

April 2025

RANGE & PASTURE *Journal*

~ Providing Stewardship Strategies For Northern Plains Grasslands ~



Range & Pasture Journal is sponsored
by the S.D. Grassland Coalition and
the Nebraska Grazing Lands Coalition

Published by
RL Publications, Philip, SD

Special insert in the April 30, 2025 edition
of *The Cattle Business Weekly*

Inside:

Leopold Winners for S.D. & Neb.
PAGE 4 & 5

Smooth Brome grass Grazing Management
PAGE 6

Going to Grass: Preventing Grass Tetany
PAGE 8

NEBRASKA Grazing Lands Coalition

NGLC sponsors Elaine Froese at 40th Annual Women in Ag Conference

The Nebraska Grazing Lands Coalition (NGLC) proudly sponsored Elaine Froese as the keynote speaker at the 40th Annual Women in Ag Conference, held on February 20-21 in Kearney, Neb. The conference brought together women from the agricultural community for a mix of workshops addressing livestock, farm and ranch concerns, as well as mental health topics.

Elaine Froese, a renowned speaker from Boissevain, Manitoba, Canada, delivered the opening keynote, “Roles of Women in Ag...Living an Intentional Life, Well.” As a member of a multi-generational grain farm, Froese has spent 28 years writing a Grainews column and authoring five books. Her mission is to help agricultural families find harmony through understanding, having coached more than 1,000 families in managing the anxieties tied to an uncertain future.

“We were thrilled to sponsor Elaine Froese and bring her expertise to this conference,” said Angela Redman, Assistant Director of NGLC. “Her insights and experience provided real value to women in agriculture, helping them to better navigate the challenges they face both on the farm and in life.”

As part of this year’s event, NGLC also offered scholarships to 10 women in agriculture, providing them with the opportunity to attend the conference. “It was important for us to provide women with time to engage, learn, and connect,” Redman stated. “An evening social with Froese was a highlight for many, creating a space for women to network and share experiences. It was a powerful reminder that they’re not alone in their struggles.”

In addition to her keynote address, Froese led a breakout session titled “Conflict Resolution as a Business Risk Manage-



Elaine Froese was the keynote speaker at the 40th Annual Women in Ag Conference, held on February 20-21.

ment Strategy,” offering valuable tools to help women in agriculture navigate the complexities of family dynamics and business operations.

As a follow-up to the conference, NGLC also hosted a webinar with Froese, “Dealing with Entitled Siblings,” which provided additional guidance for families dealing with succession and transition issues.

“NGLC is incredibly grateful for the opportunity to collaborate with Elaine Froese and the

Women in Ag team,” Redman concluded. “It was a great experience for everyone involved, and we’re proud to have been part of such a meaningful event.”

This opportunity was sponsored through a grant received by NGLC from the National Fish and Wildlife Foundation Conservation Partners Program. For more information about NGLC programs and upcoming events, visit nebraskagrazinglands.org.

NGLC hosts workshop on Generational Transition

Transitioning a farming or ranching operation from one generation to the next can be a challenging process. To assist producers in navigating this complex task, the Nebraska Grazing Lands Coalition (NGLC) recently hosted a one-day workshop titled Enhancing the Grasslands of Nebraska Through Generational Transition in Columbus.

The event offered a valuable learning experience for attendees, featuring Pamela Epp Olsen, an estate planning attorney, who guided participants

through the intricacies of estate and transition planning. Additionally, a panel of producers shared their personal stories and experiences with succession planning, providing valuable insights into the practical aspects of the process.

“Succession planning is crucial for the long-term success of operations. By planning for the next generation, producers can significantly increase their chances of sustaining their businesses,” said Angela Redman, Assistant Director of NGLC.



The Nebraska Grazing Lands Coalition recently hosted a one-day workshop titled Enhancing the Grasslands of Nebraska Through Generational Transition in Columbus, Neb.

“These workshops give participants the chance to connect and find inspi-

ration to create their own succession plans.”

Continued on page 4

NGLC Board of Directors

Tim Kalkowski Chairman	Angela Redman NGLC Assistant Director (308) 750-2330 angela@nebraskagrazinglands.org
Vern Terrell Past Chair	Alex Petersen Burn Coordinator (308) 730-2602 alexpetersen@nebraskagrazinglands.org
Logan Pribbeno Executive Committee	Doug Whisenhunt Burn Coordinator (308) 520-1317 doug@nebraskagrazinglands.org
Wayne Rasmussen Honorary Board Member	Jack Arterburn Western Nebraska Program Coordinator (308) 249-3717 jack@nebraskagrazinglands.org
Dan Stelling	Laura Nelson Statewide Grasslands Coordinator (308) 235-8420 laura@nebraskagrazinglands.org
Paul Swanson	Michele Michaelson Office Manager (402) 707-4570 officemanager@nebraskagrazinglands.org
Vaughn Hinrichs	Twila Phillips Grants Administrator & Accountant Sandhills RC & D (308) 546-9081 (cell) (307) 546-0636 (work) twila@sandhillsrcd.org
Sheila Luoma	
Ron Bolze	
Sandy Montague-Roes Vice Chair	
Corey Cable	
Jessica Lovitt	
Matt McGinn	
Alex McKiernan	
NGLC Staff Leah Peterson Executive Director (308) 872-1250 director@nebraskagrazinglands.org	

NGLC Grazing Lands Coalition

Follow us on...

Website nebraskagrazinglands.org

Facebook [https:// www.facebook.com/ nebraskagrazinglandscoalition/](https://www.facebook.com/nebraskagrazinglandscoalition/)

Instagram @negrazinglands

Twitter/X @NEgrazinglands

Linkedin Nebraska Grazing Lands Coalition

On the Cover:

It’s spring time and that means fresh baby calves and green grass are growing. Photo by Troy Walz in Nebraska.

NGLC Grazing Lands Coalition

WE ARE “GRAZING LAND LOVERS” THROUGH AND THROUGH dedicated to the enhancement of grassland by creating public awareness and improvement of the grazing lands in Nebraska. NGLC’s focus is to provide voluntary technical assistance and educational opportunities on grazing land management. Healthy Nebraska grazing lands translate directly into forage for livestock, habitat for wildlife, economic benefits for landowners and rural communities, and clean water for much of the Great Plains.

We offer consultation and educational programs to provide training on the value of grassland stewardship and mentoring programs that allow grassland management to be handed down to the next generation of farmers and ranchers. Call us now to find out how you can join others on our quest to preserve Nebraska’s grasslands. Contact the NGLC to participate in our Rangeland Monitoring Program (RMP).

308-872-1250 • www.nebraskagrazinglands.org

The Nebraska Grazing Lands Coalition (NGLC) is a part of a national effort to enhance the resource stewardship and success of grazing land-dependent operations. Objectives of the NGLC board, made up of mostly ranchers, are to strengthen partnerships, promote volunteer assistance and participation, and promote education, training, appreciation, advocacy, and public awareness of the 23 million acres of grazing lands in Nebraska.

Specific projects include sponsoring statewide grazing educational opportunities, collaboration with other partners and agencies focused on grazing management, promotion of farm and ranch transition planning and education, and advocacy for the stewardship of Nebraska’s grasslands.

Stomprud Angus Ranch receives S.D. Leopold Conservation Award

Stomprud Angus Ranch of Mud Butte has been selected as the recipient of the 2025 South Dakota Leopold Conservation Award®.

The \$10,000 award honors ranchers, farmers, and forestland owners who go above and beyond in their management of soil health, water quality, and wildlife habitat on working land.

Sand County Foundation and national sponsor American Farmland Trust present Leopold Conservation Awards to private landowners in 28 states. In South Dakota, the award is presented with the South Dakota Grassland Coalition.

Larry and Eileen Stomprud own and operate Stomprud Angus Ranch in western South Dakota with their son Jay, and his wife Jennifer, and their grandchildren: Elijah, Kaira, and Joshua. They will be formally presented with the South Dakota Leopold Conservation Award later this year.

The award, given in honor of renowned conservationist Aldo Leopold, recognizes landowners who inspire others with their dedication to environmental improvement. In his influential 1949 book, "A Sand County Almanac," Leopold advocated for "a land ethic," an ethical relationship between people and the land they own and manage.

"Farmers and ranchers are the very best conser-

vationists. They have a vested interest in passing their land down to their kids and their grandkids," said South Dakota Governor Larry Rhoden. "The Stompruds embody this mentality with their land ethic, as they operate their land with both their kids and their grandkids. Just as my family has ranched land West River for four generations, so have they been good stewards of the land. South Dakota is better off for ag producers like the Stompruds, and I thank Larry for his service in our military, as well."

The Stomprud Ranch

Whether its ranch management or military strategy, Larry Stomprud has always seen the importance in planning.

He draws inspiration from former U.S. President and military commander, Dwight D. Eisenhower, who famously said, "In preparing for battle I have always found that plans are useless, but planning is indispensable."

Larry has taken those words to heart throughout a ranching career where he's thoughtfully considered the needs of cattle and the landscape under his stewardship.

Although Larry has always had a deep affinity for ranching and conservation, upon graduating from South Dakota State University in 1971, returning to his family's ranch wasn't financially feasible. Instead, he

chose to hone his leadership skills by serving in the South Dakota Army National Guard.

He also pursued a Master's degree in big game management at Montana State University where he was introduced to planned grazing, an approach advocated by Allan Savory for regenerating land and improving soil health. This exposure deeply influenced Larry's future conservation efforts.

Upon retiring from the military in 1995, Larry remained driven by his land ethic. He and his wife Eileen seized the opportunity to become the next generation of stewards at Stomprud Angus Ranch. With his military pension, they bought his uncle's interest in the ranch and invested in neighboring properties. Providing contiguous habitat and pasture was a strategy that would benefit wildlife and the ranch's financial resilience.

Today, Larry and Eileen manage Stomprud Angus Ranch's 6,600 acres with their son Jay, his wife Jennifer, and their three grandchildren: Elijah, Kaira, and Joshua. Aside from 700 acres of hay production, they rotationally graze registered seedstock Angus and commercial cows on the ranch's rangeland.

With financial and technical assistance from state and federal agencies, the Stompruds

transformed 1,000-acre pastures into more than 30 smaller pastures ranging from 100 to 400 acres in size. Investments were made in four miles of cross-fencing, 10 miles of water pipelines, and 24 stock tanks.

To conserve grassland in a semi-arid region, their herd's size fluctuates between 220 and 300 heifers and cow-calf pairs depending on range conditions. Most pastures are not grazed for more than 20 days during the growing season. This supports range plant health by facilitating leaf regrowth and maintaining healthy root reserves for the next growing season.

In an ecosystem that averages just 17 inches of rain annually, Stomprud Angus Ranch's drought management strategy works to prevent over-grazing and sustain ecological balance.

In 2005, Larry collaborated with a neighboring rancher to drill a deep well. "That investment has been the lifeblood of our operation," Larry notes. "Without it, there probably wouldn't be a cow on this place."

Also providing essential water sources for cattle and wildlife are the 18 dams and dugouts that were established by Larry's father Calvin and grandfather Ollie.

Ample sightings of other wildlife like white-tail deer, Bald eagles, sharp-tailed grouse, partridges, and nesting grassland birds under-



Larry and Eileen Stomprud own and operate Stomprud Angus Ranch in western South Dakota with their son Jay, and his wife Jennifer, and their grandchildren: Elijah, Kaira, and Joshua.

score the richness of the ranch's biodiversity. Smooth-wire cross fences powered by solar batteries ensure safe passage of pronghorn antelope and mule deer that migrate through pastures.

Larry and Jay have planted 5,000 trees to create cattle shelterbelts that provide shelter for livestock and wildlife from winter winds in western South Dakota.

On and off the ranch, the Stompruds have worked with agriculture and conservation organizations, ranging from the Meade County Farm Bureau to the World Wildlife Fund.

Throughout its 114-year history, resilience is a cornerstone of the Stomprud Angus Ranch. Each generation faced and overcame challenges with military precision.

"It's great to be able to recognize farmers and ranchers like the Stomprud family, who practice conservation and soil health principles that help to improve and maintain the sustainability of their operations," said Mike McKernan, South Dakota Grassland

Coalition Chairman. "Their hard work and dedication to conservation will secure a legacy for future generation."

"These award recipients are examples of how Aldo Leopold's land ethic is alive and well today," said Kevin McAleese, Sand County Foundation President and CEO. "Their dedication to conservation is both an inspiration to their peers as well as a reminder to all how important thoughtful agriculture is to clean water, healthy soil, and wildlife habitat."

"As the national sponsor for Sand County Foundation's Leopold Conservation Award, American Farmland Trust celebrates the hard work and dedication of the award recipients," said John Piotti, AFT President and CEO. "At AFT we believe that exemplary conservation involves the land itself, the practices employed on the land, and the people who steward it. This award recognizes the integral role of all three."

The 2024 award recipient was Blioux River Ranch of Castlewood.

Strengthening Grazing Communities

Continued from page 3

high-quality fencing

supplies; you're also supporting the SD Grassland Coalition's initiatives. A portion of every purchase made using our discount code, SDGC10, goes back to helping us continue

our work in education, advocacy, and producer outreach.

In addition to financial support, our partnership with Powerflex ensures that our members have access to expert guidance on fencing strategies, grazing system design, and product innovations that can enhance their operations. Whether you're just beginning your regenerative grazing journey or looking to refine your existing system, Powerflex and the SDGC are here to help.

How to Take Advantage

We encourage all SDGC members and supporters to take advantage of this opportunity. By using SDGC10 at checkout when purchasing from Powerflex Supply, you'll receive a discount on essential fencing supplies while also contributing to the Coalition's ongoing efforts. It's a win-win for your operation and the broader grazing community.

We're excited to see how this partnership



Powerflex has high-quality polywire, step-in posts, energizers and paddock setup solutions,

benefits producers across South Dakota. Strong, well-managed grasslands are the foundation of our agricultural future, and with the right tools, knowledge, and support, we can ensure that future remains bright.

To learn more about Powerflex Supply and explore their product offerings, visit their website and don't forget to use SDGC10 for your discount. Together, we can continue building a thriving, resilient grazing community.

NGLC Workshop

Continued from page 2

This educational workshop was made possible through a grant from the National Institute of Food and Agriculture. "We are incredibly thankful for the opportunity to

provide this workshop to producers, helping them to enhance Nebraska's grazing lands for future generations," Redman added.

For more information about this program and other upcoming events, visit nebraskagrazinglands.org.

QUALITY THAT JUST MAKES SENSE

WIRE WINDERS

Common Sense Manufacturing, Inc.

www.commonsemfg.com

CONTACT KELLY MELIUS for dealer nearest you
35791 160th St., Faulkton, SD 57438
605-598-4157 office • 605-216-0687 cell

PASTURE PIPE FOR SALE

Providing clean water to our livestock is imperative to livestock health.

Above-ground water systems are a popular tool to deliver clean water to pastures. The Hamlin Conservation District handles 1" and 1 1/2" High Density Polyethylene black pipe, rated at 200 PSI. This tough material can withstand being walked over by cattle or driven over by lighter vehicles.

These pipeline rolls are sold in 500' or 1000' rolls and are readily available.

Please stop in our office at 301 Marsh St., Hayti, SD or call 605-783-3642 x4 to speak to the District Manager.

Diamond Bar Ranch honored with Nebraska Leopold Conservation Award

Diamond Bar Ranch is the recipient of the 2025 Nebraska Leopold Conservation Award®.

The award honors farmers, ranchers, and forestland owners who go above and beyond in their management of soil health, water quality and wildlife habitat on working land.

Robert and Susanne Jones raise beef cattle and own the 22,000-acre Diamond Bar Ranch in Logan County. The Joneses will be presented with \$10,000 and a crystal award later this year.

Sand County Foundation and national sponsor American Farmland Trust present Leopold Conservation Awards to private landowners in 28 states. In Nebraska, the award is presented with Nebraska Cattlemen, Cargill, and the Nebraska Environmental Trust.

The award, given in honor of renowned conservationist Aldo Leopold, recognizes farmers, ranchers, and forestland owners who inspire others with their dedication to environmental improvement. In his influential 1949 book, *A Sand County Almanac*, Leopold advocated for “a land ethic,” an ethical relationship between people and the land they own and manage.

“Nebraska’s farmers and ranchers help feed the world and save the planet. They are the finest examples of what it means to be responsible and sustainable stewards of our land,” said Nebraska Governor Jim Pillen. “They know the importance of best practices, water conservation, all the things that allow them to maximize their yields and at the same time, enhance and improve the environment. We congratulate Diamond Bar Ranch for being outstanding in this regard and receiving the Leopold Conservation Award.”

Nebraska landowners were encouraged to apply, or be nominated, for the award last year. Nominations were reviewed by an independent panel of Nebraska

agriculture and conservation leaders.

About Diamond Bar Ranch

The Nebraska Sandhills is one of the last intact grassland ecosystems in North America, and the largest sand dune formation in the Western Hemisphere.

Formed by glacial meltwater carrying sand and silt from the Rocky Mountains, the Sandhills are defined by rolling grass-covered dunes, fragile soil, and a delicate hydrological system. Prairie grasses stabilize nearly 20,000 square miles of sand dunes in western Nebraska. This rangeland was never tilled on a large scale but makes ideal grazing for livestock when managed responsibly.

Deeply rooted in this region is Robert and Susanne Jones’ Diamond Bar Ranch. For generations the Jones family has understood their success is tied to the health of the Sandhills, and they’ve worked to protect this unique environment. As they ranch with their grown children: Natalie, Shaylee, Grant, and Lance, their conservation ethic is centered around responsible grazing, water stewardship, soil preservation, and wildlife habitat management.

Diamond Bar Ranch’s rotational grazing system follows time-tested Sandhills principles, designed to mimic the natural movement of bison herds that once roamed the region. By resting one-third of the ranch each year from grazing, native grasses like Little Bluestem and Prairie Sandreed are regenerated. While working cattle, horses are utilized rather than motorized vehicles to minimize soil disturbance in the sandy terrain.

The Jones family’s adaptive grazing strategy takes into account rainfall variability, forage availability, and soil conditions. Cross-fencing allows for improved grazing distribution, while GPS tracking and aerial

monitoring technology assists in pasture management.

Since 2000, the Jones family has planted more than 31,000 trees and shrubs to reduce wind erosion and improve wildlife habitat. Strategically planted windbreaks offer protection for livestock during windy winters. With assistance from the Natural Resources Conservation Service and Sandhills Task Force, the Jones family has mechanically removed invasive eastern red cedar trees across their Logan County ranch.

With access to the Ogallala Aquifer, natural springs, ponds, and the South Loup River, Diamond Bar Ranch employs 56 windmills and solar wells to provide drought-prone water sources for crop irrigation and drinking water for livestock and wildlife. Wet meadows are an ecologically significant part of the ranch. These lush, moisture-rich grasslands remain productive even in dry years, providing a valuable forage source. Wet meadows are also essential habitats for migratory birds, amphibians, and native fish species.

To reduce dependence on external feed sources, the ranch produces its own high-quality forage, including irrigated corn, alfalfa, and wet meadow hay, to produce nutrient-dense beef from its Red and Black Angus cattle.

Diamond Bar Ranch’s pastures support populations of prairie chickens, sharp-tailed grouse, mule deer, white-tailed deer, and antelope, all of which depend on the same healthy grasslands that sustain livestock. The Jones family follows wildlife-friendly haying practices, allowing ground-nesting birds to flush and escape during harvest.

The Jones family shares their conservation knowledge with other ranchers, policymakers, and the public. Their ranch hosted the National Grazing Lands Coalition Tour in 2022

to provide a hands-on opportunity for ranchers and conservationists to learn about sustainable grazing practices. They are longtime supporters of the Nebraska Youth Ranch Camp, where high school students learn about range management and leadership.

As pressure mounts in agriculture to balance production with sustainability, the Diamond Bar Ranch shows how these two priorities can coexist. The Jones family’s conservation-minded land management has produced economic success and ecological resilience.

“Diamond Bar Ranch is where over a century of successful environmental stewardship practices meets modern innovation. With five generations of Sandhills cattle producers who work with the land instead of against it to uphold a strong conservation ethic, the Jones family is the perfect example of responsible ranching,” said Laura Field, Nebraska Cattlemen Executive Vice President.

“As a long-time sponsor of this award, we’re proud to partner with an organization so focused on the protection and improvement of agricultural land. This conservation work is aligned with Cargill’s greater purpose of nourishing the world in a safe, responsible and sustainable way,” said Katrina Robertson, general manager of Cargill Food in Schuyler, Nebraska.

“These award recipients are examples of how Aldo Leopold’s land ethic is alive and well today,” said Kevin McAleese, Sand County Foundation President and CEO. “Their dedi-



ABBY DURHEIM
The Robert and Susanne Jones family raise beef cattle and own the 22,000-acre Diamond Bar Ranch in Logan County, Nebraska.

cation to conservation is both an inspiration to their peers as well as a reminder to all how important thoughtful agriculture is to clean water, healthy soil, and wildlife habitat.”

“As the national sponsor for Sand County Foundation’s Leopold Conservation Award, American Farmland Trust celebrates the hard work and dedication of the award recipients,” said John Piotti, AFT President and CEO. “At AFT we believe that exemplary conservation involves the land itself, the practices employed on the land, and the people who steward it. This award recognizes the integral role of all three.”

The 2024 Nebraska Leopold Conserva-

tion Award recipient was Worth Ranch of Springview.

The Leopold Conservation Award Program in Nebraska is made possible thanks to the generous support of American Farmland Trust, Cargill, Nebraska Environmental Trust, Nebraska Cattlemen, Sand County Foundation, Farm Credit Services of America, USDA-Natural Resources Conservation Service, Audubon Great Plains, Green Cover Seed, Lyle Sittler Memorial Fund, Nebraska Department of Agriculture, Nebraska Partners for Fish and Wildlife, Rainwater Basin Joint Venture, Sandhills Task Force, and World Wildlife Fund-Northern Great Plains.

Kammerer wins Youth Forum



Earlier this winter South Dakota’s delegate to the Society for Range Management’s High School Youth Forum, Karlie Kammerer brought home the top award for her presentation. Karlie is shown with mentor Krista Ehlert.

Grazing Guide

A calendar listing of pasture and range events

May 30-31 Bird Tour, Totten Ranch, Chamberlain, S.D.

June 2-5 Young Adult Ranching for Profit Workshop, Faith, S.D. Contact Judge Jessop, jljessop@kennebecetelephone.com

June 2-3 Ranching for Profit School, Billings, MT

June 3-5 406 Grazing Academy, Havre, Mont.

June 9-11 Summer Grazing School, Anselmo, Neb. Register at nebraskagrazinglands.org

June 10 Pacific Pastures Tour, Richland, Wash.

June 10-11 Soil Days and Rangeland Days, Belle Fourche, S.D.

June 17-19 Grazing School, Wall, S.D.

June 18 Wickens Salt Creek Ranch Tour, Hilger, Mont.

July TBD Women on the Range Grazing Workshop, Wedge Tent Ranch, Faith, S.D.

July 22-24 Grazing School, Summit, S.D.

June 24-26 America’s Grasslands Conference, Kearney, Neb.

June 24-27 Ranching for Profit for Young Adults Intensive, Buffalo, WY

June 26-28 Stockmanship & Stewardship, Watertown, S.D.

Sept 9-11 Grazing School, Chamberlain, S.D.

Have a Range & Pasture Event you would like others to know about?
Send information to cattlenews@gwtc.net.

Visit these organizations online:

Nebraska Grazing Lands Coalition
www.nebraskagrazinglands.org

South Dakota Grassland Coalition
www.sdgrass.org

Smooth Bromegrass Grazing Management

By Sean Kelly,
SDSU Extension Range
Management Field
Specialist

Smooth bromegrass is a cool-season introduced grass with an advanced root system that tolerates temperature extremes and drought exceptionally well. This sod-forming perennial grass spreads rapidly through seeds and rhizomes causing pastures and rangeland in Central South Dakota to be increasingly dominated by this grass year after year (Figure 1).

As pastures become dominated by smooth bromegrass, less native grass species are able

to compete and are squeezed out of the pasture. As the native plant community declines, the ability to effectively utilize the forage available through grazing becomes more challenging. Smooth bromegrass has a much shorter effective grazing window compared to pastures dominated by native cool and warm-season grasses.

Smooth bromegrass grows best when temperatures are between 60 and 75 degrees Fahrenheit. Growth begins in mid to late April followed by a rapid growth phase in early to mid-May (Figure 2). During the summer, growth slows

considerably and the plant will go dormant through July and August. Fall regrowth typically occurs in early September through mid-October as sunlight intensity decreases. During the rapid growth phase in early to mid-May, the amount of forage produced quickly outpaces animal intake leading to poor forage utilization.

Grazing Tips

How can a ranch manager address this challenge and achieve effective forage utilization? The following guidelines for spring, summer, and fall grazing periods may assist ranch managers to develop a grazing strategy for pastures where

smooth bromegrass dominate.

All-Season: If the smooth bromegrass pasture is grazed the entire season, moderate stocking rates must be used to ensure enough forage is available during the summer months when forage production decreases. Initial turnout in spring should occur when forage height reaches 12-14 inches. Smooth bromegrass should not be grazed to a stubble height below 4 to 6 inches.

Spring, Summer, Fall Rotation: If another pasture with native warm-season grasses is available on the ranch, an alternative strategy is to increase stocking rates on smooth bromegrass

during spring, move to the native warm-season pasture in summer, then return to the smooth bromegrass in the fall with moderate stocking rates.

Rotational Grazing: Rotational grazing systems can help better utilize smooth bromegrass during the rapid growth phase. However, if no rotational grazing system is present on the ranch, an in depth cost/benefit analysis must be completed before large amounts of capital are invested in fence and water improvements. Starting slowly and carefully with one or two cross fences will allow the start of a simple rotational grazing system with minimal cost.

Summer & Fall: Smooth bromegrass qual-

ity is lower during the summer months, which makes mineral supplementation necessary during this time period. At least 8 to 10 inches of regrowth should be available in fall grazing pastures. Grazing animals should be removed from fall grazing pastures when stubble height reaches 4 to 6 inches.

The Bottom Line

In spite of the fact that smooth bromegrass has invaded several native grass pastures and rangeland in Central South Dakota, with some effective grazing management strategies, ranch managers can turn smooth bromegrass into a valuable asset to the ranch.



Figure 1. Smooth bromegrass is a cool-season introduced grass that spreads rapidly through seeds and rhizomes.

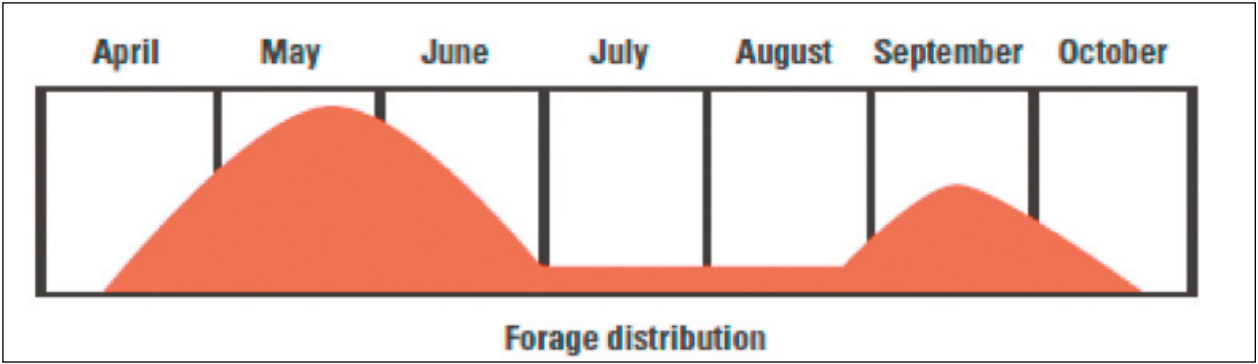


Figure 2. Forage distribution of smooth bromegrass through the growing season. Courtesy of Undersander et al. (2002).

Registration Open for 2025 Nebraska Ranch Practicum

The 2025 Nebraska Ranch Practicum offered by Nebraska Extension is just around the corner.

The practicum will be held during eight sessions over the course of three seasons to cover the production cycle of livestock and forage resources. Participants will have the opportunity to learn about a variety of topics, including the effective use of decision support tools to evaluate management and marketing alternatives, plant identification, range con-

dition and grazing strategies, wildlife management, evaluation of cow body condition scores, and beef cattle production systems.

The practicum will be held June 3 and 4, July 10, September 3 and 4, and November 6, 2025; and January 6 and 7, 2026.

Classroom activities will open and close the practicum in North Platte at the West Central Research, Extension and Education Center with the remainder of the

classes conducted at the University of Nebraska's Gudmundsen Sandhills Laboratory, a working ranch with education and research facilities, near Whitman.

The registration fee is \$750. The fee for a spouse is an additional \$400. Registration covers educational materials, noon meals and breaks. Participants are responsible for travel and lodging expenses.

The practicum can count for college or continuing education credit.

"The Nebraska Ranch Practicum advantage is in the approach, where beef production is viewed as an integrated continuous ongoing system," said Troy Walz, Nebraska Extension educator. "This approach gives participants the training and understanding to consider the use of resources, management, and economics in the context of their personal preferences and goals for their ranch."

To register, submit a completed application and registration fee by May 5. Applications will not be accepted after that date.



The practicum will be held during eight sessions over the course of three seasons to cover the production cycle of livestock and forage resources.

Enrollment is limited to 35 participants. Applicants will be notified of their status no later than May 19. Refunds will be issued if space is not available.

To learn more or register, visit <https://nebraskaranchpracticum.unl.edu/>. Questions can be directed to Troy Walz at 308-872-6831 or troy.walz@unl.edu.

Summer GRAZING SCHOOL

June 9th-11th, 2025 Anselmo, NE & McGinn Ranch

Three days of hands-on learning that includes instruction from guest instructor, Jim Gerrish.

\$300 Registration includes all class materials, meals and instruction.



United States Department of Agriculture
National Institute of Food and Agriculture

Scan for event schedule and registration or go to [NEBRASKAGRAZINGLANDS.ORG](https://nebraskagrazinglands.org)

Leah Peterson: (308) 872-1250





Jim Gerrish

Young Adult Ranching for Profit


7/8/2025 - 7/11/2025 - Burwell, Nebraska

Three days of intensive training with classroom time and ranch tours. Designed for young adults (18 to 30 years old).

\$400 per person, includes materials, instruction and meals!

Scan for more information nebraskagrazinglands.org





United States Department of Agriculture
National Institute of Food and Agriculture

Virtual fences can make a real difference

By Stan Wise
South Dakota Soil Health Coalition

Moving livestock is an inescapable part of a rancher's life, and it can be labor intensive, especially if a producer uses a rotational grazing system designed to improve rangeland and soil health.

But what if it doesn't have to be?

Enter virtual fencing, a system in which livestock wear special collars designed to keep them inside boundaries marked by lines on a GPS map instead of by wires and fenceposts. Producers using a virtual fence system can mark off a grazing area on a computer or smartphone. Animals wearing the collars will hear a tone as they approach boundaries of that grazing area. If they get too close to those boundaries, the collars deliver a small electric pulse to encourage the animals to stay within the grazing area.

The potential labor savings can be huge. Ranchers can move livestock from one pasture to another within seconds using their phone, tablet or computer.

Does it work in the real world? Recent research and producer experience is showing that it does.

North Dakota State University Associate Professor and Livestock Environmental Stewardship Specialist Miranda Meehan has been involved with virtual fencing research conducted at three sites across North Dakota and another site in Nebraska. The research, which is just entering its third year, includes both rangeland grazing trials, which are intended to promote biodiversity in pastures, and strip grazing trials, which involve grazing annual forages in the fall. Strip grazing is a method where animals are confined to a small, narrow strip of land for a short time, with the fence moved regularly to provide access to fresh forage and allow the grazed area to rest and recover.

Containment

So far, the collars seem to be doing a good job of keeping the animals within the designated grazing area. "We've seen over 90 percent (containment) across both trials," Meehan said.

When animals escape the virtual fence, it's usually not a large concern for producers. "Because of the social herding behavior, they go back into the rest of the herd. They're not out for an extended period of time, usually," Meehan said. "As we

structure our grazing system, we also structure it so that the water is within that area, and so there's something drawing them back into that area, not just the rest of the herd."

A few escapes shouldn't be anything new to ranchers. "I think virtual fence is similar to any other fence in terms that you're going to have animals that push it, but also your boundary fence, too," Meehan said. "Some animals are going to respect, one or two wires of poly wire, and some animals aren't, just depending on what they're trained to."

The collars allow producers to track which animals escape the grazing area. "We know that a lot of our escapes were the same animal," Meehan said. "That would be something to consider in your culling criteria moving forward."

Performance

The livestock performance in Meehan's trials doesn't seem to be affected by the virtual fence collars. "To date, we have not seen any differences in animal performance between [virtual fencing] and our other rotational grazing systems within the rangeland or within our other strip grazing systems within our cover crop," Meehan said. "However, we were able to get additional grazing days on our three strip graze treatments, which include the virtual fence, a manual fence, and an automatic gate opener."

While Meehan's research shows the advantage of strip grazing over continuous grazing, some producers have been reluctant to implement the practice.

"Just working with the ranchers that I've worked with here in North Dakota, there's a lot of resistance to strip grazing, not because they don't think it's effective, but because you have that extra labor. We're putting (fence) up and down every year, but also we have wildlife running through it. And, so, is it even going to stay up?" Meehan said. "So, I think (virtual fencing) is a really great option in those scenarios where we can more effectively use those annual forage resources without that hassle of putting up a fence just to take it down at the end of the grazing season."

Payoff

Meehan noted that the collars are not labor-free. It can take some time to learn how to best use and apply the system. Also, depending on the system being used, it can take anywhere from four days to two weeks to train the

animals to respond to the collars, Meehan said.

Despite the training time and the learning curve, the collars can be a labor solution for producers.

"Because the labor is a different type of labor," Meehan said. "I think labor is an issue within our area, especially on our livestock operations, and so if we can reduce some of that manual labor, I think that helps our producers in the long run."

Another advantage of the system is the data it provides.

"How can we use this data that we're getting in the platform to enhance our grazing management?" Meehan said. "For example, we get heat maps, so we can look at that to determine utilization. If there's places that are missing across that pasture and there are places that are getting used more heavily, maybe we need to adjust things a little bit."

Virtual fencing also gives producers opportunities to graze areas that don't already have fences in place.

"There're some cost comparison calculators out there through the University of Arizona that compare the cost of our four different virtual fence vendors to putting up a traditional fence for an area, and it's really quite comparable," Meehan said. "And so I do think it's a great option to optimize and put in a rotational system, to use on a rented pasture where you can't or don't want to invest in that infrastructure."

The best way to make a virtual fencing system cost effective, Meehan said, is to find a way to fully integrate it into your grazing system.

"How does it complement or enhance your existing grazing plan? If you can't quite figure out a natural way for it to fit in, then I don't think it's worth that investment at this time," Meehan said. "If it's something that you can find a way to use across multiple grazing seasons, so you are utilizing it for most months of the year, it will pay for itself faster."

Targeted grazing

Rancher and retired Natural Resources Conservation Service Area Rangeland Specialist Lealand Schoon has found a novel way to use a virtual grazing system to improve his rangeland. He runs cattle, sheep and a few goats on 2,000 acres of grassland near White River, SD.

Concerned about the loss of grazing lands to encroachment from

woody plants, Schoon started using goats for targeted grazing to control undesirable species like eastern red cedar, chokecherry, snowberry and buckbrush in early 2024. He started by containing 10 goats in a corral with a diameter of approximately 30 feet surrounded by a strand of poly wire to prevent escapes.

The problem was that he had to move the corral and the goats every day.

"What we had been doing was just so labor intensive that we always considered virtual fence," Schoon said. "What finally made us make the decision was attending a grazing conference down in Tucson, Ariz., and hearing a rancher panel discussion. There were both representatives of the virtual products and producers that told their story. When I heard a producer talk about (virtual fencing) and how well it worked with their goats, it was then I was able to make a positive decision. As a producer, I was thinking to myself that it takes so much labor away, it might be worth the investment to get the virtual fence instead of the panels, dragging them around every day. We made our virtual collar purchase in mid-December of 2024, and we've been using them since."

Schoon said that after 10 days of training he felt comfortable using the collars to contain the goats. "We trained them within the corrals that were secure so they couldn't escape if they saw a visual boundary," he said. "Once they were trained to that, we turned them out to where there's no visual boundary. It was fun to see that they pretty well stay in."

Schoon said he's seen savings in money and time as well as an increase in the targeted grazing season for his goats because he's able to move the goats virtually during the winter when weather and snow conditions would prevent him from being able to move the corrals.

"We figured, with the panels, moving the goats every day probably cost one person about \$52 a day to manage that. With the (virtual fence), it's somewhere between \$38 and \$48 a day because we don't have to go to the goats every day. When we break that down, it's somewhere between \$3 to \$4 per day savings," Schoon said. "On a per day basis, that doesn't sound like much, but when we first thought we would target graze brush and trees with goats for maybe six months out of



SD SOIL HEALTH COALITION PHOTO
North Dakota State University Associate Professor and Livestock Environmental Stewardship Specialist Miranda Meehan explains her research with virtual fencing livestock collars at a workshop in Leola, SD, in March 2025.



COURTESY PHOTO
Research conducted by North Dakota State University shows that virtual fencing livestock collars can achieve over 90 percent containment of animals within a designated grazing area. The virtual boundary between grazed and ungrazed areas can be seen behind these cattle.

the year, it's opened it up 365, that's \$1,400 savings to a 12-month browsing plus allows time to do period. At \$4 a day times
Continued on page 8

SOUTH DAKOTA

20th Annual Soil Days

&

41st Annual Rangeland Days

June 10 & 11, 2025

Belle Fourche, SD

Hosted by:

Butte Conservation District

Natural Resources Conservation Service

SDSU Extension

Pre-registration is due by

May 30, 2025

Scan the QR Code to

register online or visit

<https://bit.ly/RangeSoilsDays25>

Going to Grass: Preventing Grass Tetany with Magnesium Supplementation

By Brock Ortner, Nebraska Extension Educator; and Mary Drewnoski, Nebraska Extension Beef-Systems Specialist

Grass tetany can be a costly concern when transitioning cows to lush, cool-season pastures, but it can be prevented with proper magnesium (Mg) supplementation. Preparing for turnout by monitoring high-Mg mineral intake will help maintain adequate Mg status and prevent deficiencies.

The secondary magnesium (Mg) deficiency referred to as grass tetany is often associated with “going to grass” when cows are grazing lush, cool-season grasses, including small cereals and bromegrass.

Magnesium is critical for nervous and muscle function, which is portrayed by the key symptoms of acute grass tetany, including: excitable behavior, nervousness, reduced feed intake, twitching (especially around the face, ears, and flanks), blind staggering, and as the disease progresses, convulsions.

While grass tetany is indeed caused by Mg deficiency, it is somewhat of a misnomer because it is driven by high nitrogen (N) and potassium (K) that impair ruminal absorption of Mg, even when forages have adequate Mg concentrations. This is especially true for improved pastures that have been fertilized with N and/or K.

Lactating cows, particularly older, mature cows, are at the greatest risk of developing grass tetany. This is driven by an uptick in Mg requirements for lactating cows (0.12% for pregnant cows and 0.20% during lactation on a diet dry matter (DM) basis). The peak Mg demand corresponds with calving because of 3 times greater concentration of Mg in colostrum compared with true milk.

The main determinant of grass tetany is not only Mg concentration in the diet, but the concentration of N and K. Forages can contain variable Mg, but grass tetany tends to occur when forages have:

- low Mg (0.15%)
- low calcium (Ca; < 0.4%)
- high K (> 2.5%)

To address these factors, supplementing additional Mg is recommended (10-15% Mg in 4 oz target intake mineral), along with adequate Ca and salt intake. When evaluating commercially available products, consider the K content; supplementing additional K to the diet is counterproductive to preventing tetany.

Magnesium is commonly fed in the form of magnesium oxide (MgO), which is bitter and unpalatable to cows. To manage reduced mineral intake:

Introduce high-Mg mineral several weeks before turnout to allow cows to adapt.

Monitor mineral consumption and if intake is low consider adding 1 lb



TROY WALZ
Grass tetany can be a costly concern when transitioning cows to lush, cool-season pastures, but it can be prevented with proper magnesium supplementation.

of corn or dried distillers grains per 50 lbs of mineral mix to increase consumption.

Additionally, sodium deficiency decreases Mg absorption due to reliance on maintaining an electrochemical gradient for Mg transport into cells. Salt is critical for Mg absorption, and the delivery method affects mineral intake:

If supplementing minerals through a fortified feedstuff (e.g., cake or pellets), ensure free-choice salt is available.

If providing minerals via a free-choice mineral mix, incorporate salt into the mix rather than offering it separately, as cows tend to consume salt preferentially over the mineral mix.

The Overhead Creep

By Jordan Steele, Ranching for Profit

“It’s not that expensive” can be a very dangerous justification in the ranching world. Let’s be honest, we have all told ourselves that regarding expenses either in our business or personal life. Whatever that expense might have been is probably connected to items that create a cumulative effect. That’s what I am going to call the overhead creep.

Let’s start with a paraphrased story from “How to Not Go Broke Ranch-

ing” by Walt Davis. He talks about ranching now, compared to the late 1800s cattle drives. After the Civil War, wild cattle could be gathered, trailed to a market, and sold for cash. It wasn’t an easy business, but here are the fundamentals of that business:

The cattle survived with no human interaction.

Once they were gathered, they walked themselves to market.

Tough cowboys, good horses, and the cook-wagon were the only overheads.

I am simplifying things but in this business structure, the cattle thrived as feral bovines, took care of themselves, and then walked themselves to market.

Fast forward almost two centuries, and as a culture we still view ourselves just like we are in Lonesome Dove. Trailing cattle and living on the range. However the business structure is vastly different. Now we take care of the cows instead of them taking care of themselves. Too many cows are hand delivered balanced rations and live in a barn during the winter. Who is supposed to work for who again?

It’s always easy to pick on winter feed, so what overheads are included in a ranch business structure feeding cattle for 4+ months a year? Most ranches aren’t using small square bales anymore, so a pickup and a hired hand (or kids!) isn’t practical to feed 500 cows full feed every day. So we buy a tractor with a loader or a bale spear to feed large round bales, not that expensive right? Well we can still only haul a couple at a time, so we drive back and forth to the stackyard, too much. Let’s buy a feed wagon, not that expensive right? Well the cows eat it better if it goes through a haybuster, so let’s buy one of those. Not that expensive right? Well we need a bigger tractor to run the hydraulics on the haybuster, so it’s not that expensive to upgrade right? And we will just keep the older tractor because it isn’t worth much on a trade in anyways. It’s not that expensive to keep anyways right? And it can pull the hay rake in the summer so we don’t have to hook and unhook hay machinery all the time. Well it would be nice to not drive the tractor across the highway, so let’s buy a hydra-bed for the pickup to feed the bulls across the highway. Not that expensive right?

What about all the extra fuel, repairs, insurance, licenses, and other operating costs on all equipment?

Do you see the rabbit hole I am going down here? Pretty soon we end up with a machinery fleet bigger than most excavation companies, because we have turned luxuries into necessities for ourselves. And, all for cattle that should be taking care of themselves in the first place.

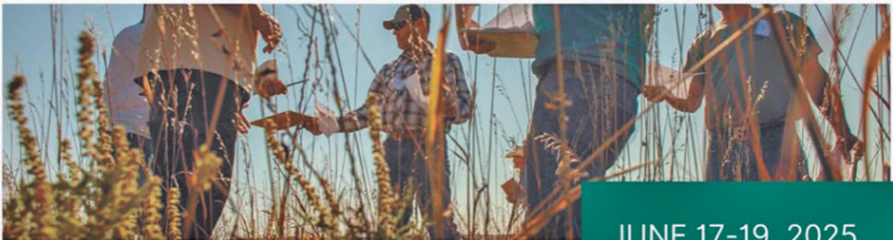
Since winter feed is too easy to pick on, let’s pick on a hobby like hunting to make it more relatable. Well we need a rifle, not that expensive right? Probably want a scope, some ammunition and a sling to carry it. Then a case to store and transport it. Maybe we should get a gunsafe for the house too. Not that expensive right? Then we need hunter safety courses, annual licenses, conservation stamps. We should practice, so we buy shooting benches and targets, and more ammunition. Not that expensive, right? Are we going alone, or do we need to hire a guide? What about an ATV to pack in the woods, and a tent to sleep in? Not that expensive right? All to be used for one hunting trip a year? Oh and the ATV isn’t for long distance,

so we need a pickup and trailer to haul it.

These rabbit holes can be dangerous. To see for yourself pick one item in your business, and follow the trail of what it’s related to. Just as we talk about cutting twigs or deadwood at the Ranching for Profit School, remind yourself that many small twigs can make a big difference too.

As always, I am not telling you to kick your cows out to pasture, never look at them or never feed them. But I do want you to be aware of the systems we trap ourselves into when running a business. I understand that there will be a minimum amount of overheads that a business can run on, that is true in any industry, we just want to keep our finger on that number. If you are profitable, and truly love every day running your business, fantastic keep it up! If you are struggling with profitability or a healthy work-life balance, then we need to define and reconsider our paradigms. I encourage you to challenge your business systems and overheads, so check out our Ranching for Profit schedule to join other like minded business owners at one of our upcoming schools.

Wall, SD Grazing School




JUNE 17-19, 2025
WALL COMMUNITY EVENTS CENTER
501 MAIN ST, WALL, SD

ABOUT THE GRAZING SCHOOL

Join fellow ranchers and land managers for a hands-on learning experience designed to strengthen your grazing management skills. Learn how to set clear goals, evaluate pasture health and stocking rates, understand grazing economics, design fence and water systems, manage weed concerns, and much more.


COST

\$300 for current SDGC members or \$335 for non-members
\$150 for additional attendees from the same operation
**Fee includes all meals and materials



United States
Department of
Agriculture

Natural Resources Conservation Service
The USDA is an equal opportunity provider, employer, and lender.



WWW.SDGRASS.ORG

605-280-0127

JUDGE.JESSOP@SDCONSERVATION.NET

Virtual Fences

Continued from page 7

something else. For the investment that we put into it, we’ll have the collars paid for in less than two years. It’s freed up a lot of time, and I think we’re more effective right now as far as targeting the species we want.”

Schoon said that the virtual fencing collars give him another tool

to help him improve his land.

“A big reason why we’re wanting to use virtual technology and goats is just for the integrity of the rangeland,” Schoon said. “We’re losing grasslands to urban environment, to cropland, and whatever else, but woody encroachment is just another measurement of loss. A big part of it is my passion for native range-

land and maintaining the integrity and the openness of the grasslands.”

For additional information about targeted grazing and virtual fencing, contact the nearest Natural Resources Conservation Service office or contact the South Dakota Soil Health Coalition at sdsoilhealth@gmail.com or 605-280-4190.