

University of Nebraska
Institute of Agriculture and Natural Resources
Research, Extension
and Education Centers

June 2021



Variety Testing Program

With a new home in western Nebraska, the University of Nebraska variety testing program is looking toward a future of growth, new and enhanced partnerships, and additional opportunities to conduct research relevant to Nebraska crop producers and food processors.

Led by Cody Creech, dryland cropping systems specialist, and Amanda Easterly, research assistant professor, the program is in its second year at its new location, the High Plains Agricultural Laboratory near Sidney.

[The move into the Dryland Cropping Systems Program](#)

Solar Powered Smart Feeder

Researchers at the University of Nebraska-Lincoln's Extension Centers and [Gudmundsen Sandhills Laboratory](#) have kickstarted a project that takes a new approach at real-time precision livestock management in extensive rangeland ecosystems.

Utilizing a solar powered [Smart Feeder](#), researchers have the ability to precisely monitor and control individual livestock feed diets and intake online.

"We create custom diets on an individual animal basis based on the animal's needs, and we can adjust the diet on each cow," said Travis Mulliniks, assistant professor in the animal science department. "That's precision livestock nutritional management."

"We are looking at how we can utilize these technologies from a production standpoint and how they work for producers. We're asking what's the benefit and what's the best for the producer in terms of profitability and sustainability."



Continue reading about [precision livestock management](#).



[Hail Know](#)

While you can't prevent hail, you can prepare for and respond quickly when dealing with hail damage to crops. The [Hail Know Team](#) can help you make informed, timely decisions regarding the hail storm, assessing damage, handling insurance, replanting your crop, managing the recover crop and the question "are cover crops for me?" Read more on each of these [topics](#).



FACULTY PROFILE:

"A Century of Plant Pathology in Nebraska" documents 100 years of the existence of Plant Pathology, its development as well as the historical look back on its growth and accomplishments. Authored by Bob Harveson, Plant Pathology Professor, located at [PREEC](#), the book was published in December 2020. Bob's inspiration for the book can be [read here](#).

DID YOU KNOW?



Eastern Nebraska Research, Extension and Education Center

Consists of 16,620 acres of land

Oversees 3 Lab Facilities

[Barta Brothers Ranch](#)

[Haskell Ag Lab](#)

[South Central Ag Lab](#)

Graduate Students - Biological Engineering, Agronomy & Horticulture, Entomology and Animal Science



West Central Research, Extension and Education Center

Consists of 16,408 acres of land

Oversees 3 Lab Facilities

[Gudmundsen Sandhills Laboratory](#)

[Water Research Lab](#)

[Henry J. Stumpf International Wheat Center](#)

Graduate Students—Biological Engineering, Agronomy & Horticulture, Entomology and Animal Science



Panhandle Research, Extension and Education Center

Consists of 3,624 acres of land.

Oversees 3 Lab Facilities

[High Plains Ag Lab](#)

[Panhandle Research Feedlot](#)

[Sioux County Experimental Range](#)

Graduate Students—Biological Engineering, Agronomy & Horticulture, Entomology and Animal Science

FIELD DAYS AND OPEN HOUSE DATES

[Wheat Variety Trial Field Tours](#) scheduled in June

[Managing Cattle for Profit in 2021](#) scheduled in June - July

2021 High Plains Ag Lab Field Day - June 15, 2021

[Nebraska Beef Quality Assurance](#) - June 16 - 17, 2021

[SCAL Weed Management Field Day](#) - June 23, 2021

[Managing Cattle for Profit in 2021](#) - June 23, 2021

[TAPS Technology](#) - June 24, 2021

[Palmer Amaranth Resistance Field Day](#) - June 30, 2021

[Haskell Ag Lab Family Field Day](#) - June 30, 2021

[Nutrient Stewardship Field Day](#) - July 15, 2021

[SCAL Field Day](#) - July 28, 2021

[Soybean Management Field Days](#) - August 10-13, 2021

[Corn Production Clinic](#) - August 25, 2021

GSL Open House - August 25, 2021

[Soybean Production Clinic](#) - August 26, 2021

Water & Crops Field Day - August 26, 2021

[Husker Harvest Days](#) - September 14-16



Archived Newsletters and Print Versions can be found at

[REEC News and Media](#)

REEC STATEWIDE STRATEGIC PLAN

A Look at Statewide Strategic Directions:

Each month we will describe one of the Statewide Strategic Directions. This month we will look at Water.



1. Water and Nutrient management, impacting both water quality and quantity.



The goals include:

- Support programming to help Nebraskans recognize interconnection between surface and ground water.
- Develop programming to Increase water and nutrient use effectiveness under variable climate.

The intended outcomes include:

- 1) seeing an improvement in water quality in both surface and ground water contaminants
- 2) improving the flow of streams/rivers in an effort to increase in the saturation of the Ogallala aquifer
- 3) having a greater appreciation of the importance of water and nutrient use efficiency

The Water and Integrated Cropping Systems (WICS) Hub formed during the Fall, 2020 brings university water experts together. Organized by Ron Yoder, the lead team includes Crystal Powers DWFI and Nebraska Water Center (NWC) research and extension communications specialist, Chittaranjan Ray, NWC director; Water Program Leader Daran Rudnick, assistant professor, department of biological systems engineering, UNL; Cropping Program Leader Daren Redfearn, associate professor, department of agronomy and horticulture, UNL; and Economics Program Leader John Westra, associate research and extension director, Nebraska Extension.

The University of Nebraska-Lincoln Water for Agriculture project, in collaboration with local agencies and organizations, is now mailing short surveys to residents of the North Platte Valley about their views on local water and agricultural issues.

The Water for Agriculture project, funded by the U.S. Department of Agriculture’s National Institute for Food and Agriculture (USDA-NIFA), is a community-led effort to identify and respond to water and agricultural issues important for area residents.

The Water for Agriculture project in the North Platte Valley Region is part of a national project designed to bring together researchers, technical experts, local partners, Extension professionals and communities to foster community-led solutions to the water and agriculture issues most important to them.

STUDENT PROFILE:



Grace Schuster, a PhD student in the [School of Natural Resources](#), under the guidance of Andrew Little is working in collaboration with the lab of Julie Peterson, Entomology at

WCREEC. Grace will focus on conservation strategies for grassland bird communities and bioenergy crop production in an agricultural landscape. With the information gathered this summer, an impact can be made on grassland bird conservation in agricultural dominated landscapes while also increasing overall cropland profitability.

Grace, a native of Pickrell, Nebraska received her Bachelor’s Degree in Fisheries and Wildlife in May 2021 from UNL and began her graduate studies June, 2021 with Andrew Little in the School of Natural Resources. Grace plans to receive her PhD in Applied Ecology in 2026

Working with Grace is Ryan Lamont, an Animal Ecology Major at Iowa State in Ames. Ryan is originally from Elgin, Illinois and met Andrew Little during a guest zoom lecture this past year. Grace and Ryan will be at WCREEC until the end of July and can be found in the Entomology Lab with Julie Peterson.