navigation Location/Functionality
    • Transition from 3 column format to 4 column format
  – Anticipated deployment of SNR Site – December 2009
  – CSD website transfer
SNR Website

- New UNL Template
SNR Website

- SNR Database
  - New Data Fields
    - Professional Organizations
    - Background Education
    - Cell Phone number availability on website
    - Office Hours (Supervisor Approved)
    - Vitae file
SNR Website

- SNR Database: On-line Information Updating
  - (Bottom of Profile/ Last four-digits of NU ID)
    - Areas of Interest (FSG)
    - SNR Faculty Areas (FSG)
    - Websites (FSG)
    - Professional Organizations (FSG)
    - Cell Phone Displayed on Web (FSG)
    - Office Hours (FS)
    - Contact Preference (FS)
    - Thesis/Dissertation Title (G)
    - Awards (G)
SNR Web and Database Services

- SNR Web & Database Services
- Websites outside of the SNR website
- Hourly Rate (1/4 hour increments)
- Center, Project, Research websites
- On-line Surveys
- Non-payment Registrations
- SharePoint Collaboration Sites / Training
- Simple Dynamic websites using ACCESS databases
  - Can include Google Map products
- Stand alone ACCESS databases
Intermission

Stand up and stretch!!
SNR Programs
SNR Faculty Area Leaders
SNR Faculties

- **Applied Climate Sciences**
  - Shashi Verma
- **Applied Ecology**
  - Dave Wedin
- **Geography/GIScience**
  - Jim Merchant/Cody Knutson
- **Geology & Soils**
  - Matt Joeckel
- **Human Dimensions**
  - Mark Burbach
- **Water**
  - Dan Snow
Applied Climate Science: Shashi Verma, Leader

- 5-year review document: Climate Chapter
- Undergraduate Major
- Climate Change Minor
- M.S. and Ph.D. Specializations
- Summer Institute on Climate Change
• **Undergraduate education**
  – Over 1800 SCH in Applied Ecology courses for fall ’09
  – 3 international field courses
  – great students (clubs, UCARE, internships)

• **Sustainable agriculture**
  – New USDA $1,400,000 grant for Brandle et al.

• **Adaptive management**
  – IGERT, USACE Missouri River project

• **Fisheries science**
  – 12 graduate students, lots of boats

• **Ecosystem science**
  – Republican River, Sand Hills, Bessey’s Forest

• **Outreach and extension**
  – Master Naturalist program
  – Internet Center for Wildlife Damage Management

• **Partnerships** (NGPC, USFWS, USACE, TNC, NRCS, USGS)

• **Exotic field work** (Namibia, Trinidad)

• **Prairie Pines & Nine Mile Prairie**
• Sunil Narumalani becomes Associate Dean, CA&S; Gene Guan joins faculty
• 3 MA and 2 PhDs awarded
• Developed brochure and updated guidelines for graduate degree programs.
• Centennial anniversary of first doctorate in Geography at UNL
• Cody Knutson co-author *Drought Risk Reduction: Framework and Practices* (UN International Strategy for Disaster Reduction)
• Geography welcomes 5 new graduate students
• New required courses for graduate degrees take effect
• New courses in *Advanced GIS and GIS and Environmental Modeling* to be offered
• Geography alumni newsletter
Teaching:

• G&S faculty teach soils- and geology-related courses in NRES, Geography, and Geosciences; faculty also advise students in the Soils Option of the Environmental Restoration Science Major (currently at 10 students).

• G&S Faculty are evaluating: (1) course options for students in the two disciplines, (2) potential overlaps, (3) possible gaps in the subject areas that can be filled by SNR expertise.

• G&S Faculty are working with the Departments of Agronomy and Horticulture and Biological Systems Engineering and the USDA NRCS to build a verified list of courses that meet the qualifications for the positions of Soil Scientist and Soil Conservationist.

• Tentative plans have been formulated for a meeting of SNR G&S and Water faculty with Geosciences faculty in order to discuss future interactions/collaborations.

• Redesign of “Soils and Society” to be taught on City Campus
Remediation of Cozad, Nebr. Landfill (Comfort and others)

- Landfill began collecting waste in March, 1969 → July, 1989
- Waste was put in unlined pits (cells) and capped with soil.
- No records were kept on what was dumped into the cells.
- Industries in the area consisted of auto parts manufacturing and dry cleaners
Research and Funding

STATEMAP Quadrangles Mapped
Research: Long-term Evolution of the Platte River System (Hanson, Young, Joeckel, and others)

silt and clay

sand and gravel

bedrock

OSL dating of sediments
Prehistoric Paleoclimate and Dune Records from the Great Plains

(Hanson et al., 2009; Hanson et al. in press)

Gray lines indicate dune activity in the Nebraska Sand Hills during the past ~ 5000 years.

Eolian sands and clay lamellae.
Groundwater Atlas Update

• **Goals:**
  – update the current atlas with existing data
  – expand the atlas by adding new data
  – improve the organization and layout of the current atlas
  – maximize its educational impact, increase public awareness, make available electronically

• **Current Activities**
  – developing outline, content, and format
  – compiling existing data sources

• **Participating Faculty and Staff**
  – Burbach, Howard, Jess, Diffendal, Hanson, Joeckel, Korus
**Eastern Nebraska Water Resources Assessment (ENWRA)**

- **Goals**
  - develop **geologic framework and water budget** for eastern Nebraska’s glaciated region
  - create **sound scientific basis for water resources management**

- **Current Activities**
  - three-dimensional geologic interpretation of **helicopter electromagnetic (HEM) and borehole data**

- **Participating Faculty and Staff**
  - Hanson, Joeckel, Lackey, Korus
Groundwater Research and Water Modeling

• Lower Salt Creek groundwater model
  – investigation of ground-surface water interactions
  – participating staff: Korus

• Analysis of aquifer depletion criteria
  – hydrologic evaluation of groundwater management tools in use by Natural Resources Districts
  – participating faculty/staff: Korus, Burbach
Research: Soil Morphology and Genesis

- Effect of a transition from prairie to forest ecosystems on soils in Nebraska (Joeckel and Kuzila)
- Geochemistry of benchmark soils in Nebraska (Hartung and Kuzila)
- Effect of organic and no-till farming practices on soil physical and chemical properties (Kuzila, Hanson, Joeckel, with C. Loerch of NRCS)
- Soil characteristics at tern and plover nesting sites (Brown and Kuzila)
- Effect of soils on growth and quality of grapes in southeastern Nebraska (Kuzila, Rundquist, and Read)
Human Dimensions: Mark Burbach, Leader

- Student Recruitment/Marketing
  - Explore opportunities to recruit students who may be interested in the Human Dimensions element of physical science programs but might pursue “traditional” physical science degrees (e.g. biology) because they are unaware of opportunities. HD element is one way SNR can provide a unique opportunity for students. Technical skills integrated with human dimension.
  - Discuss with employers about hiring needs/success of SNR grads. Share this info with students (e.g. Conservation Officer needs conflict resolution skills).
  - Review current courses to determine if they are meeting needs.
- Review other HD programs.
- Options to increase teaching FTE in HD program.
- Develop HD specialization core course.

*Activity underway
Human Dimensions Faculty Discussions

Future Directions (Undergraduate)

• Opportunities to better integrate Human Dimensions in all SNR undergraduate degree programs (e.g. human values and global warming).
• Opportunities for an HD undergraduate program.
• Ways to encourage advisors to promote the HD elements of SNR undergrad programs.*
• HD “identity” among SNR faculty and staff.
  – What’s our “elevator speech”?

*Activity underway
Future Directions (Graduates)

• Possibility of an HD seminar series.
• Opportunities/collaborations with Geography faculty.
• Collaborations with Dr. Lisa Pennisi.*

*Activity underway
SNR Water Program: Spring 2009 Highlights

• John Lenters & Dan Snow volunteered
• Includes ~50 faculty (~25 primary) + ~25 staff
• March and April program meetings
• May Workshop
  – Water Chapter 5-year Review
  – Thanks Betty, Tala and Aris!
SNR Water Program: Goals and Objectives

- **Increase funding** available for SNR Water research program
  - Improve awareness of funding opportunities
  - Increase understanding of colleagues’ research efforts/interests
- **Increase visibility** of SNR Water Research
  - SNR Water Faculty to provide short presentations of current research
  - Collaborate/publish on group water project related to Top Ten List
- **Increase undergraduate student recruitment and retention efforts**
  - Enhance number of majors in each of the water science options
- **Increase graduate student recruitment and retention efforts**
  - Explore possible media (Eos and on-line) for advertising graduate student opportunities at the School.
  - Increase funding available for graduate student support
  - Improve coordination of graduate student funding opportunities through announcements
Environmental Studies
Dave Gosselin and Sara Yendra
“The supreme reality of our time is... the vulnerability of our planet.”
John F. Kennedy

“You’ve Got the Whole World in Your Hands”

“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it’s the only thing that ever has.”
Margaret Mead
Environmental Studies Program

Human Behavior

Environmental Studies

Science and Technology

Policy and Economics
In our program, you can

Connect Science, Economics, Public Policy, and Environmental Challenges

Ecosystems

Clean and Ample Water

Biodiversity

Environmental Quality
Environmental Studies Program

- Sustainable Development
- Environmental Protection
- Public Health and Safety
- Environmental Quality
- Environmental Consulting
- Conservation
- Environmental Law
- Environmental Education
- Public Policy Analysis

“You’ve Got the Whole World in Your Hands”

- Green Business
- Natural Resources Management
Environmental Studies Program

- **Student Numbers Grow**
  - Fall 2008: 91
  - Fall 2009: 122

- **New, Improved, and (Almost) Approved Curriculum**
  - ENVR 101 Environmental Studies Orientation
  - ENVR 201 Science, Systems, Environment and Sustainability
  - ENVR 249 Individual and Cultural Perspectives on the Environment
  - ENVR 319 Environmental Engagement and the Community
  - ENVR 499 Environmental Studies Senior Thesis
Environmental Studies Program

EnvironMentors + Upward Bound = More Diverse Environmental Professionals

You Can Make

$500 Dom

$1,000 Vendra Thody

$500 Maddie Brown

$1,000 Nguyen

A Big Difference
Environmental Studies Program

More Students
+ More Courses
+ More Senior Theses
+ Environmentors

Many Opportunities to be Part of the Environmental Studies Team

To Learn More about the Team
Contact:
Coach Gosselin
or
Coach Yendra

Yendra
Gosselin
SNR-based Centers
SNR Centers and Coop Unit

- Bruce Dvorak, Water Center
- Jim Merchant, CALMIT
- Mike Hayes, NDMC
- Shashi Verma, GPRC
- Martha Shulski, HPRCC
Water Center: Bruce Dvorak, Interim Director

- Professor, Civil Engineering and Biological Systems Engineering
  - Areas of expertise
    - Physical and Chemical Treatment Processes for water environmental engineering, focusing on industrial pollution prevention as a method of minimizing the need for later environmental remediation and on small community drinking water issues (especially those involving sorbents).
• Continued focus on remote sensing of vegetation and water (Anatoly Gitelson and Don Rundquist)
  – Art Zygielbaum quantified an increase in synthetically active radiation reflectance in corn and soybeans undergoing water stress; developed wireless radiometer system

• Aircraft program (Rick Perk and Don Rundquist) added thermal infrared sensor

• Mapping evapotranspiration (Ayse Irmak)

• GIS projects:
  – establishing lake nutrient standards (with John Holz and Aris Holz)
  – land cover change impacts on groundwater quality
  – Nebraska vineyards (Paul Read)
  – Invasive vegetation (Craig Allen)
• Continue collaboration with NDMC (Brian Wardlow) - drought-related remote sensing
• Coastal remote sensing research continues for fifth year (Don Rundquist)
• NebraskaView (Milda Vaitkus) – eighth year
• NebraskaMAP project (Dan Pfeffer) – Office of the Chief Information Officer, Nebraska GIS Council
• Gene Guan – new research on high performance computing and environmental modeling
• Continue GIS support for Nebraska Emergency Management Agency and Nebraska Army National Guard
NDMC Overview

risk management

Planning
Monitoring and Prediction
Mitigation
Disaster
Protection
Impact Assessment
Reconstruction
Recovery
Response
Recovery

crisis management
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

http://drought.unl.edu/dm

Author: Laura Edwards, Western Regional Climate Center
NDMC Fall Activities

• National Integrated Drought Information System (NIDIS)
  – Pilot Project Coordination
• Mali U.S. Drought Monitor Workshop
• U.S. Drought Monitor Forum
• Drought Ready Communities
• International Drought Workshop
  – December 8-11, 2009 (Lincoln)
Great Plains Regional Center for Global Environmental Change

- **1993:** Established by the Board of Regents.
  - One of six regional centers of NIGEC (National Institute for Global Environmental Change), funded by DOE.

- **Director:**
  - Shashi Verma (1997 – Date)

- **2007:** NIGEC funding ended. Research focus updated.
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 ($\text{CO}_2$). Through understanding gained by such research, the GPRC will provide scientific information required for accurate prediction of future CO$_2$ concentrations and the climate.
GPRC: Collaborations

• **UNL:**
  – School of Natural Resources
  – Department of Agronomy and Horticulture
  – Department of Biological Systems Engineering
  – School of Biological Sciences
  – Department of Biochemistry

• **North American Carbon Program, Mid-Continent Intensive Campaign (MCI):**
  – Synthesis of measurements made in Illinois, Iowa, Minnesota and Nebraska

• **AmeriFlux, CarboEurope, Fluxnet, …**
HPRCC: Martha Shulski, Director

Applied Climate Research

Regional Climate Services

Climate Education and Outreach
Staff News
• New Regional Climatologist, Natalie Umphlett
• New Research Climatologist, Ken Hubbard
• New Director, Martha Shulski
• 2 incoming student interns (BJ, Braedi), 1 leaving (Allan)

Network News
• More AWDN stations coming online (WY)
• Site visits for new HCN-M stations (NM)
• Use of data for soil moisture, drought, irrigation scheduling

Ongoing Projects
• Producing high quality data (QC studies)
• Applied Climate Information System efforts
• Thousands of climate products generated online

Future?
• Involvement in NOAA’s National Climate Service
• Interdisciplinary studies and collaborations in SNR
• Climate change, variability, and impacts
Mission

• Serve as a representative body for the graduate students in the School of Natural Resources to promote a closer relationship within the graduate student community; serve as a channel of communication between graduate students, faculty and staff; and to foster professional development.
• **Specific Goals**
  - Increase the awareness and involvement of graduate students in the decision making process in the SNR
    - Facilitate communication between faculty and students
  - Maintain a supportive and interactive graduate student community
    - Organize the annual SNR Open House to welcome new graduate students and provide important information
  - Increase participation of graduate students at meetings and social events
  - Increase participation of grad students and faculty in the UNL award-winning McPhee Elementary School Science Outreach Program
    - Identify and develop future science outreach opportunities
Upcoming events: 2009-2010 academic year

- SNRGSA Open House: August 28, 2:30-5pm in Hardin Hall Auditorium
- Chili competition
- Sandhill Crane field trip
- SNRGSA t-shirt design competition
- 1st Annual SNR Grad Student Poster Competition?
- Holiday parties (Thanksgiving, Christmas, Easter, …)
- Hardin Hall auditorium movie nights?
- SNR bowling league?
- 1rst Annual SNRGSA International Food Festival?
2009-2010 SNRGSA officers (and advisers)

- **Chair**: Saadia Bihmidine (Tala Awada and Tom Clemente)
- **Vice-chair**: Jamie McFadden (Drew Tyre)
- **Treasurer**: Jane Okalebo (Michael Hayes and Brian Wardlow)
- **Grad Committee rep**: Brenda Pracheil (Mark Pegg)
- **UNL GSA Rep**: Nathan Freitas (James Merchant)
- **Social chair**: Dave Owens (Steven Thomas)
- **Outreach chair**: Tara Anderson (Mark Pegg)
- **Fundraising Chair**: Rebecca Howser (Drew Tyre)
- **Faculty advisers**: Jim Brandle, Mark Kuzila, and Ed Harvey
Geography Student Organization

• First Meeting:
  • Thursday August 27th
  • 3:30pm
• Hardin Hall Room 209
Activities

• Geography Awareness Week: Geography Bowl- Fun & Prizes!

• GIS Day: Speakers and poster sessions

• Playground maps

• Bowling

• Camping

• Encourage participation at national/regional conferences
  (Association of American Geographers, GIS/LIS, National Council for Geographic Education, Environmental Design Research Association, and many others)
Nebraska Night in Las Vegas

Date: Wednesday 3/25/2009
Time: 8:00 to 10:00 pm
Place: Riviera Hotel
Room: Royale Pavilion 8

Sponsored by:
UNL- Geography
Questions?