

January 2026

EXTENSION
INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES
Scotts Bluff County

Mark Harris, Chair
Scotts Bluff County Board of Commissioners/Supervisors
Administration Building
1825 10th Street
Gering, NE 69341

Dear Commissioner Harris:

Nebraska Extension is pleased to continue a strong tradition of making a difference in the lives of individuals, families, businesses, and communities in Scotts Bluff County! Our programs address issues that Nebraskans have identified as being important to them.

Enclosed you will find local Extension programming and financial summaries for 2025. Specific items include 1) Summary of 2024-25 budget expenditures, 2) Current fiscal year 2025-26 budget, 3) County Impact Report, 4) Program impacts and accomplishments for each educator and assistant/associate, Individual Impact Statements, and 6) Samples of 4-H newsletters, Extension newsletters, major program brochures, and other products that represent 2025 programming.

Thank you for continuing to invest in Nebraska Extension as a local collaborative partner. We strive to be great stewards of resources and work hard every day to demonstrate a strong return on your investment. As you know, Extension educators and assistants live, work, and engage with people in your local and area communities. We look forward to making a difference in the lives of Nebraskans together with you!

Sincerely,



Skip Jenne
President
Scotts Bluff/Morrill County Extension Board



Jackie Guzman
Lead Educator
Nebraska Extension in Scotts Bluff County

Enclosures

Nebraska Extension Scotts Bluff County

Annual Report

January – December
2025



ANNUAL REPORT
of
NEBRASKA EXTENSION IN SCOTTS BLUFF/MORRILL COUNTIES
January – December 2025

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**ANNUAL REPORT
of
NEBRASKA EXTENSION IN SCOTTS BLUFF/MORRILL COUNTIES**

January – December 2025

Scotts Bluff/Morrill County Extension Board Members

President	Thomas (Skip) Jenne
Vice President	Sherry Preston
Secretary	Lex Larsen
Treasurer	Pam Willey
Member	Janice Newhoff
Member	Christy Schuler
4-H Representative	Julie Kappen
4-H Representative	Becky Ulrich
Scotts Bluff County Commissioner	Mike Blue
Morrill County Commissioner	Jeff Metz

Scotts Bluff County Extension Office Staff

Jacqueline Guzman – Extension Educator/Unit Leader – Early Childhood

Nathan Rice – Extension Educator – 4-H Youth Development–*left October 1, 2025*

Gary Stone – Extension Educator – Water & Cropping Systems

Emily Stine – Extension Educator – Horticulture Landscape & Environmental Systems

Audra Brown – 4-H Extension Assistant – 4-H Youth Development

Jana Scwhartz – 4-H Extension Assistant – Beyond School Bells

Stacy Brown – Administrative Assistant

Courtney Larson – Office Assistant/Receptionist–*left December 15, 2025*

Organization and Planning

Extension Board

The Scotts Bluff/Morrill County Extension Board is the local governing body, directing the agricultural, family and consumer science, and 4-H youth programs in the county. It is composed of six members appointed by the Commissioners. Three are appointed from both counties. There is one representative from each of the Scotts Bluff and Morrill County Commissioners.

In addition to the six appointed board members, a selected member of the 4-H Council in both counties will serve on the Extension Board.

The above composition of the board is the result of an interlocal agreement with the respective county commissioners. The interlocal agreement was made effective July 1, 1997.

The primary purpose of the County Extension Board is to determine the annual budget, to disburse funds, and to assist in the development of annual plan of work.

The board usually meets on the third Tuesday of every month to review and approve expenditures, programs, and activities. At each meeting the educators explain their activities, review upcoming programs, and ask for suggestions from the board members.

4-H Council

The Scotts Bluff County 4-H Council assists in the planning and execution of the 4-H program. They are actively involved in the making of 4-H policy and administrative decisions. Funds generated from fund raising activities and donations are used to finance scholarships, school enrichment, camps, and other projects.

The 4-H Council meets every other month. A selected member of the Extension Board will serve with full voting privileges. The council is comprised of volunteers. Officers are elected at the annual achievement program in the fall. Other members are typically the chairpersons of the awards, horse, livestock, sale, dog/companion animal, static/inside the building, dairy goat, fiber animal, and shooting sports committees and one Ag Society representative. Elected officers serve a one-year term. Two elected 4-H youth generally represent the youth at the meetings.

The 2025 4-H Council members are as follows:

President	Becky Ulrich
Vice President	Jenny Bohl
Treasurer	Julie Lane
Secretary	Laurie Zitterkopf
Youth Representative	Hunter Creech
Youth Representative	Lillian Debus

Committee Chairs:

Livestock Committee Chairs	Amie Hessler & Kaden Hubbard
Awards Committee Chair	Lanna Hubbard & Kerry Marker
Dog/Companion Animal Committee Chair	Casey Debus
Static Committee Chair	Laurie Zitterkopf
Shooting Sports Committee Chair	Jenny Bohl
Horse Committee Chair	Craig Schadwinkel
Dairy Goat Chairs	Patty Pittman & Carolyn Thomas
Fiber Animal Committee Chair	Kira Bowhay
Poultry/Rabbit Committee Chair	Becky Ulrich & Jennifer Splichal
Youth Livestock Sale Committee	Dustin & Kate Schmer

Other Planning Groups

A wide variety of organizations and businesses assist Nebraska Extension in Scotts Bluff County in planning and implementing Extension programs. They include:

1. Scotts Bluff County Ag Society
2. Banks and financial institutions
3. Public School Systems
4. Service Clubs
5. Panhandle Research Extension & Education Center
6. University of Nebraska
7. Advisory Committees
8. Commodity Groups

The Vocational Agricultural Departments of the Scottsbluff Public School District, Gering Public School District, Minatare Public School District, Mitchell Public Schools, and Morrill Public School District work closely with the Scotts Bluff County Extension. County fair operations and animal weigh-ins are greatly enhanced by the contributions of Alan Held, Regan Hodsden, Walker Dobry, Nicole Sorensen, Alicia Keller, and Cameron Magee – voc-ag instructors.

Scotts Bluff County		Actual	Actual	Actual	Official's	Co. Board	Adopted
645	Cooperative Extension Service	Expenditures	Expenditures	Expenditures	Request	Proposed	Budget
		2022-2023	2023-2024	2024-2025	2025-2026	Amount	
1-0301	Regular Salary-Administrative	41,131.77	46,425.65	48,668.49	50,884.56	50,884.56	51,839.00
1-0305	Regular Time Salary - Clerical	26,427.70	33,336.69	34,937.62	34,885.36	34,885.36	35,539.00
1-0323	Regular Salary-Ag Agent-Aide	-	-	-	-	-	-
1-0405	Part Time Salary - Clerical	0.00	-	-	-	-	-
1-0802	Insurance Premium - Health	19,950.00	22,800.00	22,800.00	24,000.00	24,000.00	24,000.00
1-0803	Insurance Premium - Group Life	127.05	145.20	145.20	145.00	145.00	145.00
1-0804	Insurance Premium - Dental	240.00	360.00	360.00	360.00	360.00	360.00
1-0807	H.S.A. Contributions	300.00	300.00	450.00	600.00	600.00	600.00
1-0901	Retirement - County Share	4,560.26	5,383.98	5,643.40	5,789.47	5,789.47	5,900.00
1-1000	Social Security	4,995.00	5,895.62	6,125.39	6,245.04	6,245.04	6,245.00
Total		97,731.78	114,647.14	119,130.10	122,909.43	122,909.43	124,628.00
2-0100	Postal Services	1,631.91	1,161.82	409.21	500.00	500.00	500.00
2-0200	Telephone Services	2,820.73	2,567.31	2,488.75	1,722.00	1,722.00	1,722.00
2-0601	Insurance - General Liability	-	-	-	-	-	-
2-1200	Office Equipment Repair	216.94	152.99	-	300.00	300.00	300.00
2-1700	Travel Expenses	9,049.38	12,352.99	10,704.10	11,000.00	11,000.00	11,000.00
2-1708	Travel Expense-Board Members	-	-	-	-	-	-
2-1710	Conventions/Workshops & Training	-	-	-	-	-	-
2-1751	Dues, Sub, Registration, Etc.	260.00	380.00	450.00	450.00	450.00	450.00
2-2000	Printing and Publishing	81.39	115.89	93.38	130.00	130.00	130.00
2-2502	4-H Fees to UNL (Schwartz)	47,220.50	24,095.59	53,555.77	51,100.00	51,100.00	51,100.00
2-2544	Maintenance Agreements	1,177.68	1,177.68	1,177.68	1,178.00	1,178.00	1,178.00
2-9900	Miscellaneous	70.00	16.95	35.00	-	-	-
Total		62,528.53	42,021.22	68,913.89	66,380.00	66,380.00	66,380.00
3-0101	Supplies - Office	5,584.25	8,548.85	2,478.12	4,000.00	4,000.00	4,000.00
3-0116	Duplicating Paper/ Supplies	1,239.31	2,565.62	1,679.56	2,000.00	2,000.00	2,000.00
3-0128	Supplies - Data Processing	-	-	-	-	-	-
Total		6,823.56	11,114.47	4,157.68	6,000.00	6,000.00	6,000.00
5-0500	Office Equipment	838.00	3,089.17	-	2,500.00	2,500.00	2,500.00
Account Total		167,921.87	170,872.00	192,201.67	197,789.43	197,789.43	199,508.00
Revenue:							
341-20	Extension Reimb - clerical	-	-	-	-	-	-
Net Tax requirement		167,921.87	170,872.00	192,201.67	197,789.43	197,789.43	199,508.00

**2025-2026 INVENTORY REPORT
SCOTTS BLUFF COUNTY EXTENSION OFFICE**

Tag # 645	Serial #	Description	Acquisition Date	Original Cost or Estimated Historical Cost at Acquisition
90-92		Steel Cabinets w/doors (3)		N/A
94,95, 97-107		Steel 4-drawer File Cabinets (14)		N/A
108-109		Steel 2-drawer File Cabinets (2)		N/A
123-126		Bookcases (4)		N/A
138-139		Shelving		N/A
155-156		Sewing Machines (Bernina & Singer)		N/A
161		Mr. Coffee Machine	1/92	\$ 14.99
169		2-door Storage Cabinet - tan		N/A
170		1-door Storage Cabinet - tan		N/A
175		Printer Stand	5/93	\$ 94.25
238-239	N/A	2 - Snackmaster Dehydrators**		\$ 60.00
244	N/A	5-shelve bookcase**	8/97	\$ 116.00
254	N/A	Hand Cart** (red)	8/97	\$ 240.78
255	N/A	Quartet Duramax Flip Chart Easel**	9/97	\$ 259.97
270-271	N/A	Metal Locking Storage Cabinets	4/00	\$ 354.00
287-292	N/A	Office Desks (6)	6/00	\$ 3,175.00
296-298	N/A	Computer Desks (4)	6/00	
299-303	N/A	Desk Hutches (5)	6/00	
406	N/A	Desk Hutch	6/00	
313	N/A	Microscope Table	12/00	\$ 252.00
334	CNC4003496	HP Laser Jet 1200 Series Printer	1/03	\$ 399.00
342	3432757	Nikon Coolpix Digital Camera	7/03	\$ 429.00
354-355		Locking Metal Cabinets	2/04	\$ 799.98
357		Executive Chair	7/04	\$ 479.99
384		Locking Metal Cabinets	6/05	\$ 399.99
385		O'Sullivan Desk	6/05	\$ 259.00
386		O'Sullivan Computer Desk	6/05	\$ 349.00
387		Hon Chair	6/05	\$ 459.00
390		Presto Pressure Cooker Testing Unit	4/08	\$ 75.00
415	807944	Quaray Task Chair (Grey)	2/11	\$ 69.00
420	219311-CC	Lockridge Managers Chair (Nathan)	2/12	\$100.00
424	HK28KBZ021	OfficeJet Pro 8100 printer	12/13	\$99.00
431	CN4874FONT	HP Deskjet 2540 printer (Nathan)	10/14	\$80.00
433	HS-1280BT	Hisonic Portable PA System s/wireless mics	6/15	\$ 140.00
		Hoky SE, Inc. PR3000 (4-H room)	3/17	\$74.95
448	05242018KW	Swingline/Ingento cutter	8/18	\$188.00
449		Muscle Storage Rack 77"Wx72"Hx24"D	6/19	\$119.99
450		Muscle Storage Rack 77"Wx72"Hx24"D	6/19	\$119.99
451		Muscle Storage Rack 4 Level Rack	6/19	\$159.00
452		1 Safo Directional Signs @ \$142.00	10/19	\$142.00
455	U64643M9F12515	Brother HL-8360CDW	6/20	\$709.56
456	NXHKBAA002011236E0	Acer Macbook Chrome	6/20	\$279.99
457	NXHKBAA002110F5D	Acer Macbook Chrome	6/20	\$279.99
458	NXHKBAA0029520BE	Acer Macbook Chrome	6/20	\$279.99
459	069N0363MJ2	Tru Red Misco-Cut Shredder (TR-BMC20A)	7/20	\$269.99
460		Casio HR-170RC Calculator	12/20	\$34.99
461	JG31FN3	Dell Precision 3551, Keyboard, Monitor, Sou	2/21	\$1,387.37
462	GOGY583	Dell WD19TB Docking Station (Stacy)	2/21	included
463	7HV7BC3	Dell Precision 3551, Keyboard, Monitor (2),	2/21	\$1,686.59
464	22GY5B3	Dell WD19TB Docking Station (Courtney)	2/21	included
	NEX21-DMPVT8USHI	iPad Pro 2nd Generation (10.5-inch Wi-Fi)	3/22	
467	MZF-20215	Linon Draper Executive Chair	5/22	\$261.21
468-472		5 5-tier Muscle Rack 48x24x72	5/22	\$699.95
473		1 5-tier muscle Rack 36x72x18	5/22	\$84.99
474-476		3 4-tier Muscle Rack 77x24x72	5/22	\$839.97
477		Sauder Palladia L-Shaped Desk	5/22	\$550.59
478		Sauder Lateral File Cabinet	5/22	\$254.28
479		Flexfit Kroy Mesh Task Chair	6/22	\$200.00
481-482		Flash Furniture Accent Chair (2)	6/23	\$442.45

483-484		Rosevera Vaseri Tufted Wingback Chair (2)	6/23	\$415.90
485	G61061FJJC	Apple 10.9 inch ipad wi-fi 10th generation ta	6/23	\$419.00
486	F99P3KYTWM	Apple 10.9 inch ipad wi-fi 10th generation ta	6/23	\$419.00
487		Shark SV1106 Navigator Cordless Vac	9/23	\$130.00
488		Milwaukee 800 lbs convertible hand truck	9/23	\$159.00
489	X003UMCAL3	LEVN Headset (Courtney)	12/23	\$34.59
490		Swingline 390NX Heavy Duty Stapler	3/24	\$41.21
491-492		Tribesigns 55 " desk and 43" file cabinet	4/24	\$269.99
493-494-495		3 Letaya Metal Storage Cabinets	4/24	\$409.94
496-497		2 Lissimo Metal File Cabinets w-2 drawers	4/24	\$459.96
498		Somedream Round table w/4 Chairs	4/24	\$399.99
499		Kroy Ergonomic Swivel Chair	5/24	\$269.99
500-504		5 Desk Phones-Wyoming First Cloud Servic	6/24	\$480.00
505		Floor Cord Cover	10/24	\$36.00
506		Digital Shipping Postal Scale	3/25	\$27.99

Board Approval
2025

Annual Inventory of County Real Property of

Scotts Bluff County Extension
(Name of Department)

of Scotts Bluff County, State of Nebraska.

Filed this 27 day of August, 2025

By Kepha Ballenger County Clerk
Deputy

Verify by all members of the County Board

This _____ day of _____, 2025

Official's Oath

STATE OF NEBRASKA, COUNTY OF SCOTTS BLUFF

I, the undersigned, being duly first sworn on oath, deposes and says that the foregoing is a true and correct inventory of all county real estate as of this _____ day of Wednesday, 2025.

Jackie Chapman
Title: Extension Educator

SUBSCRIBED AND SWORN to me this 27 day of August, 2025



Kepha Ballenger
Title: Deputy Clerk

Under Section 23-348.01, the foregoing inventory must be filed with the County Clerk within two calendar months after the close of the fiscal year.

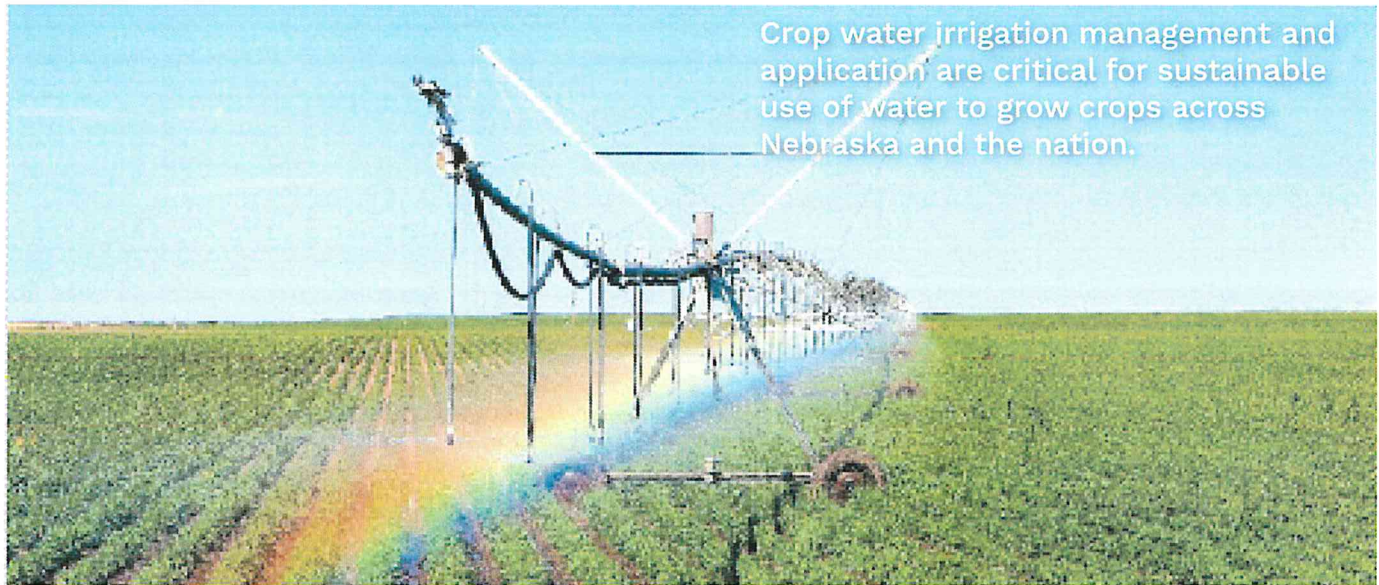
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Scotts Bluff County

2025 Impact At-A-Glance



scottsbluff.unl.edu



One producer's quote: "I first learned that ET gages are available for placement on individual farms from John Thomas and Gary Stone, extension educators. When I expressed interest, Gary installed one promptly and explained how to use and read it. I used it during the growing season to make decisions about when and how much to irrigate dry edible beans. It was very helpful to know the amount of weekly evapotranspiration in my specific location. Without the ET gage, I probably would have underestimated the irrigation needs of my crop at several critical points in the growing season."

**NEBRASKA EXTENSION is
RELENTLESSLY RELEVANT.**



**EXPLORE ALL 2025
IMPACT HIGHLIGHTS**

1,131

adults and youth were reached through direct early childhood programs.

6,000+

growers have utilized the published crop water-use numbers since inception.

4,580

participants, aged 5-18, were reached by 4-H. 37 youth were engaged in all 4 program priorities.

**STRENGTHEN NEBRASKA
AGRICULTURE & FOOD SYSTEMS**

**INSPIRE NEBRASKANS &
THEIR COMMUNITIES**

**ENHANCE THE HEALTH
& WELLBEING OF ALL
NEBRASKANS**



Nebraska Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska– Lincoln cooperating with the Counties and the United States Department of Agriculture. Nebraska Extension educational programs abide with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture. ©2025

Jacqueline Cervantes-Guzman
Early Childhood Extension Educator, Lead Educator

2025 Goals and Accomplishments

Goals

- Nebraska families and children have increased access to high-quality early childhood experiences.
- Caregivers increase their knowledge of effective strategies for enhancing their health and wellness, as well as the health and wellness of children in their care.

Accomplishments

Early Childhood Educator: A total of 1,131 direct and indirect reach serving the southern panhandle early childhood professionals, families, and stake holders, who participated in early childhood trainings and presentations to include these highlighted early childhood programs: Cultivating Healthy Intentional Mindful Educators (CHIME), Communities for Kids, Youth Leadership Gering High School Links Program, Challenging Behaviors, Professional development for After School/Summer Youth Workers, Real Colors, Circle of Security, Look Who's Hatching, and serving as Child Development Associate Professional Development Specialist completing verification visits for those seeking a CDA certification.

As member of the early childhood team, I offer programs that are consistent across the state with other early childhood colleagues. Requests for CHIME, an 8-week 16 certificate hour training have slowly increased. A total of 74 early childhood educators trained and 3 Head Start staff attended the trainers of trainers, offered by the Extension early childhood team, to continue the momentum in their organization. In partnership with Connections for Kids and Rooted in Relationships 17 additional early childhood educators received this training.

In evaluations 95% of participants intend to use the information presented in the CHIME training.
Comments:

"The program provided tools to have more calm, understanding, and peace that can be passed down to the children in our care."

What are the personal savings to you by attending this online class?

"Time away from family, having to pay for childcare, and travel expenses."

"Able to teach the whole day and not pay for a substitute."

In addition to CHIME, I offered Circle of Security to 5 teen parents at the Gering High School Links program. Youth attended this program regularly, with 100% indicating that COS taught them the importance of parenting and bonding with their children.

Real Colors: Is a training that I get requests for every year for leadership development groups like Leadership Scottsbluff. This year I lead youth Real Colors training and other leadership activities for 40 Gering High School Links students. I have also incorporated this into my early childhood programs primarily to help employees view co-workers from a positive perspective while participating in team building activities.

Partnerships: New programming partnerships emerged this past year with Beyond School Bells (BSB), Empowering Youth Summer Camp (EYSC), Gering High School Links Program, and Community for kids (C4K). BSB After School Programs and EYSC requested training for their youth

workers. A total of 31 youth workers were trained with a combined reach of 270 preschool-6th grade children. In partnership with Hayley Jackson, Extension Early Childhood Educator and Jana Schwartz, Extension Assistant: 4-H Youth Development, we offered a 5-hour training for BSB. Topics included Challenging Behaviors, Real Colors Personality Traits, and Team Building. I led Positive Youth Development (ages and stages, program planning, lesson plan writing.) Team Building, and Real Colors trainings for Empowering Youth Summer Camp. As a result of a new partnership with Gering Public Schools trainings LINKS program, I offered Circle of Security for teen parents and Youth Leadership training for their students, for a total reach of 45 students. In partnership with Communities for Kids serving Morrill County, I began with offering the Look Who's Hatching curriculum with incubators and eggs. This program allowed me to build a relationship with these early childhood home providers and centers. We have a proposed plan for professional development in 2026. In addition, these educators will participate in Cultivating Healthy Intentional Mindful Educators (CHIME) and Knowledge Network for Early Childhood Education Workforce (KNEW) in 2026 through Communities for Kids (C4K). KNEW is training course I have completed to lead these efforts.

Lead Educator: Manage the county budget, supervise and evaluate county paid staff, attend Scotts Bluff County Commissioners' monthly meetings, attend monthly elected/appointed county officials' meetings. In recent years Scotts Bluff County's annual budget consistently falls short each year. As a department head my primary role is to make certain that our budget is within the boundaries the county commissioners set for each department. Our budget has been reduced due to the budget shortfall. I attend commissioner meetings regularly to keep up with changes and discussions as they pertain to the budget. Schedule, prepare and guide Extension staff as they prepare presentations for the Extension board and commissioners to reflect our value to the county.

Reaching One Reaching All: Georgia Jones and I created and anchored six Creating Inclusive Communities Through Food, Music, Art, and Conversation for the INCLUDE sessions. The premise of these sessions was to examine our heritage that informs us who we are and how we view the world. Its focus was on values – what divides and what unites by examining traditions through the lens of food, music, and art to reflect how we grow as individuals. This program highlighted the various cultures of Extension personnel highlighting African American Germans from Russia, Slovenian, Czech, and Mexicana with a total of 6 sessions and 10 participants. As our political climate around this topic has become volatile within the UNL, country, and the requests I have made for additional training/programming around the topic of belonging have been denied by Extension and IANR administration, at this time I feel my only option is step away from this work.

Emily Stine

Horticulture, Landscape and Environmental Systems Extension Educator

Goals, Impacts and Accomplishments 2025

This year, five intern Master Gardeners were certified through the Extension Master Gardener Program in the Panhandle region. 20 veteran EMGV's returned for Advanced Training, where topics ranged from rose care to soil health and plant physiology with guest speakers from the area. The Flower Morphology lab - where participants dissected lilies to identify the parts of the flower - was very well received. One Master Gardener stated "I plan on seeing if I can do this with my kids!" Other topics included identifying different fungi in mulch and garden beds, greenhouse structures designed for homeowner use, and pollinator floral preferences and morphology.

While there was no ProHort in-person conference in Scottsbluff due to low registration, the Lunch and Learn sessions held during the lunch hour were productive. I hosted in August, with eight attendees outside of the ProHort team. We discussed damage management following storms and dry spells, specifically focusing on tree damage sustained during many of the tremendous summer storms this year. Other diseases and insect pests were discussed, including grubs in turf and grasshoppers in landscapes. Participants were active and had many questions and insights to share about their experiences.

Growing Together Nebraska had another successful year in Scottsbluff. 2161lbs of produce were donated to our donor sites - Scottsbluff First Baptist church and Gering Methodist church. Nine-hundred sixty five hours were spent managing and harvesting, with Master Gardeners taking on the brunt of the work with 690 of those hours]. Informational recipe cards went out with every delivery so individuals could take advantage of the produce provided. While there was some storm damage in the early summer season, most of the plants recovered. Plants have been made for next year to minimize some of the tomato diseases observed within the plots, as symptoms progressed through the season. While it was not the most productive season on record, given the late planting date, limited volunteer pool and amount of time, the produce was well received, as were the educational materials and information about healthy eating and fresh produce.

Hydroponic Growing for Homeowners was a workshop held in partnership with the North Platte NRD. With Stacy Adams' knowledge and experience, participants were able to learn about how hydroponic systems work and had the opportunity to practice balancing water pH and nutrient availability in their own Deep Water Well systems. They gained an understanding of how hydroponic systems can provide year-round access to fresh produce and have the opportunity for value-added products being made available to the public. Each participant left with their own Deep Water Well system, and the knowledge to nurture 6 lettuce plants to harvest maturity. A few followed up about six weeks later, sharing their successes and following up with more in depth questions about hydroponic systems and how to be successful in a home garden.

I participated in KGOS/KERM's Yard and Garden radio show twice as a guest, first in June and then again in August. Both times we discussed common garden questions that were called in, but notably discussed iris blooming and care in June and the heat spell slowing tomatoes down in August. I look forward to working with them again next growing season.

A vast majority of my time was spent responding to client questions, walk-in visits, and site visits to homeowner landscapes in the community. I answered over 350 phone calls, with questions ranging from fertilizer quantities for new garden beds, insecticide options for garden pest management, and grass seed sourcing for new turf installations. Many of the questions posed focused on drought mitigation and irrigation for trees, highlighting the community awareness of lasting drought damage over time. Pine wilt was also a large issue this year, with a large number of trees succumbing and requiring removal. While the 15 site visits I made ranged in question and severity, many of them took over an hour with multiple questions and discussions happening at each location.

Much of the work I have been doing this last year has revolved around giving homeowners the confidence to make informed, knowledgeable decisions about their landscapes. Repeatedly I had individuals requesting information on pollinator friendly landscape plants, hearty shade trees and evergreens, or ideal management conditions for turf in the panhandle. In each occasion, when presented with information about their options, they were able to make an educated decision and plans to see it through.

Questions focusing on fruit and vegetable production were plentiful this year, especially with unseasonable weather occurrences and less than ideal growing conditions in the region. There were a plethora of questions about tomato blossom drop - a phenomenon that occurs when the plant is exposed to high temperatures (near 100 °F) and the flowers abort. This delayed fruit ripening by almost 3 weeks, and lent itself to many discussions about tomato morphology and pollination with clients.

Looking back over the year, I've identified ways I plan to improve my client call turnaround and increase my communication across my Accountability Region to better reach the entire region. I've noted common questions that come in during certain weather events and throughout the year, and will be better prepared to answer those questions and be proactive in sending out relevant information through articles, social media and radio interviews.

I also intend to become more proactive in the rural food access space, with the launching of the Grow Big Red: Market Growers program. I look forward to better collaborating with local producers and connecting them with markets to increase food access and availability within the region. I made contact with many small growers this year, and look forward to expanding that network going forward.



Gary Stone
Nebraska Extension Helps
Mitigate Invasive Cheatgrass
in Nebraska Rangeland

2025 Impact

Extension

Nebraska Extension—Engagement Zone 01

Water and Cropping Systems, Livestock Systems, & Agricultural Profitability

Issue

Western Nebraska ranchers and land managers face major challenges with invasive grasses invading the rangeland and the Pine Ridge. Estimates of over twenty percent or approximately 2.3 million acres of the Nebraska Panhandle alone are infested with invasive grasses, predominately cheatgrass. Along with impacting the environment and native forb and grass forage production for livestock, cheatgrass poses an extreme fire hazard when mature.

Public Value

Nebraska Extension Educators and specialists provide the training and education to keep our ranchers and land managers apprised of the latest technology available to help manage cheatgrass. With this information, ranchers can make sound economic decisions regarding their livestock production operations and land managers make environmentally sound recommendations in fire prone areas.

Action

As a Nebraska Extension Educator working with other educators, specialists, and industry, I assisted and facilitated workshops, test plot strips, and plot tours. For over four years, we helped establish numerous test plot strips with the herbicide combination of Indaziflam (Rejuvra® and Imazapic (Plateau®) across the Nebraska Panhandle. Data provided from industry illustrated the economic benefit for ranchers and with this herbicide application.

Results/Outputs

These test plot strips provided graphic results, both short and long-term, of the effectiveness of the herbicide application. These test plot strips also provided Nebraska Extension specialists the basis for research programs to determine the benefits of increased native grass production, soil health, and overall long-term benefits to the environment.

Impact

The treatment provides multiple years of cheatgrass control. Nebraska Extension research showed an increase of native perennial grass biomass production was 2.5 times greater than in untreated areas. Ranchers and land managers treated small areas on their own to determine if the economic and environmental benefits were valid. In following years, the same individuals increased the number of treated acres as they found the herbicide treatment did increase native forage production and quality which resulted in increased weaning weights and better cattle conditioning. Land managers were able to obtain grants to help offset the cost of the herbicide treatment and make applications to fire prone areas and those areas that were affected by fire to prevent reinfestation of cheatgrass.

IANR PILLARS

Grow and strengthen Nebraska agricultural and natural resources ecosystems.

EXTENSION'S BIG 3

Strengthen Nebraska Agriculture & Food Systems



Image Description: Four years after herbicide treatment for cheatgrass, treated area on the left, untreated on the right

Gary L Stone

2025 Goals & Accomplishments

Nebraska Extension Educator, Water, and Integrated Cropping Systems

gstone2@unl.edu

308-632-1230

The Nebraska On-Farm Research Network is a cornerstone for answering grower's questions relating to their farming operations and economic viability. Nebraska Extension Educators and Specialists work with growers on field size research projects relevant to growers' concerns. I collaborated with John Thomas on six On-Farm Research Network projects collaborating with growers on edible dry beans, black-eyed peas and winter wheat. The black-eyed pea population study was conducted in Colorado to determine the optimum planting population and yield. This is the first year of the trial and several more years are required for valid project results. The dry edible bean studies conducted in Box Butte County requested by growers involved using a dry bean seed inoculant at planting. This field-scale trial was conducted to determine if seed treated with Exceed inoculant produced more yield than seed that was not treated, and if it was economically viable to do so. The second trial involved using a product called Pod Ceal®, a polymer used to help with harvest management. This product is applied with a desiccant just prior to harvest. This product coats the bean pod, helping seal it against moisture and reduce pod shatter. Outcomes from this research will determine if the product reduces harvest loss from decreased pod shatter and if the use of the product is economically viable. Both of these on-farm research projects were conducted for three years and the results indicated that the Pod Ceal® product did not provide an economic benefit. The Exceed did provide an economic benefit when total soil and applied nitrogen levels were below optimum recommended levels. A first year great northern dry bean variety trial was conducted in Box Butte county. The Banner County trial, also requested by the grower, involved using a "compost tea" applied to his winter wheat crop to determine if there is a yield and economic advantage to using this product. The result of this project was disappointing. The grower did not adequately manage his irrigation water applications to the crop which resulted in very low yields, poor quality of the harvested crop, and invalid test results.

Along with Samantha Daniel, Nebraska Extension Educator, we conducted a second Bean Grower Day at the Stumpf International Wheat Center with forty-nine in attendance. Eighty-three percent of the attendees indicated the meeting was well presented and helped answer their questions. They also responded that they would save \$20 to \$150 per acre from the information they learned at the meeting. A third meeting is planned for the late summer of 2026. The on-farm research dry edible bean projects and grower meeting are funded from a grant by the Nebraska Dry Bean Commission.

Efficient irrigation water use, and application continue to be focal points in managing our water resources in the Nebraska Panhandle. Dr. Xin Qiao and I published weekly crop water use numbers for Panhandle crops to assist growers with their irrigation water application management and help preserve and sustain our water resources. At the request of the Colorado Dry Bean Committee, we also published weekly crop water use numbers for the north-eastern Colorado dry bean growing area. Both of these were grant funded by the Nebraska Dry Bean Commission and the Colorado Dry Bean Committee respectfully. These weekly crop water use numbers were published in CropWatch and area newsprint outlets. There were over 668 views during the growing season for this series on CropWatch alone. Dr. Xin Qiao also developed a direct text message program where sixty-three producers could obtain the weekly crop water use numbers by providing their cell phone numbers. These weekly crop water use numbers also appeared on Dr. Qiao's PHREC Irrigation and Digital Aglab website.

Several growers and Panhandle NRDs prefer more localized crop water use numbers for themselves or their local growers to help manage their irrigation water applications. To assist them, I provided producers and NRDs with ET gauges and a crop water use spreadsheet to help manage their irrigation water applications. The NRDs provided these weekly numbers on their respective websites. Quote: "During the 2025 growing season, I used an ET gauge

and a set of soil moisture sensors provided by UNL extension to manage the irrigation of corn. It was very valuable to know how much moisture was available in the three root zones, especially when determining the last irrigation of the season. The end-of-season chart gave me reassurance that I had used water resources efficiently. Thank you, Gary and John, for your work and service with this program.”

Water is a finite resource that all must utilize efficiently. Education about this resource for everyone is essential and more so with our younger clientele. Audra Brown, Nebraska Extension 4H Assistant, and I taught at the Water Education for Tomorrow (WET) program for Panhandle area school fifth graders. Prior to attending this program, the students have little or no knowledge about where our water resources come from and the understanding of how much water different crops use. We educated the students about the importance of water in crop production, crop water use, the sources of water utilized for crop irrigation, and for the fun part, how to set a syphon tube. We taught 318 students and fourteen teachers during this two-day program.

Safe and efficient applications of pesticides through sprayers and chemigation are always a major focal point for our agricultural producers. I collaborated with John Thomas, Nebraska Extension Educator, to conduct pesticide applicator safety education and chemigation training for 333 private and chemigation applicators. The private pesticide applicator training was for all counties in the Nebraska Panhandle. The commercial / non-commercial training for 180 individuals was for the entire Panhandle, adjoining counties, and states. All training ensures the applicators have the proper safety training required by the Nebraska Department of Agriculture and the Nebraska Department of Environment and Energy for the safe use and application of pesticides in the environment. As a result of our training in the eleven-county training area, eighty-three percent of private attendees were going to implement integrated pest management, use Personal Protective Equipment, calibrate their sprayers, and delay applications until weather and wind speed conditions are conducive for safe pesticide applications.

Cheatgrass / downy brome has been a growing problem with livestock producers in the Nebraska Panhandle and surrounding states for many years resulting in decreased grass production and increased fire hazard in our rangelands. John Thomas and I assisted Envu industry representatives with the establishment of cheatgrass herbicide trial strips with area ranchers using Rejuvra™, a new cheatgrass herbicide. Utilizing these test strips, Nebraska Extension research showed an increase of native perennial grass biomass production was 2.5 times greater than in untreated areas. Ranchers and land managers treated small areas on their own to determine if the economic and environmental benefits were valid. In following years, the same individuals increased the number of treated acres as they found the herbicide treatment did increase native forage production and quality which resulted in increased weaning weights and better cattle conditioning. Land managers were able to obtain grants to help offset the cost of the herbicide treatment and make applications to fire prone areas and those areas that were affected by fire to prevent reinfestation of cheatgrass.

My goals in 2026 are to continue with the Nebraska On-Farm Network research program; produce and publish weekly crop water use numbers, utilize ET gauges and soil water sensors for to assist growers with their irrigation water management; and teaching growers about safe pesticide applications to their crops and the environment.

Other goals include the Yonts Water Conference, Water Education for Tomorrow (WET), participation in the PHREEC PARTT, LEAD group, and Scotts Bluff County Fair.

Gary L Stone

2025 Goals & Accomplishments – Other Contributions

- **Yonts Water Conference**
 - The surface water resources in the North Platte River Valley rely on the snowpack and runoff from the south-central mountains of Wyoming. The surface water deliveries rely on an extensive system of canals and laterals that is over one hundred years old. I collaborated with Dr. Xin Qiao and Jessica Groskopf to organize and conduct the Yonts Water Conference to address these issues. The U.S. Bureau of Reclamation provided the estimated snowpack runoff for the 2025 growing season. This conference is important to growers to know how much surface irrigation water will be available for the growing season to assist with their planting decisions, the progress being made on the replacement of Tunnels 1 and 2 on the Goshen / Gering-Fort Laramie canal, and the latest irrigation research by Dr. Qiao. There were approximately ninety attendees.
- **Water Education, Water Law, and Efficient Irrigation Water Use**
 - These continue to be a focal point for me working with and educating the public. I made presentations to the LEAD 44 group, thirty individuals. The topics I presented were about the North Platte Valley irrigation system, its history and function, the crops grown in the area and the diversity of the geography and climate across the state.
- **PHREEC Safety Day**
 - Conducted and collaborated with John Thomas for a safety training day for forty-two specialists, educators, interns, students, and post-doctoral students on the Worker Protection Standards (WPS), farm equipment safety, ATV safety, and weather-related safety.
- **Other, Participation and Presentations**
 - UNL / IANR Radiation Safety Officer for the PHREEC
 - Nebraska Extension EDEN member
 - Certified Professional Agronomist and Certified Crop Advisor
 - Scotts Bluff County CERT / SAR member
 - PHREEC PARTT FFA field day
 - KNEB Farm and Ranch Show Nebraska Extension booth
 - Nebraska Ag and Science Education Lesson Inventory (NSELI) Summer Institute Science and Ag Workshop
 - Bean Day
 - Scotts Bluff County Fair
 - Sidney Garden Club
 - Direct contacts with clientele, Quote: "Gary, you are a true Extension Educator – a walking encyclopedia, quick responder and knowing where to find just about anything"
 - Articles for CropWatch and other news outlets
- **Memberships**
 - American Society of Agronomy
 - Soil and Water Conservation Society, Nebraska Chapter
 - Western Society of Weed Science
 - North American Invasive Species Management Association
- **Licenses and Certificates**
 - Federal Aviation Administration Remote Pilot Airman Certificate, Part 107 (Drone), current
 - Certified commercial pesticide applicator license in the states of Nebraska and Wyoming
 - Private pesticide and chemigation applicator licenses for the state of Nebraska

Gary L Stone

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308-632-1230 – Work

EDUCATION

- 2013 Nebraska Water Leaders Academy, Nebraska State Irrigation Association
- 1977 M.S. Mechanized Agriculture, University of Nebraska
- 1976 B.S. Agricultural Mechanization, University of Wyoming
- 1973 A.S. Western Nebraska Community College

WORK HISTORY

- 2007 – Current Nebraska Associate Extension Educator, Nebraska Panhandle, University of Nebraska – Lincoln; water and integrated cropping systems, irrigation water management, crop water use, turf and ornamental, on-farm dry bean research, invasive species management, special projects, Nebraska Extension EDEN.
- 2007 – 2006 Certified Manager of Invasive Plants, Goshen County Weed and Pest Control District, Torrington, WY; pesticide use recommendations, management, stewardship, and application of pesticides for the Goshen County Coordinated Resource Management, North Platte, and Laramie Rivers.
- 2006 – 1993 Sales and Territory Manager for United Agri Products Distribution, Inc. (former ConAgra subsidiary), Scottsbluff, NE; warehouse manager and sales, product use recommendations and stewardship for agricultural, invasive, vector, turf, and bare ground sectors in Nebraska and Wyoming.
- 1993 – 1979 Agricultural Field Representative for Jirdon Agri Chemicals, Inc. (now WESTCO), Morrill, NE; pesticide and fertilizer recommendations for area growers. Purchasing and inventory manager for company pesticides.
- 1979 – 1972 Research Assistant / Work Study Student, University of Nebraska Panhandle Research and Extension Center, Scottsbluff, NE; assisted in research on irrigation, soil water infiltration, experimental design and layout, data collection and analysis.

PROFESSIONAL

- 1998 – Current Certified Professional Agronomist
- 1995 – Current Certified Crop Advisor

Certification done by ARCPACS, a Federation of Certifying Boards in Agriculture, Biology, Earth and Environmental Sciences, American Society of Agronomy.

MEMBERSHIPS

American Society of Agronomy
Soil and Water Conservation Society, Nebraska Chapter
Western Society of Weed Science
North American Invasive Species Management Association

LICENSES AND CERTIFICATES

Federal Aviation Administration Remote Pilot Airman Certificate, Part 107 (Drone), current.

Certified commercial pesticide applicator license in the state of Nebraska for agricultural plant, ornamental and turf, aquatic, right-of-way, non-soil fumigation, aerial, and demonstration and research categories. Certified commercial pesticide applicator license in the state of Wyoming for agricultural plant, ornamental and turf, aquatic, right-of-way, vector, and demonstration and research categories, current.

Private pesticide and chemigation applicator licenses for the state of Nebraska.

PROFESSIONAL DEVELOPMENT

Attend meetings and conferences as needed to obtain 45 hours continuing education units (CEUs) over a two-year period to maintain my Certified Professional Agronomist and Certified Crop Advisor status in soil and water management, nutrient management, integrated pest management, crop management and professional development. Attend meetings and conferences to maintain my commercial pesticide applicators license by obtaining the required CEUs.

AWARDS / HONORS

- | | |
|------|--|
| 2024 | Nebraska Chapter Soil and Conservation Society Commendation Award, for leadership promoting and educating producers about water law, irrigation water management, crop water use, and irrigation applications. |
| 2019 | Nebraska Extension Excellence in Extension Team Award, Goshen / Gering – Fort Laramie Irrigation Districts Tunnel Collapse and Canal Breach. |
| 2016 | Nebraska Extension Chester I Walters Extra Mile Award. |
| 2015 | Wyoming Stockgrowers Association Environmental Stewardship Special Award, Upper North Platte River Weed Management Area group for invasive species management. |
| 2014 | USDA National Institute of Food and Agriculture Innovative Programs and Partnership Extension Award, UNL Nebraska Agriculture Water Management Network ET Gage Project. |
| 2011 | Nebraska Extension Excellence in Team Programming Award, Nebraska Agricultural Water Management Network (NAWMN). |
| 2002 | Harold P Alley Award from the Wyoming Weed and Pest Council to recognize outstanding contributions toward the advancement of weed and pest control programs in Wyoming. |

COMMUNITY SERVICE

Member of the Scotts Bluff County Community Emergency Response Team (CERT / FEMA) and Search and Rescue team. A FEMA program that educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills such as fire safety, light search and rescue, team organization, and disaster medical operations.

Board member of the Wyoming Weed Management Association.

GRANTS

Qiao, X. (Principal Investigator), Stone, G. (Co- Principal Investigator), Grant, this proposal seeks to establish a comprehensive crop water use reporting system for major crops grown in the Nebraska Panhandle, Nebraska Dry Bean Commission. (Awarded), \$6,000.

Qiao, X. (Principal Investigator), Stone, G. (co- Principal Investigator), Urrea, C. (Co- Principal Investigator), Grant, this proposal seeks to establish a comprehensive crop water use reporting system for major crops grown in the north-east Colorado area, Colorado Dry Bean Commission. (Awarded), \$6,000.

Cochran, S. (Principal Investigator), Bearnes, K. (Co- Principal Investigator), Varner, D. (Co- Principal Investigator), Ahrens, A., Alley, H., Barrera Fuentes, S., Boyle, J., Bright, J., Brison, C., Cantu-Hines, M., Collins, R., Eirich, R., Fischer, J., Fulton, J., Hinrichs, K., Hunt, E., Krehbiel, M., McClure, G., Patent-Nygren, M., Prochaska, T.J., Quick T., Reddish, L., Sand, S., Saner, R., Sehi, N., Stone, G., Stoner, N., Stowell, R., Timmerman, A., Westra, J., Woiwode, R., Yoder, A., USDA-NIFA Rapid Response to Extreme Weather Events Across Food and Agricultural Systems. Strengthening extension's capacity to provide education and outreach through collaborative networks in response to extreme weather events. (2024-2025). (Awarded) \$300,000.

Thomas, J. (Principal Investigator, 2020-Current), Stone, G. (Investigator, 2020-Current), Daniel, S. (Investigator-Current) Nebraska On-Farm Research Grant, Nebraska Dry Bean Commission, (Awarded) \$56,618.

Maharjan, B. (Principal Investigator), Stone, G. (Investigator), Walters, C. (Investigator), Groskopf, J. (Investigator), Larson, R. (Investigator), Thapa, V. (Investigator), Thomas, J. (Investigator), Genshert, A. (Investigator), Heldt, N. (Investigator), Johnson, D. (Investigator), Grant, "Promoting Optimized Fertilizer Nitrogen Management for Conservation Stewardship in Sugar Beet Production", USDA Conservation Innovation Grant, (Awarded) \$1,100,000.

Qiao, X. (Principal Investigator), Stone, G. (Investigator), Liang, W. (Investigator), Katimbo, A. (Investigator), Rudnick D. (Investigator), Taghvaeian, S. (Investigator), Mieno, T. (Investigator), Thompson, L. (Investigator), Dorsey, N. (Investigator), Stockton, M. (Investigator), Burr, C. (Investigator), Lena, B. (Investigator), Mohamed, A. (Investigator), Oliveira, L. (Investigator), Kasabian, A. (Investigator), UNL-00056272, Grant, "AI-FlowCAM step 2", Colorado State University -Irrig Innov Consor, Universities, Research, Submitted. (sub: May 20, 2022). (Declined).

Kranz, W. (Principal Investigator), Koelsch, R. (Investigator), Haghverdi, A. (Investigator), Rudnick, D. (Investigator), Krienke, B. (Investigator), Shaver, T. (Investigator), Franz, T. (Investigator), Shapiro, C. (Investigator), Burr, C. (Investigator), Glewen, K. (Investigator), Ingram, T. (Investigator), Nygren, A. (Investigator), Timmerman, A. (Investigator), Stone, G. (Investigator), Pryor, R. (Investigator), VanDeWalle, B. (Investigator), 90651, Grant, "Irrigation Water Management Project", Ne Water Balance Alliance, Associations/Foundations, Public Service. (Declined).

Maharjan, B. (Principal Investigator), Stone, G. (Investigator), Groskopf, J. (Investigator), Das, S. (Investigator), Fulton, B. (Investigator), Thapa, V. (Investigator), 154482, Grant, "Nitrogen in Beet", Dept of Agriculture-NRCS, Federal, Research. (Declined). (sub: September 22, 2022).

PROFESSIONAL PRESENTATIONS

Stone, Gary, Sidney Nebraska Garden Club, Sidney, Nebraska, "Nebraska Invasive Plants," (July 12, 2025).

Stone, Gary, Nebraska Dry Bean Commission International Trade Mission, Nebraska Dry Bean Commission, Scottsbluff, Nebraska, "North Platte River Water History and Water Law," (September 21, 2022).

Stone, Gary, Panhandle Research & Extension Center International Students, University of Nebraska Panhandle Research & Extension Center, Scottsbluff, Nebraska, "North Platte River Water History and Water Law", (August 25, 2022).

Stone, Gary, Nebraska Geological Society Field Trip, Nebraska Geological Society, Scottsbluff, Nebraska, "North Platte River Water History and Water Law", (July 27, 2022).

Qiao, Xin, Stone, Gary, Junior Red Angus Association Tour, Nebraska Extension / Junior Red Angus Association, Scottsbluff, Nebraska, "Irrigation Management Tools & Techniques", (July 15, 2022).

Stone, Gary, Nebraska Water Leaders Academy Panhandle Tour, Nebraska Water Leaders Academy, Scottsbluff, Nebraska, "North Platte River Water History and Water Law", (July 14, 2022).

Stone, Gary, Sidney Nebraska Garden Club, Sidney Nebraska Garden Club, Sidney, Nebraska, "Nebraska Invasive Plants", (May 5, 2022).

Stone, Gary, Nebraska Extension Master Gardeners - North Platte, Nebraska Extension, North Platte, NE, "Pesticide Modes of Action for Extension Master Gardeners", (April 25, 2022).

PUBLICATIONS

CropWatch Articles

Qiao, Xin, Joseph Oboamah, and **Gary Stone**. "No Sensors? No Sweat. New App Feature Supports Timely Irrigation Decisions." CropWatch (August 1, 2025) [No Sensors? No Sweat. New App Feature Supports Timely Irrigation Decisions | CropWatch | Nebraska](#)

Stone, Gary, Xin Qiao. "Weekly Crop Water Use for Nebraska Panhandle Crops and Northeast Colorado Crops." CropWatch article series (May 7, 2025 – Current) [Initial Crop Water Use for Week Ending May 6 | CropWatch | Nebraska](#)

Stone, Gary, Kathleen Anderson, Nevin Lawrence, and Mitchell Stephenson. "Develop a Management Plan for Foxtail Barley in April and May." CropWatch (May 1, 2025) [Develop a Management Plan for Foxtail Barley in April and May | CropWatch | Nebraska](#)

Qiao, Xin, **Gary Stone**, Joseph Oboamah, Wei-Zhen Liang. "Introducing PLAN: Mobile Irrigation Management App." CropWatch (April 23, 2025) [Introducing PLAN: Mobile Irrigation Management App | CropWatch | Nebraska](#)

Stone, Gary, Jessica Groskopf, John Thomas, and Xin Qiao. "Public and Stakeholder Input Requested for Irrigation Tunnels." CropWatch (January 16, 2025) [Public and Stakeholder Input Requested for Irrigation Tunnels | CropWatch | Nebraska](#)

Stone, Gary, Dirk Charlson, and Libby Walsh. "Drones and the Nebraska Pesticide Act." CropWatch (December 5, 2024) [Drones and the Nebraska Pesticide Act | CropWatch | Nebraska](#)

Stone, Gary, Jessica Groskopf, John Thomas, and Xin Qiao. "Ft. Laramie Tunnel Replacement Delayed." CropWatch (December 5, 2024) [Ft. Laramie Tunnel Replacement Delayed | CropWatch | Nebraska](#)

Guzman, Chabella and **Gary Stone.** "Panhandle Research, Extension, and Education Center Cuts Corn Plots for Silage." CropWatch (September 10, 2024) [Panhandle Research, Extension and Education Center Cuts Corn Plots for Silage | CropWatch | Nebraska](#)

Guzman, Chabella and **Gary Stone.** "Sugar Beet Harvest Begins, But Water Still Necessary for Maturing Crops." CropWatch (September 4, 2024) [Sugar Beet Harvest Begins, But Water Still Necessary for Maturing Crops | CropWatch | Nebraska](#)

"Soil and Water Conservation Society Honors 2024 Nebraska Award Winners." CropWatch (August 6, 2024) [Soil and Water Conservation Society Honors 2024 Nebraska Award Winners | CropWatch | Nebraska](#)

Stone, Gary. "Center Pivots: Innovation That Grew Crops and Acres in Nebraska." CropWatch (August 1, 2024) [Center Pivots: Innovation That Grew Crops and Acres in Nebraska | CropWatch | Nebraska](#)

Stone, Gary. "Siphon Tubes: Setting Water to Grow Crops in Western Nebraska." CropWatch (July 23, 2024) [Siphon Tubes: Setting Water to Grow Crops in Western Nebraska | CropWatch | Nebraska](#)

Stone, Gary, TJ Prochaska, Bruno Lena, and Ron Seymour. "Extension Crop and Pest Reports (June 24-28)." CropWatch (June 28, 2024) [Extension Crop and Pest Reports \(June 24-28\) | CropWatch | Nebraska](#)

Stone, Gary, and Mitchell Stephenson. "Common Mullein, an Invasive Weed on Nebraska's Horizon." CropWatch, Revised from the June 4, 2018 publication (September 20, 2024) [Common Mullein, an Invasive Weed on Nebraska's Horizon | CropWatch | Nebraska](#)

Julie Peterson, Jeff Bradshaw, Pin-Chu Lai, and **Gary Stone.** "Army Cutworm Scouting Urged in Western Nebraska Wheat and Alfalfa." CropWatch (March 6, 2024) [Army Cutworm Scouting Urged in Western Nebraska Wheat and Alfalfa | CropWatch | Nebraska](#)

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Stone, Gary, TJ Prochaska, Bruno Lena, Ron Seymour, and Kayla Safarik. "Extension Crop and Pest Reports (May 27-31)." CropWatch (May 30, 2024) [Extension Crop and Pest Reports \(May 27-31\) | CropWatch | Nebraska](#)

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Stone, Gary. "Community Emergency Response Teams (CERT)." Nebraska Extension Keeping Up (July 7, 2023) [Community Emergency Response Teams \(CERT\) | Announce | University of Nebraska-Lincoln](#)

Stone, Gary. "Major Nebraska Rivers and Their Drainages: Part 6 / The Niobrara River, White River and Hat Creek." (June 28, 2023) [Major Nebraska Rivers and Their Drainages: Part 6 | CropWatch | Nebraska](#)

Stone, Gary. "Major Nebraska Rivers and Their Drainages: Part 5 / The Platte Rivers." CropWatch (June 13, 2023) [Major Nebraska Rivers and Their Drainages: Part 5 | CropWatch | Nebraska](#)

Stone, Gary. "Major Nebraska Rivers and Their Drainages: Part 4 / The Republican River." CropWatch (June 1, 2023) [Major Nebraska Rivers and Their Drainages: Part 4 | CropWatch | Nebraska](#)

Stone, Gary. "Major Nebraska Rivers and Their Drainages: Part 3 / The Loup River." CropWatch (May 18 2023) [Major Nebraska Rivers and Their Drainages: Part 3 | CropWatch | Nebraska](#)

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Stone, Gary. "Major Nebraska Rivers and Their Drainages: Part 1 / The Big Blue, Little Blue and Nemaha Rivers." CropWatch (April 19, 2023) [Major Nebraska Rivers and Their Drainages: Part 1 | CropWatch | Nebraska](#)

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Stone, Gary. "Dry Bean Harvest in the Nebraska Panhandle." CropWatch (October 20, 2022) [Dry Bean Harvest in the Nebraska Panhandle | CropWatch | Nebraska](#)

Stone, Gary. "The North Platte River – Multi-use Water, Part 6 / Other Dams, Reservoirs and Powerplants – Nebraska and Wyoming." CropWatch (September 1, 2022) [The North Platte River – Multi-use Water, Part 6 | CropWatch | Nebraska](#)

Stone, Gary. "The North Platte River – Multi-use Water, Part 5 / The Pick-Sloan Missouri River Basin Project - Glendo." CropWatch (August 25, 2022) [The North Platte River – Multi-use Water, Part 5 | CropWatch | Nebraska](#)

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Stone, Gary. "The North Platte River – Multi-use Water, Part 2 / The North Platte Project – Pathfinder, Guernsey and Whalen." CropWatch (July 7, 2022) [The North Platte River – Multi-use Water, Part 2 | CropWatch | Nebraska](#)

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Stone, Gary, Jessica Groskopf, John Thomas, Xin Qiao, Soni Cochran, and Brittany Fulton. “Pathfinder Canal Break Update.” CropWatch (July 14, 2022) [Pathfinder Canal Break Update | CropWatch | Nebraska](#)

Stone, Gary, Jessica Groskopf, John Thomas, Xin Qiao, Soni Cochran, and Brittany Fulton. “Pathfinder Canal Break on July 1, 2022.” CropWatch (July 5, 2022) [Pathfinder Canal Break on July 1, 2022 | CropWatch | Nebraska](#)

Stone, Gary. “The North Platte River – Multi-use Water, Part 1 / The North Platte River Basin Projects – Background.” CropWatch (June 30, 2022) [The North Platte River — Multi-use Water, Part 1 | CropWatch | Nebraska](#)

Moore, Katy. “Digging into Extension: Stone on the Water.” CropWatch Feature Series, **Gary Stone** (March 24, 2022) [Digging into Extension: Stone on the Water | CropWatch | Nebraska](#)

Stone, Gary, Jessica Groskopf, John Thomas, Xin Qiao, and David Ostdiek. “Update on the 2019 Tunnel Collapse and Canal Washout and 2021 Irrigation Season.” CropWatch (October 19, 2021) [Update on the 2019 Tunnel Collapse and Canal Washout and 2021 Irrigation Season | CropWatch | Nebraska](#)

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Audra Brown Annual Summary Statement 2025

2025 was my first full calendar year in Nebraska Extension. Throughout this year I have had tremendous growth in my knowledge and extension capabilities. Within the Panhandle, I have had a direct education reach of 3,719 participants, through 111 sessions and 484 hours. This is from afterschool activities, big day programs, summer camps and other day activities. Scotts Bluff County had an increase of unique youth that were reached throughout the year.

Scotts Bluff County

Unique Youth: 4580 (Up 950 from 2024)

Dup. Included: 4953

Traditional 4-H: As the 4-H assistant I am mainly responsible for everything traditional 4-H. From working with club leaders to relaying to families all the information necessary to ensure they are aware of deadlines and when events are held, as well as answering any questions they may have. This year we had 621 youth club members (up from 556 in 2023) throughout the county. We also had 134 volunteers during the 2024-2025 4-H year. Volunteer types range from 4-H club leaders, workshop teachers and more.

With my first fair under my belt, this year felt a lot smoother as I didn't have to learn the ropes of a new county. Our support staff, Stacy, helped me with the check list and answered my questions as I went but this year, I was able to do a lot of prep work on my own. I was solely the contact person for judges and made sure we had all the correct information, working closely with the fairgrounds staff. Stacy helped me with printing items for family packets and double checking everything that we needed was in each species bin. With a county fair as large as ours, organization is key to making sure fair week is set up for success.

During the fair, we reached a total of 257 youth. I had a new goal this year of learning some more of the behind-the-scenes work – Data Contest, breaking weight classes, showmanship classes etc. During the livestock shows, I ensured that the superintendents always had what they needed, troubleshooted any issues – I got really good with fixing the mic, ran placings to staff, and assisted the judges with whatever they needed.

“Can you and your team run all the counties I ultrasound at? I have never had it go this smoothly before.” – Allen Hines - Swine Ultrasounder

This was my second time running a county fair behind the scenes instead of being in the show ring. Next to teaching youth about agriculture, I love getting to put on a county fair. Past experiences and courses that I took in college help keep me prepared.

With the start of the new 4-H year, I have been sending out all the important paperwork for families, deadlines, and helping volunteers get enrolled and screened for the new year. Along

with that, in November I hand-wrote 85 thank you cards to send to our volunteers in appreciation of their dedication to our 4-H program.

Big Day Events: From Ag Literacy to STEM, I got my first experience of a full year of what programs we do in the Panhandle.

Animals Inside and Out is a popular program. At the Alliance field day, I taught the by-product bingo to 100 youth. Students got to play bingo while learning different by-products that are used in their everyday lives. This year was structured differently. We usually host Animals Inside and Out in the fall but for the 2025-2026 school year, we moved the other locations to spring of 2026 due to bussing issues at schools.

Scotts Bluff County hosted the two STEM Days for the Panhandle, one in January and other in November. In January I taught 86 students about laparoscopic surgery. We discussed the experimental design process in biomedical engineering. They had to work in teams to solve two different challenges, only being able to see with a camera and having to create the tools for the challenges. In November, I taught 91 students Egg-streme engineering. This is one of the new foundational programs for STEM and the Panhandle 4-H Staff decided to incorporate it into our STEM Day. Students have pre/post work lessons that they complete. During our session, they work in teams to build an egg helmet within the parameters set, to try and keep their egg from breaking.

Embryology: This spring I taught embryology to 160 students in grades K-3rd. This was my first time teaching embryology, but I quickly loved teaching it. To fully prep myself, I did a test hatch with eggs from one of our 4-H families who donates eggs. She wanted to see her fertile ratio, and it was good for me to go through the entire process before teaching the students. I felt more comfortable and prepared going into the first classroom. I teach two lessons in each classroom, the lifecycle and how to care for their eggs on the first day, and then I come back nine to ten days later to candle and see which eggs are fertile or not. Most classrooms' favorite part, no matter their age, they love being able to see the embryo inside of the egg when we candle.

"Thank you for teaching us about the lifecycle of chickens. We loved looking at the embryos inside the eggs with the flashlight!" – Northfield School

Robotics: This year I was a coach for the First LEGO League Submerged season. I had a rookie team of nine kids. This was a new learning experience – I have never coached a team solely by myself and I had never been exposed to robotics prior to coming to extension. It was a season of growing and learning new things with the kids. As time went on, the kids became a team, and it was so much fun watching them grow in what they were doing by the end of the season. Watching their eyes light up and being excited when their code finally worked after a lot of fine tuning is a big perk! I am excited to continue to work with them for the 2025-2026 robotics season and build those relationships with the youth in the county.

Professional Development: Starting the year only 6 months into a new career, I continued to have monthly zoom meetings with our cohort that allow us to discuss certain topics with state extension as well as being able to ask questions that directly affect us. These set me up for the day-to-day work as I navigated new territory and doubling back on some topics from the previous year. I continue to participate in Extension Professional Development when my schedule allows.

I attend all 4-H Council, Livestock Committee, Horse Committee, and Extension Board meetings throughout the year. I continue to build relationships with our volunteers on those boards.

“Audra has done a great job so far – everything has gone smoothly and has brought her own touch.” – Livestock Superintendent

With the year ending a new one starting, I am in full planning mode for next year and putting my touch on things. A new thing that was brought to the county fair this year was a fair wide theme and livestock costume contest. I grew up with themes at my county fair and wanted to bring it back to Scotts Bluff County. We also added a stalling decoration contest to help spark an interest in the theme. I got a lot of positive feedback with the theme, decorating contest and livestock costume contest and cannot wait for next year’s theme and see what the 4-H members come up with.



Audra Brown

Scotts Bluff Robotics

Extension
Nebraska Extension-Engagement Zone 01
4-H Youth Development
2025 Impact

Issue

In Scotts Bluff County, there is a great interest in First LEGO League Robotics. Our 4-H club continues to grow and grow each year. As schools continue to have STEM activities in school and in after school programs, youth are increasingly interested in participating. With so many interested kids, the one struggle we have is finding volunteers to be coaches. STEM is an area of teaching that I am learning that I enjoy teaching.

Public Value

Scotts Bluff County would not thrive without a connection to STEM. Within the Panhandle, agriculture relies on STEM every day to bring new technologies to improve production. There is multiple STEM based companies that provide services to our area. STEM is an important field for keeping our community advancing. Our community has supported teams competing at the world level.

Action

In the fall of 2024, there were 20 youth on our interest list to be on a robotics team. Even though this was outside of my comfort and confidence zone, I stepped up to be a coach for 10 youth. We learned together how to program code a robot, build, research, and work together a cohesive team to be able to participate at the state level. With this team, 10 more youth were exposed to 4-H when they otherwise wouldn't be. While this was a new experience for me, I knew that the impact for the kids would be great - so I was willing to work hard at learning something new.

Results/Outputs

Ten youth had the opportunity to learn about robotics and grow their interest in STEM. Without this team, they wouldn't have had the opportunity to expand their knowledge about robotics, programming, building, teamwork, research, important life skills, and learning to fail. STEM is not failproof, sometimes a code doesn't work the way they think it should. They learn different ways to solve issues.

Impact

In robotics, one of the biggest indicators of impact is seeing them light up. Whether that be from finally getting a code to work after hours of failing and improving or watching them connect with their teammates as they are working together. This year the team is able to take what they learned from the previous season and make it better. Their collaboration with each other and being more confident in telling me what they would like to work on at practice means there is an impact. I believe that no matter what happens during competitions, these youth will continue to learn and grow – creating an impact on others later. I know that I didn't see the true impact 4-H programs like this had on me until I was in college and in the work force.

IANR Pillars

Promote progress and prosperity for all Nebraskans.

Extension's Big 3

Inspire Nebraskans & Their Communities

Impact In Nebraska

1

Nebraska Counties Impacted
SCOTTS BLUFF



Image Description: Robotics team on left of board, deliberating on how to fix a coding issue.



Jana Schwartz

Innovation Beyond the Bell: 2025 Impact of Beyond School Bells and 4-H Partnership in Scotts Bluff Co.

Extension
Nebraska Extension-Engagement Zone 01
4-H Youth Development
2025 Impact

Issue

Rural Nebraska youth often have limited access to high-quality STEM learning outside the school day due to geographic isolation, staffing constraints, and limited resources. Afterschool and summer programs provide critical opportunities for hands-on, inquiry-based STEM experiences that build curiosity and skills. Without intentional support, rural communities struggle to offer consistent, impactful STEM programming.

Public Value

The Beyond School Bells and 4-H partnership maximizes public and private investment by aligning schools, Extension, and community resources to deliver high-quality STEM and outdoor education. Shared staffing, facilities, and materials expand reach, and strengthen rural learning systems—supporting workforce development, family stability, and long-term economic vitality in rural Nebraska.

Action

Beyond School Bells and 4-H leveraged their long-standing partnership to address growing demand for afterschool programming in Scotts Bluff County, the most populated county in western Nebraska. As the Beyond School Bells grant-funded 4-H Assistant, I delivered over 150 sessions totaling more than 300 hours of STEM and outdoor education. BSB funding also supported the Think Make Create Lab, expanding staffing capacity and access to hands-on learning. Throughout 2025, these efforts supported afterschool, summer, and field day programs reaching over 3000 youth.

Results/Outputs

Through this work, 4-H was recognized by schools and community partners as a trusted leader in informal STEM education and a key resource for meeting out-of-school learning needs. Youth participating in Beyond School Bells–4-H programs showed increased confidence in STEM by approaching lessons with enthusiasm, persisting through challenges, and viewing failure as part of the learning process.

Impact

The Beyond School Bells–4-H partnership increased access to high-quality STEM and outdoor education for youth in rural western Nebraska, addressing unmet demand in both school and out-of-school settings. Youth developed greater confidence, persistence, and problem-solving skills through hands-on learning experiences. Schools and community programs benefited from a reliable, research-based partner that strengthened informal learning systems, reduced staff burden, and expanded opportunities that support long-term workforce readiness and community vitality.

IANR Pillars

Promote progress and prosperity for all Nebraskans.

Extension's Big 3

Inspire Nebraskans & Their Communities

Impact In Nebraska

2

Nebraska Counties Impacted
SCOTTS BLUFF, MORRILL



Aaron Berger

Calculating Cow Costs to Improve Profitable Decision Making

Extension
Nebraska Extension-Engagement Zone 01
Livestock Systems
2025 Impact

Issue

Nebraska is the home to 1.5 million beef cows which utilize 22 million acres of rangeland and pasture along with millions of acres of crop residue. Cow-calf production is a foundational business to Nebraska's beef cattle economy. When cow-calf producers understand what it costs them to produce a pound of weaned calf and the major factors that influence that, it provides them with information that they can use to help them improve profitable decision making.

Public Value

Sales of cattle are a leading contributor to the in Nebraska agricultural economy with 1 in 4 jobs directly tied to agriculture production. When cow-calf producers are profitable, they personally experience a higher quality of life, benefiting Nebraska's economy through the multiplier effect of having net income and the purchasing of equipment and other production inputs in their communities.

Action

Most cow-calf producers do not know what it actually costs them to produce a pound of weaned calf. To conveniently meet clientele's needs that want to grow in their understanding of the basics of cow-calf cost of production, an interactive curriculum for calculating annual cow costs was developed. This educational experience is delivered over six evenings in 75 minute, interactive online sessions. A resource notebook, consisting of supporting course materials is mailed to participants which includes homework questions that can be used to apply the concepts discussed.

Results/Outputs

The interactive course teaches about the three major categories of cow costs, which are feed, labor and equipment, and cow replacement. Because cost of production is a relationship between costs and units produced, the five ways that unit cost of production can be reduced are discussed. Scenarios common in Nebraska are utilized as examples to teach concepts and help participants apply them.

Impact

Two courses were held in February and March with eighty-two people participating. Nine out of ten survey respondents stated that the webinar and the content delivered met or exceeded their expectations! One participant wrote, "One of the best meetings I have ever been to and Aaron did a great job of explaining new concepts. Helped shift my mindset to think through things differently/more profitably." Half of participants estimated the value of knowledge gained would be worth from \$1-\$40 per cow managed, with the other half stating it would be worth over \$40 per cow managed. When participants were asked what changes they were planning to make as a result of knowledge gained, one stated, "I am going to be looking more closely at all my expenses, looking for places to reduce costs."

IANR Pillars

Grow and strengthen Nebraska agricultural and natural resources ecosystems.
Promote progress and prosperity for all Nebraskans.

Extension's Big 3

Strengthen Nebraska Agriculture & Food Systems

Aaron Berger Extension Educator 2025 Goals, Outcomes & Accomplishments

Goal: Strengthen Nebraska Agriculture and Food Systems

Outcome: Beef producers will learn and share strategies to improve economics, marketing and risk management while enhancing the sustainability of beef enterprises.

Calculating Annual Cow Costs Webinar Series February and March

Profitability of cow-calf producers positively impacts rural communities and supporting industries. To conveniently meet clientele's needs that want to understand the basics of cow-calf cost of production I developed curriculum for and delivered six evening, seventy-five-minute interactive Zoom sessions. Course materials were mailed to participants that included homework questions that participants could use to apply the concepts discussed. One participant stated on an end of meeting survey,

One of the best meetings I have ever been to, and Aaron did a great job of explaining new concepts. Helped shift my mindset to think through things differently/more profitably. Thank you for putting this together...."

- **82 people participated with 9 out of 10 survey respondents stating the course increased their knowledge and understanding of cow-calf production costs**
- Generated \$5,740 in educational fees

Knowing Growing Grazing Grass Course held in October

A course was developed to teach landowners and managers who want to better understand and steward pasture and range resources. I co-developed curriculum with Ryan Benjamin and Bethany Johnston and we delivered this six-session, interactive Zoom webinar series. Resource materials were mailed to participants that included a grass identification book that participants could use to apply the concepts discussed.

Participants ranked their knowledge prior to and after participating in the course on topics presented on a scale of 0-100, with 0 being no knowledge and 100 being extremely knowledgeable. In 2025, pre-to-post knowledge scores surged by +22 to +63 points across eight topics, led by +63 in Rangeland Analysis Platform, +56 in Grazing Response Index, and +48 in Pasture, Rangeland, Forage (PRF) insurance usage.

Every survey participant planned immediate operational changes, including developing written grazing plans, adjusting stocking rates and rotations, reducing overgrazing, and adopting RAP and Web Soil Survey tools. **Producers projected an average economic benefit of \$11.25 per acre through enhanced efficiency, drought resilience, and soil health, equating to a potential \$1.2 million impact across affected lands.**

- 36 producers from 5 states participated
- Over 18,000 cattle and 106,000 acres would be influenced by knowledge gained.
- Generated \$3,600 in educational fees

UNL BeefWatch Podcast

Coordinator and host. Podcasts are primarily of interviews related to BeefWatch articles. ***Podcasts were downloaded 54,000 times, by listeners in 50 states and 80 countries.*** A follow-up survey was provided for listeners in the fall of 2025. A Nebraska listener wrote, "I listen to almost every episode, and appreciate the timely topics throughout the year. It has given me more knowledge of a lot of topics. Economics and nutrition have been important, but I always like the out-of-the-box type episodes."

2025 Drought Preparation for Cattle Producers April 15 and June 5 Meetings

Coordinator and planning team member. Topics covered included: Conditions and Outlook by Dr. Eric Hunt, Rangeland Response to Drought by Dr. Mitch Stephenson, Annual Forage Options by Dr. Jerry Volesky, Summer Dry Lot Feeding Pairs by Dr. Karla Wilke and Programs for Producers by Laura Baker, CED Kimball County FSA. ***Over 200 people attended online, downlinks sites or viewed archived recordings.*** Fortunately, timely rains in May and June drastically reduced the drought severity.

2025 Fundamentals of Feeding the Cow Webinar Series

Grazing and feed costs are the largest economic expense for cattle producers. Two on-line webinar series courses were developed and delivered in January and November to help producers understand these costs. I co-developed curriculum and taught the five-session course with Troy Walz, Erin Laborie, Brock Ortner, and Mary Drewnoski.

- 63 producers from Nebraska and ten other states participated in 2025.
- Generated \$4,095 in educational fees
- ***Awarded as a state winner by the National Association of County Agricultural Agents in the Search for Excellence in Livestock Production Programming***

Women in Ag Conference Growing and Grazing Grass Workshop Presentations

There were 124 participants. The following are some of the comments from post program surveys when asked the question, "What is the most important thing you learned in this workshop?" "I am getting a plan in place to evaluate and improve pastures." "How to know what grasses you have and how to find out what I could have."

Grazing Standing Milo Webinar – Coordinated and hosted. Twenty-four participated online and host sites. I will work with an area producer to host a demonstration in 2026.

Calving Workshop Alliance – Planning team member and host. Nine producers and 12 FFA students participated in the hands-on sessions.

Winter/Summer Stocker/Yearling Meetings and Tours Lexington and North Platte – Planning team member. I co-coordinated and led the producer panel discussions.

Nebraska Youth Range Camp – Taught 24 students the value of grazing management.

BeefWatch – Articles viewed 15,000 times and reprinted in Beef, Drovers, Progressive Cattlemen, Nebraska Farmer and other publications reaching thousands more people.

In addition to these programs, I have had on-site consultations and conversations with ranchers and farmers in the southern Panhandle as well as from across Nebraska and other states on topics related to cattle nutrition, economic, range management, cow-calf production, annual forage production, cow leasing and weed control.

Aaron Berger Extension Educator 2025 Other Contributions

Lead Educator 2025

- Developed position description for, recruited and hired 4-H Aide Office Manager.
- Served on search committee for 4-H Educator position.
- Coordinated meetings and communications with Extension Board members.
- Recruited new Extension Board members for Cheyenne and Banner Counties.
- Worked with other Educators and staff on developing annual reports, fulfilling University policies and plans, county budgets and office operations logistics.
- Met with county commissioners to update them of personnel changes and the hiring process for the 4-H Aide Office Manager as well as 4-H Educator.

High Plains Ag Lab Advisory Member

- Attend annual meetings and provide feedback to researchers and staff on forage and range related research ideas.

Beef Communications Advisory Team Member

- Discuss Extension Livestock Team educational content and event promotion as well as beef.unl.edu website content and logistics.

Supporting Role for 4-H Program in Kimball-Banner Counties

- Assist Livestock Judging Contest
- Help with set-up, running and clean-up at the Kimball-Banner County Fair
- Answer livestock feeding and care questions for 4-H families.

Professional Development

- Livestock Educator Capacity Building – Kearney
- Fall Extension Conference Road Show – Scottsbluff
- Cheatgrass Management Working Group Meeting January 2025
- Attended the 2025 Range Beef Cow Symposium in November at Cheyenne
- Member Nebraska Cattlemen's
- Member Society for Range Management

Invited Presenter

- Beef Efficiency Conference Presenter at the 2025 Kentucky Cattlemen's
- Guest Lecturer
 - Cow-Calf Management Class UNL
 - Beef Scholars Class UNL
 - Land Management Class NCTA
 - Dan Scott Ranch Management Program Montana State University



Jamie Bright
**Enhancing Workplace Support:
A Guide for Businesses on
Employee Child Care Needs**

2025 Impact

Extension

Nebraska Extension-Engagement Zone 01

Rural Prosperity Nebraska

Issue

Businesses across rural Nebraska struggle to recruit and retain employees due to a shortage of affordable, reliable child care. Many employers want to help but do not know what options exist or how to support working parents effectively.

Public Value

Improving access to child care strengthens the workforce, reduces absenteeism, and supports family well-being. When employers understand practical ways to assist employees, communities benefit from higher retention, greater economic stability, and stronger local businesses, and families benefit from stability for their children.

Action

As part of the 6 Regions One Nebraska initiative, I created a clear, employer-focused resource guide explaining child care challenges, benefits of employer involvement, and actionable strategies businesses can implement. I distributed the guide to regional partners, engaged employers through meetings and outreach, and released a press announcement to raise awareness.

Results/Outputs

The guide was shared with employers, chambers, and community leaders across the region. Several businesses requested follow-up conversations, and stakeholders used the resource in planning discussions about employee supports and workforce retention.

Impact

The resource guide increased understanding of child care as a workforce issue and equipped employers with practical tools to support employees. Businesses reported clearer awareness of available options, helping them consider benefits such as flexible scheduling, partnerships with providers, or financial supports. The guide also elevated child care as a shared regional priority, strengthened collaboration among economic development partners, and contributed to ongoing efforts to improve workforce retention and family stability.

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EXTENSION'S BIG 3

Inspire Nebraskans & Their Communities

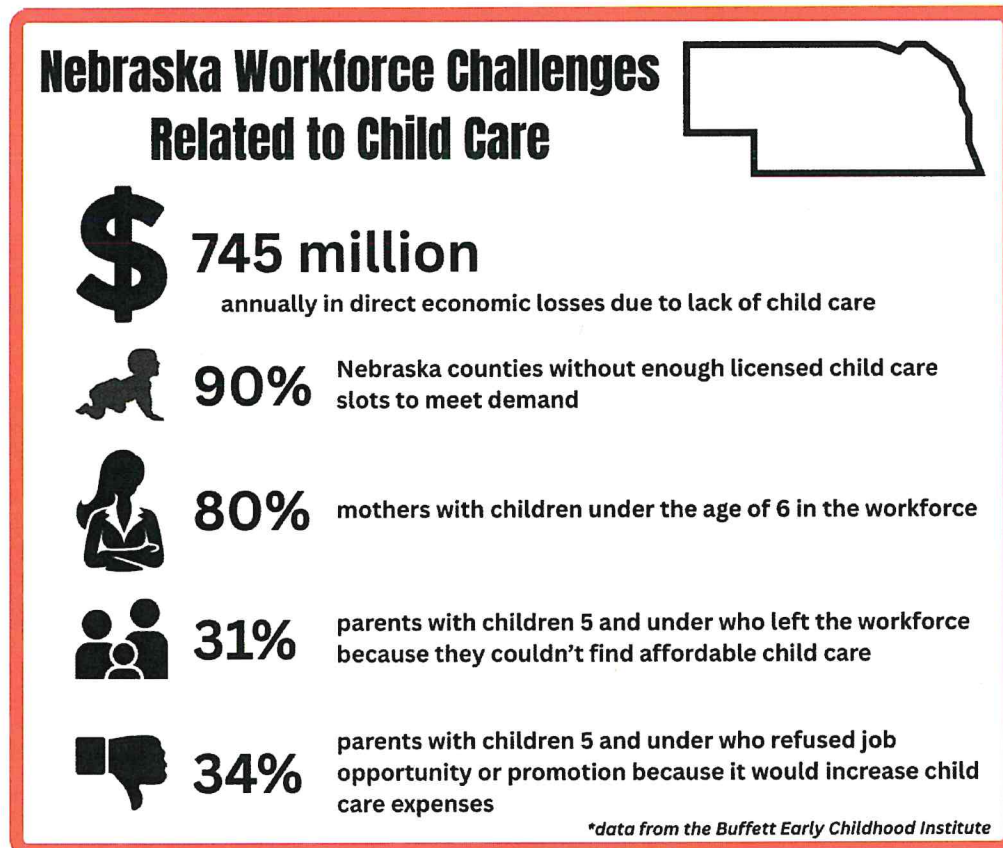


Image Description: Graphic with statistics on Nebraska workforce challenges related to child care. Data from Buffett Early Childhood Institute.

Other Contributions in 2025

Jamie Bright, Rural Prosperity Nebraska (RPN) Extension Educator

Additional Significant RPN Programming

- ❖ Red Carpet Service – 4 trainings on customer service in Sidney (2 adult, 2 high school)
- ❖ Supported implementation of Marketing Hometown America in Cheyenne County as part of a \$29,500 Nebraska Department of Economic Development investment
- ❖ Nebraska EDEN team (Extension Disaster Education Network) – Professional Development Retreat, Heartland EDEN grant awarded for emergency planning for businesses information sharing (presentations to 4 groups)
- ❖ CEC Conference – helped with conference planning and co-presented 2 sessions
- ❖ Contributed to a regional grant effort with 6 Regions One Nebraska supporting new in-home childcare providers, that was awarded at \$65,000.
- ❖ Co-taught Onboarding for Elected Officials workshop to 140 city and village clerks at the Annual Clerks Institute
- ❖ Delivered 3 Artificial Intelligence Basics classes in my region
- ❖ Sent out information to contacts on upcoming events/conferences, funding opportunities for communities and businesses, UNL student project opportunities, research studies and surveys, Rural Poll, land banks, workforce development, people attraction, placemaking, UNL non-credit classes, state resources, and more

Building/maintaining connections with community members and resource partners – Career Connections of Western Nebraska, 6 Regions One Nebraska, Western Nebraska Development Network (WNDN), Panhandle Area Development District (PADD), Western Nebraska Economic Development (WNED), Panhandle Partnership (board member), Cheyenne County Rotary, Chappell Chamber of Commerce, Kimball Active Living, Kimball Wellness Center Committee, Kimball C4K, Cheyenne County Chamber of Commerce, Cheyenne County E3, Panhandle Business and Professional Women, Panhandle Worksite Wellness Council

Local 4H Support – Cheyenne County Fair assistance, Deuel County Fair assistance, Kimball-Banner County Fair assistance, Deuel County 4-H Council while without 4-H Educator

Administrative/service work – Community Leadership Development team lead for RPN, Hiring Committee for 4-H Educator in Cheyenne/Deuel Counties, Nebraska Extension Association of Community Development Professionals – president in 2025, Nebraska LEAD Panel at the Panhandle Research Extension and Education Center, Lead Educator duties in Cheyenne & Deuel

Advancing Rural Prosperity through Regional Collaboration and Peer Learning

Jamie Bright, Rural Prosperity Nebraska (RPN) Extension Educator
Annual Summary of Goals & Accomplishments (2025)

In 2025, my work emphasized regional approaches, cross-community collaboration, and peer-to-peer learning to advance rural community vitality across the Nebraska Panhandle and statewide networks. Rather than focusing on isolated programs, I prioritized building shared frameworks, regional networks, and collaborative initiatives that allow communities to learn from one another, reduce duplication, and become stronger together.

Creative Districts: Regional Peer Networks and Placemaking-Based Collaboration

Goal: Strengthen placemaking in Western Nebraska through Creative District development and structured peer learning.

Key Outcomes

- Provided ongoing technical assistance and coaching support to multiple districts, including Oshkosh, Gering, and Scottsbluff.
- Organized and facilitated the Western Nebraska Creative District Cohort, hosting meetings in multiple communities to encourage peer exchange and collaboration.
- Shared applied Extension practice through a peer-reviewed presentation at the National Association of Community Development Extension Professionals annual conference, contributing to national peer learning.
- Facilitated partnerships between creative districts and the University of Nebraska system.

Regional & Collaborative Impact

- Built a sustained peer network that allows communities to share strategies, challenges, and resources.
- Increased regional coordination around events, planning, and funding readiness.
- Created the connections needed to build the Panhandle Frontier Finds collaboration.

My Role: Convener, technical advisor, and facilitator.

Panhandle Frontier Finds: Regional Collaboration for Economic Development and Tourism

Goal: Strengthen regional economic vitality by facilitating a panhandle-wide collaborative sales and tourism event.

Key Outcomes

- Supported early planning and regional coordination for Panhandle Frontier Finds, a multi-day, multi-community shopping and tourism event scheduled for June 2026.
- Facilitated collaboration among communities, businesses, and partners across all 11 panhandle counties.
- Assisted with early structure, promotion planning, and stakeholder engagement to ensure broad regional participation.

Regional & Collaborative Impact

- Created a shared platform for communities to benefit from regional marketing rather than competing individually.
- Strengthened cross-county relationships and laid groundwork for long-term regional collaboration.

My Role: Convener and facilitator.

Rural Rendezvous: Statewide Peer Learning and Information Exchange

Goal: Support rural leaders through consistent, accessible opportunities for peer learning and shared problem-solving.

Key Outcomes

- Hosted a monthly series of Rural Rendezvous sessions connecting rural leaders with state agencies, nonprofit organizations, and peer communities.
- Curated and distributed timely funding opportunities, tools, and technical assistance through a statewide listserv.

Regional & Collaborative Impact

- Reduced geographic barriers to learning and collaboration.
- Strengthened Extension's role as a connector and knowledge broker across regions.

My Role: Host, facilitator, and content curator.

Alignment and Positioning for 2026

By emphasizing peer learning, shared frameworks, and cross-community networks, these efforts position communities to scale successful strategies across the region in 2026. This work strengthened Extension's role as a trusted partner in helping rural communities not just survive—but thrive, creating communities where people want to live, work, and stay.



Institute of Agriculture and Natural Resources
NEBRASKA EXTENSION



Ashley Fenning Supporting Healthy Aging and Fall Prevention Through Tai Chi

2025 Impact

Extension

Nebraska Extension-Engagement Zone 01

Food, Nutrition & Health

Issue

As adults age, declines in balance, chronic pain, and fear of falling often limit physical activity, independence, and social engagement. Fear of falling is a major contributor to reduced mobility and increased risk of injury. According to the CDC, unintentional falls are the leading cause of injury-related deaths among adults aged 65 and older. In Nebraska, 29.1% of older adults reported experiencing a fall in 2023.

Public Value

Falls among older adults contribute to increased healthcare costs, loss of independence, and reduced quality of life. In rural communities, limited access to safe, low-impact physical activity options can increase fall risk and social isolation. Accessible, evidence-based programs support healthy aging, improve mobility and confidence, and help older adults remain active and independent longer.

Action

Nebraska Extension offered the Tai Chi for Arthritis and Fall Prevention program at three locations in the Panhandle. This evidence-based program improves balance, strength, flexibility, mindfulness, and confidence in movement. Classes included warm-up and cool-down exercises and Tai Chi forms practiced through slow, smooth, continuous motions performed as if against gentle resistance. Instruction emphasized upright posture, weight transfer, and mindfulness to support relaxation. Sessions also provided social interaction and safe movement strategies participants can apply in daily life.

Results/Outputs

Participants reported reduced pain and increased confidence moving safely. When surveyed, 64% reported that their arthritis pain had decreased since starting the class, and 40% indicated that they applied Tai Chi skills learned in the program to improve their overall health. Among the 26 participants surveyed, only three reported one fall. A participant said, "I feel stronger and more in control."

Impact

Participants demonstrated improved physical confidence and adopted ongoing physical activity behaviors that support fall prevention and pain management. Many reported improved posture, movement control, and strength, along with reduced pain and increased confidence moving safely. One participant described calmly standing after a fall, citing increased arm and leg strength. Another reported decreased reliance on pain medication from a past injury. Continued enrollment and use of Tai Chi movements beyond class indicate sustained behavior change. By reducing fear of falling and supporting strength, confidence, and social connection, this program helps older adults maintain independence and quality of life.

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Improve the health and well-being of all Nebraskans.

EXTENSION'S BIG 3

Enhance The Health & Wellbeing Of All Nebraskans

IMPACT IN NEBRASKA

2

SCOTTS BLUFF, MORRILL

NEBRASKA COUNTIES IMPACTED



Image Description: Participants practicing the Basic 6 forms during a session.



Ashley N. Fenning

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Email: astevens4@unl.edu

EDUCATION

Bachelor of Science, Chadron State College, 2017.

Major: General Biology

APPOINTMENTS

- Nebraska Extension Food, Nutrition and Health Instructor, Morrill County, University of Nebraska – Lincoln (July 1, 2024 – Present).
- Nebraska Extension 4-H Assistant, Box Butte County - University of Nebraska – Lincoln (February 28, 2018 – June 30, 2024).

PROFESSIONAL MEMBERSHIPS

- Member, NCEA FCS Section (November 19, 2025-Present)
- Member, NEAFCA (December 2025 – Present)
- Member, NCEA-4-H Section. (November 27, 2018 – November 2024)
- Member, NAE4-HYDP (November 2018 – November 2024)

UNIVERSITY SERVICE

- Committee Member, Box Butte County 4-H Educator Search Committee. (February 1, 2019 - April 30, 2019).

PROFESSIONAL SERVICE

- Officer, Chair-Elect, NCEA Awards and Recognition Committee. (November 2026)
- Committee Member, Women's Health Cohort. (2025 - Present).
- Committee Member, Panhandle Partnership. (2025 - Present).
- Committee Member, Food Access Cohort. (2025 - Present).
- Member, Dementia Coalition. (2025 - Present).
- NCEA Board, Engagement Zone 1 Representative (November 2023-November 2025)
- Officer, Secretary, NCEA Awards and Recognition Committee (November 2022-2023, November 2024-2025)
- Officer, Chair, NCEA Awards and Recognition Committee. (November 2023 - 2025).
- Chair, NCEA 4-H Section Professional Development Committee. (November 2023 – July 2024).



- Committee Member, Nebraska 4-H Month Planning Committee, Statewide. (January 2023 – November 2024).
- Committee Member, Nebraska 4-H Livestock Advisory Committee. (July 2022 – April 2024).
- Chair Elect, NCEA 4-H Section Professional Development Committee. (September 2022 - Present).
- Officer, Secretary, NCEA 4-H Section - Professional Development Committee. (October 2021 - 2022).
- Committee Member, NCEA 4-H Section Professional Development Committee. (November 2019 – November 2024).
- Committee Member, NCEA Awards and Recognition. (November 2019 - Present).
- Program Coordinator, Box Butte County 4-H Council. (February 2018 – July 2024).

AWARDS AND HONORS

- Nebraska Cooperative Extension Association (NCEA) Creative Programming Award – Team, Tai Chi for Health (November 2025).
- Excellence in Ag Literacy Programming Award, NCEA 4-H Section (state), (November 2025)
- Excellence in Camping Award, NCEA 4-H Section (state) & NAE4-HYDP (regional) (November 2025)
- Promotional Team Award, State Communicator Award (October 2024)
- Excellence in Camping Award, NCEA 4-H Section (state) & NAE4-HYDP (regional). (November 2023)
- Heart of 4-H Award, Box Butte County Junior Leaders (local) (November 2022)
- Excellence in Ag Literacy Programming Award, NCEA 4-H Section. (November 2022)
- Excellence in Teamwork Award, NCEA 4-H Section. (November 2022)
- Promotional Team Award, NAE4-HYDP. (October 2021)
- Excellence in Extension Team – Ag Literacy Festivals – Relevance, Nebraska Extension (November 2020)

PROFESSIONAL PRESENTATIONS

- C. Applegarth, A. Fenning, A. Fenton, P. Slaymaker, B. Spieker; "Tai Chi for Health" . Poster Session; National Health Outreach Conference, Omaha, NE (May, 2025)
- C. Applegarth, A. Fenning, A. Fenton, P. Slaymaker, B. Spieker; "Tai Chi for Health" . Break Session; National Health Outreach Conference, Omaha, NE (May, 2025)
- Presenter, AgriSafe Network Webinar – "Drive Present, Arrive Safe." (October 2025)
- Proposal Submission-Tai Chi Cohort, National Health Outreach Conference (October 2024).
- Presenter, Statewide 4-H Share Day, Pumpkin Lifecycle (December 2020).
- Presenter, Panhandle 4-H District Share Day, Learn, Grow, Eat, Go Curriculum (December 2018).



PROFESSIONAL DEVELOPMENT & CERTIFICATIONS

- Master's Courses Taken – MS Leadership Education, *Specializing in Teaching and Extension Education -12 credits* (2025)
- Tai Chi for Energy Certification (2025)
- Certified ServSafe Instructor & Registered ServSafe Examination Proctor (2025)
- Nebraska Health Outreach Conference, Omaha NE (2025)
- Rural Engagement & Wellness Summit, Kearney, NE (2025)
- Improving Health Outcomes through Preventing Childhood Obesity Conference Virtual (2025)
- Adult Learning Theory PD (2024)
- Cottage Food Certification (2024)
- Tai Chi for Health Certification (2024)
- Emotional Intelligence (2023)



Ashley Fenning
Nebraska Extension Instructor – Health & Wellbeing
2025 Goals and Accomplishments
308-262-1022 – astevens4@unl.edu

The year 2025 proved to be anything but easy. Early in the year, I was still navigating my onboarding process when we lost our Food, Nutrition & Health Program Area Lead. This was particularly challenging as I was still learning a new Extension program area and had not yet fully identified my niche within it.

Another new opportunity emerged when I learned that Scotts Bluff County, within my accountability region, has a significant population that utilizes SNAP benefits. I was asked whether I could apportion some of my time to offer SNAP-Ed programs. While I was learning the rules and regulations associated with this new assignment, the President signed the “One Big Beautiful” bill in July, which eliminated funding for SNAP-Ed. Although this change did not directly impact my position, as it did for some colleagues, it created additional uncertainty and disruption.

PSE Effort – Grow Together Nebraska Project

The loss of SNAP-Ed funding has also placed the Grow Together Nebraska (GTN) donation garden project at risk of discontinuation. During the 2025 growing season at the Community Evergreen House Garden, we harvested a total of 2,161.09 pounds of produce, including 505 pounds donated through food rescue efforts. One produce donor shared, *“I am so grateful that the GTN program serves as a food rescue site, and I know the extra produce I’m donating is going to a good cause.”* Through these efforts, we served approximately 275 low-income individuals with fresh produce.

As a collaborative project between Emily Stein, Extension Horticultural Educator, and me, we participated in the Community Garden Walk, strengthening partnerships critical to the garden’s success. This event directly supported two key short-term outcomes: building organizational partnerships between Extension and community stakeholders, and allowing access to fresh produce for low-income individuals, thereby improving food resource management. Despite ongoing funding uncertainty for 2026, proactive improvements to the garden and partnerships formed through the Garden Walk provide optimism for the donation garden’s continued operation.

Tai Chi for Health: Arthritis and Fall Prevention

As both a short- and medium-term goal for 2025, I focused on helping individuals strengthen their intentions and demonstrate behavior change related to increased physical activity and reduced sedentary behavior. One program that gained significant momentum was Tai Chi for Health: Arthritis and Fall Prevention. I taught three 16-week classes across two counties, with average enrollments of 8, 5, and 12 participants, totaling 51.4 hours of instruction. Initially, I planned to offer the program at a single location at the Gering Public Library. However, the class quickly filled and developed a substantial waiting list. In response, I collaborated with the library to form a partnership with a local yoga studio, allowing us to offer a second Tai Chi class. This partnership not only expanded program capacity but also led the yoga studio owner to agree to serve on the Scotts Bluff County Extension Board, strengthening community leadership connections.

Participants reported meaningful improvements in strength, confidence, and functional ability. One participant shared, *“I have fallen before, and when that happens, I usually start worrying right away about how I’ll get back up. In the past, it has taken me a while. However, this time was different—I was able to get up quickly and continue my*



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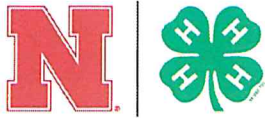
work in the kitchen. I also felt that my arms and legs were stronger, which really helped me.” As the program concluded, participants expressed a strong desire to continue. I offered additional sessions for two of the classes to meet this demand. Beyond the structured classes, three participants independently sought out Tai Chi videos and purchased exercise DVDs to continue practicing at home, demonstrating sustained engagement and self-directed behavior change. Evaluation data further support the program's impact; when surveyed, 64% of participants reported that their arthritis pain had decreased “somewhat” or “quite a bit” since starting the class. Additionally, 40% indicated they had applied Tai Chi skills learned in the program “quite a bit” or “very much” to improve their overall health.

As a member of an eight-person Tai Chi cohort team, we collaboratively promoted Tai Chi for Health across our individual accountability regions and statewide Extension units. Together, we presented Tai Chi for Health at the National Health Outreach Conference through a poster presentation and a short breakout session. The team also supported Brittany in offering the first virtual Tai Chi for Health: Energy series, reaching five participants, and presented Tai Chi for Health: Energy during breakout sessions at the Annual Cooperative Extension Conference. Looking ahead, the team has plans to expand statewide virtual offerings and pursue additional training opportunities to obtain further Tai Chi for Health certifications, strengthening program reach and sustainability.

Husker Performance

The last short-term outcome I focused on was improving participants' knowledge, goals, and intentions related to healthy eating. Through a partnership with ESU 13, I presented the Husker Performance curriculum during a teacher education day. As a result of this presentation, a teacher invited me to deliver the lesson to her senior sports medicine class. This program was a key factor in my decision to change my career course from the 4-H program area to Health and Wellbeing. As a former collegiate athlete who could have benefited from performance nutrition training, I am passionate about offering this to young student-athletes.

As part of the performance nutrition curriculum, students learned about the importance of macro- and micronutrients, hydration, and nutrient timing, including pre-workout fueling and post-exercise recovery. In post-program surveys, three students specifically noted that the course helped them better balance their diets. Pre- and post-survey data further illustrate changes in student behavior related to energy drink consumption. Of the six students who completed both surveys, three reported no change in their consumption patterns. Two students reported a decrease in energy drink use, shifting from “often” or “sometimes” to “rarely,” while one student reported an increase from “sometimes” to “often.” Overall, the results suggest emerging awareness and reflection around energy drink consumption following the lesson.



Ashley Fenning

Nebraska Extension Instructor – Health & Wellbeing

2025 Other Contributions

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Professional Development and Presentations

- Master's Courses Taken – *MS Leadership Education, Specializing in Teaching and Extension Education* -12 credits.
- Tai Chi for Energy Certification.
- Certified ServSafe Instructor & Registered ServSafe Examination Proctor.
- Trainings – Healthy Food Fast program, Food Smart curriculum, SNAP-Ed training, and Civil Rights training.
- National Health Outreach Conference in Omaha, Nebraska, poster presentation on Tai Chi for Health with colleagues – Carly Applegarth, Ann Fenton, Pamela Slaymaker, and Brittany Spieker.
- National Health Outreach Conference in Omaha, Nebraska, break session on Tai Chi for Health with colleagues – Carly Applegarth, Ann Fenton, Pamela Slaymaker, and Brittany Spieker.
- AgriSafe Network Virtual Presentation, “Drive Present, Arrive Safe.”

Professional Association Service

- Presented during the Nebraska Cooperative Extension Association Breakout Sessions, Tai Chi for Energy with Tai Chi Cohort.
- Presented Awards during the Nebraska Cooperative Extension Association Evening Banquet, recognizing members and outside partners.
- Served as Awards and Recognition Committee Chair of the Nebraska Cooperative Extension Association.
- Joined NEAFCS Association & attended FCS Section Meeting.

Other Service

- A part of the Nebraska Cancer Coalition Campaign – Promoted different cancer awareness screenings.
- Attended Nutrition Education Program Meetings as a part of my SNAP-Ed time.
- Robotics Judge in Morrill County.
- Morrill County Government Day.
- Leadership Summit Program in Hemingford.
- Disability Pride Event in Scottsbluff County.
- Assisted with Leadership Opportunities for Growth in Nebraska 4-H (LOG N) Camp in the Panhandle.
- Pressure Canner Testing – Kimball, Deuel, and Morrill Counties.
- Assisted Morrill County, Scottsbluff County, and Garden County Fairs.
- Attended Commissioner meetings and Extension Board meetings.



Jessica Groskopf

Cornhusker Economics: Ag Outlook

Extension

Nebraska Extension-Engagement Zone 01

Agricultural Profitability

2025 Impact

Issue

Nebraska net farm income is projected to rise 42% to \$8.42 billion in 2025, driven largely by higher livestock receipts and more than \$2 billion in government payments, despite declining crop receipts. Strong cattle prices are boosting income, while lower corn and soybean prices, rising expenses, and tight margins mean the outlook looks stronger on paper than many Nebraska producers feel.

Public Value

Farm income affects food prices, rural jobs, and local economies. While higher income suggests stability, reliance on government payments and uneven gains between livestock and crop producers highlight financial stress for many farmers. The outlook impacts consumers, taxpayers, policymakers, and rural communities across Nebraska.

Action

To address financial uncertainty, the University of Nebraska–Lincoln’s Center for Agricultural Profitability hosted “Cornhusker Economics: Ag Outlook” meetings across the state to help producers and agribusiness professionals plan for the year ahead. Experts will provide market and income outlooks, review historical farm financial trends, explain 2025 tax provisions, and discuss farm program options such as ARC and PLC. These sessions support informed decision-making amid ongoing policy and market changes. Additionally, a follow-up webinar, and recording were posted online.

Results/Outputs

Four workshops and one webinar reached 165 producers and agribusiness professionals, providing timely outlook information, policy updates, and practical tools to assess income trends, tax planning strategies, and ARC/PLC decisions. Recordings continue to attract additional views, extending the reach and impact of the information beyond the live events.

Impact

A total of 108 participants completed the post-event evaluation. Of those respondents, 79% reported an improved understanding of the topic, 51% gained new resources to support decision-making, 23% learned how to develop a plan, and 29% increased their confidence in making decisions. In addition, 55% intend to use the tools provided, 48% plan to develop a strategy, and 48% expect to adopt at least one practice or concept learned from the event. Funding for this program was provided by the North Central Farm and Ranch Stress Assistance Center: 2024-2025 2024-70028-43552.

IANR Pillars

Grow and strengthen Nebraska agricultural and natural resources ecosystems.

Extension's Big 3

Strengthen Nebraska Agriculture & Food Systems

- ✓ Indicates that the deliverable was accomplished.
- * Indicates that progress was made but the deliverable was not fully executed.
- Indicates that little or no progress was made on the deliverable.

This year I collaborated on 66 events, for 4,679 participants. I taught at 49 of those events to 2,686 participants. As a Project Investigator (PI) or Co-Project Investigator (Co-PI), I managed/helped manage \$6,113,662 in funding this year (sum of the highlighted “Awarded Grants” on CV). Seven of these grants were awarded in 2025, totaling \$734,289.

- ✓ **(Short) Author or co-author at least one Nebraska Farmer “Tough Decisions” column.**
 - I contributed one article this year, “[Insider viewpoint: Risks for farmers and ranchers using infinite banking](#)”.
- ✓ **(Short) Author or co-author at least four articles/podcasts for cap.unl.edu.**
 - This year, I authored or co-authored 15 articles for the Center for Ag Profitability. These articles had 5,934 views.
 - I recorded four podcasts for the Center of Agricultural Profitability totaling 450 plays.
- ✓ **(Short) Teach at least three CAP webinars.**
 - I taught or co-taught or hosted 6 CAP webinars with 238 live participants and 355 recording views.

Know Your Numbers, Know Your Options

- **(Long) Review and update the “Know Your Numbers, Know Your Options” curriculum.**
 - No progress was made on this goal in 2025.
- ✓ **(Long) Apply to the Nebraska Department of Agriculture to get the “Know Your Numbers, Know Your Options” course approved for the Nebraska Beginning Farmer Tax Credit.**
 - This course was approved Jan. 24, 2025. The course was released to the public, at the end of February.

Nebraska Women in Agriculture

- ✓ **(Medium) Maintain the Nebraska Women in Agriculture program by identifying needs, writing grants, cultivating relationships with key stakeholders and partners, evaluating outcomes, and supervising a student intern and program assistant.**
 - As a Project Investigator (PI) or Co-Project Investigator (Co-PI), I managed/helped manage 10 awarded grants totaling \$323,122 in funding related to Women in Agriculture (Sum of BLUE highlighted Awarded Grants on CV).
 - I supervised a Program Coordinator, Lindsey McKeever.
 - In 2025, WIA held 9 educational events for 972 participants.

- ✓ **(Short) Oversee the 2025 Nebraska Women in Agriculture Conference. Duties include working with speakers, supervising student intern, and program assistant, assisting with event execution, evaluating outcomes and reporting outcomes to grant agencies.**
 - Our flagship event remains the Nebraska Women in Ag Conference which had 366 participants.

Returning to the Farm/Land Link/Transition Workshops

- ✓ **(Medium) Maintain the Nebraska Land Link program by identifying needs, writing grants, cultivating relationships with key stakeholders and partners, evaluating outcomes, and supervising a student intern.**
 - A. Meyer, S. Sand and I executed a \$34,375 grant proposal to the North Central Extension Risk Management Education Center to perpetuate the Land Link Program, along with workshops for Beginning Farmers.
- ✓ **(Short) Sustain the “Land Link” program. Duties include hiring and supervising a student worker, vetting applicants, updating website content, and advising Land Seekers and landowners through one-on-one consultations.**
 - Currently, the program has 243 land seekers and 25 landowners.
 - I conducted 37 land seeker interviews (According to Calendly Event Reports). Sent hundreds of emails supporting the land link program, including scheduling interviews, and encouraging people to complete or update their application.
- **(Medium) Review and update the "Returning to the Farm" curriculum.**
 - No progress was made on this goal in 2025.

Other Contributions

Professional Development

- ✓ Completed the continuing education units (CEUs) necessary to retain my Agricultural Focused Financial Planning® Certification through the University of Illinois Urbana-Champaign **and** my Farm Succession Coordinator Certification through International Farm Transition Network.
- ✓ Attended the Wittman Consulting Train the Trainer Program in Kansas City, MO, using scholarship funding from SARE.
- ✓ Attended multiple CAPacity Building Webinars

Service to Extension

- ✓ Serve on the “Data Team” for the Center for Ag Profitability PEARs Reporting (2024 – Present).
- ✓ Serve on the Nebraska Water Quality and Quantity Task Force, Financing and Incentives Committee (2025 – Present).

Other Service

- ✓ Continue to serve as a Board Member for the Nebraska Agricultural Leadership Council (May 2020 – Present), currently presiding as Chair (2024-2025).
- ✓ Continue to be a member of the Nebraska Cooperative Extension Association (2012-Present).
 - President (2024-2025).
 - Past-President (2025-2026).
 - Ag Section
 - Professional Excellence Committee Chair (2024- Present),
 - Alternate for Zone 1-2 District Representative
- ✓ Continue to serve as a Board Member for the Scotts Bluff County Farm Bureau (2013-present).

Curriculum Vita

Jessica Groskopf, M.S., AAFP®

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Professional Experience

2020 – Present	Extension Educator, University of Nebraska-Lincoln
2018 – Present	Director of Nebraska Women in Agriculture, University of Nebraska – Lincoln
2016 – 2020	Associate Extension Educator, University of Nebraska-Lincoln
2012 – 2016	Assistant Extension Educator, University of Nebraska-Lincoln
2010 – 2011	Graduate Research Assistant, Kansas State University

Education

University of Nebraska – Lincoln	Family Financial Planning	Graduate Certificate	2022
Kansas State University	Agricultural Economics	Master of Science	2011
Colorado State University	Agricultural Business	Bachelor of Science	2010

Training

Wittman Consulting	Consultant Train-the-Trainer	2025
University of Illinois Urbana-Champaign	Agricultural Focused Financial Planning	2024
Nebraska Mediation Association	Basic Mediation Training	2022
International Farm Transition Network	Certified Farm Succession Coordinator	2016
Annie's Project - Education for Farm Women	Facilitator Training	
	<i>Managing for Today and Tomorrow</i>	2016
	<i>Level 1</i>	2013

Synergistic Activities, 2021-2025

- Task Force & Financing and Incentives Committee Member, Governor Pillen's Water Quality and Quantity Task Force (2025 – Present)
- Board Member, Nebraska Agricultural Leadership Council (2020 – Present)
 - Chair (2025 – 2026)
- Member, Nebraska Cooperative Extension Association (2012 – Present)
 - Past President (2025-Present)
 - President (2024 – 2025)
 - President- Elect (2023-2024)
 - Ag Section
 - Past President (2023-2024)
 - President (2022-2023), Public Issues Leadership Development (2023)
 - President-Elect (2021-2022), Extension Leadership Conference (2022)
 - Secretary (2016-2021)
- Committee Member, Gering High School Agricultural Education Program/FFA Advisory (2020 – 2024)
- Committee Member, Nebraska Extension Dean's Advisory Committee (2022 – 2024)

Honors, 2021-2025

2025	National Extension Association of Family and Consumer Sciences, 2025 Program Excellence Through Research Award, National Finalist (L. Reddish, et al)
2025	University of Nebraska Lincoln, Institute of Agriculture and Natural Resources Omtvedt Innovation Award for a Team (Center for Agricultural Profitability)
2025	National Association of County Agricultural Agents, Search for Excellence Beginning, or Small Farmers/Ranchers, National Finalist (A. Meyer, J. Groskopf , and S. Sand)
2024	Nebraska Cooperative Extension Association, Creative Programming by a Team, (J. Groskopf , G. McClure, S. Sand, and B. Johnston)
2023	National Association of County Agricultural Agents, Farm and Ranch Management Search for Excellence, National Winner (J. Groskopf , and G. McClure).
2023	North Central Extension Risk Management Education Center, Outstanding 2020 Project (G. McClure, J. Groskopf , and C. Walters).
2022	Oregon Trail Community Foundation, Spirit of Agriculture Award
2021	National Association of County Agricultural Agents, Achievement Award – Nebraska

Peer-Reviewed Journal Articles

1. Kotsakou, S., et al. "A Unique Marketing Educational Tool: Marketing in a New Era Simulation Game," *Journal of Extension* 56, no. 6 (October 2016).
https://joe.org/joe/2018october/pdf/JOE_v56_6tt4.pdf
2. Pavlista, A., and **J. Groskopf**. "Growing Potato Profitably for Organic Dry Matter Production in Western Nebraska," *American Journal of Potato Research* 93 (June 2016):1-9.
3. **Johnson, J.**, and A. Barkley. "Trade Agreement Impact on Trade Flows, Trade Creation, and Trade Diversion: The Determinants of International Wheat Trade, 1999-2008," *Journal of International Agricultural Trade and Development* 8, no. 1. <http://purl.umn.edu/156553>

Conference Presentations, 2021-2025

1. **J. Groskopf**. "Know Your Numbers: Online Flipped Classroom Financial Management Training." Search for Excellence National Winner presentation, National Association of County Agricultural Agents Annual Meeting/Professional Improvement Conference, Des Moines, IA, August 2023.
2. Vyhnaelek, A., and **J. Groskopf**. "Farm/Ranch Succession Resources for Nebraskans." Breakout session presentation, annual Extension Risk Management Education National Conference, Omaha, NE, March 2022.
3. Santangelo, N., and **J. Groskopf**. "Strategies for Navigating Difficult Issues; Water4Ag." Agricultural Issues Session presentation, 2021 National Association of County Agricultural Agents Annual Meeting/Professional Improvement Conference, Online, July 2021.
4. **Groskopf, J.** "Know Your Numbers: Online Flipped Classroom Financial Management Training." Session presentation, 2021 Extension Risk Management Education National Conference, Online, April 2021.

Awarded Grants, 2021-2025

1. **Groskopf, J.** "2020-21 Financial Viability Programming for Nebraska Women in Agriculture," North Central Extension Risk Management Education Center, \$49,124. Awarded. (2020-2021).
2. **Groskopf, J.** and A. Vyhnalek "Nebraska Female Beginning Farmer and Rancher Development Project," USDA National Institute of Food and Agriculture, Beginning Farmer and Rancher Development Program, \$49,995. Awarded. (2020-2021).
3. McClure, G. et al "Farm Survival, Understanding the Role of Risk Exposure in Financial Decision Making," North Central Extension Risk Management Education Center, \$26,447. Awarded. (2020-2021).
4. Rudnick, D. et al. "UNL-Testing Ag Performance Solutions (UNL-TAPS)," Nebraska Corn Board, \$86,284. Awarded. (2020-2021).
5. Rudnick, D. et al. "UNL-Testing Ag Performance Solutions (UNL-TAPS)," United Sorghum Checkoff Program, \$10,000. Awarded. (2020-2021).
6. Rudolphi, et al. "North Central Farm and Ranch Stress Assistance Center: Engaging Programs to Support Wellbeing," USDA National Institute of Food and Agriculture, Farm and Ranch Stress Assistance Network (FRSAN), \$7,300,000. Awarded. (2020-2023).
 - a. 2020 – 2021 University of Nebraska – Lincoln Award \$144,846
 - b. 2021-2022 University of Nebraska – Lincoln Award \$146,169
 - c. 2022 -2023 University of Nebraska – Lincoln Award \$146,178
7. Creech, C. et al. "Developing a UNL-TAPS Program for Wheat," Nebraska Wheat Board, \$10,000. Awarded. (2021-2022).
8. **Groskopf, J.** and A. Vyhnalek "Nebraska Land Access: Connecting Landowners and Land Seekers," North Central Extension Risk Management Education Center, \$49,886. Awarded. (2021-2022).
9. Rudnick, D. et al. "UNL-Testing Ag Performance Solutions (UNL-TAPS)," Nebraska Corn Board, \$103,585. Awarded. (2021-2022).
10. **Groskopf, J.,** and C. Walters "North Central QuickBooks Resources," North Central Extension Risk Management Education Center, \$4,998.88. Awarded. (2022-2023).
11. **Groskopf, J.** et al. "The Power of Negotiation and Open Conversation: A Hybrid Leasing Educational Series for Midwestern Farm Women," North Central Extension Risk Management Education Center, \$49,988.1. Awarded. (2022-2023).
12. Creech, C. et al. " UNL-TAPS Program for Wheat," Nebraska Wheat Board, \$15,000. Awarded. (2022-2023).
13. **Groskopf, J.** and K. Hothem "2023 Nebraska Women in Agriculture Pre-Conference," North Central Regional SARE Professional Development Program Nebraska Mini-Grant, \$5,000. Awarded. (2023).
14. **Groskopf, J.** "Human Resource, Production, and Financial Risk Management Education for Nebraska Farm Women," North Central Extension Risk Management Education Center, \$49,989. Awarded. (2023-2024).
15. Redfern, et al. "Climate-Smart Advances in Ag Performance," USDA Natural Resources Conservation Service, \$1,609,202. Awarded. (2023-2027).
 - a. 2023-2026 Award \$539,202
 - b. 2024-2025 Award \$120,000
 - c. 2025-2028 Award \$950,000
16. Creech, C. et al. " UNL-TAPS Program for Wheat," Nebraska Wheat Board, \$15,000. Awarded. (2023-2024).

17. Rudolphi, et al. "North Central Farm and Ranch Stress Assistance Center: Engaging Programs to Support Producers Wellbeings," USDA National Institute of Food and Agriculture, Farm and Ranch Stress Assistance Network (FRSAN), \$2,476,967.00. Awarded. (2023-2024).
 - a. 2023 -2024 University of Nebraska – Lincoln Award \$50,000
18. Nees, J. et al. "Emergency Preparedness for Rural Families," North Central Regional Center for Rural Development, \$39,000. Awarded. (2023-2024).
 - a. University of Nebraska – Lincoln Award \$12,000
19. Rudolphi, et al. "North Central Farm and Ranch Stress Assistance Center: 2024-2025," USDA National Institute of Food and Agriculture, Farm and Ranch Stress Assistance Network (FRSAN), \$2,403,856.00. Awarded. (2024-2025).
 - a. 2024- 2025 University of Nebraska – Lincoln Award \$50,000
20. **Groskopf, J.** and J. Hill "2024 Nebraska Women in Agriculture Pre-Conference," North Central Regional SARE Professional Development Program Nebraska Mini-Grant, \$5,000. Awarded. (2024).
21. **Groskopf, J.,** S. Sand and A. Meyer "Nebraska Beginning Farmers: Beginning, Managing, & Transitioning," North Central Extension Risk Management Education Center, \$34,375. Awarded. (2024-2025).
22. **Groskopf, J.,** J. Nees, and R. Reid "Leaving a Lasting Legacy for Midwestern Farm Women: A Succession Planning Series," North Central Extension Risk Management Education Center, \$75,000. Awarded. (2024-2025).
23. Sand, S. et al. "Risk Management Education for Women, Beginning producers, and Underserved Producers with a Focus on Livestock Insurance Options and Availability," North Central Extension Risk Management Education Center, \$99,871. Awarded. (2024-2025).
24. Maharjan, B. et al. "Promoting Optimized Fertilizer Nitrogen Management for Conservation Stewardship in Sugar Beet Production," USDA NRCS, \$1,116,149. Awarded. (2024-2029).
25. **Groskopf, J.** and J. Hill "Nebraska Women in Agriculture Conference," Nebraska Soybean Board, \$10,160. Awarded. (2024-2025).
 - a. 2024, \$5,215
 - b. 2025, \$4,945
26. Zahid, M. et al. "Adverse Health Outcomes from Pesticide Exposure in the Female Agricultural Workforce," UNMC Central States Center for Agricultural Safety and Health, \$20,000. Awarded. (2024-2025).
27. **Groskopf, J.** "Women in Agriculture Gallery: An Agricultural Science Connections Opportunity," Humanities Nebraska, \$4,005. Awarded. (2024-2025).
28. **Groskopf, J.** and C. Walters "Speaking Engagement Agreement: FCSA Side-by-Side Conference," Farm Credit Services of America, \$8,092. Awarded.
 - a. 2024-2025 Award \$4,000
 - b. 2025-2026 Award \$4,092
29. **Groskopf, J.,** and E. Dennis "From Risk to Resilience: Producers and Insurance Education," North Central Extension Risk Management Education Center, \$99,697. Awarded. (2025-2026).
30. Reddish, L., and J. **Groskopf.** "Supporting Farm Families in Divorce: Needs Assessment," North Central Extension Risk Management Education Center, \$9,954. Awarded. (2025-2026).
31. Groskopf, J. "Legacy of Leadership: Faces of Nebraska Women in Agriculture Innovation Campus Display," Humanities Nebraska, \$1,950. Awarded. (2025-2026).
32. **Groskopf, J.** "Nebraska Women in Agriculture Conference," Nebraska Corn Board, \$6,350. Awarded. (2024-2025).

33. **Groskopf, J.** "Nebraska Women in Agriculture Conference," Nebraska Dry Bean Commission, \$1,350. Awarded. (2024-2025).
34. Parsons, J. et al. " Making the Ag Budget Calculator (ABC) A More Effective Financial Decision Tool," Nebraska Corn Board, \$14,840. Awarded. (2025).
35. Soll, M. and **J. Groskopf** "Enhancing Services to Distressed Farmers/Ranchers and Rural Residents," 1890 Universities Foundation, \$598,811. Awarded. (2025-2027).
 - a. University of Nebraska – Lincoln Potential Award \$289,998

Pending Grants,

36. McKeever, L., and J. Groskopf. "Essential Risk Management for Nebraska Producers," North Central Extension Risk Management Education Center, \$74,998. Pending. (2026-2027).
37. Parsons, J. et al. "Phase II: Adding Incentive Program Participation into the Ag Budget Calculator (ABC)," Nebraska Corn Board, \$19169. Pending. (2026-2027).



John Thomas
Nebraska Extension Out-Reach to Bean Growers in Southwest Nebraska Expands to Eastern Colorado

2025 Impact

Extension
Nebraska Extension-Engagement Zone 01
Water and Cropping Systems

Issue

In Nebraska, dry edible beans are an important crop, with 140,000 to 200,000 acres grown annually. Planted acres are trending down with only 120,000 acres planted in 2025. The state is one of the leading producers of dry beans in the United States. The value of the 2024 crop was estimated at \$108,659,000 sold in domestic and international markets. The SW corner of Nebraska and eastern Colorado (52,000 acres of beans) have lacked dry bean research and grower outreach by UNL and industry.

Public Value

The Nebraska On-Farm Research Network is designed to answer the real questions growers are asking about their Ag operations. Answers to these questions will enhance farm profitability, water use and conservation, nutrient use and efficiency and food production. On-farm research is trusted by growers as they do it on their farm with their equipment from planting to harvest.

Action

We planned and implemented 5 On-Farm research studies in Nebraska and one in Colorado looking at planting populations in black-eyed peas, inoculants, Pod-Ceal harvest aid, Biotrinsic seed treatment and a dry bean variety trial. UNL also had our second Dry Bean Growers Day meeting in the area bringing valuable information on weeds, disease, fertility, water management, insects and markets. Colorado has recognized the value of Nebraska research and has directed money to the Nebr. Dry Bean Commission. On-farm research is funded by the NDBC so we are extending our research projects into Colorado.

Results/Outputs

The 2025 dry bean On-Farm Research projects obtained data from five successful studies. A higher black-eyed pea population demonstrated a significantly higher yield, while the inoculant, Pod-Ceal and the Biotrinsic products demonstrated no yield gain. The variety trial demonstrated that the GN variety Virgo was a top performer. We had our 2nd Bean Grower Day in Grant as well.

Impact

Five growers participated in dry bean On-Farm Research studies. The 2025 research demonstrated that a higher black-eyed pea population in this case did not increase yield costing the grower an additional \$45/ac. Inoculant use in a lower N soils could add \$59/ac to the grower's profit. Pod Ceal did not increase yield and cost \$15/ac. Biotrinsic seed trt was of no yield advantage at a cost of \$3.22/ac. The GN variety Virgo was a winner over several years, outcompeting other varieties through hail and disease stress. These may seem like small findings, but they add up over many acres helping growers to reduce inputs and realize profits through on-farm research! The 2nd Bean Grower Day in Grant had over 50 people in attendance with very positive reviews and desire for continued meetings.

IANR PILLARS

Grow and strengthen Nebraska agricultural and natural resources ecosystems.

EXTENSION'S BIG 3

Strengthen Nebraska Agriculture & Food Systems

IMPACT IN NEBRASKA

5

NEBRASKA COUNTIES
IMPACTED

BOX BUTTE, BANNER, PERKINS, CHASE, DUNDY



Image Description: On-Farm Research Harvest, Box Butte County



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Scotts Bluff County Extension First Quarter Newsletter January–March 2025

Nebraska Association of County Extension Boards (NACEB) members come from all walks of life, but they all have one thing in common: a passion for Nebraska Extension.

NACEB held its annual meeting on February 4, recognizing Elaine Pile as its 2025 Outstanding Advocate. NACEB consists of county extension board members from all 93 counties across the state that the University of Nebraska Extension serves.

"Elaine Pile is a tireless champion for Nebraska Extension. For 18 years, she's served on the Scotts Bluff/Morrill Counties Extension Board, often as secretary and treasurer. She dedicates her time and resources to attending other county board meetings and spreading the word about NACEB and its vital advocacy work," said Brenda Corman, NACEB Awards Committee Chair.

Pile was "very surprised" to receive the award and says her secret to success as an advocate is telling her story. "One of the things they (NACEB) stresses to us is to tell our story with Extension."



Fifth graders explore and learn at Incredible STEM Day

Due to impressive interest exceeding 240 participants for the Incredible Stem Day scheduled for the fall of 2024, 4-H educators decided to divide the event into two days. On Jan. 23, more than 90 fifth-graders attended the second day for the event at the University of Nebraska-Lincoln Panhandle Research Extension and Education Center in Scottsbluff.



"We have a great day with four sessions developed by our panhandle educators to help give kids an opportunity to see STEM as they haven't before," said Nathan Rice, 4-H Extension Educator and one of the coordinators for the event. "The hope is that they can get a spark from STEM. It can be a lot of fun, building with your hands, doing active things, and using technology."

The four stations included a micro-bits program, where the fifth-graders programmed and built an animal out of cardboard with moving parts and lights. The drone station had codable drones, where students could program the drones how to move through an obstacle course. The fifth-graders also tried their hand at laparoscopic surgery, designing tools and performing surgery inside the body with only a camera.

"It's showing them different opportunities for their future and things they can pursue," said Sarah McCabe, Morrill Elementary fifth-grade teacher. "They really loved the laparoscopic session and the drones. These are very hands-on experiences, which the kids really enjoy."

Rice said they purposely pick STEM projects the students don't necessarily do in school. However, the mineral properties station has information the students are familiar with from their classroom instruction.

The popular event had four schools, Geil Elementary, Minatare Elementary, Morrill Elementary, and St. Agnes Catholic School, participating in the day's events. "This is the only activity that I have teachers sign up with me before I even send out invitations. We have kids and teachers really excited for it," Rice said.

SNOW PACK AND RESERVOIR WATER REPORT

Wyoming Reservoirs

3-20-25

- Seminole Reservoir - 492,354 acre-feet = 48% full
- Pathfinder Reservoir - 611,924 acre-feet = 57 % full
- Glendo Reservoir - 308,466 acre-feet = 63 % full

- Upper North Platte River Drainage 101% of normal for this time of year (above Casper, Wyo.)
- Sweetwater River Drainage 107% of normal for this time of year
- Lower North Platte River Drainage 89% of normal for this time of year (below Casper, Wyo.)
- Laramie River Drainage 98% of normal for this time of year

- #### Overall
- North Platte River Drainage 101% of normal for this time of year
 - South Platte River Drainage 99% of normal for this time of year

Gary Stone, Nebraska Extension Educator, provided a Snow Pack and Reservoir Water Report on March 20. He added that several fronts coming through over the next few weeks should provide more snow in the mountains, the Snowy Range, and Sierra Madre. Snowfall in the mountains generally peaks around mid-April.

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Scotts Bluff County Extension Second Quarter Newsletter April–June 2025

The **2025 Yonts Water Conference** was held on April 9 at the Panhandle Research, Extension, and Education Center in Scottsbluff. It is named in honor of Dean Yonts, who was the center's irrigation specialist for many years.

The snowpack/snowmelt runoff estimates delivered by the U.S. Bureau of Reclamation in Mills, Wyoming, for the upper North Platte River basin were presented at the conference. The forecasted runoff above Seminoe Reservoir is currently 650,000 acre-feet or 89 percent of the 30-year April-July runoff. Forecasted runoff for the Sweetwater River drainage is 50,000 acre-feet or 91 percent, and Alcova to Glendo is 75,000 acre-feet or 51 percent of the 30-year April-July runoff. The forecasted total water supply on the North Platte River System is forecasted to be 1,364,035 acre-feet.



The Bureau of Reclamation Wyoming Area Office covers most of Wyoming east of the continental divide into western Nebraska. It oversees seventeen reservoirs, with 3,800 miles of canals and laterals. The BOR WAO management area also operates and maintains eleven hydroelectric power plants located on the reservoirs, which provide power to over 80,000 homes. The total value of the hydropower generation on the North Platte River facilities was approximately \$28 million.

More information shared is available at <https://cropwatch.unl.edu/yonts-water-conference-updates->

Look Who's Hatching – Embryology for Early Childhood

Look Who's Hatching is a program for childcare centers, preschools, and family home programs with preschool-age children. Extension Educator Jackie Guzman offered workshops and on-demand modules to support early childhood professionals' use of the program and assisted with the implementation of program curriculum. Extension staff provide incubators, eggs, and a curriculum toolkit.



Information on the program is available at <https://child.unl.edu/programs-and-activities/look-whos-hatching/>.

State Legislature Presentation

Extension Educator Nathan Rice had the opportunity to take two 4-H members and one volunteer club leader to present to 15 State Legislatures at a luncheon in the Governor's Mansion. They shared about the importance of 4-H Robotics in preparing them to be Beyond Ready for moving on into their professional Careers.



First Lego League

Scotts Bluff County 4-H Robotics Club had four teams compete in First Lego League this year. There were two new rookie teams that got to witness their first competition. The Lord of the Gummies and Panhandle Cookie Bytes got 1st and 3rd place at the State Tournament with the Lord of the Gummies qualifying for the World FLL festival in Houston, Texas and the Panhandle Cookie Bytes qualifying for the Massachusetts Invitational. The Lord of the Gummies only had 3 weeks to fundraise, book travel, and prepare for their world festival so it was a whirlwind. There were over 70 countries in attendance and over 1000 teams competing in 4 different levels of competitions. Over 55,000 people were in attendance at the conference center. Our youth got to meet so many youth from across the world with our booth next to Greece, Estonia, and Malaysia. The Panhandle Cookie Bytes Team returned with the prestigious Innovation Project Award and an impressive 8th place overall finish among a competitive field of 104 teams representing 30 countries and 40 states at the WPI Annual FLL Event (WAFFLE) held June 13-15.



The Innovation Project Award recognizes a team's creativity and problem-solving skills in developing an innovative solution to a real-world problem. The Cookie Bytes' project, the Aqua-Vine Robot, addressed the challenge of ocean researchers exploring and researching the abyssal zone of the ocean. Their solution, which involves sending a robot that grows when pressurized with ocean water, allowing researchers into areas too dark and deep to access, was praised by judges for its originality, thorough research, and potential community impact.



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Scotts Bluff County Extension Third Quarter Newsletter July–September 2025

Eighteen adult volunteers, eight 4-H members, and four families of volunteers are being recognized with **2025 Nebraska 4-H Volunteer Awards.**

Congratulations to Hunter Creech, Outstanding Youth Volunteer award winner, and Natalie Creech, Outstanding Adult Volunteer from Engagement Zone One!

What is your favorite memory as a 4-H volunteer?

"My favorite part of 4-H volunteering is helping other youth find something new they enjoy. For example, I have been able to share my skills in my robotics club. Helping a youth that is struggling with their robot get their robots to accomplish the task and see the light bulb go off is the best. I also enjoy teaching youth in my 4-H sewing club new skills like setting up a sewing machine or how to sew a curve. Then a few months later after they have learned these new skills, seeing how proud of the item or garment that they have created. You just cannot forget it!" - Hunter Creech



How have you helped youth find their spark through 4-H?



"As a club leader, I try to host a variety of learning activities during our club meetings, so youth have an exposure to new ideas, skills, and can further their knowledge and skills in topics they are already familiar with. I like to point out to youth how the skills and knowledge they are gaining are skills they will use in their future. 4-H truly builds life skills! I encourage youth to participate in county events such as the Speech and Communications contest and support them as they try new things. Oftentimes, it's the new experiences that are the most intimidating for youth to try, but once they do, they will usually participate again and again and their confidence soars!" - Natalie Creech

Congratulations and thank you for your contributions to the 4-H program in Scotts Bluff County!

Nebraska Extension early childhood educator passionate about building strong families

Many Nebraska Extension educators are called to their positions. Jackie Guzman is no exception. She is the Nebraska Extension early childhood educator and lead educator in the Nebraska Extension Engagement Zone 1, located at the University of Nebraska-Lincoln Panhandle Research Extension and Education Center in Scottsbluff.

"It is a purpose, a calling for me. This is where we need to start with parents and children to build a solid foundation, where the children are ready to learn and more apt to graduate," she said.

Among the programs Guzman provides to professionals is the CHIME (Cultivating Healthy Intentional Mindful Educators) program. It is an eight-week program that focuses on the person working with young children, providing them with the skills to work effectively with children by first helping themselves through mindfulness.



"It (CHIME) has different areas, including mindful breathing, mindful meditation, mindful listening, and mindful speaking.

They (professionals) receive activities for themselves and the children in the classroom." The participant keeps a journal and comes back to the class to share. The lessons help professionals develop techniques to manage stress. Then they can set children on a path that enables them to positively engage with others. When a child can label and understand their emotions, they are able to self-regulate and are then ready to learn.

To learn more about these programs or others available to you, contact Jackie Guzman at 308-632-1480 or by email at jguzman2@unl.edu.

The **2025 County fair** went really well - all of our volunteers and superintendents are amazing and helped everything go so smoothly. There were a lot of compliments about the theme and livestock costume contest. We had such a great turnout - both with participants and audience. Fair Entries for 2025 - All entries that received ribbons. (Livestock includes breeding, showmanship, and market). Shooting Sports: 116, Beef: 108, Sheep: 88, Meat Goats: 72, Dairy Goat: 49, Swine: 145, Static: 321, Horse: 178 (23 exhibitors), Dog: 55, Rabbit: 45, Poultry: 71, Total entries: 1248.

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Scotts Bluff County Extension Fourth Quarter Newsletter October–December 2025

The 2025 Scotts Bluff County 4-H Achievement Program was held on October 19 at the UNL Panhandle Research Extension and Education Center. The event recognized the progress and growth of 4-H members. Adults were also recognized for providing youth development experiences and leadership to our clubs and members.

The Volunteer of the Year Award recognizes individuals who go above and beyond in giving service to the 4-H program. The recipient does not need to be an enrolled 4-H volunteer leader. This year's award was received by Amie Hessler.

The Friend of 4-H award recognizes a person or organization who has been a true friend in providing support to the 4-H program. This year's award went to Regional West Medical Center.



The Outstanding Leader of the Year Award recognizes an enrolled 4-H volunteer leader. This person or persons may be a club leader, project leader, special interest leader, community leader, or a resource leader. Janeene Brown received the outstanding leader award this year.



Landen Heine received the I Dare You Leadership Award. Recipients receive a certificate and a \$200 college scholarship.

Sheridan Ferguson was awarded the Outstanding 4-H Member Award. She received a certificate and a \$250 college scholarship.

AgSplosion Field Day

The annual AgSplosion Field Day welcomed 190 second graders on Tuesday, October 14, to the University of Nebraska-Lincoln at the Panhandle Research Extension and Education Center. The 4-H Ag Literacy event rotated the students through eight stations to learn more about agriculture in their surrounding communities.



"We teach second graders about agriculture, specifically within the Panhandle," said Audra Brown, Nebraska 4-H Extension Assistant.

A 4-H team was created from extension assistants in the surrounding counties. They created a schedule, contacted schools, and then came together to help staff the stations at each field day to ensure a successful event.

The stations included: beef, dairy, dry beans, potatoes, wheat, and their many products; corn, and the Nebraska Corn Board; and ag technology used by producers. The swine session, which explained commercial swine operations, was led by Brown.

"They really enjoy looking at the model swine barn - the comment I hear the most is 'wow that's a lot of pigs in there!' she said. The students were surprised to learn that pig heart valves can be used to replace damaged or diseased heart valves in humans, which function in much the same way. The students also learned about by-products that come from swine.

Sponsors this year included: Corn Board Grant, Morrill County Farm Bureau, Nebraska Dry Bean & Lentil Commission, Oshkosh Heifer Development (donating dairy station supplies), Scotts Bluff County Farm Bureau, and Walthers Farms (donating the potato chips).

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Look Who's Hatching – Oryology for Early Childhood

Communities for Kids (C4K) Gering and Morrill County

Meeting with C4K early childhood educators and providers, stakeholders, and the Nebraska Children and Families Foundation to assist C4K staff to develop a plan for professional development for area educators.



We all have a culture that informs who we are and how we view the world. NCLUDE's focus is on culture – what divides and what unites. We examine culture through the lens of food, music and art. Exploring cultures will help us to reflect and grow to facilitate bridge building among Extension communities.



- EC Reflective Consultation
- System of Care Birth-8
- NLT/EC Connections
- EC team monthly meetings
- Knowledge Network for Early Childhood Education Workforce (KNEW) Creating a Caring and Compassionate Culture within Early Care and Education team planning
- Professional Development Session for Empowering Families Summer Camp Stat

- Staff Performance Evaluations
- County commissioners' monthly meetings attend and report
- Elected/appointed county official's monthly meetings – Attend budget discussions

- Facilitating Attuned Interactions (FANI) Mentoring



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Jackie Cervantes-Guzman
Scottsbluff/Morrill County

May-June 2025 Narrative

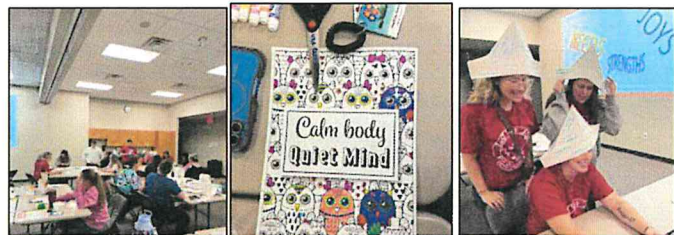
**Look Who's Hatching –
Embryology for Early Childhood**

Look Who's Hatching is a program for childcare centers, preschools, and family home programs with preschool-age children. This program spanned from May to June serving four early childhood/preschool programs in Morrill County. Reaching 13 staff members and 61 young children.



Beyond School Bells Afterschool Staff Training

Sessions included: Behavior Management – Hayley Jackson Perez, Real Colors Strengths & Teambuilding – Jackie Guzman with assistance from Jana Schwartz STEM Educator for Beyond School Bells. Twenty-one afterschool personnel attended from across the panhandle. In evaluations participants commented, “It gave me a lot of ways to control myself, meanwhile also trying to calm the kids down. And to not overreact on certain things.” “I learned more about how to deal with unplanned situations.” “I learned more about myself, my values, strengths, needs, and joys.” “Learning how each personality works with other personalities.”



Educator

- EC Reflective Consultation
- NLT/EC Connections
- EC team monthly meetings
- Knowledge Network for Early Childhood Education Workforce (KNEW) Creating a Caring and Compassionate Culture within Early Care and Education team planning
- Professional Development Session for Empowering Families Summer Camp Stat

Lead Educator Duties

- Staff Performance Evaluations
- County commissioners' monthly meetings attend and report
- Elected/appointed county official's monthly meetings – Attend budget discussions

Professional Development

- Facilitating Attuned Interactions (FAN) Mentoring

Search Committees

- Cheyenne County 4-H Educator



Anthony Warrior - Spiritual Pathways to Food

Anthony Warrior is an entrepreneur, renowned chef, and educator. He currently serves as human resource and Indianpreneurship director for the Nebraska Indian Community College. Anthony uses his expertise and experience in the food industry to create new ways of thinking about food, wellness, and how both are inextricably linked to cultural identity. Anthony specializes in indigenous food preparation and has created a remarkable network of organic and sustainable food sources. He uses his catering business to provide outreach and empowerment programming within indigenous communities throughout the country.



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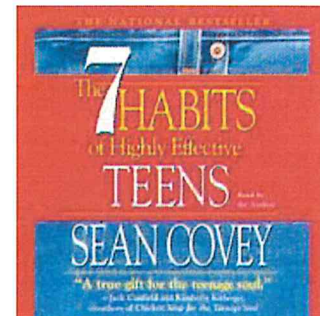
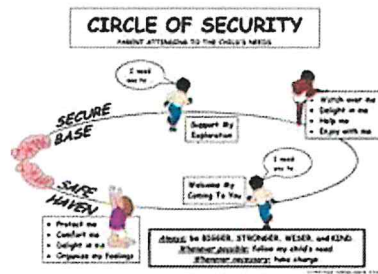


Jackie Cervantes-Guzman
Scottsbluff/Morrill County

July – August 2025

Gering High School Links Program

Discussions with Gering High School Links program has resulted in Extension programs Real Colors Personality Traits, Circle of Security for Teen Parents, and Covey 7 Habits of Highly Effective Teens for 38 students enrolled in this program. These trainings will run from August to October for 38-40 students.



Educator

- EC Reflective Consultation
- EC team monthly meetings
- Knowledge Network for Early Childhood Education Workforce (KNEW) Creating a Caring and Compassionate Culture within Early Care and Education team planning

Lead Educator Duties

- County Commissioners Budget Meetings
- County commissioners' monthly meetings attend and report
- Elected/appointed county official's monthly meetings – Attend budget discussions

Professional Development

- Final Facilitating Attuned Interactions (FAN) Mentoring
- Emotional Intelligence Training

Search Committees

- Cheyenne County 4-H Educator

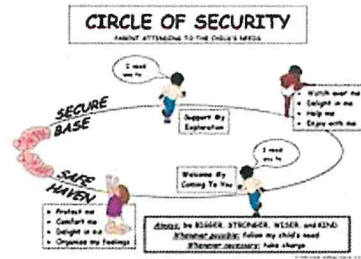
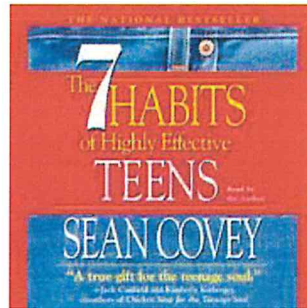


Jackie Cervantes-Guzman
Scottsbluff/Morrill County
September – October 2025


Gering High School Links Program

Forty Links students participated you Real Colors assessment tools and activities. In addition, forty Links students participated in three youth leadership programs based on Covey 7 Habits in September and August.

Five teen parents at Gering High School Links program participated in an 8-week Circle of Security Parenting Program.



Fourteen adult Leadership Scottsbluff members participated in Real Colors as part of their initial introduction meeting for the Chamber Leadership Scottsbluff program.



Cultivating Healthy Intentional Mindful Educators (CHIME) was an early childhood Extension program offered by Connections for Kids to the Rooted in Relationships program. Seventeen early childhood providers, educators and coaches from early childhood programs around the panhandle participated in this program. The CHIME Program provides education and guidance on how to incorporate mindfulness and reflective practice into your daily routine, teaching, and caregiving. This is an 8-week course with weekly sessions. The first session is 2-hours long, and the other seven sessions are 1.5-hours of virtual training with and additional 30 minutes in homework and activities with children in the classroom, receiving 2-hours per week. Upon completion of the training participants are eligible to receive a total of 16 hours of CEU's.

Educator

- Communities For Kids Morrill County
- EC team monthly meetings
- Knowledge Network for Early Childhood Education Workforce (KNEW)
- Creating a Caring and Compassionate Culture within Early Care and Education team planning

Lead Educator Duties

- County commissioners' monthly meetings attend and report
- Elected/appointed county official's monthly meetings

Search Committees

- Cheyenne County 4-H Educator
- Scotts Bluff/Kimball/Banner 4-H Educator



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**2025 January & February
Narrative**

Upcoming Events & Programs

January:

- Private Applicator Pesticide Safety Applicator Training
- Commercial / Non-Commercial Pesticide Safety Applicator Training
- Nebraska Extension Crop Protection Clinic
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues

February:

- Private Applicator Pesticide Safety Applicator Training
- Commercial / Non-Commercial Pesticide Safety Applicator Training
- Nebraska Extension Disaster Education Network (EDEN)
- Nebraska Invasive Species Council
- Q&A from clients on Crop & Horticultural Issues

March & April Programs

- Private Applicator Pesticide Safety Applicator Training
- Commercial / Non-Commercial Pesticide Safety Applicator Training
- Chemigation Applicator Safety Training
- Nebraska Extension Disaster Education Network (EDEN)
- Yonts Water Conference
- Nebraska LEAD 42
- Nebraska Invasive Species Council
- Q&A from clients on Crop & Horticultural Issues

Upcoming Yonts Water Conference

Update on the snowpack and expected runoff for the 2025 growing season for the North Platte River drainage. Other topics include an update on the tunnel replacement, and the North Platte NRD nitrogen management plan.



Major Nebraska Rivers and Their Drainages

[Major Nebraska Rivers and Their Drainages: Part 1 | CropWatch | University of Nebraska-Lincoln \(unl.edu\)](#)

North Platte River – Multi-Use Water

[The North Platte River — Multi-use Water, Part 1 | CropWatch | University of Nebraska-Lincoln \(unl.edu\)](#)

Water Law 101 Series – A six-part series on basic water law in the western United States.

<https://cropwatch.unl.edu/articles/?crop=All&topic=water+law&search=>

CropWatch Articles, Tunnel Collapse & Canal Breach [Gary Stone - Extension Educator |](#)

[CropWatch \(unl.edu\)](#) & [Canal Irrigation |](#)



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Scotts Bluff / Morrill Counties

2025 March & April

Upcoming Events & Programs

May:

- Crop Water Use Numbers for Panhandle Crops
- On-Farm Research Projects
- On-Farm ET Gage & Soil Water Sensors for Producers
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues

June:

- Crop Water Use Numbers for Panhandle Crops
- On-Farm Research Projects
- On-Farm ET Gage & Soil Water Sensors for Producers
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues

July & August Programs

- Crop Water Use Numbers for Panhandle Crops
- On-Farm Research Projects
- On-Farm ET Gage & Soil Water Sensors for Producers
- Cheatgrass Tour
- Scotts Bluff County Fair
- PHREEC PARTT Field Days
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues

Yonts Water Conference

Update on the snowpack and expected runoff for the 2025 growing season for the North Platte River drainage. Other topics include an update on the tunnel replacement, and the North Platte NRD nitrogen management plan. [Yonts Water Conference Updates Growers on Runoff Estimates | CropWatch | Nebraska](#)



Major Nebraska Rivers and Their Drainages

[Major Nebraska Rivers and Their Drainages: Part 1 | CropWatch | Nebraska](#)

North Platte River – Multi-Use Water

[The North Platte River — Multi-use Water, Part 1 | CropWatch | Nebraska](#)

Water Law 101 Series – A six-part series on basic water law in the western United States. [Water Law 101: Part 2, Other Water Rights | CropWatch | Nebraska](#)

CropWatch Articles, Tunnel Collapse & Canal Breach

[Gary Stone - Extension Educator | CropWatch; Articles | CropWatch | Nebraska](#)



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Scotts Bluff / Morrill Counties

2025 May & June Narrative

Upcoming Events & Programs

July:

- Crop Water Use Numbers for Panhandle & Colorado Crops
- On-Farm Research Projects
- On-Farm ET Gage & Soil Water Sensors for Producers
- Cheatgrass Meeting & Tour
- Scotts Bluff County Fair
- Water Leaders Academy
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues

August:

- Crop Water Use Numbers for Panhandle & Colorado Crops
- On-Farm Research Projects
- On-Farm ET Gage & Soil Water Sensors for Producers
- PHREEC PARTT Field Days
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues

September & October

- Crop Water Use Numbers for Panhandle & Colorado Crops
- On-Farm Research Projects
- On-Farm ET Gage & Soil Water Sensors for Producers
- Bean Day – Grant, NE
- Water Education for Tomorrow (WET)
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues



Nebraska Extension On-Farm Research, Dry Bean Variety Trial



Cheatgrass Herbicide Evaluation Test Strip

Major Nebraska Rivers and Their Drainages

[Major Nebraska Rivers and Their Drainages: Part 1 | CropWatch | Nebraska](#)

North Platte River – Multi-Use Water

[The North Platte River — Multi-use Water, Part 1 | CropWatch | Nebraska](#)

Water Law 101 Series – A six-part series on basic water law in the western United States. [Water Law 101: Part 2, Other Water Rights | CropWatch | Nebraska](#)



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Gary Stone

Scotts Bluff / Morrill Counties

2025 July & August Narrative

Upcoming Events & Programs

August:

- Crop Water Use Numbers for Panhandle & Colorado Crops [Gary Stone - Extension Educator | CropWatch](#)
- On-Farm Research Projects
- On-Farm ET Gage & Soil Water Sensors for Producers
- Scotts Bluff County Fair
- PHREEC PARTT Field Days – Grower & FFA
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues

September & October

- Crop Water Use Numbers for Panhandle & Colorado Crops [Gary Stone - Extension Educator | CropWatch](#)
- On-Farm Research Projects
- On-Farm ET Gage & Soil Water Sensors for Producers
- Bean Day – Grant, NE
- Water Education for Tomorrow (WET)
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues



Nebraska On-Farm Research Winter Wheat Plot Harvest – Compost Tea Trial

Major Nebraska Rivers and Their Drainages

[Major Nebraska Rivers and Their Drainages: Part 1 | CropWatch | Nebraska](#)

North Platte River – Multi-Use Water

[The North Platte River — Multi-use Water, Part 1 | CropWatch | Nebraska](#)

Water Law 101 Series – A six-part series on basic water law in the western United States. [Water Law 101: Part 2, Other Water Rights | CropWatch | Nebraska](#)



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Gary Stone

Scotts Bluff / Morrill Counties

2025 September & October

Upcoming Events & Programs

September & October:

- Crop Water Use Numbers for Panhandle & Colorado Crops [Gary Stone - Extension Educator | CropWatch](#)
- On-Farm Research Projects
- On-Farm ET Gage & Soil Water Sensors for Producers
- Bean Day – Grant, NE
- Water Education for Tomorrow (WET)
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues

November & December

- Nebraska Extension Fall Conference
- Nebraska Extension Pesticide Safety Education Program In-Service
- Bean Day – Scottsbluff, NE
- Bean Day – Fort Morgan, CO
- Nebraska Department of Agriculture Pesticide Mitigation Training
- Nebraska Invasive Species Council
- Nebraska Extension Disaster Education Network (EDEN)
- Q&A from clients on Crop & Horticultural Issues



Nebraska On-Farm Research Dry Bean Direct Harvest – Variety & Pod Ceal® Trials

Major Nebraska Rivers and Their Drainages

[Major Nebraska Rivers and Their Drainages: Part 1 | CropWatch | Nebraska](#)

North Platte River – Multi-Use Water

[The North Platte River — Multi-use Water, Part 1 | CropWatch | Nebraska](#)

Water Law 101 Series – A six-part series on basic water law in the western United States. [Water Law 101: Part 2, Other Water Rights | CropWatch | Nebraska](#)



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Dr. Emily Stine

Horticulture, Landscape and
Environmental Services (HLES)

Nebraska Regional Food Systems

Upcoming Events

Stay tuned...Lots to come
this growing season!

January—February 2025
Warmer than Average

Past Events:

Master Gardener Training

In person classes were held on Mondays from February 24 through March 17. Topics included rose care, companion planting, season extending builds (greenhouses and cold frames) and photography in the garden.

Online Statewide classes ran February 4th through March 11th covering topics like pollinator morphology, interesting plant selections, and vegetable production.

There are over 20 returning and at least 3 new Master Gardeners.

Continuing Programs:

Responding to client calls

With the dry weather, many questions on overwinter watering and drought damage have been coming in.

Aside from a few select snow storms, this winter has been incredibly dry. This has long-reaching implications for our landscapes.

Plants are more susceptible to diseases and pest pressure when they are stressed, and drought is one of the most common stressors in our area. Trees will be most impacted because of their size, but probably won't show symptoms until later years.

Additional watering goes beyond a brief spurt with your irrigation system for your turf. Most root systems are deeper than the root systems of the grass, so longer watering times are necessary.

I like to set my hose on a low trickle a few feet away from the trunk of the tree and run it for roughly 20-30 minutes on at least two sides of the tree. I also watch to make sure it's not running off, but instead soaking into the soil.

Mulching around trees can also reduce water loss and improve water retention in the soil - just make sure not to pile it up around the trunk.



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Dr. Emily Stine

Horticulture, Landscape and
Environmental Services (HLES)

Nebraska Regional Food Systems

Upcoming Events

ProHort Lunch and Learn - Zoom

May 20; June 17; July 15

11am - 12pm MST

go.unl.edu/25ProHortLunchAndLearn

Total Client Outreach:

Phone Calls: 36

Emails: 15

Walk-in: 6

Site Visits: 2

Lots of questions regarding evergreen tree decline - attributed mostly to long-term stress and winterkill

Past Events:

Master Gardener Training

February - March

Training covered many topics - rose care, greenhouses, photography, and other plant related topics.

Opportunities for outreach into the community are being solidified for Summer 2025.

Continuing Programs:

GTN Garden

Revitalization of raised beds, installation of new beds, development of educational outreach in progress

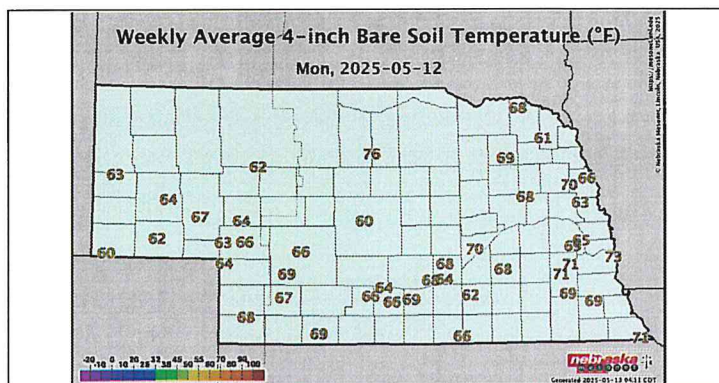
March - April: Frost Free Yet?

This is the most challenging part of the year for gardeners - waiting for soil temperatures to warm up and the frost free date to pass. With the somewhat chaotic weather patterns we've been having - ranging from cool, overcast days to blissfully sunny and warm days - it can be difficult to estimate when it's safe to go ahead and plant gardens and landscape plants.

Knowing the plant's environmental needs is key - many plants can withstand the coolness of early spring, but others (like tomatoes and peppers) thrive in warmer weather.

In general, when soil temperatures are above 60°F and the frost free date (around May 15) have passed, it is considered "safe" to plant into anticipated gardens.

Of course, that's not to say weather won't do as weather does and surprise us!





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Dr. Emily Stine

Horticulture, Landscape and
Environmental Services (HLES)

Nebraska Regional Food Systems

Upcoming Events

ProHort Lunch and Learn - Zoom

July 15, Aug 19, Sept 16

11am - 12pm MST

go.unl.edu/25ProHortLunchAndLearn

Total Client Outreach:

Phone Calls: 57

Emails: 64

Walk-in: 11

Site Visits: 5

Reoccurring calls about heat stress in
gardens and landscape plants

High volume of weed ID and
management strategies

Past Events:

ProHort Lunch and Learn

May: Discussion of increased
weed pressure, drought
symptoms, insect pests,
expected spring lawn care

June: Tree damage from high
winds and equipment,
heat stress in plants,
weed management,
summer lawn care

Continuing Programs:

GTN Garden

Revitalization of raised beds,
installation of new beds,
development of educational
outreach in progress

May - June: You're Killin' Me, Weather!

May and June bring with them warmer weather, strong winds and punishing hail. All of these have a specific impact on our landscapes and gardens - especially when new plants have recently been installed.

Excessive heat can cause symptoms ranging from temporary leaf curl to the thickening of leaves to permanent scorching. Unfortunately, other than consistent watering and shifting plants into the shade when possible, there isn't much that can be done. Most of the plants should grow out of the damage.

Hail causes a number of issues for gardeners. The sharp ice often leaves open wounds and damage behind. In some cases, it will strip leaves and thrash other soft tissue. Post-storm inventory allows gardeners to assess the damage and plan for future concerns.

Many pathogens rely on wounds and other openings to enter the plant and infect the host. Monitoring of damaged plants should continue beyond the hail event to remove infected limbs or the entire plant to prevent spreading infection to other plants.



A common
example of hail
damage on
broad-leaf
plants.

Image: Forest
and Kim Starr



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Dr. Emily Stine

Horticulture, Landscape and
Environmental Services (HLES)

Nebraska Regional Food Systems

Upcoming Events

ProHort Lunch and Learn - Zoom

Sept 16

11am - 12pm MST

go.unl.edu/25ProHortLunchAndLearn

Total Client Outreach:

Phone Calls: 59

Emails: 78

Walk-in: 27

Site Visits: 3

Grass diseases - brown patch and summer patch; result of fungal infections in spring.

Iron chlorosis in trees and shrubs.

Past Events:

ProHort Lunch and Learn

July: Turf growing tips and physiological responses displayed in plants in response to abiotic stressors.

August: Brown patch damage and grub management in turf, heat stress and storm damage management in landscapes.

Continuing Programs:

GTN Garden

Harvest is going well.
Working with the City of
Gering to repair irrigation.

July- August: Spotting Grass Spots

The heat of the summer is always difficult to manage, even with best watering practices. Curling leaves, premature leaf coloration and degradation of leaf tissue is always a concern in landscapes.

In turf, fungal infections that happen in the spring don't show up until the stress of the summer. Often, there's a desire to spray a fungicide or have some sort of curative tool to prevent the dying area from getting worse.

Unfortunately, there isn't much on the market by way of curative chemicals for fungal infections. The best management is preventative; fungicidal applications go on in the spring.

Beyond fungicides though, mowing grass at 3 - 3.5" and watering only when necessary can help have a healthier and more robust stand of turf grass. While that may not eliminate all of the diseases and pests that plague turf, it's a good start to minimize infections running rampant.



5628033

Rhizoctonia solani infestation; Brown Patch in Turf.
Thirunarayanan Perumal, Bugwood.org



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Dr. Emily Stine

Horticulture, Landscape and
Environmental Services (HLES)

Nebraska Regional Food Systems

Upcoming Events

Winter Wonder Landscapes:
How to Keep Your Landscape
Healthy in Winter
Zoom; Date and Time TBA

Master Gardener Registration is open
[https://mastergardener.unl.edu/
become-ne-emgv-volunteer/](https://mastergardener.unl.edu/become-ne-emgv-volunteer/)
Classes are scheduled for February and
March 2026 at PREEC.

Total Client Outreach:

Phone Calls: 54 Emails: 15
Walk-in: 45 Site Visits: 5

Fall herbicide management, perennial
weed applications

Early fall coloring/leaf deterioration
consistent with weather patterns.

Past Events:

ProHort Lunch and Learn
September.

Fall management, sod web
worm, proper pruning and
mulching techniques.

Continuing Programs:

GTN Garden

Total Pounds Harvested: 1,650
Total Pounds Gleaned: 501
Total Volunteer Hours: 965

September-October: Browning Leaves and Needles

It can be difficult as fall starts to set in to distinguish between planned senescence and browning due to disease or injury.

One of the first phases of diagnostics should examine the entire plant - where is the browning occurring? Is it localized to one part, or is it directionally influenced? Often this can provide essential information - localization of damage can point to a specific cause, while direction could indicate an environmental cause. Planned senescence often occurs entirely across the plant uniformly.

Second is to look at the leaves and needle tissue itself. Diseases often have uneven distribution across the leaf blade - manifesting in spots or uneven discoloration. In contrast, planned senescence tends to be across the leaf with little distortion and uneven coloration.

Looking at discoloration and the location can give insight into what is going on in your plant to better diagnose problems.



Two examples of fall color showing the uniform distribution
Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo, Bugwood.org



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Nathan Rice
Scottsbluff, Kimball, & Banner Counties
March & April 2025

Upcoming Events: May & June

May 1	Outdoor Discover Days Wildcat Hills
May 6 & 7	Agsplosion Chadron and Sidney
May 13	Outdoor Classroom Kimball
May 14	Animals Inside and Out Hemingford
May 16	Optional Enrichment Friday Banner County
May 19 & 22	Sheep & Goats Weigh-Ins Scotts Bluff County
May 28	Scottsbluff Summer School Scottsbluff

Agsplosion

Our fifth annual Agsplosion season has come and gone. Panhandle 4-H hosted six Agsplosion events located in Ogallala, Sidney, Bridgeport, Scottsbluff, Chadron, and Hemingford. In total we were able to reach 778 2nd and 3rd grade youth. During the day classes rotate through 8 different agriculture sessions that give them the opportunity to learn about the local commodities we grow and harvest in Nebraska.



Agsplosion



World Champ. FLL



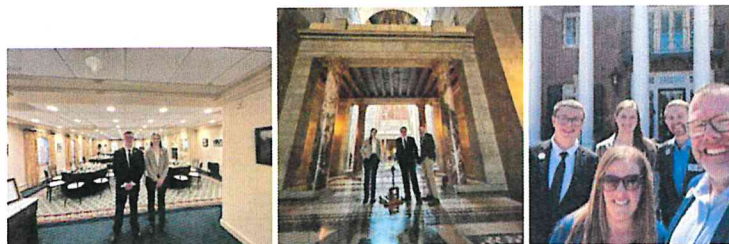
Outdoor Classroom

I had the amazing opportunity to serve as an instructor at the Game and Park's Outdoor Discovery Expo in May. I led a station on outdoor cooking where the youth learned about fire safety and how to start a fire from scratch. We then covered cooking techniques for open campfires. We ended out each session by putting those techniques to the test by making quesadillas and marshmallows. I am always amazed at all the amazing offering Outdoor Discovery Day has! It was a well-run event with any outdoor activity a kid could imagine. I look forward to serving there again next year.



State Legislature Presentation

I had the opportunity to bring two 4-H'ers and one volunteer club leader to present to 15 State Legislatures at a luncheon in Governor's Mansion. They shared about the importance of 4-H Robotics in preparing them to be Beyond Ready for moving on into their professional Careers. I couldn't have been more proud of the skills they displayed on such a big stage.



First Lego League

Scotts Bluff County 4-H Robotics Club had four teams compete in First Lego League this year. We had two new rookie teams that got to witness their first competition. They did amazing and I can't wait to see how they grow in the years to come. The Lord of the Gummies and Panhandle Cookie Bytes got 1st and 3rd place at the state Tournament with the Lord of the Gummies qualifying for the World FLL festival in Houston, Tx and the Panhandle Cookie Bytes qualifying for the Massachusetts Invitational. The Lord of the Gummies only had 3 weeks to fundraise, book travel, and prepare for their world festival so it was a whirlwind. There were over 70 countries in attendance and over 1000 teams competing in 4 different levels of competitions. Over 55,000 people were in attendance at the conference center. Our youth got to meet so many youth from across the world with our booth neighboring Greece, Estonia, and Malasia. I can't wait to see what these youth will be able to accomplish as they move on to the First Tech Challenge next year.



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Nathan Rice
Scottsbluff, Kimball, & Banner Counties

May and June 2025

Upcoming Events: May & June

July 8	Fair Cleanup
July 9	Empowering Families Summer Camp
July 16	Fair Stalling
July 17	Drones Workshop Camp Rock
July 19	SB Clothing Day SB Rifle Shoot
July 20	SB Dog Agility/Rally
July 26 – Aug 3	SB County Fair
Aug 4 – Aug 10	Kimball/Banner Fair

Scottsbluff Summer Enrichment Program

Scottsbluff offers a summer school enrichment program each year for K – 6th grade youth from the end of school until the middle of June. They asked if I would host a STEM club once a week for their 4th graders. During the program, we dove into engineering design creating builds that would float suspended in an air tube. We then built, spray painted, and launched model rockets to finish out the year with a bang.

Camp Rock – Drone Obstacle Races

Camp rock asked for us to host two STEM special interest days at their Discovery Summer Camps this year. We brought in types of small flyable drones and setup an agility obstacle course for youth to race through. They got to learn about how drones fly and why they tilt in certain directions for motion. We also created paper rotors and had a small competition on who could develop the best rotor to stay in the air the longest.

Kimball Outdoor Classroom

I had the amazing opportunity to serve as an instructor at the Outdoor Classroom in Kimball, NE. I led a station on GPS units where I taught youth how GPS works, why handheld units are still valuable tools today, and gave an introduction to Geocaching. Youth then had to go track down 5 ribbon geocaches I hid throughout the lakeside. Once they found each geocache, I talk them how to setup their own waypoints and created a new ribbon stash for the next group to find.



Engineering Explorers Camp

I had the opportunity to take part in an NSF funded grant project that was looking at how engineering educators talk to youth during lessons. The goal of the grant is to better equip educators for being comfortable teaching engineering and designing engineering lessons to be used for teaching. During the grant I served as one of the engineering educators in the first cohort. We met throughout the year gaining professional development resources related to engineering education and put together a program offering we were all tasked with implementing in our local counties. The camp consisted of 3-days with 2 hour long lessons each day. The first four lessons were designed to give the youth skills with design iteration, instrumentation and controls, dealing with clientele, and designing under constraints. We then closed out with a 2-hour long capstone project where youth identified a program in their own life and tried to design an engineering solution to solve that problem. Throughout all of this the group with videotaped and recorded to investigate classroom dynamics throughout the lessons.





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Audra Brown
4-H Youth Development
Extension Assistant

January/February Narrative 2025

Upcoming Events

March 5th – First Round of
Embryology

March 21st – State Robotics

March 26th – Sidney Inventure Day

April 8th – Second Round of
Embryology



STEM Days

In January and February, I taught Laparoscopic Surgery at Bridgeport, Scottsbluff, and Chadron STEM Days. This day is for 5th graders to learn more about different paths of STEM. In Laparoscopic Surgery. Students learn the Engineering Design Process by creating tools that complete challenges in “surgery”.



Robotics

I am coaching one of the new teams for our Robotics club.

We competed at the Region Mini Play on February 15th and lots of learning happened! The team is brand new, but they are having fun learning with me. State is on March 21st and they are excited! They set goals in the beginning of the season and are doing great at reaching them and setting new ones!

Upcoming Events

March 5th will be the start of Embryology Season. This is my first time with Embryology in a classroom setting, I am excited for this learning opportunity and to be in classrooms.

Sidney Inventure Day is at the end of March, this is another new big day event that I haven't gotten to see.

The second round of embryology is April 8th.



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Audra Brown
4-H Youth Development
Extension Assistant

Upcoming Events

April 30th & May 1st – Outdoor
Discovery Days

May 7th – Sidney AgSplosion

May 19th & 22nd – Sheep/Goat/Swine
Fair weigh-ins

June 3rd – CWF Trip with Sarah
Paisley



March/April Narrative 2025

AgSplosion

April 16th was the kickoff date for the six AgSplosions set for the Panhandle this spring. This was a new program for me to see and teach and I really enjoyed it. I taught the swine rotation and 2nd graders learned about how pigs are taken care of/fundamental needs and some cool fun facts!



Embryology

As April drew to a close so did the embryology in schools. Through the months of March and April, 19 classrooms got to experience the process of incubating and hatching chicks. I taught two lessons for each classroom; discussing what a fertilized egg is, and what is needed to grow a chick and for the candling lesson, looking inside the egg to see if there was a chick and what they will need once they hatch. I had fun teaching the kids and seeing their reactions if the egg had a chick in it.

Upcoming Events

Outdoor Discovery Days was new and fun, I helped Nathan and Jana with the food prep for our station – Outdoor Cooking. Sidney AgSplosion will be the last one for the year. Sheep/Goat/Swine weigh-ins means fair is quickly approaching. Citizenship Washington Focus trip - I am going to be a UNL chaperone for the youth in the Panhandle attending the trip.



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Audra Brown
4-H Youth Development
Extension Assistant

May/June Narrative 2025

Upcoming Events

July 9th – Empowering Families
Summer Camp
County Fair
July 19th – Shooting Sports & Clothing
Day
July 20th – Dog Show
July 26th – Horse Show
July 27th – Aug 2nd County Fair Week



Citizenship Washington Focus Trip

I got to chaperone half of the CWF trip for Garden/Cheyenne county youth to New York to Washington, DC. We got to see many sites such as the State of Liberty, 9/11 Memorial, a show on Broadway, Amish Country, Philadelphia, Battlefield of Gettysburg, Washington Monument, Thomas Jefferson Memorial, FDR Memorial and so much more. Watching these 4-Hers learn about all the sites we saw and then in full conference mode in Bethesda was awesome to see. They were a great group to work with!



May

May was filled with wrapping up AgSplosions and embryology in the classrooms. We also had our two sheep/goat/swine weigh ins at the fairgrounds.

Upcoming Events

My second county fair is coming up fast and I am in full prep mode!



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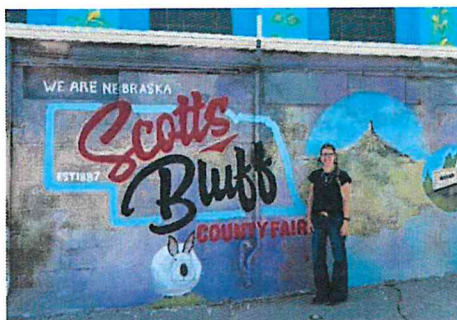


Audra Brown
4-H Youth Development
Extension Assistant

July/August Narrative 2025

Upcoming Events

Sept. 11th – 4-H Foundational Training Program
Oct. 7th – 8th WET Conference
Oct. 19th – Achievement Celebration
Oct. 9th – Chappell AgSplosion
Oct. 14th – Scottsbluff AgSplosion
Oct. 16th – Bridgeport AgSplosion
Oct. 22nd – Chadron AgSplosion
Oct. 23rd – Hemingford AgSplosion



County Fair

Overall, my second county fair was a success! This year I was able to head most of the prep work since I knew what to expect and take on the same roles during fair as last year. Our volunteers and superintendents are so awesome and are vital to helping our shows and fair run as smoothly as it did. New this year, I brought a theme to the fair, stall decorating competitions, and a livestock costume contest.

I have heard so many positive comments from it and I know people are excited for it again next year.



(Some of our swine superintendents at weigh ins)

State Fair

This was my second year on the Nebraska State Fair Sheep Crew! I helped with check-ins and handed out awards/ribbons in the show ring for both days of the sheep show. I enjoy getting to work with the crew and meeting new/familiar faces within 4-H Extension across the state!

Upcoming Events

I will be attending the 4-H Foundational Training Program in Grand Island where we will be learning how to teach new programs that we will be implementing into our counties over the next year. I am helping Gary Stone teach Irrigation with the WET Conference. Scotts Bluff County's Achievement Celebration is on October 19th where we will give out awards for Achievement applications, Diamond Clover awards, and nomination awards. AgSplosions for the Panhandle will be this fall for 2nd graders to learn about ag commodities in their area.



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Audra Brown
4-H Youth Development
Extension Assistant

September/October Narrative 2025

Upcoming Events

Nov. 6th STEM Day – Scottsbluff
Dec. 4th – 4-H Share Day



AgSplosion

In October, the Panhandle 4-H Staff hosted five sites for AgSplosion - Chappell, Scottsbluff, Bridgeport, Chadron, and Hemingford. There are eight rotations where 2nd graders get to learn about agriculture in Nebraska and specifically what is special to the Panhandle area. Topics include beef, swine, dairy, corn, wheat, beans, ag technology, and potatoes. I taught the swine lesson again and enjoyed watching the kids have fun while learning something new. They always love looking at the model of the swine barn (pictured left).

Water Education for Tomorrow

I assisted Gary Stone at the Water Education for Tomorrow event for 5th graders on October 7th and 8th. We taught about how much water certain crops need to grow and how to set an irrigation syphon tube.



County Government Day

Jana Schwartz and I talked at the Scotts Bluff County Government Day in September for juniors and seniors in high school. We discussed different career paths within extension, the importance of it for the community, and how we got to our positions now.

Upcoming Events

The first STEM Day for the Panhandle will be in Scottsbluff on November 6th. 4-H Share Day is on December 4th, I am hosting a site and activity with Jana Schwartz. The morning is a statewide share on zoom and after lunch we have a group activity. We will be building 3D printed models.

4-H/Beyond School Bells

Jana Schwartz, 4-H Assistant

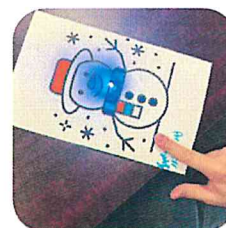
December 2024
January & February 2025

UPCOMING EVENTS

- Innovation Invitational - Beyond School Bells Conference in Lincoln
- Gering Afterschool Programming - 2 Weeks of Engineering and Ag Science Lessons
- Lincoln Heights Afterschool Programming - 2 Weeks of Robotics and Aerospace Lessons
- Lake Minatare Engineering Design Challenge Afternoon
- Morrill Elementary Engineering Design Challenge Friday

DECEMBER

- Onboarding - University, Nebraska Extension, 4-H, Beyond School Bells
- Minatare Afterschool - K-5th grade - Electricity Lesson - Paper Circuits
- Mitchell Afterschool - 3th-5th - Electricity Lesson - Paper Circuits
- 4-H Professionals Lesson Share Day - Alliance



**PAPER
CIRCUITS**

JANUARY

- Longfellow Afterschool - K-5th - 8 lessons - Robotics and Aerospace
- Westmoor Afterschool - K-5th - 4 lessons - Robotics
- Minatare Afterschool - K-5th - 3 lessons - Robotics and Aerospace
- Gering Afterschool - K-5th - Site Visit - STEAM
- STEM Day - 5th Graders



**BEARCHAIR
ENGINEER**

FEBRUARY

- Westmoor Afterschool - K-5th - 4 lessons - Aerospace
- Scottsbluff High School Spanish Club - Mentor Roosevelt Afterschool
- Roosevelt Afterschool - K-5th - 8 lessons - Robotics, Aerospace, BearChair Engineering Design Challenge
- Scottsbluff Lied Library - Plan Summer Programming



**BEARCHAIR
ENGINEER**



ROBOTICS



SPANISH CLUB



ROBOTICS

4-H/Beyond School Bells

Jana Schwartz, 4-H Assistant

March & April 2025

UPCOMING EVENTS

- Beyond School Bells Afterschool Staff Training, Scottsbluff
- Recruiting and Training High School Students to teach STEM in out of school programs
- Using Think Make Create Lab (Trailer) in summer programming and at community events
- National Shooting Sports Data Core Crew - Grand Island

MARCH

- Innovation Invitational - Beyond School Bells Conference in Lincoln
- Gering Afterschool Programming - 2 Weeks of Engineering and Electricity Lessons
- Lincoln Heights Afterschool Programming - 2 Weeks of Robotics and Aerospace Lessons
- Lake Minatare Engineering Design Challenge Afternoon
- Morrill Elementary Engineering Design Challenge Friday
- Science Fair STEM Activity - Drones and Robots



ROBOTICS



ENGINEERING

APRIL

- Morrill Elementary Electricity - Paper Circuit STEM Club
- Gering Afterschool - K-5th - 8 lessons - engineering and robotics
- Mitchell Afterschool - K-6th - 6 lessons - engineering, robotics, and aerospace
- Agsplosion Ag Literacy - 2nd Graders - Scottsbluff
- Westmoor Afterschool Beyond School Bells site visit
- Embryology - Assisted Audra
- Outdoor Discovery Days - 5th-7th graders - Outdoor Cooking - TMC Trailer



BEAR CHAIR
ENGINEER



AGSPLOSION



OUTDOOR
DISCOVERY



ROBOTICS

4-H/Beyond School Bells

Jana Schwartz, 4-H Assistant Scotts Bluff County

May & June 2025

UPCOMING EVENTS

- Empowering Families Camp programming
- UNL Summer Program with Gering and Empowering Families
- Scottsbluff Library Block Party
- Scotts Bluff County Fair - Fair Tours and TMC Lab
- Old West Balloon Fest - TMC Lab, Kids Balloon Camp

MAY

- Beyond School Bells Afterschool Staff Training was organized and taught by UNL. Afterschool Staff attended from Bayard, Scottsbluff, Chadron, and Alliance.
- Morrill Elementary STEM Club
- Bayard Afterschool Programming - 2 Weeks STEM
- Just Kidding Around 4-H Club - Corn Lesson
- Lake Minatare Engineering Design Challenge Afternoon
- Summer Programming at Scottsbluff Summer School



**WILDLIFE
EDUCATION**



**BEAR CHAIR
ENGINEERS**

JUNE

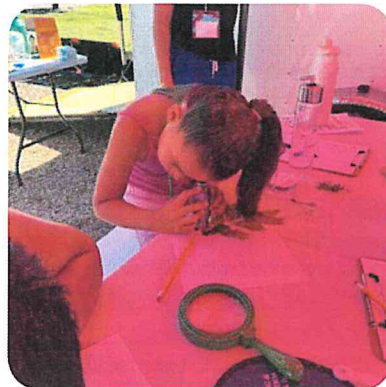
- Summer Programming with Think Make Create Lab at Gering Elementary, Trails West YMCA Camp, Minatare Elementary, and Bayard Elementary- 2 Weeks of Engineering and Electricity Lessons
- Environmental Education Interns - Wildlife Lesson with Bayard
- Color My World Messy Art Fair - Scottsbluff Library - TMC Lab
- Exploring STEM Career Connection Grant - Hiring 10 High School Students to teach STEM in out-of-school programs. 5 students starting in July.



**FOIL BOAT
ENGINEERS**



**EXPLORING
NATURE**



**USING A
MICROSCOPE**



**THINK MAKE
CREATE LAB**

4-H/Beyond School Bells

Jana Schwartz, 4-H Assistant Scotts Bluff County

July & August 2025

UPCOMING EVENTS

- STEM Clubs at Gering Library and Scottsbluff Library
- 4-H Foundational Training in Grand Island
- GetConnected Afterschool Conference in Kearney
- Westmoor Elementary Afterschool Programs
- Gering Afterschool Programs

JULY

- Empowering Families Camp, Community Christian Elementary, Alliance Rec - Science Exploration using Microscopes
- 2 programs - Think Make Create Lab
- UNL Summer Program with Gering and Empowering Families - Entomology-Insect Discovery
- Scottsbluff Library Block Party - Be a Scientist! - TMC Lab
- Scotts Bluff County Fair- Fair Tours - Connected summer programs with 4-H exhibitors to highlight fair experiences



**BALLOON
CAMP**



COUNTY FAIR

AUGUST

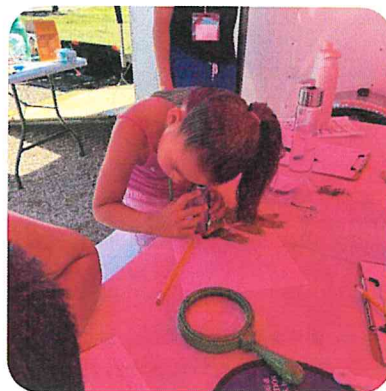
- Old West Balloon Fest Kids Balloon Camp - Science of Hot Air Balloons, Flight Navigation, Balloon Artwork
- Planning for Fall Afterschool Programming
- Exploring STEM Career Connection Grant - Hiring and mentoring 10 High School Students to teach STEM in programs. Start date has been extended to fall programming



FAIR TOURS



**THINK MAKE
CREATE LAB**



**USING A
MICROSCOPE**



**BALLOON
CAMP**

4-H/Beyond School Bells

Jana Schwartz, 4-H Assistant Scotts Bluff County

September & October 2025

UPCOMING EVENTS

- STEM Day PREEC 5th Graders
- Exploring Career Connections in STEM
- Roosevelt Elementary Afterschool Programs
- Longfellow Afterschool Programs

SEPTEMBER

- Exploring STEM Career Connection Grant - Hiring and mentoring 10 High School Students to teach STEM in programs. Start date has been extended to fall programming
- 4-H Foundational Training-Engineering And Ag Literacy
- Westmoor and Gering AfterSchool - STEM Fairy Tales & Be a Scientist!
- 3rd Grade Wellness Day
- County Government Day
- Beyond School Bells Conference-Kearney



**4-H
ACHIEVEMENT**



BEARCHAIR

OCTOBER

- LEAD Panel - Nontraditional 4-H Programming
- Water Education of Tomorrow - 5th Grade Water Science
- Lincoln Heights & Bayard Afterschool - STEM Fairy Tales & Be a Scientist!
- Lights on Afterschool! Bayard
- AgSplosion - 2nd Graders
- 4-H Achievement Event



SCIENCE



**NATURE
EXPLORATION**



CREATING



**AGSPLOSION
WHEAT**

Scotts Bluff County 4-H

- February 2025 -

February is Nebraska 4-H Month!

Every year, Nebraska 4-H Month brings thousands of young people, parents, volunteers, and alumni together to celebrate all the ways in which 4-H helps youth find a place where they belong. Across the state, Scotts Bluff County 4-H invites community members to celebrate:



- 4-H Spirit Day on Thursday, February 6th
- 4-H Volunteer Appreciation Day on Thursday, February 13th
- 4-H Supporters and Donors Appreciation Day on Thursday, February 20th
- Day of 4-H Service or Give Back to Your Community on Thursday, February 27
- Leap into 4-H – Get Enrolled on 4HOnline on Friday, February 28

<https://4h.unl.edu/4-h-promotion>

Enrollment

Not too Late to Enroll in 4-H!!

Hello 4-H Families! As we embark on a new 4-H programming year, all 4-H families will enroll in clubs and projects through 4HOnline at v2.4honline.com.

If you are a returning member, go to v2.4honline.com and log in with your email address and password. Once logged in, you can update and add members and member information along with projects and clubs. Required fields are marked with red asterisk.

4Honline is a web-based enrollment system that will allow families to enroll in 4-H on your personal computer or mobile device. If you do not have internet access at home, feel free to stop by the Nebraska Extension office and use our computers. You'll be able to complete all of the information necessary to join 4-H online, including 4-H code of conduct forms and health forms. There will be no paper forms to submit for enrollment.

Members may enroll at any time during the year, but to be eligible for County Fair and State Contests enrollment must be complete before June 15.

Re-Enrollment - If you were enrolled in 4-H in 2024 or previous years, please enroll online and pay the \$5 fee to the Extension Office by February 1. This will allow members to be covered by insurance when participating in 4-H activities.

[4-H Online member re-enrollment instructions](#)

New Enrollment - Youth who are joining 4-H for the first time are encouraged to enroll online and pay the \$5 as soon as possible and no later than June 15 to be eligible for County Fair.

[4-H Online new member enrollment instructions](#)

Volunteers - Volunteers will enroll electronically. Returning leaders: If you have children in 4-H, log into your family account at v2.4honline.com and update your information. Volunteers without children in 4-H should go to v2.4honline.com, enter the email you have used in the past with 4-H and choose, "I forgot my password". A new password will be emailed to you. If you have any questions or concerns, let the Extension office help you!

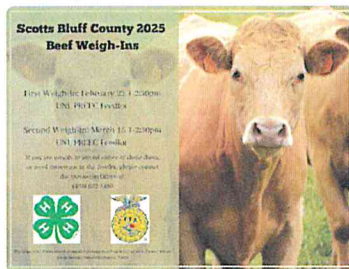
Nebraska 4-H has launched a new volunteer orientation. This online training serves as an introduction to the 4-H Youth Development program in Nebraska and covers a few essential topics for volunteers. While the orientation is required for new volunteers and those going through the re-screening process, any interested individuals, including current and prospective volunteers, are welcome to complete the course.

Learn more at 4h.unl.edu/volunteer-orientation.

Volunteers must re-enroll each year to retain status in years of service and for University of Nebraska-Lincoln insurance. Contact the Extension office for more info.

- [Volunteer enrollment instructions](#)

Weigh-in/Tagging



2025 4-H & FFA Weigh-in

Beef

4-H & FFA Beef weigh-in will take place at the University of Nebraska (UNL) Panhandle Research Extension & Education Center Feedlot on February 22 and March 15, 2025 from 1:00-2:30 p.m. The UNL Feedlot is located north of Scottsbluff off of Experiment Farm Road. Call 632-1480 if you need directions!

County tags are \$1 each and we will have all the paperwork needed. If you are interested in showing market beef, breeding beef, and feeder calves at State Fair, you will need an EID tag (\$3) and MUST submit a DNA kit for these animals. DNA Kits will be available at the weigh-in and are due to the Nebraska Extension Office before June 15. To finish your nomination for State Fair you must submit nomination information and fees online.

Contact the Extension Office if you have questions.

Sheep/Swine/Goat

4-H & FFA Sheep/Swine/Goat weigh-in/tagging will take place at the fairgrounds in Mitchell on May 19 and May 22 from 6:00-7:00 p.m.

YQCA Training

Youth for the Quality Care of Animals Training

Save the Date – Speech & Presentation Contest

Scotts Bluff County Speech & Presentation Event

Contests

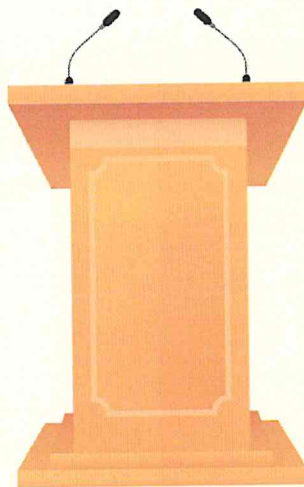
Prepared Speech
Public Service Announcements (PSA)
Illustrated Presentation
Impromptu Speech
Video Communication

PSA Theme for 2025:
"Ready through 4-H...and
beyond"



Scotts Bluff County

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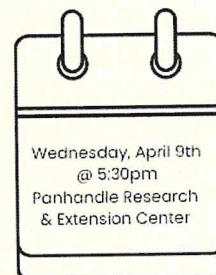
REGISTRATION THROUGH GOOGLE
FORM LINK BELOW, DUE 3/26

<https://forms.gle/nxcfy1Kvx2vShU5Q8>

Age Divisions

Age as of January 1 of this year

Clover Kids: 5-7
Junior: 8-10
Intermediate: 11-13
Senior: 14-18



State 4-H

WHAT'S THE BUZZ? 2025

4-H CAMP 101 July 13-15, Burwell

4-H CAMP June 22-26, Chadron
July 17-21, Burwell

LEADERS IN TRAINING May 28-31, Burwell

APPLY FOR A SCHOLARSHIP TODAY
GO.UNL.EDU/CAMPSCHOLARSHIP

NEBRASKA STATE 4-H CAMP

4h.unl.edu/camp **4hcampscholarship.unl.edu**

Nebraska State 4-H Camp Registration Open

The 2025 What's the Buzz? season of the Nebraska State 4-H Camp will share the importance of pollinators in Nebraska- why they're important, how they impact agriculture, and what youth can do in their own communities to support the various native pollinators we have in Nebraska. From bees and butterflies to hummingbirds and bats- it's going to be a week full of learning and fun!

The Nebraska State 4-H Camp is returning to Chadron and Burwell for summer camp 2025! Youth new to camping can attend a shorter camp session designed to let them experience all the best parts of summer camp in a 3 day/2 night session. Choose from one of two 5 day/4 night sessions for youth 10-14 years old and returning this year is the Leaders in Training camp for high school youth 15-17 years old! Campers will focus on developing leadership skills with an opportunity to put those skills into practice by volunteering at one of our other camp sessions! Registration is now OPEN! More information on sessions, dates, and the link to register can be found at 4h.unl.edu/camp.

The scholarship application is also live and families can apply at go.unl.edu/campscholarship. Scholarships must be awarded prior to registration.

Nebraska 4-H Volunteer Awards

The Nebraska 4-H Volunteer Recognition Program is designed to complement the tradition of recognizing outstanding volunteers and provides a standard and consistent approach to volunteer recognition across Nebraska. The purpose is to provide a base for Extension staff to sustain volunteers, build leadership potential, and offer recognition and praise for the great work of volunteers.

Timeline:

- Nomination Form Opens - February 8
- Nomination Form Closes - March 15
- Award Winners Announcement - Week of the Volunteer
- Awards Presentation - Nebraska State Fair



Nominations can be submitted by any 4-H member, family, supporter, or Extension staff member. Nominees must fit the award categories and can be a volunteer for any Nebraska 4-H experience. Some examples may include 4-H club leader, project leader, junior leader, county or state fair volunteer, special interest volunteer, such as robotics or shooting sports, afterschool club volunteer, 4-H camp volunteer. etc.

More information is available at <https://4h.unl.edu/volunteer-recognition>.



Innovative Youth Corn Challenge for 4-H and FFA Members

We are delighted to announce the Innovative Youth Corn Challenge, a prestigious contest open to 4-H members (aged 8 and older as of January 1st) and FFA members (in-school members). This competition is designed to guide participants through a comprehensive exploration of all facets of corn

production, including aspects related to agricultural careers associated with corn production.

Key Features:

- Team Participation: Teams comprising two or more youth participants will collaboratively embark on the challenge.
- Innovative Practices: Youth will be tasked with implementing a production practice differing from the norm, with the goal of assessing its impact on increasing corn yield.
- Data Collection: The Corn Challenge management summary will systematically gather crucial information, including yields, cropping history, and production details.
- Recognition and Rewards: Outstanding achievements will be duly rewarded with cash prizes and plaques for the top three teams:
- First Place: \$1,000
- Second Place: \$500
- Third Place: \$250
- Special Awards: In addition to the top rankings, commendable efforts will be acknowledged through the "Extra Mile" and "Ag Literacy" Awards, each carrying a value of \$200.

This competition not only fosters a spirit of innovation in corn production but also serves as a platform for recognizing dedication and excellence within the 4-H and FFA communities. We encourage all eligible participants to embrace this opportunity to showcase their skills and contribute to the advancement of agricultural practices. Registration deadline is April 1st.

For detailed guidelines and participation information, please refer to the <https://cropwatch.unl.edu/youth/cornchallenge> webpage or contact Brandy VanDeWalle at brandy.vandewalle@unl.edu.

Livestock Achievement Program Sign Up!

We are excited to announce the fifth year of the Nebraska 4-H Livestock Achievement Program. This additional opportunity for enrolled livestock project youth is designed to promote all educational aspects of 4-H livestock projects including selection, production, leadership, and exhibition by recognizing youth striving to improve in their livestock project knowledge and leadership.

The program recognizes Members of Excellence across all 4-H livestock project areas, including: beef, sheep, meat goat, swine, dairy cattle, dairy goat, rabbit, and poultry.

The program consists of three levels that require 4-H members to plan and report a broad range of age-appropriate and project-related accomplishments. For each level, the Livestock Achievement Program provides a list of accomplishments from which 4-H members choose their goals. Each accomplishment is worth a specific number of points. Junior 8-10 submits pictures, a poster, a presentation, or other learning activities to receive the distinction of Junior Member of Excellence, no point value required. Intermediates, ages 11-13, must complete 100 points worth of activities to receive the distinction of Intermediate Member of Excellence. Seniors, ages 14-18, must complete 150 points worth of activities to receive the distinction of Senior Member of Excellence. The Plan and Reports, linked on the webpage, show examples of the project related accomplishments they can choose, or they can identify their own with approval of their local educator.

Applications/Sign up are due June 15th through the application form link on the website. Plan and Reports, as well as Project Records will be due August 1 via the completion form on the website.

Youth completing the achievement program and receiving member of excellence recognition in the various species will be recognized during the Parade of Champions, 4-H weekend at the Nebraska State Fair.

For more information or to apply, go to: [Livestock Achievement Program | Nebraska 4-H \(unl.edu\)](https://cropwatch.unl.edu/youth/cornchallenge)

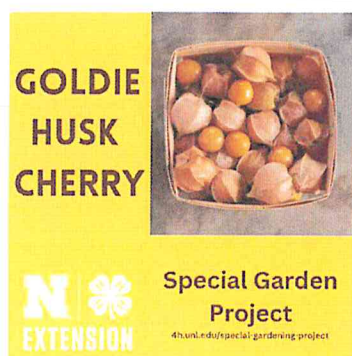
Ashley Benes ashley.benes@unl.edu

Brett Kreifels brett.kreifels@unl.edu

Cole Meador cmeador2@unl.edu



Special Garden & Agronomy Projects



2025 Special Garden Project

The 2025 Special Garden Project will focus on the Goldie Husk Cherry. This old-fashioned fruit from the tomato family has sweet berries inside golden husks. The fruits have many uses and can be eaten raw, dried, frozen, canned, or made into tasty treats like pies, desserts, or preserves. (I assure you the husk cherry is different than a groundcherry, which is a weed in Nebraska, that looks very similar, but isn't edible)

The special gardening project offers 4-H members an opportunity to grow fun and unusual projects in their gardens. Each year, a new plant is selected as the focus for all members enrolled in the

project. Youth receive seeds that they plant and cultivate using project resources provided throughout the experience. 4-H'ers then have the opportunity to exhibit harvested vegetables or cut flowers or present their experiences through a poster or report at their county fair. Youth interested in participating are encouraged to enroll in the special gardening project through 4-H Online. Learn more at <https://4h.unl.edu/statewide-events-opportunities/special-garden-project/>.

2025 Special Agronomy Project

The Nebraska Extension Special Agronomy Project gives 4-H members an opportunity to experience a crop that is grown, was grown, or has the potential to be grown in Nebraska. Youth participate by receiving seed and resources to grow the crop, and research traits of the crop that determine the viability of that crop in the part of the state they live in. The project allows 4-H members interested in agronomy to grow something fun, new, and different. This year, we will be exploring a crop that can be marketed different ways depending on the variety.

In the fifth year of the special agronomy project, youth will explore sunflowers! There are two types of sunflower production in Nebraska. There are those grown for oil production, and those grown for human food consumption referred to as confectionery seeds. A portion of the oil seed production is used in the bird seed industry. Sunflowers are grown throughout the state of Nebraska with the greatest concentration in western Nebraska. The variety we will be growing is a high oleic hybrid. Its oil profile combined with a nice black seed color ensures multiple market options.

Be eligible to enter an exhibit at the County and/or State Fair in the agronomy project area.

Enroll for the 2025 Special Agronomy Project through 4-Honline by enrolling in the Agronomy project and contacting the Extension Office to order packets of seeds. The Extension Office will order and distribute the seeds to members. The seed order will be placed prior to March 1st.

For project specifications and details, be sure to go to the Nebraska State Fairbook at <https://4hfairbook.unl.edu/fairbookview.php/rules>.



Horse Project

Horse Information

Fort Robinson Horse Camp – June 12-14 Save the Dates

4-H Horse Stampede - March 29-30 <https://4h.unl.edu/horse-stampede/>

- March 29 & 30, 2025: 4-H Horse Stampede held at the UNL Animal Science Complex in Lincoln, NE
 - Entries due Friday, February 28, 2025
 - Contests include:
 - Public Speaking (may compete virtually through zoom)
 - Demonstrations (may compete virtually through zoom)
 - Horse Bowl
 - Art
 - Photography
 - Horse Judging – new for 2025
 - Hippology – new for 2025

Fonner Park 4-H State Horse Show- July 12-16, 2025: Fonner Park State 4-H Horse Expo at Fonner Park in Grand Island, NE

- Entries due June 1, 2025
- Advancement levels and Horse IDs need to be completed by June 1

Age Divisions 2025:

Elementary: 8-9 years (level 1 & 2 only)

Elementary: 10-11 years (any level)

Junior: 12-14 years (any level)

Senior: 15+ years (any level)

<https://4h.unl.edu/statewide-events-opportunities/horse-program/horse-expo/horse-show/>

Scholarship Opportunities

Upper Mitchell Valley Scholarship

The Upper Mitchell Valley Scholarship is for \$300 and will be awarded to an outstanding student who has been in 4-H within the last four years and who is interested in continuing their education. Payments will be made directly to the school of the recipient's choice.

Application Deadline is April 20, 2025.

Contact the Extension Office for the application.

Panhandle Research Extension and Education Center Student Scholarship

The University of Nebraska – Lincoln Panhandle Research, Extension and Education Center will again offer the "Panhandle Research, Extension and Education Center Student Scholarship." Scholarships of \$1000 each will be awarded.

The application period will be open from February 1 to April 1, 2025.

To apply for the scholarship visit https://ssp.qualtrics.com/jfe/form/SV_eXN13Dj6FA7J3aS. We are asking that you please submit one supporting letter of recommendation along with your application the letter must be turned in by the deadline for applications. If a letter is not emailed to be included with the application, it will be considered incomplete. Please email the recommendation letter with the following subject line 2025 Scholarship Recommendation Letter (Insert Name of Student) and attach the letter and email to dmccarthy2@unl.edu.

Applicants must meet the following criteria:

- Have attended high school in the Panhandle of Nebraska in one of the following counties:
 - Banner, Blaine, Box Butte, Cherry, Cheyenne, Dawes, Deuel, Garden, Grant, Hooker, Kimball, Morrill, Scotts Bluff, Sheridan, Sioux, and Thomas
- Be attending any of the Nebraska University Campuses, including Nebraska College of Technical Agriculture.
- Majoring in Agronomy, Ag Economics, Animal Science, Vet Science, Agriculture Technology, or a related degree emphasizing agriculture.
- Be a graduating high school senior or in the first or second year of study.

Awards will be chosen by May 1, and applicants will be notified via email if selected.

For more information or questions, contact Deidra McCarthy at dmccarthy2@unl.edu or 308-632-1230.

Nebraska Cattlemen Foundation Scholarship

The Nebraska Cattlemen Beef State Scholarship awards a \$10,000 scholarship to an outstanding college junior, senior, or graduate-level student. Eligible students must be residents of Nebraska

and be enrolled in a Nebraska college or university pursuing a breed industry-related degree. The scholarship will be awarded based on student needs, Nebraska beef industry involvement (past achievements and future plans), and academics. The application period for 2025 is now open through March 15.

Nebraska Cattlemen Foundation Youth Scholarships

The Nebraska Cattlemen Foundation (NCF) offers scholarships to qualified youth in Nebraska who have an interest in the beef industry. These scholarships are provided through contributions received by NCF. The application period for 2025 is now open through March 15.

Find both applications on the website <https://www.nebrascacattlemen.org/research-and-education-foundation>.

Northern International Livestock Exposition (NILE)

For over 30 years, the NILE (Northern International Livestock Exposition) has awarded scholarships to deserving FFA and 4-H students who have been leaders in their respective programs, excelled in the classroom, participated in NILE events and are actively involved in their communities.

Scholarship applications will close on March 1, 2025 and will be awarded and announced in April 2025. Similar to previous years, the NILE Scholarship Committee will be awarding five levels of scholarships:

- High School One Time Scholarship – Awarded to high school seniors that meet the qualifications listed in the guidelines.
- Rolling Scholarship – The rolling scholarships will be offered to a select group of High School Seniors who will have the opportunity to renew the scholarship yearly, up to four years of their secondary education. Recipients of rolling scholarships will be chosen from the pool of applicants that are current seniors in High School.
- Secondary One Time Scholarship – A one-time grant, for students already enrolled in College or a Vo-Tech school meeting the qualifications.
- Shining Star: All qualified applicants are eligible. This scholarship is for an applicant that stands out in the crowd.
- NILE Legacy Award – Offered to students that have been very active in various NILE events from the time they were young!
- Hugh F. Miller Memorial Scholarship was created in memory of long time NILE Member Hugh Miller. Two \$500 scholarships will be awarded in his memory.
- Needle In The Haystack – This scholarship will be randomly drawn for during the NILE Foundation's Stetson and Stilettos in the Spring 2025. All scholarship applicants will be eligible – must be present to win.

More information is available at <https://thenile.org/events/youth/scholarships/>.

YQCA Scholarship

Youth for the Quality Care of Animals is excited to announce the 2025 Scholarship Program available to high school seniors and students enrolled in a 2-4 year university or certification program. In order to be considered for this scholarship, you must be a high school senior up to 21 year of age and In order to be considered for this scholarship, you must

- Be a high school senior or a high school graduate up to 21 years of age
- Have an active YQCA certification at the time of application (2025).
- Have had active YQCA certification the previous two years (2023, 2024)

Applications open January 1, 2025 and close February 17, 2025.

More information is available at <https://yqcaprogram.org/local/scholarship-program.php>

Animal Science at UNL

The Department of Animal Science offers scholarships to incoming freshmen and transfer students, as well as students at the sophomore, junior and senior level within the University of Nebraska-Lincoln Animal Science Program. The criteria, qualifications and application process varies according to the scholarship.

In addition to the departmental scholarships listed, there are also scholarship opportunities through CASNR, the University of Nebraska-Lincoln, commodity groups at both the state and national level, and even in your local area.

<https://animalscience.unl.edu/academic-programs/scholarships-and-financial-aid/>

Jarvis Memorial Scholarship

The intent of the scholarship is to assist women who live 3 or more hours drive from Lincoln but wish to attend the University of Nebraska-Lincoln. Applicant must reside in Love Memorial Cooperative Residence Hall on East Campus.

Qualifications:

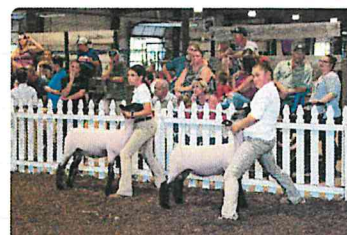
- Female born high school graduate (or soon to be) OR a UNL student who has not resided at Love Memorial Hall OR an undergraduate transfer student from another university or college pursuing any major for an undergraduate or graduate degree.
- Must have applied (minimum) or been accepted (preferred) to the University of Nebraska-Lincoln.
- Must have requested residency in Love Memorial Hall.

If you have questions email Gloria Turnbull at gloria.turnbull@windstream.net. The application is available at the Extension Office.

Application deadline: postmarked or email a PDF file no later than March 15, 2025.

Farm Service Agency (FSA) Youth Loans

The Farm Service Agency (FSA) makes loans to youth to establish and operate agricultural income-producing projects in connection with 4-H clubs, FFA and other agricultural groups. Projects must be planned and operated with the help of the organization advisor, produce sufficient income to repay the loan and provide the youth with practical business and educational experience. The maximum loan amount is \$5,000.



Youth Loan Eligibility Requirements:

- 1) Be a citizen of the United States (which includes Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands) or a legal resident alien
- 2) Be 10 years to 20 years of age
- 3) Comply with FSA's general eligibility requirements
- 4) Conduct a modest income-producing project in a supervised program of work as outlined above
- 5) Demonstrate capability of planning, managing and operating the project under guidance and assistance from a project advisor. The project supervisor must recommend the youth loan applicant, along with providing adequate supervision.

For more information and help preparing the application forms, contact the farm loan team at the nearest USDA Service Center. To find the nearest office, visit: farmers.gov. Additional information about youth loans can be found at <https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/youth-loans/index>.

2025 Important Dates

2025 Important Dates and Deadlines

- **February 22nd**- First 4-H and FFA Market Beef Weigh/Tag in- 1:00-2:30pm @ the UNL experimental feedlot
- **March 15th**- Second 4-H and FFA Market Beef Weigh/Tag in- 1:00-2:30pm @ the UNL experimental feedlot. (If you do not make one of these dates with your fair market animal, you will not be permitted to sell in the Scotts Bluff County Fair Livestock Sale).
- **April 15th**- YQCA In-Person Training 6:00pm @ PREEC
- **May 19th**- First 4-H and FFA sheep, swine, and goat Weigh/Tag in- 6:00-7:30pm @ the Scotts Bluff County Fair Grounds.
- **May 22nd**- Second 4-H and FFA sheep, swine, and goat Weigh/Tag in- 6:00-7:30pm @ the Scotts Bluff County Fair Grounds. (If you do not make one of these dates with your fair market animal, you will not be permitted to sell in the Scotts Bluff County Fair Livestock Sale).
- **June 1st**- ALL breeding animals, stockers, swine, sheep, goat, and fiber animal ID sheets due.
- **June 1st**- ALL county horse show ID sheets (and breed registration papers copy if applicable) due.
- **June 1st**- ALL dog and cat vaccination records due.
- **June 1st**- ALL rabbit ID sheets due.
- **June 15th**- Final date for 4-H enrollment (v2.4honline.com). This makes you an official 4-H member in the state of Nebraska and allows you to be covered under 4-H insurance when participating at 4-H events.
- **June 15th**- ALL Nebraska State Fair livestock DNA packets and nominations (<https://showstockmgt.com/>) due.
- **July 1st**- Certified Pure Bred Registration Papers due for ALL swine showing in the pure-bred division at fair (If you miss this deadline, you will be put into the crossbred division).
- **July 1st**- YQCA certificates due.
- **July 1st**- All required horse levels due for the Scotts Bluff County Horse Show.
- **July 1st - July 10th**- (open on the 1st and close on the 10th) Scotts Bluff County Fair Entries deadline (This is when you tell us what entries/animals you are bringing to fair; you **MUST** complete this if you plan on exhibiting at fair. THIS IS NOT what you would have completed for 4-H enrollment when you listed potential projects).

2025 Scotts Bluff County Fair Dates

Clothing Day and Shooting Sports- July 19th

Dog Show July 20th

Main Fair Dates: July 26th- August 3rd

○ Full Schedule to be released at a later date.



Nebraska Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska - Lincoln cooperating with the Counties and the United States Department of Agriculture. The 4-H Youth Development program abides with the nondiscrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.

Scotts Bluff County 4-H Contact Information



EXTENSION

Nebraska Extension-Scotts Bluff County

Email: abrown132@unl.edu

Website: <https://extension.unl.edu/statewide/scottsbuff/>

Location: 4502 Ave I Scottsbluff, NE 69361

Phone: [308-632-1480](tel:308-632-1480)

Facebook: <https://www.facebook.com/scottsbuffco4h/>

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Audra Brown

Using Smore to create beautiful newsletters

Panhandle Master Gardener Advanced Training Spring 2025

Monday, January 24, 2025

- 10 AM - Welcome and Overview, Emily Stine (Nebraska Extension)
- 11 AM - Volunteer Opportunities
- 1 PM - 4H Pollinator Project and Garden Design

Monday March 3, 2025

- 10 AM - Photography in the Garden, Gary Stone (Nebraska Extension)
- 1 PM - TBA

Monday, March 10, 2025

- 10 AM - Caring for Roses, Chrissy Land (NE Forest Service)
- 11 AM - Paul Safford (NPNRD)
- 1 PM - TBA

Monday March 17, 2025

- 10 AM - Anaerobic Soil Disinfestation, Kirstee Moore (NPNRD)
- 11 AM - TBA
- 1 PM - Season Extending Builds, Jeff Edwards (University of Wyoming)



NEWS RELEASE - FOR IMMEDIATE RELEASE, March 27, 2025

Contact Chabella Guzman, communications specialist, 308-632-1252, cguzman2@unl.edu

Cutline - Lego League team "Lord of the Gummies" brought home the 1st Place Champions Trophy on March 22. Team members are left to right: Simon Rugroden, Cole Shimp, Henry Winterbottom, Lee Rogers, Oliver Howard, Lydia Rugroden, Emmaline Hergert, and Kolter Luce. Courtesy Photo

Panhandle Lego Robotics teams bring home awards

By Chabella Guzman, PREEC Communications



Gummies, cookies, hawks, and dozens of robots descended on Lincoln for the annual Nebraska First Lego League Robotics State Championship Tournament on March 21-22.

"The Nebraska Panhandle showed up with our teams to compete at the Nebraska First Lego League Robotics State Championship Tournament that had 89 teams from across the state," said Nathan Rice, Nebraska Extension 4-H Youth Development and coach for the Lord of the Gummies team. "Our teams demonstrated what they learned this year through countless hours of problem-solving, building, and coding."

The competing teams had between 2 and 10 members, aged 9 to 14 years. The teams work together to design, build, and program a robot. The robots must accomplish as many missions as possible in two minutes and 30 seconds. Along with building and coding the robots, the teams design and present an innovation project that positively impacts their local community.

"We (Scotts Bluff County 4-H) had two teams finish in the top three, with the Lord of the Gummies receiving the 1st place Championship Trophy and the Panhandle Cookie Bytes receiving the 3rd Place Champions Trophy," Rice said. Both Teams are qualified to move on to world tournaments. The Lord of the Gummies will compete in April at the FIRST World Championships in Houston, Texas, where 67 countries from across the world will be represented at the tournament. The Panhandle Cookie Bytes will compete in June at the WPI Annual First Lego League Event in Worcester, Mass.

For the third consecutive year, the Scottsbluff County 4-H Robotics program has secured two of the top three spots in the state. This has led to a jump in interest and growth of robotics education in the local community.

First Lego League is a worldwide youth program that partners with LEGO each year to release a challenge board and theme for the year's competition. The 2024-25 theme was "Submerged," and students were invited to address challenges related to the oceans.

The 4-H season begins in August and runs through March. Anyone interested in learning more about the program or supporting the teams on their trip to Worlds is asked to contact the Scotts Bluff County Extension Office at 308-632-1480.

Awards from teams across the Panhandle:

- Scottsbluff - Lord of the Gummies: 1st Place Champions Trophy & Nebraska Innovation Award Nominee
- Scottsbluff - Panhandle Cookie Bytes: 3rd Place Champions Trophy, 1st Place Robot Performance Award, and Nebraska Innovation Award Nominee
- Alliance - Sting Ray: 1st Place Core Values
- Hay Springs - Pixilated Hawks: Nebraska Innovation Award Nominee
- Kimball - Kimbots: 2nd Place Robot Design
- Rushville - Tiny But Smart: 3rd Place Robot Design
- Scottsbluff - CCS Robotics 2: 4th Place Core Values

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Stacy Brown

From: All employees located in Elliott Bldg <phctr@lists.nebraska.edu>
Sent: Monday, April 14, 2025 1:02 PM
To: Chabella Guzman
Subject: News Release: 4-H members present pollinator garden service project at Great Plains Conference
Attachments: creech 4-11 butterflies.jpg



**PANHANDLE RESEARCH, EXTENSION
AND EDUCATION CENTER**

NEWS RELEASE - FOR IMMEDIATE RELEASE, April 14, 2025

Contact Chabella Guzman, communications specialist, 308-632-1252, cguzman2@unl.edu

Cutline - Scotts Bluff County 4-H members from left, Brooklyn, Hunter, and Gage Creech, presented a service project 4-H is helping with to create a pollinator garden in Gering, Neb.. Courtesy Photo

4-H members present pollinator garden service project at Great Plains Conference

By Chabella Guzman, PREEC Communications

The 50th annual Great Plains conference was held on April 8-10 in Lincoln, and a poster session was held at the Great Plains Art Museum. Nebraska Extension Master Gardener Laurie Zitterkopf and Scotts Bluff County 4-H members presented a poster on a service project they will be performing this spring to introduce a pollinator garden at the Scotts Bluff County Administration Building in Gering, Neb.

"Mike (Zitterkopf) and I were able to transport the display and poster to the conference," Laurie Zitterkopf said. Three of the 4-H project members from Scottsbluff, Hunter, Brooklyn, and Gage Creech, joined her at the conference. "Our 4-H youth attended to answer questions from the attendees. They had wonderful interest in the project and did very well presenting."

Zitterkopf and the 4-Hers used guidelines for native landscape design from the Nebraska Statewide Arboretum. The team will create a garden that focuses on the larval (caterpillar) stage of the butterfly's life cycle. They also chose host plants for butterflies of Scotts Bluff County, as listed on the Nebraska Lepidoptera, 89 Species, website. "With our research of the chosen butterflies, we have already learned that the *Icaricia shasta*, Shasta Blue, takes two years to complete its life cycle."

The garden will have signage highlighting the featured butterflies and the host plants needed for these insects to complete their life cycle. "We want to show with our educational sign and our garden how we can bring the rich landscape of the Great Plains into our living spaces."

The 4-H youth were approached by a number of attendees commenting on their presentation and project. "Dr. Larkin Powell, Director of the School of Natural Resources, asked to receive pictures of their blooms this summer so that he might share them on his social media," Zitterkopf said.

Work on the pollinator garden will begin soon, and the space has been added to the Nebraska Statewide Arboretum's Wildflower Week schedule on Friday, June 6. The gardeners will finish planting on June 6, and there will be a ribbon cutting at 10 a.m. The public is invited.

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**PANHANDLE RESEARCH, EXTENSION
AND EDUCATION CENTER**



NEWS RELEASE - FOR RELEASE, April 22, 2025

Contact Chabella Guzman, communications specialist, 308-632-1252, cguzman2@unl.edu

Cutline - Foxtail barley (Hordeum jubatum L.) also known as skunk grass, squirrel-tail, and wild barley is a native grass. Its scientific name is Hordeum jubatum L. It belongs to Poaceae (Grass family). Photo by Kim Todd

Develop a management plan for Foxtail barley in April and May

By Gary Stone, Nebraska Extension Water and Crops Educator | Brock Ortnier, Nebraska Extension Livestock Educator | Dr. Kathleen Anderson, University of Nebraska Horse Extension Specialist | Dr. Nevin Lawrence, University of Nebraska Integrated Weed Management Specialist | Dr. Mitchell Stephenson, University of Nebraska Range Management Specialist

Early Detection and Rapid Response (EDRR) is a concept to identify potentially invasive species prior to or just as the establishment of the invasive species is taking place. An Integrated Pest Management plan (IPM) can be developed to manage, contain, and eradicate the invasive species before it can spread further. This will avoid costly, long-term control efforts.

Foxtail barley is a native cool-season bunchgrass. It is a short-lived perennial that has a shallow fibrous root system. Foxtail barley reproduces from seed and vegetatively by tillering. When mature, the plant can be one to three feet tall. Plants are gray-green to blue-green in color. Growth initiates in April and May; flowers and sets seed from June to August. Seed may survive up to seven years.

As a forage for horses, it has fair to good forage value until seed heads develop. During the vegetative state, before seed heads develop, it can be safely grazed. However, once seed head development begins, horses and cattle grazing Foxtail barley can be problematic.

When the seeds form, awns with small, sharp barbs along the edge extend from the seed. The awns can be up to two inches long with sharp barbs that point backwards. These sharp barbs allow the seed to lodge in the hair and fur of animals and be transported to new areas. The barbed awns can cause injury to pets, horses, and livestock lodged in their skin, eyes, nose, mouth, and digestive tract. Since the barbs point backwards, they continue to work their way deeper, potentially affecting organs and blood vessels. Affected areas may also form abscesses and become infected. Animals affected need to be treated immediately. Caution should be taken with hay containing the seeds and awns if fed to livestock.

Signs that a horse or livestock have grazed Foxtail barley or consumed hay contaminated with Foxtail barley may consist of drooling and a lack of appetite. Drooling and loss of appetite are caused by awns that are lodged in the mouth and most likely cause the mouth to become inflamed and sore, resulting in the formation of abscesses.

Foxtail barley should not be confused with green, yellow, or bristly foxtail (*Setaria* spp.), which are non-native summer annuals not closely related to Foxtail barley and are often a major weed in annual crops.

Early in the growing season, Foxtail barley is palatable, the forage value is fair to good, and can be safely grazed early, prior to seed development. Grazing after seed development is where the problems may occur. However, horses and other livestock typically avoid grazing Foxtail barley once seed head formation occurs if other forage is available.

Habitat

Foxtail barley can grow in most soil types and is an aggressive pioneer weed. However, it is saline and alkaline tolerant and is found most often in moist or wet areas, such as pastures, meadows, disturbed areas, ditch banks, and roadsides. Occasionally, it will show up in hay and grain fields. It can form monocultures and force out other vegetation.

Management

Prevention is the best and cheapest management option. Having well-established perennial grasses and forbs on maintained meadows, hayfields, and pastures, with proper grazing and rotational grazing techniques, can go a long way in preventing their establishment. Scouting, monitoring, and proper identification are key factors for management.

Currently, there are no biological control methods available.

Cultural and mechanical control measures include timed burning, hand pulling, mowing, and proper grazing management. Late spring burning has shown limited success. Hand pulling can be done if there are not too many plants. Mowing can reduce seed head production, but the plants will regrow.

There are limited chemical treatment options available to manage Foxtail barley, and the options available will depend on whether Foxtail barley is being managed in alfalfa, a cool-season hay crop, or a pasture. In alfalfa, glyphosate is available as the best management option in Roundup Ready® alfalfa. In conventional alfalfa, clethodim (Select Max®, Arrow® 2 EC) can be used but labels warn that multiple applications may be necessary for control. Products containing hexazone can be used at seeding, and products containing pronamide are labeled in the fall or winter, both providing residual control. In grass hay, pasture, and rangeland, imazapic (Plateau®) is labeled for control of Foxtail Barley, but care must be taken to ensure that the grass grown for hay or forage is tolerant to imazapic. The success of chemical control declines if it is sprayed later in the growing season, after seed heads have become established.

Be sure to select a product labeled for the site and target pest. Use of product brand names is for information purposes only and does not imply endorsement by the University of Nebraska-Lincoln. Read, understand, and follow all label instructions when using any pesticide.

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**ENGINEERING
EXPLORERS**

ENGINEERING EXPLORERS CAMP

May 28 - 30, 2025

9:00 AM to 11:30 AM

Panhandle Research and Extension Center

4502 Ave I

Scottsbluff, NE 69361

Ages: 8-12 years-old

Cost: \$20 per student

Register for the camp by
emailing the 4-H Office @
nrice3@unl.edu



Join us to invent, design, and create in this exploration of engineering. Using everyday materials and your ingenuity, you'll create a contraption that hovers in a wind tube, build a lock box, invent the ultimate desk organizer, and design helpful tools for a dog. Have fun building solutions to everyday problems, creating cardboard constructions, and defying gravity!

This program is part of a University of Nebraska-Lincoln research study exploring how 4-H Educators and youth talk about engineering during 4-H activities. A researcher will be video recording parts of the program. If you and your child would like to help UNL and 4-H learn about and improve engineering education, please go here to learn more: <https://go.unl.edu/FACETparentconsent> or scan the QR code below.





NEWS RELEASE - FOR IMMEDIATE RELEASE, July 29, 2025

Contact Chabella Guzman, communications specialist, 308-632-1252, cguzman2@unl.edu

EDS: The "Engaging Agriculture" articles are written weekly by and for Engagement Zone 1 Nebraska Extension Educators, who cover the 11 counties in the Panhandle.

Cutline - Know what kind of lease you are getting into, or which one will fit your purposes. Photo by Chabella Guzman

Terminating a Verbal Farm Land Lease

By Jessica Groskopf, Nebraska Extension Ag Economist | Dave Aiken, UNL Ag Economist

Some farm leases are not written but are verbal or "handshake" agreements. Because nothing is in writing, the parties may have different recollections of their agreement, making lease disputes more difficult to resolve. The most common legal issue associated with verbal farm leases is how a lease may legally be terminated. For verbal leases in Nebraska, six months advance notice must be given to legally terminate the lease. In contrast, the termination of a written lease is determined by the terms of the written lease. If the lease does not address termination, the lease automatically terminates on the last day of the lease.

Terminating verbal leases

For verbal leases, the Nebraska Supreme Court has ruled that the lease year begins March 1. Notice to a tenant to vacate under a verbal or handshake lease (legally referred to as a "notice to quit") must be given six months in advance of the end of the lease, or no later than September 1. This rule applies regardless of the type of crop planted. Those with winter wheat should consider providing notice before it is time to prepare wheat ground for planting.

For example, for the lease year beginning March 1, 2026, and ending Feb. 28, 2027, notice from the landlord that the lease will be terminated would have to be received by the tenant no later than Sept. 1, 2025. The lease would then expire Feb. 28, 2026, with the new tenant (or new buyer) able to take over the lease March 1, 2026. If, however, the notice to quit were given (or received) after Sept. 1, 2025, the existing tenant would have the lease until Feb. 28, 2027.

Notice should be provided to the tenant for either lease termination or changing lease provisions. A verbal termination notice might be adequate but could be difficult to prove in court if litigation were necessary to enforce the lease termination. It is recommended that the farmland lease be terminated by Registered Mail™. This means that the person receiving the letter signs for it, providing evidence that the termination notice was received. The University of Nebraska-Lincoln does not provide sample lease termination letters. If you need guidance, consult your attorney.

Pasture Lease Terminations

Handshake or verbal leases are different for pastures. The typical pasture lease is for the five-month grazing season rather than the entire year. The lease is only in effect for that time, so the lease is terminated at the end of the grazing season; however, different lease length arrangements can be made in a written lease, and that would be followed if in effect. Importance of Good Communication Regardless of the type of lease - written, verbal, or even multiple year - the landlord should have clear communication with the tenant. By sending a termination notice before September 1, even for written leases, you can avoid any miscommunication or pitfalls.

Written Leases

In all instances, written leases would be preferred over oral or "handshake" leases. Sample leases are available in the Document Library at aglease101.org and can help both parties start thinking about the appropriate lease conditions for their situation before they consult an attorney to draft a lease or review a proposed lease. The Ag Lease 101 site was developed by university extension specialists in the North Central Region but is not a substitute for personal legal advice.

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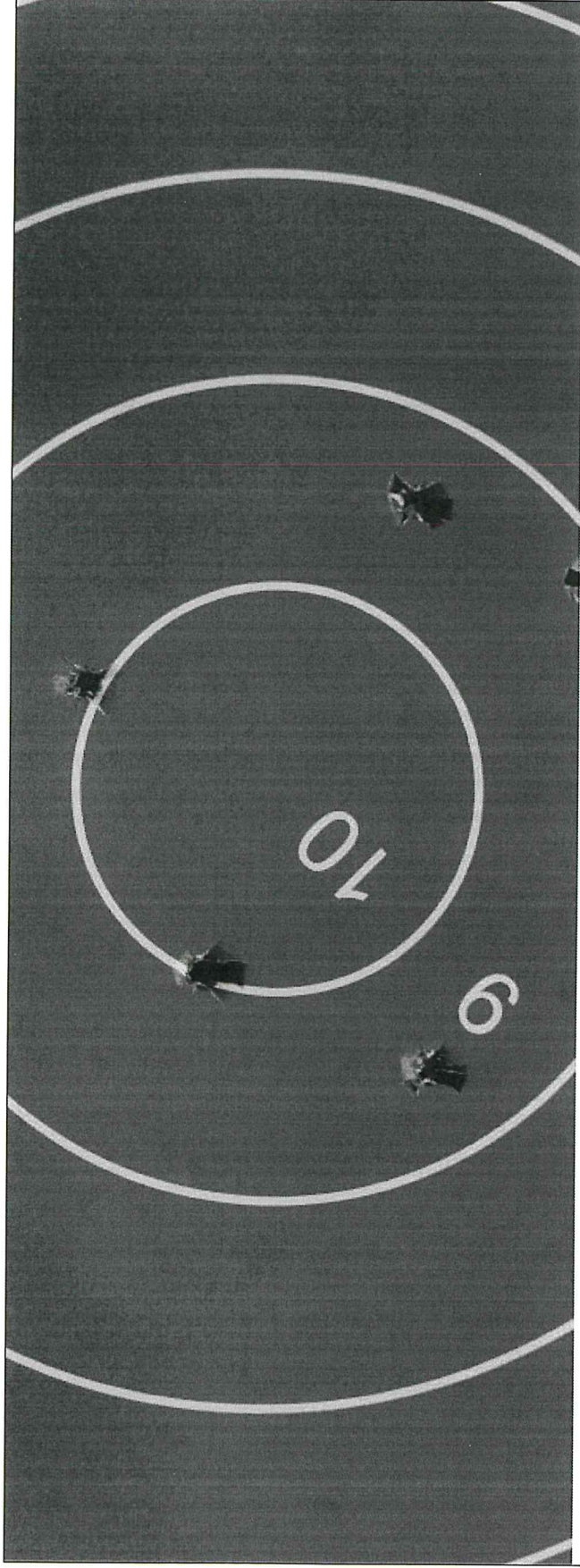
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NEBRASKA 4-H SHOOTING SPORTS INSTRUCTOR WORKSHOPS

Oct 4th 8am-6pm (Initial)

Oct 4th 9am- 12pm (Update)

Oct 5th 8am-12pm (Initial)



Location: Panhandle Research & Extension Center

4502 Ave I Scottsbluff, NE 69361

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NEWS RELEASE - FOR IMMEDIATE RELEASE, Oct. 21, 2025

Contact Chabella Guzman, communications specialist, 308-632-1252,
cguzman2@unl.edu

Cutline - Goshen / Gering-Fort Laramie Tunnel No. 2 Exit. All photos by Gary Stone

1 - Goshen / Gering-Fort Laramie Tunnel No. 2 Entrance

2 - Goshen / Gering-Fort Laramie Tunnel No. 2 Entrance closeup

Groundbreaking for Tunnel Replacement, Construction scheduled to begin

By Gary Stone – Extension Water & Cropping Systems Educator

It has been six years since the tunnel collapse and canal breach on the Goshen / Gering-Fort Laramie main line canal, which curtailed water deliveries to over 107,000 acres in Nebraska and Wyoming for 44 days. Replacement for tunnel No. 2 on the Goshen / Gering-Fort Laramie canal will begin this fall.

A groundbreaking ceremony will take place on Tuesday, October 28, at the Goshen Irrigation District office in Torrington, Wyo., followed by a review of the anticipated work at the Tunnel No. 2 site.

The preliminary work this fall will include development of the inlet and outlet structures at Tunnel No. 2 prior to actual removal and replacement of the tunnel. Building access roads to the construction sites and installation of power lines to serve the construction equipment during the tunnel replacement will also be initiated. Actual tunnel excavation and replacement will not start until the fall of 2026.

The sequential boring machine and shield are being purpose-built for this project. The tunnel excavation and replacement will start at the outlet end, progressing up to the entrance. The old tunnel will be bored out larger than the existing tunnel, removing the old tunnel and any construction timbers from the initial construction. As the tunnel excavation progresses in five-foot increments, the old tunnel and surrounding substrate will be removed. Pre-cast, reinforced concrete sections will be installed and bolted together as work progresses up the tunnel. The void left between the outside of the new tunnel wall and the tunnel substrate will be filled with grout. Replacement of Tunnel No. 1 would begin in the fall of 2027. Anticipated replacement of both tunnels is expected to be completed in the spring of 2028.

Anticipated timeline for the tunnel replacement:

- 2025 - All permitting completed and approved
- 2025 - Right-of-Way access (approximately 116 acres) secured
- Fall 2025 – Inlet and outlet for Tunnel No. 2 developed
- Fall 2025 – Boring machine and tunnel sections manufactured
- Spring / Summer 2026 – Irrigation season
- Summer 2026 – Construction site setup



- Fall 2026 / Winter 2027 – Excavation and replacement of Tunnel No. 2
- Fall 2026 / Winter 2027 – Inlet and outlet for Tunnel No. 1 developed
- Spring / Summer 2027 – Irrigation season
- Fall 2027 / Winter 2028 – Excavation and replacement of Tunnel No. 1
- Spring 2028 – Tunnel replacement project completed

Funding for the project continues to be a challenge for the irrigation districts. The total anticipated cost of the project is estimated to be \$150 million. The irrigation districts have secured \$64.5 million in grants from Nebraska and Wyoming and have an option to access \$58.5 million from the U.S. Bureau of Reclamation as a low-interest loan. Additional support is required for the balance.

Complete background and history of the tunnel collapse and canal breach can be found on CropWatch' s [Canal Irrigation | CropWatch](#) page.

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