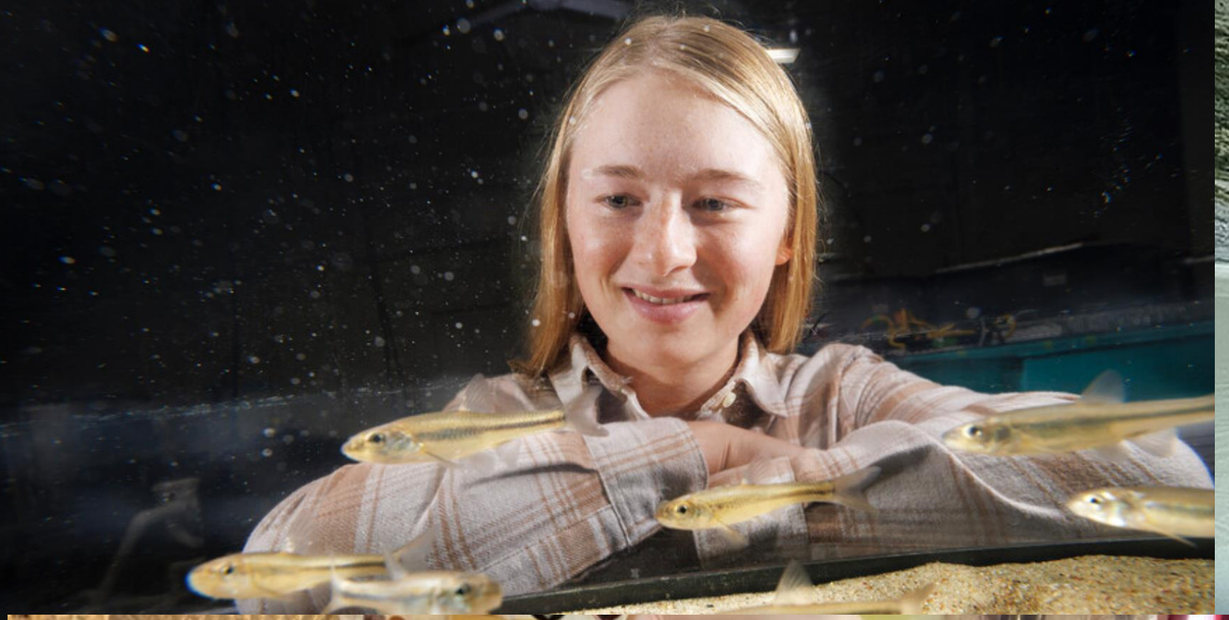
IANR All Hands Meeting

Feb. 13, 2024

IN OUR GRIT, OUR GLORY™

Since our last meeting…




A TEAM DEVOTED TO SUPPORTING EVERY STEP OF THE BEEF INDUSTRY IN NEBRASKA
1869
RENOVO SEED
ART'S WAY
HD HYUNDAI

AGRICULTURE

Geitner Simmons, October 27, 2023

NU institute lands $19 million grant to advance global food security

The U.S. Agency for International Development has selected the University of Nebraska's Daugherty Water for Food Global Institute to lead a global, multi-partner collaboration focusing on smallholder irrigation and mechanization needs. Courtesy | USAID

HIGH PLAINS JOURNAL™

NEBRASKA, REGIONAL ROUNDUP, WESTERN REGION

Husker team receives $5M grant to reduce methane emissions from cattle

By Eric Buck | University Of Nebraska-Lincoln | December 28, 2023

BROWNFIELD
POWERED BY LEARFIELD

NEWS

UNL RESEARCH TEAM TO STUDY SUSTAINABLE DAIRY AND BEEF PRODUCTION

January 10, 2024 By Brent Barnett Filed Under: Agriculture, Beef, Cattle, Climate, Climate Change, Human Interest, Livestock, Nebraska, News

University saluted by Carnegie Foundation for excellence in community engagement

by Geitner Simmons | IANR Media

Image Credit:
Craig Chandler | University Communication and Marketing

Justin McMechan demonstrates a hail machine at the Eastern Nebraska Research, Extension and Education Center near Mead in June 2017. The machine is used to inflict damage on crops during various growing stages to measure their response.

the Fence Post

NFarms research will bring precision ag innovations to producers

LINCOLN, Neb. — Husker scientists and staff are formalizing existing research and outreach in precision agriculture into a strategic initiative called NFarms. The effort, in collaboration with producers and industry, will refine and expand precision ag capabilities crucial to boosting farm efficiency and environmental sustainability.

University of Nebraska-Lincoln faculty pursue a range of precision ag work on 3,000 acres of the university's Eastern Nebraska Research, Extension and Education Center near Mead. Those efforts will be channeled into NFarms to facilitate strategic coordination and maximize the outreach and benefits.

NFarms will be a test bed for new technologies, as well as platforms to help farmers better harness data. The initiative also will develop innovative decision-making tools producers can use for efficient field management.

Cover: *A prescribed fire in western Nebraska, USA, conducted to reduce Eastern red cedar invasion into the landscape. Eastern red cedar management needs to occur at multiple spatial scales as the effects of invasion, and difficulty in controlling the invasion, scales up as the Eastern red cedar invasion into grasslands progresses. Photograph: Craig Allen.*

JOURNAL ARTICLE

Multiscale adaptive management of social–ecological systems FREE

Ahjond Garmestani ✉, Craig R Allen, David G Angeler, Lance Gunderson, J B Ruhl

BioScience, Volume 73, Issue 11, November 2023, Pages 800–807,
https://doi.org/10.1093/biosci/biad096

December 12, 2023

Lincoln, Neb. —Nebraska figures large in the latest issue of *BioScience*, with the cover showing Nebraska grasslands on fire and the related story cowritten by Craig Allen, natural resources professor at Nebraska.

The article, "Multi-scale adaptive management of socio-ecological systems," explains how land managers can adaptively manage complex ecosystems. In adaptive management, people learn as they go.

"People can undergo their normal management or tweaks on their normal management on their properties, while putting in a framework so they can learn over time," Allen said. "The beauty of it is that you're learning by doing it, and you don't wait for experimental results. You can continue with management alternatives while undergoing your normal operations. You learn as you go and adapt with what works instead of waiting for something to fail and then adapt."

In the article, the five authors give examples of how people have used adaptive management to tackle the spread of redcedars in grasslands and of common reed in the Platte River.

NACEB Legislative Day

Corn Nitrogen Calculator

RESET ENTIRE FORM

Please Note: The accuracy of the recommendation you receive using this tool is dependent on the quality of the data you put in.

Field #1

+ ADD NEW FIELD

CURRENTLY EDITING:

Field #1

Name Required

Field #1

Size in Acres Required

acres

Field acres are required (number between 5 and 5000)

Soil Texture

Med./Fine

Expected Corn Value Required

$ /bu

Expected Corn Value is required (number between 1 and 10)

January 26, 2024 · 5 min read

Husker researchers aim to help crops survive cold snaps

by Tiffany Lee | Research and Economic Development

Craig Chandler I University Communication and Marketing

James Schnable (from left), Rebecca Roston and Toshihiro Obata hold young sorghum plants outside of the Bioscience Greenhouses on City Campus. The researchers are part of a $1.8 million grant from the National Science Foundation to try to boost the cold tolerance of sorghum, and eventually corn and other crops, by harnessing the power of the plant's circadian rhythms.

ABN Annual Meeting January 2024

Washington DC Visit January 2024

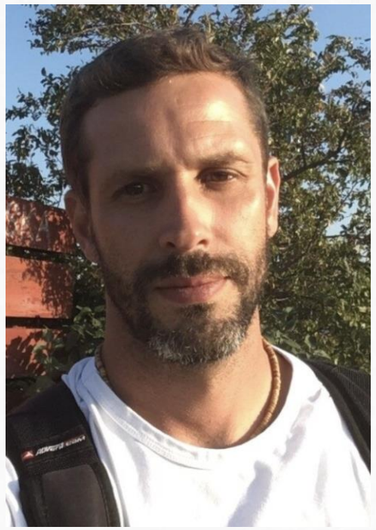

1
HUSKERS
22
40

IANR All Hands Meeting, Feb. 13, 2024

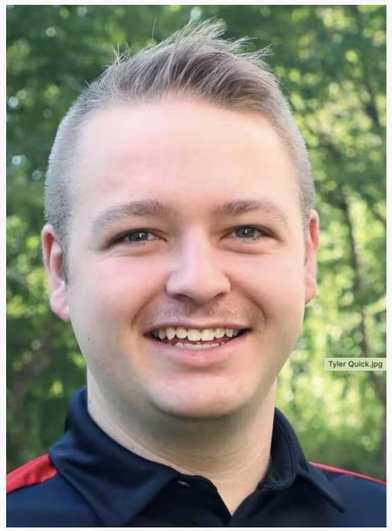
Celebrating the people of IANR

New faculty

Tessa Reece



Matheus Ribero



Tyler Quick

Mickayla Blender

Keeley MacNeill

Fernando Aramburu Merlos

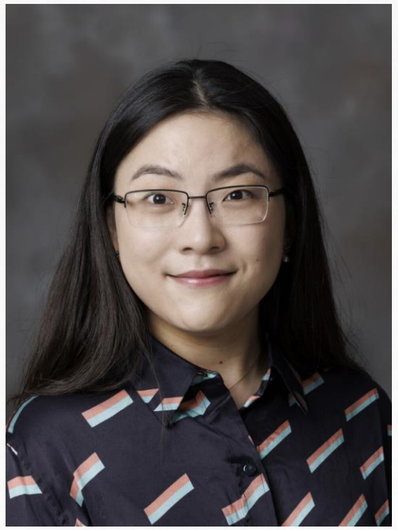
Walter Carciochi

Marina Duarte de Val

New faculty

Brian Rice

Pin-Chu Lai



Keting Li

Somayeh Taghian Dinani

Mark Frickel

Asako Stone

Xiaomeng Li

Makki Khorchani

Retirements

Thomas Franti
Robert Hutkins
Stephen Kachman
Ronald Lewis
Rodney Moxley
Robert Wright
Rachel Allison
Richard Goodman
Kathryn Hanford
Doak Nickerson
Steven Niemeyer
Ronald Yoder
Fred McCartney
Steve Westerholt
Cheryl Gresham
Lisa Spilker
Kenneth Cejka
Merle Still
Michael Wilford

Outstanding Employee Awards

Samantha Link
Agricultural Research Division
Greenhouse Innovation Center

Julie McManamey
Food Science and
Technology

Melisia Bieber
Textiles, Merchandising
and Fashion Design

Shana Gerdes
Nebraska LEAD

2023 IANR Staff Awards

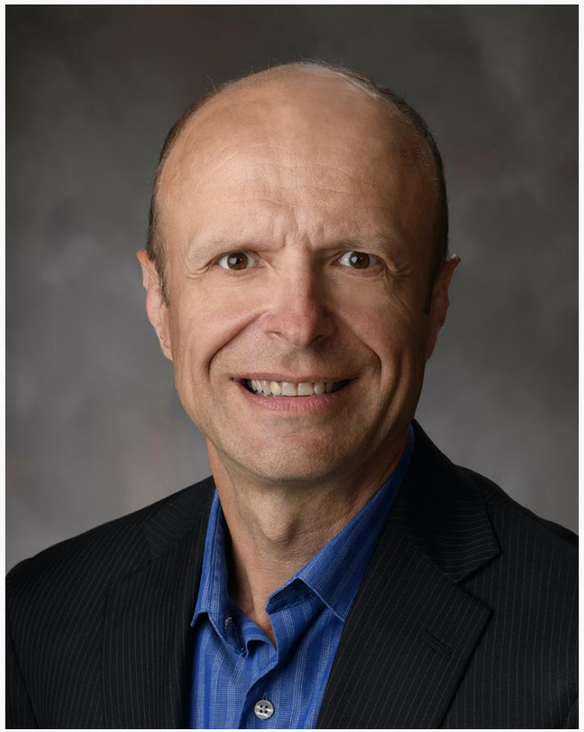
Exemplary Service Award

Dee Ebbeka
Conservation and Survey Division
School of Natural Resources

Omtvedt Servant Leader Award

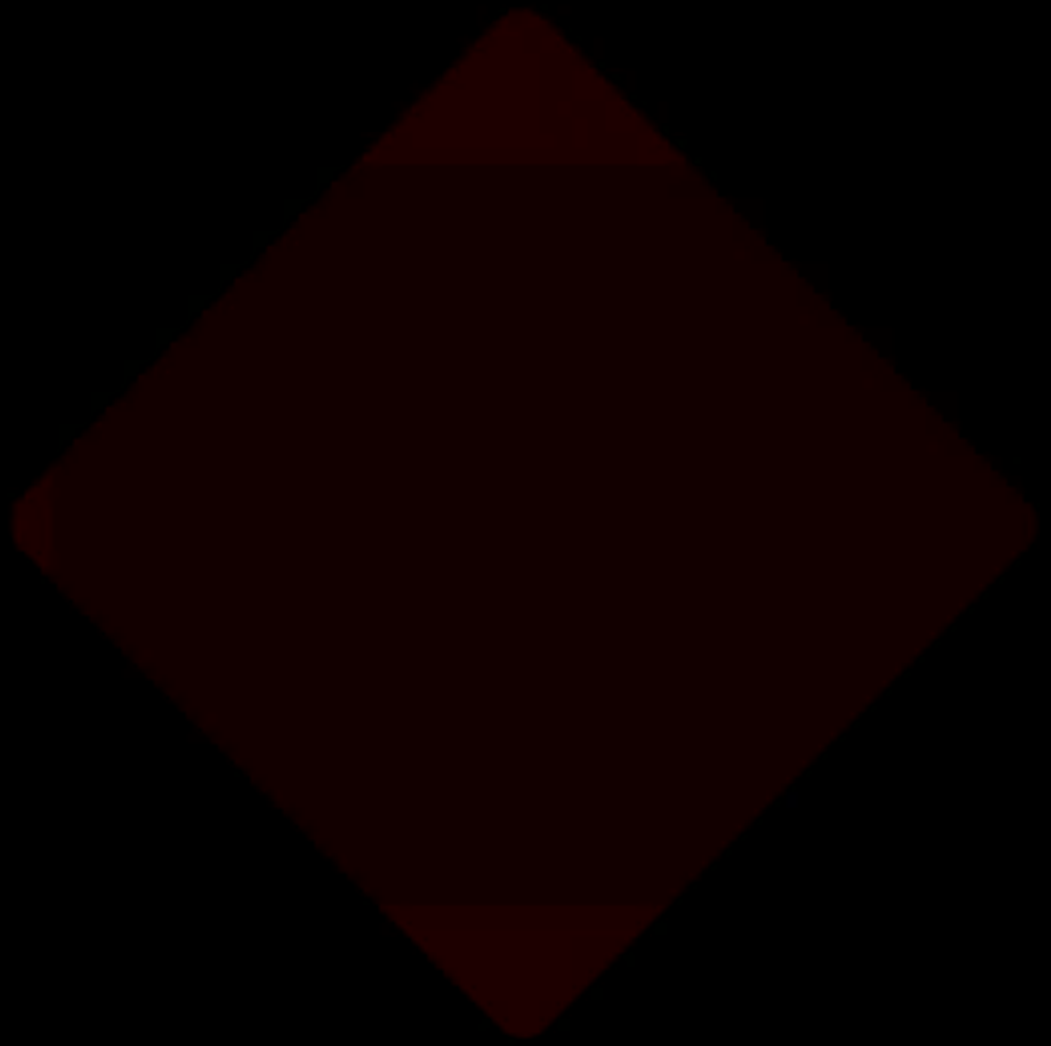
Sherri Pitchie
Animal Science

Faculty Recognition



Daniel Ciobanu
Fellow, National
Academy of Inventors

James Schnable
Nebraska Corn Check-Off
Presidential Chair



Early Career Faculty Research Award

Katarzyna Glowacka
Biochemistry

Kasia Glowacka joined the Department of Biochemistry and Plant Science Innovation Center at the University of Nebraska-Lincoln in 2018. She has completed her PhD from Adam Mickiewicz University in Poznań, Poland and postdoctoral studies from the University of Illinois at Urbana-Champaign, IL, USA. She has published more than 40 papers in peer-reviewed journals including Science and Nature Communications. Her scientific passion is to make a difference in improving crops for better resistance to the environment via studying photosynthesis. Her research group activities are centered on the regulation of a non-photochemical quenching mechanism that protects photosynthesis machinery against the formation of reactive oxygen species.

Over the course of her career, she became the co-author of 90 poster presentations at scientific meetings. She is a recipient of the NSF CAREER grant. Last year she served as a member of the Organizing Committee of the International Soybean Conference. She is a Review Editor for Crop and Product Physiology in Frontiers in Plant Science. Through her outreach activities, she aims to increase the participation of women in STEM which currently she pursues through collaboration with Girl Scouts Spirit of Nebraska.

Early Career Faculty Research Award

Dan Uden is an Assistant Professor in UNL's School of Natural Resources, Department of Agronomy and Horticulture, and Center for Resilience in Agricultural Working Landscapes. Dan's research program—which is anchored in collaboration and funded by several federal and state agencies—aims to understand what makes landscapes and ecosystems resilient, and to apply that understanding to the development of maps and other spatial tools that support land managers.

Daniel Uden
School of Natural Resources

Team-based projects to which Dan and his advisees are currently contributing include testing stakeholder-driven approaches to rangeland management, targeting habitat management for ring-necked pheasants, providing early warning of the spread of trees and shrubs in grasslands, monitoring vegetation productivity across pastoral lands, mapping algal blooms in lakes, estimating biodiversity in grasslands, high-resolution crop yield mapping, and quantifying conservation program outcomes.

Dan grew up on a small corn and soybean operation in south-central Nebraska. He received his B.A. in Geography from Concordia University, Nebraska and his M.S. and Ph.D. in Natural Resources Science from UNL. He remains eager to contribute to efforts that advance spatial resilience science and benefit landscapes and the people that manage them.

Upcoming Leadership Transitions

Terry Hejny
Director, Nebraska LEAD

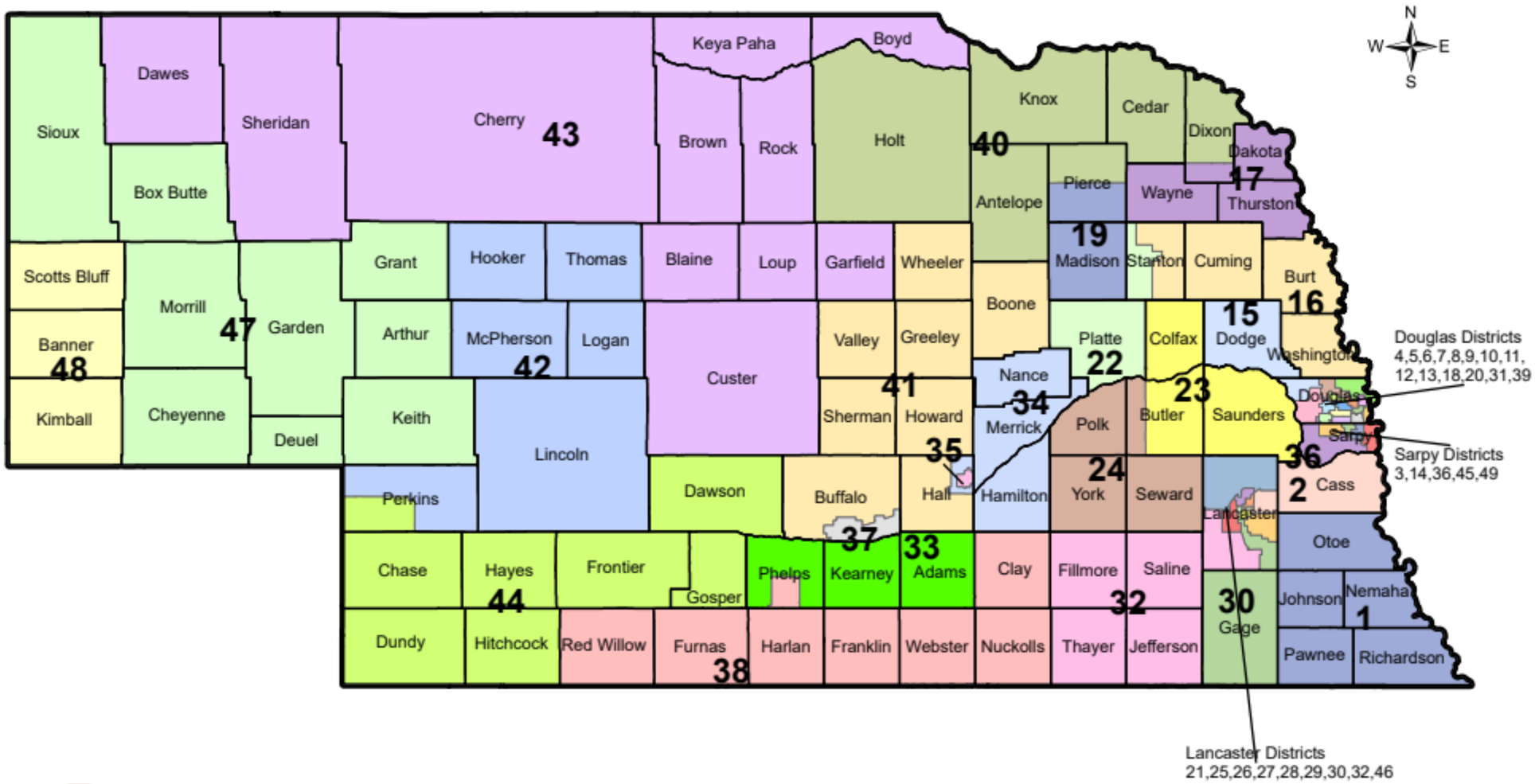
Searches underway:

- Department of Agricultural Economics, head
- Department of Food Science and Technology, head
- Department of Statistics, head
- Nebraska LEAD, director
- Food Processing Center, executive director

IANR All Hands Meeting, Feb. 13, 2024

Legislative Update

Legislative Update

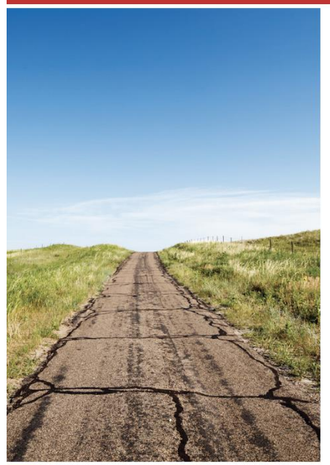


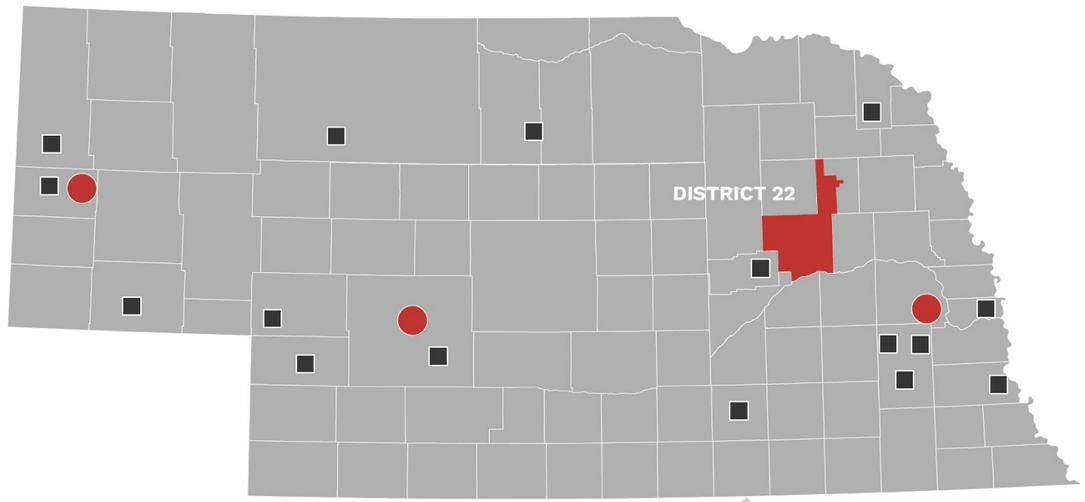
Legislative Bill Process / Calendar

January 3	First Day of Session
January 3-17	Bill Introductions
January 10	First Day of all day debate
February 14	Priority Bill Deadline
February 29	Nebraska Forecasting Advisory Board Meeting
February 29	Completion of public hearings
March 1	Full day floor debate begins
March 7	Deadline for Appropriations Committee mid-biennium budget bill placed on General File
April 18	Tentative Sine Die adjournment
May 14	Primarily Election Day
November 5	General Election Day

Legislative Engagement

UNIVERSITY *of* NEBRASKA-LINCOLN • INSTITUTE *of* AGRICULTURE & NATURAL RESOURCES





● Research, Extension and Education Centers ■ Research Sites

In Legislative District 22

In 2023, the University of Nebraska developed a new easy-to-use digital tool to help ag producers determine the appropriate application of nitrogen for individual fields, as well as to help determine yield goals. The tool, an updated version of the corn N-calculator, is designed to increase efficiency of nitrogen use, as well as ease of record-keeping. The tool is available as both a mobile app and a web tool. Users can input specifics for individual fields including soil characteristics, soil nitrate sampling data, organic matter, irrigation practices, economic information, and more. The tool is available on the CropWatch website.

Economic Forecasting Board

UNICAMERAL UPDATE

The Nebraska Legislature's official news source since 1977

Economic forecasting board raises short-term revenue projections

October 27, 2023

The Nebraska Economic Forecasting Board voted to raise revenue projections for the current fiscal year during an Oct. 27 meeting at the Capitol. The board provides an advisory forecast of general fund receipts that is used by the Legislature to craft the state budget.

The board's projections for fiscal year 2023-24 were raised mainly based on an anticipated $81.72 million increase in corporate income tax receipts. That increase was offset, however, by projected decreases in other categories, including a $64.88 million decrease in individual income tax receipts.

Total projected revenue receipts for FY2023-24 were raised to $6.44 billion, an overall increase of $7.87 million.

The economic forecasting board will next meet on **Feb. 29.**

IANR All Hands Meeting, Feb. 13, 2024

Budget update

The university faces an estimated $58 million shortfall by the end of the 2024-25 fiscal year

Short-term measures:

- **A hiring freeze on all non-faculty positions.**
- **A temporary 4% across-the-board rescission on all departmental operating and supply budgets.**

Long-term five-point vision:

1) **A reinvigorated focus on student recruitment**
2) **A renewed commitment to raising the University of Nebraska's academic profile**
3) **A more proactive process for reviewing the university's range of academic programs**
4) **New strategies for communication and transparency around budget planning**
5) **A focus on operational excellence**

Source: https://nebraska.edu/news-and-events/news/2023/06/carter-unveils-plan-to-address-budget-challenges-accelerate-university-success

UNL Budget Reduction

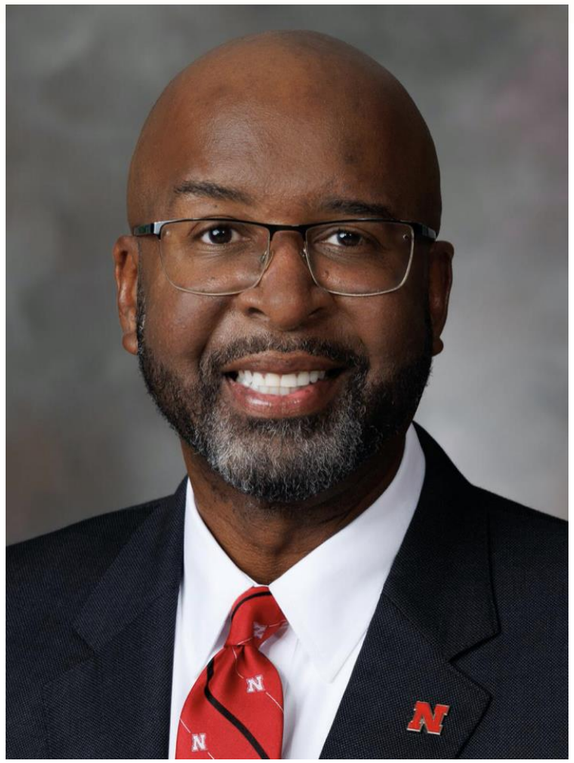
NEBRASKA TODAY

Agriculture & Environment | Arts | Business & Law | On Campus | Science & Technology

January 11, 2024 · 1 min read

Chancellor finalizes $12M budget reduction

by University Communication and Marketing



In a Jan. 11 message to campus, Chancellor Rodney D. Bennett announced that the University of Nebraska–Lincoln has finalized $12 million in budget reductions. The final reduction plan mirrors a proposal announced Nov. 8 and updated Nov. 21.

The reductions, which eliminate a deficit the university has carried forward for a number of years, were developed with feedback provided by UNL's Academic Planning Committee.

"This was an important process for UNL," Bennett said. "While we must continue to work towards balancing our budget and understanding our financial constraints, I look forward to engaging all of you in the coming weeks and months in conversations about our future — who we want to be and what we want to look like."

The chancellor's message and a complete overview of the reductions is available on the university's budget reduction website.

50%

27%

Historically:

50% of NU's state-aided budget is allocated to UNL

27% of UNL's state-aided budget is allocated to IANR ($12M * 0.27 = $3.24M)

Summary of IANR's Permanent State-aided Budget Reductions - 2017-2024*

Amount Reduced	% of IANR's Cumulative Cut	Description of Cut
$ 5,719,311	31.8%	IANR Administrative Reductions (Positions and Operating Budgets)
$ 4,241,920	23.6%	Permanent re-basing of IANR Unit state-aided budgets
$ 4,056,155	22.5%	Elimination of t/tt faculty lines (41)
$ 2,574,670	14.3%	Elimination of staff lines (41)
$ 1,271,400	7.1%	Rural Futures Institute
$ 126,435	0.7%	Academic Degree Program Support (CASNR HRTM Program)
$ 17,989,891	**100.0%**	

*Does not include one-time cash that was returned - ~$7M

Looking forward…

- **NU five-point vision**
- **Structural changes** – Is the system that was put into place in 1969 allowing us maximize our impact on Nebraska and beyond?
- **State support of Nebraska Higher Education**

Interim NU President

"I can't guarantee anything. Disruption is uncomfortable, but if we're comfortable, we're probably not making as much progress as we need to, and every day we're not making progress is another day we risk falling behind our peers and other institutions across the country."

--Interim NU President Chris Kabourek

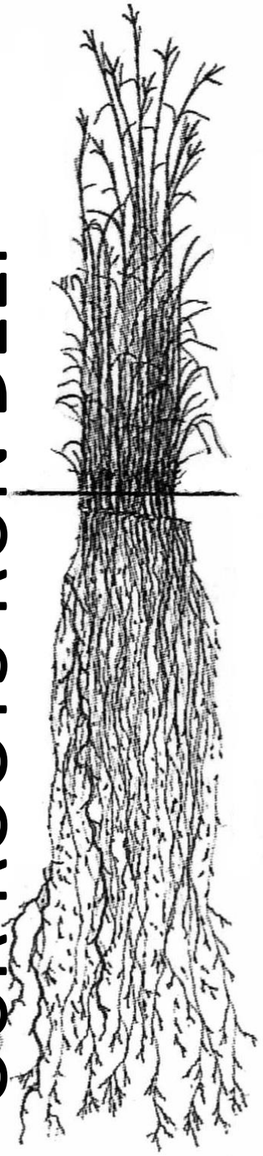
NU Board of Regents

"We can't have everything on Nebraska's Mount Rushmore, but we can be world-class in matters that matter most to our state. Four things come to mind:

Agriculture, its' who we are in Nebraska.
Athletics, it's what we love here in Nebraska.
Medicine, it's what we need in Nebraska
And lastly, it's **the Military**, it's what we care about in Nebraska..."

--NU Regent Rob Schafer

OUR ROOTS RUN DEEP



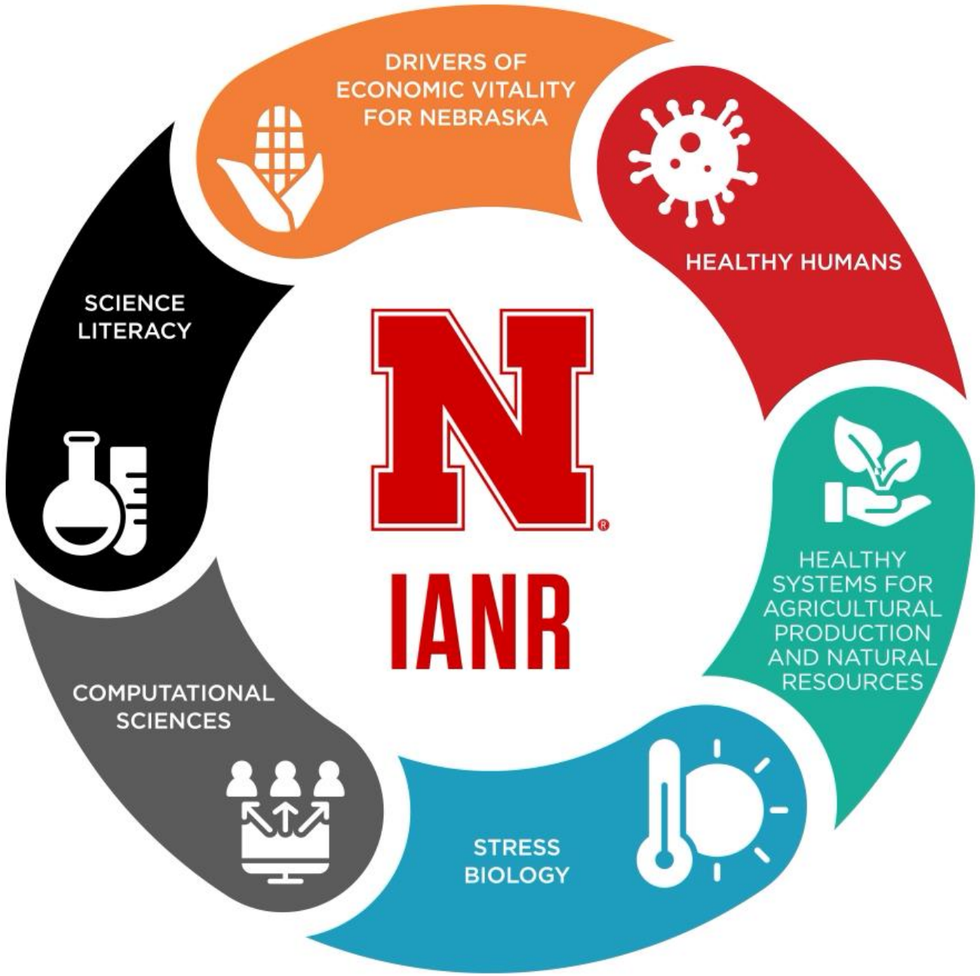
INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES

5-year Strategic Direction 2024-2028

Integrating Learning, Discovery, and Engagement for an Even Better Nebraska


GIVE A
DAMN

IANR 5-year strategic direction



INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES

IANR PILLARS

Grow and strengthen Nebraska agricultural and natural resources ecosystems.

We are committed to working with producers, industry leaders, policy makers, and others in making Nebraska the second largest agricultural economy in the nation. IANR is focused on scientific discovery and education that help the state's crop and livestock producers continually improve efficiency, profitability, performance, resilience, natural resources stewardship, and global competitiveness. This includes biobased innovations that transform the role of Nebraska agriculture in the world economy. IANR will leverage its national and global leadership by using research findings to help shape the conversation around agriculture, food production, natural resources management, and human health.

Improve the health and well-being of all Nebraskans.

IANR initiatives encompass the entire lifespan of Nebraskans—from birth to early child development, from parenting to quality child care, from food security to nutrition for overall human health and well-being. IANR research and Extension programming help improve the availability of high quality water, the nutritional value and human health impacts of food, the productivity and profitability of production agriculture, the vitality of rural communities, and the developmental and educational outcomes for young children and youth. IANR's overall objective is to empower Nebraskans to have confidence in their decisions, make well-informed choices, and help them be active, engaged participants in the success and health of their families, their communities and their state.

Promote progress and prosperity for all Nebraskans.

Nebraskans look to IANR for strong leadership, trusted partnership, and unbridled optimism when it comes to the future for their families and their communities. Because IANR is integrally connected and present across the state, IANR has a pulse on what Nebraskans want and need to thrive and be successful—providing youth STEM programming, providing pathways to critically important careers and expertise in ag and natural resources, and fostering entrepreneurship and leadership in urban and rural communities. IANR helps Nebraskans discover their strengths and opportunities, empowers them to have confidence in their decisions, and provides continual access to the education they need to prepare for and confidently meet the challenges that await and opportunities that lie ahead.

On the horizon…


24 HOURS OF HUSKER GIVING
GLOW
BIG RED
N
FEBRUARY 14-15, 2024
DONATE
Glow Big Red and support Husker students!
February 14 - 15, 2024

Yeutter Institute International Trade Minor Week

Rep. Smith to deliver Feb. 20 lecture on international trade

by Geitner Simmons | IANR Media

Work to start on USDA facility in '24

Lab expected to double agency's science, support staff at UNL

CHRIS DUNKER
Lincoln Journal Star

As Nebraska Innovation Campus has grown out of the former State Fairgrounds, bringing with it state-of-the-art classrooms, startup companies spun out of research labs and new places to hang or grab a bite to eat, one piece has remained missing.

The University of Nebraska-Lincoln's research park, which opened in 2015, has been without a U.S. Department of Agriculture research laboratory that was once envisioned as a cornerstone of the public-private partnership in the heart of the campus.

Locating an Agricultural Research Service facility in Lincoln is no longer an elusive goal, however.

Beginning next year, construction will begin on the National Center for Resilient and Regenerative Precision Agriculture, a $160 million USDA laboratory expected to double the federal agency's science and support staff presence at UNL.

The first phase of construction, slated to start sometime in mid-2024, will build 15,000 square feet of new greenhouses and 10,000 square feet of headhouse space that connects with the existing Greenhouse Innovation Center.

In the future, a 120,000-square-foot lab and office building standing four stories above Salt Creek Roadway will be a hub for research into precision crop production, precision livestock management, water and climate resiliency, as well as innovations into digital agriculture.

"It's exciting to see the investment of the USDA in Nebraska, creating a national platform that is focused, really, on the future of agriculture innovation," said Mike

Please see FACILITY, Page B2

HDR COURTESY PHOTO

The National Center for Resilient and Regenerative Precision Agriculture will research ways to improve water and climate resiliency, precision crop and animal production, and digital agriculture at Nebraska Innovation Campus.

Klosterman Feedlot Innovation Center

- **Slated for completion in spring 2024**
- **Grand opening celebration to be scheduled**

Statewide capital improvements

Panhandle Research, Extension and Education Center

- HVAC, restrooms, small parking repairs will be completed next month. (funded by LB 384 deferred maintenance repairs)
- New roof is 90% complete. The last details will be completed next few months
- Approximately $6.3M amount of dollars worth of work will be completing the next few months at Elliott building

Gudmunsen Sandhills Laboratory

- Emergency generator complete and operational

East Campus capital improvements

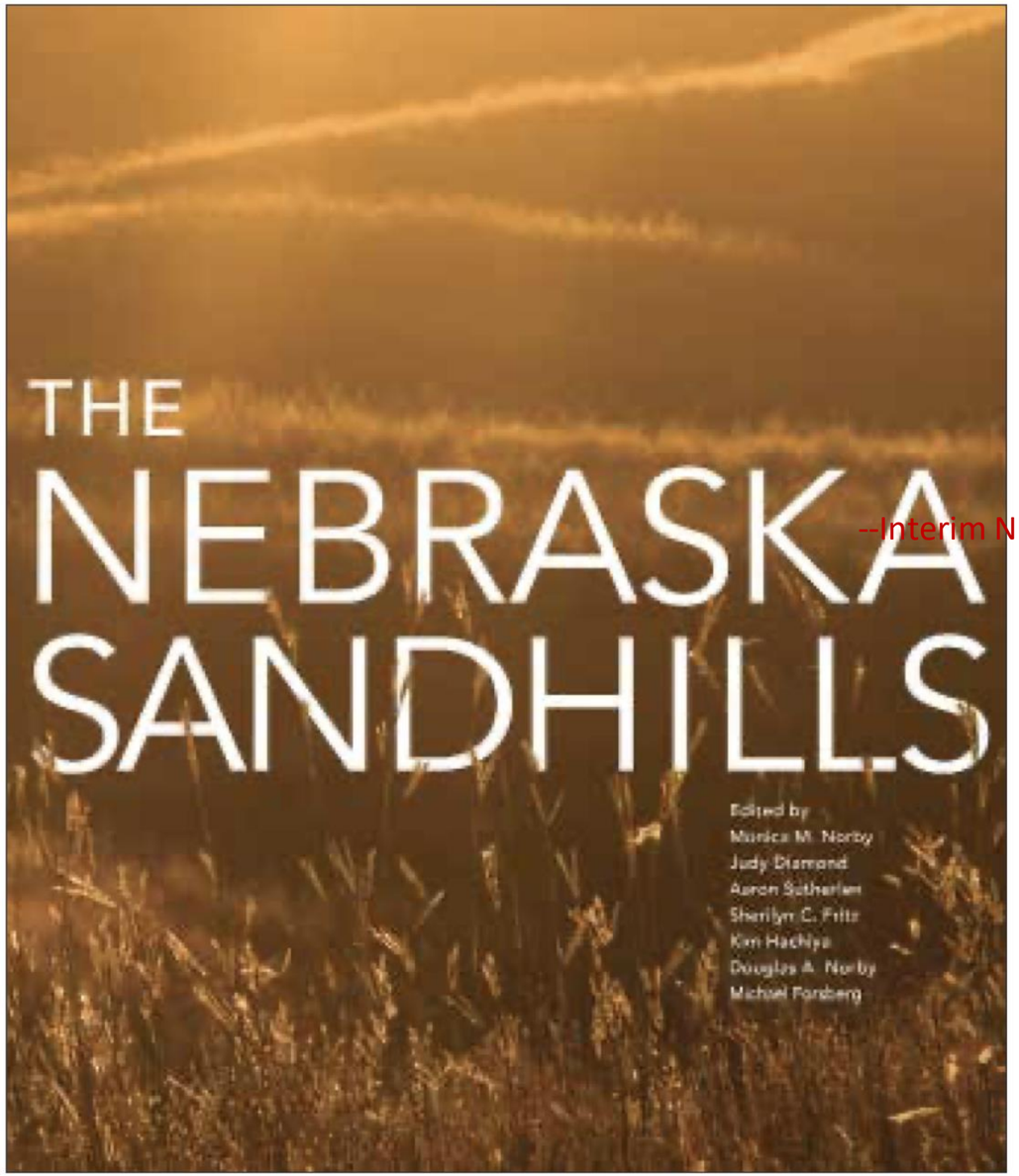
Ag Hall HVAC project

- Will be completed summer 2024
- North half is 90% complete
- South side construction is beginning currently
- Occupants will return to building beginning this summer

Legacy Plaza Meadow renovation

- On track for completion in fall 2024
- Parking lot will not be added at this time
- Will see major changes soon

The Nebraska Sandhills



The Nebraska Sandhills

EDITED BY MONICA M. NORBY, JUDY DIAMOND, AARON SUTHERLEN, SHERILYN C. FRITZ, KIM HACHIYA, DOUGLAS A. NORBY, AND MICHAEL FORSBERG

--Interim NU President Chris Kabourek

APRIL

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