June 2024

Range & Pasture Journal

~ Providing Stewardship Strategies For Northern Plains Grasslands ~

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Inside:

NEBRASKA Grazing Lands Coalition

Tour focuses on land recovery after 2023 fire

By Donnis Hueftle-Bullock

The Nebraska Grazing Lands Coalition (NGLC) held a grazing tour in Anselmo Wednesday, June 13.

The 140 attendees heard from a variety of speakers regarding soil health and toured the McGinn and Cooksley ranches on grassland that was burned in the April 12, 2023, Cooksley Complex Wildfire. More than 10 ranches were affected.

Tim Kalkouski, NGLC-board chair, welcomed the attendees, stating,

"Everyone is passionate about our grasslands. Grass and soil are the foundation of everything we do."

Leah Peterson, Executive Director of NGLC, said the day was all about "Their mess to a message," referring to how the ranch land came back after the 2023 fire.

Shawn Jacobs, the Warning Coordination Meteorologist with the National Weather Service (NWS) out of North Platte, explained in detail how the weather conditions leading up to the fire were "the perfect storm" to create the conditions for the fire.

Attendees could walk the Sandhills that were burned to nothing but sand 14 months prior.

Both the McGinn and Cooksley families talked about the process of "Rest and Recovery" for their portion of the Sandhills.

Peterson talked about how the event came to be, saying, "The Nebraska Grazing Lands Coalition was honored to receive a 2024 Mini Grant from the National Grazing Lands Coalition. These funds made this event possible."

She also acknowledged the landowners and those who helped organize the event.

"We are grateful to the Cooksley and McGinn families, along with the entire community of Anselmo, for hosting this event, as we revisited the tragedy of the Cooksley Complex Wildfire, and all the resiliency shown in the year since. The Nebraska Sandhills are a treasure to our state, and these kind of learning opportunities are an important component of learning how each of us can play a role in caring for Nebraska's grasslands." She added, "The hospitality in Custer County is unparalleled and we enjoyed the opportunity to gather and learn, and have a lot of fun while doing so!"

Article and photos provided by the Custer County Chief newspaper.

DONNIS HUEFTLE-BULLOCK

The Nebraska Grazing Lands Coalition Grazing Tour that focused on the land's recovery from 2023 fires had nearly 150 attendees.

Shawn Jacobs with the National Weather Service talks about the weather conditions that helped fuel the April 13 fire. "It couldn't have happened any other day," he said.

At right, the McGinn and Cooksley families are presented with commemorative books in thanks for their participation. From left are Barb Cooksley, Matt McGinn, Leah Peterson with NGLC and George Cooksley.

Matt McGinn speaks about grazing practices that aided the grassland recovery.

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The Nebraska Grazing Lands Coalition (NGLC) is a part of a national effort to enhance the resource stewardship and financial success of grazing land-dependent operations. Objectives of the 14-member NGLC board, made up of mostly ranchers, are to strengthen partnerships, promote volunteer assistance and participation, respect private property rights, encourage diversification to achieve and promote education, training and public awareness of the 23 million acres of grazing lands in Nebraska.

Specific projects include co-sponsoring statewide grazing conferences to pursue common interest with other grazing groups, hosting a carbon sequestration workshop to explain what it is and how ranchers may benefit, and monitoring and lobbying legislation on grazing issues.

On the Cover:

An Angus cow/calf pair graze summer pasture in western South Dakota. Photo by Codi Vallery-Mills.

"A unified voice for managing South Dakota's grass resource"

The Coalition's goal is to provide local leadership and guidance in a cooperative effort, and provide information and technical assistance to grassland managers.

By focusing the collective power of resource management agencies, producer organizations, educational institutions, professional societies, environmental organizations and private grassland managers, much can be accomplished.

To that end, the Coalition is a major partner in the Grassland Management and Planning Project. For more detailed information on this project, visit sdconservation.org and click on Grassland.

To become a member, clip and mail the form below with your payment.

SD GRASSLAND COALITION MEMBERSHIP - $30/yr or $55/2 yrs.

Address _____

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Return to: Judge Jessop
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S.D. Dakota Grasslands' Tribute Lands Music Video of the Year Award

An anthem to the heritage, beauty and diversity of Dakota's healthy grasslands, "Where Good Things Grow" recently won the Music Video of the Year Award at the Midwest Country Music Organization's annual awards show in Arnolds Park, Iowa.

Earlier this year, the South Dakota Grassland Coalition partnered with Minneapolis-based musical artists Maygen Lacey and Noah Neumann, and their band Maygen & The Birdwatcher, to help save North America's most threatened ecosystem: its native grasslands.

The Lacey-Neumann song writing duo composed the original song to help raise public awareness regarding the importance of grassland ecosystems and generate support for programs and activities to encourage farmers, ranchers and state and local officials to develop programs and policies that preserve and restore the health of North America's grasslands.

The music video is part of a broader awareness and education campaign developed by the South Dakota Grasslands Coalition, which received funding through a USDA-Natural Resources Conservation Service cooperative grant to develop a healthy grasslands public service campaign titled "Dakota Grasslands: Where Good Things Grow." The campaign includes television and radio ads, a dedicated website and out-of-home ads highlighting the many environmental, ecological and economic benefits of healthy grasslands, as well as identifying on-going threats to North America's native grasslands.

"We're delighted to bring home this prestigious award and are especially grateful that this recognition provides another opportunity to help further spread the word about the importance of our healthy grasslands and the people who are the stewards of this treasured resource," Lacey said. "When we wrote and recorded the song, our goal was to touch the hearts of those who heard it, so they could feel the love we feel and be motivated to be part of restoring and protecting the health of our beloved grasslands. Noah and I are thrilled that the song, video and its messages are valued and appreciated by so many."

Minneapolis-based musical artists Maygen Lacey and Noah Neumann, and their band Maygen & The Birdwatcher, recently won the Music Video of the Year award from the Midwest Country Music Organization for a song they wrote and performed as part of the "Dakota Grasslands - Where Good Things Grow" public service campaign. The band was also named Entertainer of the Year.

The artists' music video performance was filmed by Minneapolis-based, Emmy-nominated filmmakers Joe and Charlie Dickie at The Nature Conservancy's Chippewa Prairie Complex, while the other scenes in the video were filmed on ranches throughout South Dakota over several years by the Dickie filmmaking team.

To view the music video and to learn more about the "Dakota Grasslands: Where Good Things Grow" campaign, visit WhereGoodThingsGrow.org.

Faulstich receives honorary degree

Congratulations to South Dakota Grassland Coalition's very own Jim Faulstich for receiving an honory doctorate from South Dakota State University this spring.

Jim has been an integral part of the South Dakota Grassland Coalition for many years and currently serves as the vice-chairman of the board. While Jim has taken on various roles as a regenerative agriculture advocate over the years, SDGC is especially grateful for his willingness to educate and support producers throughout the state of South Dakota and beyond.

Jim and his wife, Carol, own and operate Daybreak Ranch near Highmore, S.D. and are longtime advocates for regenerative land use.

Jim and Carol Faulstich. Jim received an honorary degree from South Dakota State University this spring.

Cheyenne River Ranch draws good crowd for bird tour

The 2024 SD Grassland Coalition Bird Tour was held June 3-4 at Cheyenne River Ranch, Hermosa, S.D.

The Cheyenne River Ranch is home of South Dakota conservationist Dan O'Brien. Dan is the celebrated author of 'Buffalo for the Broken Heart' and other books about life on the Northern Plains. He is also the founder of Wild Idea Buffalo Company and an advocate for ranching in concert with nature.

The bird tour drew a nice size crowd to take in the two days of bird watching and education.

Author and rancher, Dan O'Brien (driving), welcomed guests to his ranch home.

Transportation during the bird tour made particpants felt as if they were truly going off the beaten path.

Krista Ehlert (at left) with SDSU Extension was on the tour to talk about all things rangelands and birds.

Binoculars in hand, many different species of birds could be spotted during the tour.

Beautiful, wide-open views of the Cheyenne River Ranch.

2024 Nebraska Soil Health School has successful launch

The first installment of a planned 2024 Nebraska Soil Health School series was held on April 24 at the University of Nebraska-Lincoln High Plains Ag Lab in Sidney, Neb. The event addressed the semi-arid Panhandle climate and potential management practices for soil health and had over 60 attendees. Water is the most limiting factor for growing almost anything in the Panhandle of Nebraska, from crops to cover crops. The latter is a popular topic in soil health, as it keeps roots and biomass in the soil.

"There is a lot of talk about cover crop use, but a lot of the information comes from environments that are not like this (area)," said David Nielsen, a retired U.S. Department of Agriculture Research Service research agronomist and one of the two keynote speakers at the Sidney event. "Much of the information on cover crops comes from humid areas, where there is more precipitation and less evaporative demand."

Nielsen said that in 2011-12, there was a lot of discussion on growing cover crops in mixtures. The information was coming from south and central Nebraska. "They claimed the cover crop mixtures used less water, but research found the mixtures used either the same or more water as a single species cover crop."

Growers are often aware of their soil types and what will and won't work and make management plans accordingly. Most farms in the Panhandle use some kind of no-till or residue management in their fields. The soil, a silt loam, in western Nebraska is very good for growing crops when there's moisture.

"Farmers need to be aware if you don't use that water that you save, you might as well not save it," said Gary Peterson, Colorado State University professor emeritus and another keynote speaker at the event. Peterson did his master's degree projects at the UNL Panhandle Research Extension and Education Center in Scottsbluff. "You can't save any of the water in a wheat-fallow system, so getting a crop in there to use it is important."

Peterson said growing a grazing crop in fallow years to feed livestock is one way to use the water. He admits not everyone has the option of growing a cover crop for livestock, and if the region is in a drought, it may not work out in the long run. These are some of the issues research specialists are working on at the UNL High Plains Ag Lab (HPAL) in Sidney.

"All the different projects we have going on at the High Plains Ag Lab relate to the soil and its health," said Cody Creech, Nebraska Extension dryland cropping specialist. "So, we've looked at this from a number of different angles." The lab has studied everything from no-till to biochar and cover crops. The HPAL has also seen positive results with intensifying crop rotations. The grounds use flex rotations, where if the conditions are right and there is enough moisture, a cover crop can be grown in a field following wheat or in a fallow field.

Bijesh Maharjan, Nebraska Extension soil and nutrient management specialist and event organizer presented soil health measurements at the Nebraska Soil Health School. Unless there is some kind of benchmarking system, it is hard to make use of soil health measurements. Maharjan shared the soil health gap concept developed by his team, which can be used to benchmark soil health measurement in croplands with reference to native land. The soil health gap informs how far managed land can come from its native state and sets the highest possible soil health targets.

NICOLE HELDT

Carlos Villarreal (right), USDA-NRCS State Soil Scientist, and Riley Hackbart, USDA-NRCS soil scientists, debuted their new rainfall simulator and soil health demonstration trailer to a crowd outside a UNL's High Plains Ag Lab shop at the Nebraska Soil Health School on April 24.

Jessica Groskopf, UNL agricultural economist, discussed carbon markets and the opportunity to engage in carbon credit markets. She said carbon markets are currently unregulated, and producers are working under voluntary markets where carbon aggregators are coming together to sell their credits for them. The USDA is putting together a list of carbon credit opportunities where growers will be able to find more information.

The event ended with a soil health demonstration by NRCS soil scientists Carlos Villareal and Riley Hackbart. The scientists presented the impacts of rainfall on various soil conditions – with or without residue, tilled at varying degrees, and native soil. The plot tour was called off due to high winds.

The other 2024 Nebraska Soil Health Schools are planned for August 6 in Kearney, in conjunction with the NE Grazing Conference, September 4 in Crawford, and September 5 in North Platte, in conjunction with UNL WCREEC Field Day. For more information, contact Nicole Heldt, research project coordinator in Maharjan lab at nheldt@unl.edu.

Public Lands meeting to be held in Colorado

Registration is now open for the Public Lands Council's (PLC) 56th Annual Meeting that will be held in Grand Junction, Colo. from September 17-19.

"At a time when federal lands ranchers are facing tremendous government overreach, I cannot think of a better time to come together to coordinate our policy and advocacy efforts. In the last year, federal rulemakings finalizing regressive changes to the Endangered Species Act and NEPA, along with the Bureau of Land Management's Public Lands rule, have posed threats to the foundation of our livelihoods," said PLC President Mark Roeber. "I am honored to host annual meeting in my home state, near the grazing allotments my family have worked on since 1889 and hope that all federal permittees attend as we work to safeguard our industry for the next hundred years."

In Washington, D.C., PLC defends the rights and interests of cattle and sheep producers who utilize federal lands and grazing permits as part of their operations. Every year PLC's Annual Meeting brings these ranchers together in the West to discuss emerging issues and craft policy to direct policymakers in federal agencies and Congress.

Registration for the three-day in-person event is $375, with discounted rates available for family members, students, and media. The entire event will be hosted in the DoubleTree Hilton.

Pasture Weed Management After Drought

By Todd Whitney

Pasture grass root injury caused by drought and/or wildfire can extend into the next grazing season. If grass stands have only been slightly damaged, then recovery can be quick… especially with proper weed control, fertility and deferred grazing management. However, if the stressed pastures were overgrazing, then recovery may extend beyond one growing season and require patience. Further, root injury and biomass reductions are usually more prominent on sandy soil pastures than heavier soils.

During pasture recovery, higher invasive weed numbers are usually a symptom of previous grass stress; so herbicide spraying may provide short-term benefits. The downside of herbicide applications are spraying expenses and potentially damaging non-target desirable pasture plants.

Therefore, rather than just focusing on stress symptoms such controlling invasive weeds; consider increasing pasture rest periods for grass recovery. This may mean implementing rotational grazing with periods of no grazing in each pasture during the growing season. Also, installing more cross-fences to limit grazing in target zones can aid pasture rest and recovery.

For example, a three-pastures rotation system may lengthen rest days between grazing before the cattle rotate to the next pasture. When the grass is rapidly growing, cattle may move quicker such as every 30 days through the pasture rotation. Then, as grass growth slows or drought stress occurs, grazing time in each pasture may be lengthened to 45 days.

Then, pasture rotation will have more days of rest prior between grazing periods.

To further reduce the negative impacts of grazing, alternate the first pasture in the rotation at the beginning of each growing season. This will allow each pasture to be grazed annually at different times of year compared to the previous year or two.

More online Nebraska Extension grazing strategies are available at: https://beef.unl.edu and https://cropwatch.unl.edu

Annual Summer Stocker/Yearling Tour focuses on marketing yearling cattle

The stocker/yearling sector of the cattle industry offers flexibility and an opportunity for new producers to get started in the business.

Nebraska Extension beef systems team is offering a chance to learn from producers with established stocker/yearling operations July 11 during the fifth annual Summer Stocker/Yearling Tour near Bassett, Neb.

"A stocker/yearling component in a cattle production system can improve profitability and give some options that allow for quick adjustment in drought situations," said Hannah Smith, Nebraska Extension beef educator and one of the organizers of the event.

The annual Stocker/Yearling Tour has been popular with both beginning and established producers as it gives them an opportunity to see how other producers have incorporated the stocker/yearling component into their systems, and they can learn from their peers.

"We build in time for attendees to ask questions and discuss the practical elements of stocker/yearling management," said Erin Laborie, Nebraska Extension Beef educator and event organizer. "We want to hear from producers about what they need to know from a research standpoint, so we can shape UNL's priorities around that, but this kind of discussion where they learn from each other has been valuable to both attendees and tour hosts."

This year's tour and program are focused on the marketing aspect of yearling cattle, which was a topic that many previous attendees asked to address more in-depth.

Registration begins at 9:30 a.m. CDT outside of the Bassett Livestock Auction, 105 W. 4th Street, Bassett, Neb. Two local cattle operations are opening their pastures to the group to visit. Lunch will be served at Bassett Livestock Auction, followed by a producer panel to discuss the intricacies of marketing in the stocker/yearling space and how value can be captured through the various scenarios.

"We planned this to coincide with the annual Barbecue Yearling and Fall Calf sale at Bassett Livestock Auction, which is always a popular event that brings people to the area," Smith said. "People who come to town for the sale can stay one more day and learn about options that could have major implications for the way they do business."

MARIA TIBBETTS, UNL BEEF COMMUNICATIONS SPECIALIST
The 2023 Stocker Yearling Tour was held at the Skavdahl Ranch in Nebraska. This year's tour will be located near Bassett, Neb.

The cost is $20 per person, which includes lunch. Please register by July 1 at go.unl.edu/stockertour24 or contact the BKR Extension Office at 402-387-2213.

Homer Buell elected Sand County Foundation Chairman

Homer Buell has been elected chairman of the board of Sand County Foundation.

Buell, a cattle rancher from Rose, Neb., was first elected to Sand County Foundation's Board of Directors in 2014. He succeeds Lynne Sherrod, a Colorado cattle rancher who has served as chairman since 2015. Sand County Foundation is a national nonprofit organization working at the intersection of agriculture and environmental improvement.

"Homer brings tremendous experience and landowner perspective to this role. We're grateful to have him at the helm," said Kevin McAleese, Sand County Foundation President and CEO.

Buell and his wife Darla are the fourth generation of Buells to own Shovel Dot Ranch near Rose, Neb. The ranch received the Leopold Conservation Award in 2012 for the Buell's efforts to improve soil health, water quality, and wildlife habitat on their working land.

Buell, who recently served as Sand County Foundation's treasurer, is the former president of the Nebraska Cattlemen's Association, Nebraska Hereford Association and Nebraska 4-H Foundation. He serves on the board of the Sandhills Task Force and has served in many positions within the National Cattlemen's Beef Association during 14 years of board service.

Homer Buell, Sand County Foundation Chairman of the Board

Buell also chaired the Campaign for Nebraska Committee and Rock County Community Fund. He graduated from the University of Nebraska in 1971 with a degree in business administration and serves on the University of Nebraska President's Advisory Council.

Visit these organizations online:

Nebraska Grazing Lands Coalition
www.nebraskagrazinglands.org

South Dakota Grassland Coalition
www.sdgrass.org

In Rememberance: Mitch Faulkner

In April, South Dakota's ranching, range and grasslands community suffered a great loss with the passing of Mitch Faulkner.

He was a grasslands specialist and a self-proclaimed "grass nerd".

Mitch spent his career committed to the conservation of western rangelands with the USDA Natural Resources Conservation Service. He had a passion for the landscapes, plants, animals, and people of the western US and worked hard to improve the unique natural resources there. He deeply valued the sense of camaraderie he developed with his professional colleagues and enjoyed his many friendships made within the ranching community.

He died April 29, 2024 at home in Spearfish, S.D. due to complications from his battle with leukemia.

Mitch D. Faulkner
March 20, 1973 - April 29, 2024

Grazing Guide

A calendar listing of pasture and range events

July 23-25 East River Grazing School, Wall, SD. Contact Judge Jessop at judge.jessop@sdconservation.net or 605-280-0127.

Aug. 8 SD Leopold Conservation Award Recipient Tour at Blioux Ranch, Castlewood, SD

Sept. 10-12 Chamberlain Grazing School, Wall, SD. Contact Judge Jessop at judge.jessop@sdconservation.net or 605-280-0127.

September 17-19 Fall Grazing School with Jim Gerrish – Anselmo, NE

November TBD Generational Transition Workshop in Nebraska

2025

February 9-13 Society for Range Management Annual Meeting, Spokane, Washington

June 2-6 XII International Rangeland Congress, Adelaide, Australia

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

Weed Wise

Leafy Spurge or an Imposter?

Across South Dakota, yellow flowers are appearing all over the landscape. First thoughts when seeing these yellow flowers in pastures/rangeland and in roadsides might be: "That is leafy spurge!". Leafy spurge is a statewide noxious weed that can be difficult to manage. However, are the yellow flowers leafy spurge or another species?

In some cases, hedge mustard can be easily confused for leafy spurge from a distance due to the yellow, showy flowers (Figure 1). However, upon further investigation, it is evident that the flowers (Figure 2) and leaves (Figure 3) are quite different between the two species.

Leafy Spurge: Leafy spurge has large, yellow bracts (modified leaf surrounding the flower) and long, thin leaves. When leaves are removed from the plant, a white, milky sap is exudated from the stem. Leafy spurge spreads by rhizomes (underground stems) and seed. Therefore, patches of leafy spurge could be a singular plant.

Hedge Mustard: Hedge mustard has small clusters of yellow flowers and underneath the flowers are siliques (slender seed pods). The leaves are deeply lobed and covered in small, dense hairs. Hedge mustard reproduces by seed; therefore, the patches of these plants are all individual plants.

Similar Plants: While hedge mustard is a common plant that can be confused with leafy spurge at a distance, other plants can be confused with hedge mustard and leafy spurge. Other species could include sweet clover or goldenrod (Figure 4).

While all these plants may need to be managed in a pasture/rangeland setting, proper identification is important as different tactics will be effective on the different species. Refer to the latest SDSU Extension Noxious Weed Control and Weed Control: Pasture and Range guides for selecting effective herbicides. While herbicides are effective, these are not the only tactics that can be utilized to manage leafy spurge and other weeds. Mowing, grazing, rotational grazing, and hand weeding are all viable options to manage these weeds. Additionally, the leafy spurge beetle manages leafy spurge by feeding on the plant. While, not as effective when used alone, the leafy spurge beetles are a great complementary tactic; especially in areas that are not easily accessible.

Written collaboratively by Eric Jones, Philip Rozeboom, Jill Alms, and David Vos of SDSU.

Figure 1. Different stands of leafy spurge (left) and hedge mustard (right). At a distance, these plants can be confused with each other.

Figure 2. The yellow, showy bracts (modified leaf surrounding a flower) of leafy spurge (left) and the small clusters of yellow flowers with siliques (slender seed pods) of hedge mustard (right). While easily confused with each other at a distance, closer inspection shows that the species are different.

Figure 3. Long, thin leaves of leafy spurge (left) that exudate a white, milky sap when removed from the stem and the large deeply, lobed leaves covered in short, dense hairs of hedge mustard (right).

Figure 4. Sweet clover (left) and goldenrod (right) can also be confused with leafy spurge when seen at a distance. However, the vegetative morphology of all these species is quite different under careful inspection. (Courtesy: Tom Heutte, Rob Routledge;

Celebrate Rangelands and Pastoralists

By Walter Schacht, Professor Emeritus, University of Nebraska-Lincoln, Lincoln, NE

In its 76th session, the United Nations General Assembly adopted the resolution made by the Government of Mongolia to celebrate an International Year of Rangelands and Pastoralists (IYRP). The General Assembly designated 2026 as the IYRP and invited the Food and Agriculture Organization of the United Nations to facilitate its implementation. The IYRP reflects the importance of rangelands in creating a sustainable planet and supporting economic growth and resilient livelihoods for pastoralist (a person who raises livestock) communities around the world. Rangelands are commonly described as uncultivated lands that include grasslands, savannahs, steppes, shrub lands, deserts, and tundra. They make up about 770 million acres, or 30% of the land cover of the US, and about 53% of land cover in the Great Plains and western USA. Every citizen of the world is impacted by rangelands, which constitute approximately half of the earth's land surface area. Rangelands are used primarily for extensive livestock production, and their health, productivity, and environmental sustainability are directly critical to the livelihoods and cultures of more than 500 million pastoralists in the world.

The IYRP seeks to increase worldwide understanding of the value of rangelands and pastoralism at regional and global scales and work towards the stewardship, policies, and processes that protect and improve ecosystem services and economic benefits provided by rangelands. Greater understanding will inform efforts to better manage rangelands and to change national and global policies that improve food security, habitat, and biodiversity. Better management and national and global policy changes have potential to mitigate climate change, increase the value of ecosystem services, and limit out imigration of human populations. This in turn has the potential in many parts of the world to improve political stability, lessen conflict, and reduce gender inequity.

Each country will decide how to observe IYRP, but a global frame-work of 12 monthly themes is being advocated to highlight urgent and topical issues, and demonstrate that pastoralists (ranchers, in the case of the USA) and rangelands across the globe share similar issues and concerns despite their diversity and complexity. Themes include the importance of rangelands and pastoralists, access to rangelands by pastoralists, services and resources for pastoralists, climate change, and biodiversity and ecosystem services. Possible activities under consideration include national and state/provincial events to showcase sustainable rangeland systems, an international congress on the state of science and knowledge on rangelands, and social media campaigns and video productions.

Hundreds of organizations are supporting the IYRP in the USA, including professional societies, universities, state and federal agencies, and conservation groups. The Nebraska Section of the Society for Range Management is collaborating with other organizations in Nebraska, including the Natural Resources Conservation Service, the Nebraska Grazing Lands Coalition, and the Center for Grassland Studies, with the goal of educating and engaging Nebraskans concerning the value of rangelands as an economic and natural resource base of Nebraska and the world, ultimately creating an informed population that is involved in policy decision-making. The group will work together in developing media, seminars and meetings, and educational programs focusing on the significance of rangelands and in influencing policy related to rangelands. To learn more and to contribute to IYRP, go to https://iyrp.info and contact Bob Broweleit (bentbarc@gmail.com) or Walt Schacht (wschacht@unl.edu).

Leopold Tour is August 8 at Blioux Ranch

The South Dakota Leopold Conservation Award Recipeint Tour will be held on Aug. 8 at the Blioux River Ranch.

Operated by Barry and Eli Little and Family of Castlewood, S.D. they prioritize soil health on their 1,600 acres of cropland and 800 acres of pastures. They rotationally graze 500 head of beef cattle on pastures of native grasses. They also graze cattle on fields of cover crops to enrich the soil.

A variety of conservation practices have produced environmental and economic benefits through better crop yields, and less fertilizer and herbicide usage and expense. They have also demonstrated that grazing livestock can enhance wildlife habitat.

As active members of Pheasants Forever, the Littles volunteer their time and equipment to establish bird-friendly habitat for other landowners. The most important things for pheasant chick survival are insects of food and habitat for cover. The seed mix they plant provides cover and sequentially flowering plants to protect and feed pheasants, as well as provide a water source from dew on the plant stems.

The August tour will better highlight the conservation tools the Little Family has implemented over the years.

Please RSVP for meal count to Judge Jessop, jljessop@kennebectelephone.com.

Barry and Eli Little will host the public Aug. 8 at their ranch near Castlewood, S.D.

Successful Grazing Management: Anticipate changes and adapt to evolving conditions

By Victor Shelton, Retired NRCS Agronomist/ Grazing Specialist

I was recently asked to briefly explain "ruminating." Ruminating is when the ruminant animal regurgitates partially digested food from its stomach back into its mouth, where it chews it again to further break it down. This process helps these animals extract as many nutrients as possible from their food, which is typically plant material that is difficult to digest. Ruminants are key to sustainable agriculture systems because they have a unique ability to convert low-quality forages into high-quality meat and milk products.

Ruminants possess a distinctive digestive system optimized for the microbial breakdown of complex plant materials. The ruminant "stomach" consists of four chambers which are home to a microbial population that degrades feedstuffs consumed by ruminant animals. Optimizing the rumen microbiome not only enhances animal welfare and productivity but can also address environmental impacts linked to livestock production.

It's important that the ruminant animal has a healthy microbiome early in life and keeps it. The pH of the rumen is probably one of the most important things to keep stable if you want the animal to be able to breakdown forages efficiently. The normal pH of the rumen for an animal on a forage based diet is between 6 and 7. As the pH of the rumen starts dropping to 5.8 or below, it is harder to maintain the flora needed to breakdown complex plant material.

Humans also ruminate, but in a totally different sense of the word. You ruminate – ponder or think – about something, going over it in your mind repeatedly and often casually or slowly giving it a lot of consideration before making a decision. Please feel free to ruminate on this topic!

This year has been full of significant challenges. At times, it felt like I was procrastinating on important tasks, but I wasn't. I was actually waiting for the right opportunities to tackle them. The weather has mostly been uncooperative with only brief moments of favorable conditions, and I've spent more time fixing things because of it! Strong winds and dead ash trees don't mix.

Wet conditions continue to create hay challenges, especially for dry hay. I've seen a little hay cut and baled during the very short windows of opportunity we've had. Excess soil moisture remains a problem, even when the sun shines for a couple of days. Avoid mowing hay when the top two inches of soil are wet, as this moisture slows drying and complicates storing dry hay. Mow at least 2-3 inches high to allow for better air circulation. Don't bale as tight as you normally would.

Excessive moisture requires more drying time to make it suitable for baling for dry hay and even for good ensiling. For hay to store well and maintain quality, it must be baled with absolutely no more than 18% moisture, and for small square bales, 16% should be the upper limit. Higher moisture content usually leads to soured or moldy hay.

Given the current conditions, baleage might be the best option if you have or can access the necessary equipment. Baleage is hay too moist to store as dry hay, so it is wrapped or sealed in plastic at about 50% moisture. It can be fermented as individual bales or in a tube. Ensure the wrap is tight and sufficient to exclude oxygen and prevent mold. Baleage is typically wrapped with at least six layers of thin plastic and can produce high-quality forage if done correctly.

Every producer worries at times about making hay. I'd rather leave the forage standing than end up with poor-quality hay. If hay is baled and stored wet, its quality quickly deteriorates, leading to costly consequences. Livestock won't thrive on low-quality hay and added supplementation will be needed, and you'll have removed and relocated valuable nutrients that will need to be replaced.

Sadly, running equipment on wet soils usually leads to soil compaction which damages soil structure, water infiltration, root growth, water storage for later in the year, and future forage yields. In the end it's your decision and sometimes you just have to do what you think you have to do and live with the choice.

You may ask what to do with runaway forage. The best approach is to keep grazing, allocating smaller sections to graze and moving the animals frequently. This method helps return more nutrients to the soil in the same area and keeps the forage under control. Then, allow enough time for the forage to recover before grazing it again. Normally, this takes a while unless you have too many animals. Since it's the beginning of June, you shouldn't be short on forage.

Clipping can help maintain quality, but it is costly, and you also still have to consider soil moisture. If you decide to clip, remove the seed heads and avoid cutting the leaves. If that's not possible, stick to grazing.

Ask yourself why you're mowing. If it's to improve or maintain quality, go ahead, but don't mow shorter than necessary. If it's just for looks, you might be better off leaving it alone. Taller forages produce more live roots, providing some drought protection. They can also shade out weeds, keep soils cooler, and retain moisture, promoting growth of cool season forages instead of less desirable plants. This cover could be very important if it decides to turn dry later this year.

As of the date that I'm writing this during the last week of May, I've received 52 percent of my yearly average of rain. Looking at this in another way, I've already received all of June's rain and starting into July's. Changing weather conditions and maturing forages impact grazing much like a chess game, requiring strategic thinking and adaptability to stay ahead.

Successful grazing management, like winning a chess game, relies on anticipating changes, making calculated decisions, and adapting to evolving conditions. Each move counts, and a well-thought-out strategy can keep your livestock healthy and your pastures sustainable through the changing seasons.

Remember, it is not about maximizing a grazing event, but maximizing a grazing season! Keep an eye on the forages and keep on grazing!

– Ohio State University

New agronomy field specialist in S.D.

Clarence Winter as joined South Dakota State University Extension as a new Agronomy Field Specialist.

Based at West River Research and Extension in Rapid City, Winter will support crop producers in central and western South Dakota, focusing on soil fertility and cropping systems in dry climates.

"One of the great things about this position is having an unbiased approach to solving problems that farmers may have," Winter said.

Winter grew up on a no-till farm by Martin, S.D. He obtained a bachelor's degree in agronomy with a minor in precision agriculture and a master's in plant science, both from SDSU. As a graduate research assistant at the Dakota Lakes Research Farm by Pierre, part of the South Dakota Agricultural Experiment Station at SDSU, Winter studied phosphorus efficiency.

His agronomy experience also includes research internships at ABG Ag Services in Toronto, S.D., the United States Department of Agriculture-Agricultural Research Service in Brookings, and Pivot Bio in Brookings.

Clarence Winter

New book out about Nebraska Sandhills

"The Nebraska Sandhills," released by the University of Nebraska Press highlights both the science and beauty of the Sandhills region.

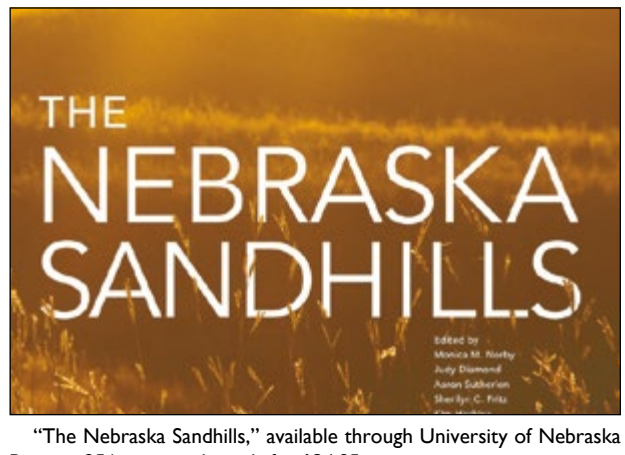
Mike Boehm, vice chancellor of the Institute of Agriculture and Natural Resources, said it's a celebration of the place and its people.

"We've got one of the last great grasslands of the world," Boehm said. "For the people who call the Sandhills home, I think it will go a long way to pay homage to their way of life and to their neighborhood."

"The Nebraska Sandhills" was conceived to mark the 50th anniversary of the Institute of Agriculture and Natural Resources. It includes 184 color photographs, 15 black-and-white photographs and 28 color illustrations, along with nealry 40 essays by a range of contributors from across the University of Nebraska system. It covers topics including the wildlife, plants, geology, geography, weather, history and people of the region.

The project is in part an update of "Atlas of the Sand Hills," published in 1989, which took a mostly scientific approach to depicting the area. While the new publication features scientific information about the ecology of the region, Boehm said the team wanted this publication to be more accessible and incorporate more of the human element of the Sandhills to introduce more of the general public to the region.

The Sandhills are home to a range of diverse plant and animal life in a habitat unlike almost any other ecosystem.



"The Nebraska Sandhills," available through University of Nebraska Press, is 256 pages and retails for $34.95.

Ranching for Profit

Earlier this month, Ranching for Profit for young adults happened in Nebraska. Dallas Mount instructed 31 students from 9 different states.

Attendees divided their time between the classroom and the field.

Register now for Women on the Range

A Women on the Range Workshop will be held on July 8-10, 2024, at Bart and Shannon Carmichael's Wedge Tent Ranch near Faith, S.D.

This is a hands-on grazing workshop for women, by women.

The workshop will cover how range ecology and the intersection between plants and grazing ruminants is critical to your operation, as well as the impacts of grazing on your system - from grazing principles to grazing more efficiently.

Also to be covered: ecosystem processes, range health and spend time learning and discussing supply and demand. Instructors will include producers and Extension specialists.

The cost to attend this event is $175. Go online to https://extension.sdstate.edu/event/women-range-grazing-workshop.

Visit these organizations online:

Nebraska Grazing Lands Coalition
www.nebraskagrazinglands.org

South Dakota Grassland Coalition
www.sdgrass.org

Grazing livestock on cropland pays off

By Stan Wise,
South Dakota Soil Health Coalition

The five principles of soil health

1. Keep the soil covered
2. Minimize disturbance
3. Keep a living root in the soil
4. Increase biodiversity
5. Incorporate livestock

The core idea behind the regenerative agriculture movement is a simple one: Mimic nature. What did farmland look like before it was farmed, and how can producers make their operations look more like that picture?

This concept lies at the foundation of all five principles of soil health: Keep the soil covered, minimize disturbance, keep a living root in the soil, increase biodiversity, and incorporate livestock.

The last principle, livestock incorporation, is an important one. The native prairies relied on large herds of bison to help cycle the nutrients of aboveground plant matter back into the soil, feeding the belowground biological communities that are so important to soil health.

Finding a way to mimic that natural process can be a challenge for many row crop farmers, especially if they don't own cattle. Fortunately, there are some economic incentives to encourage them to find a solution. Grazing livestock on cropland can increase a producer's overall profit while also improving their soil.

One way to achieve this is to plant a cover crop.

Managing for success

Renovo Seed Product Expert Justin Fruechte said the first step in cover crop success is to choose the right mix of seed. "Most people that are grazing cover crops are having success when they are using blends of species that work together and were developed for forage purposes," he said.

"Step two is that managing it like you would manage any other crop becomes important when you want forage production," Fruechte said. "We want to spray and kill off the weeds before we plant – no different than you would before you plant a field of corn. And we've got to have some fertilizer on board, too. We will see drastic differences in forage production for fields that are fertilized or not fertilized."

Fruechte said the final step for cover crop grazing success is well-timed and well-managed grazing.

"When we're managing for livestock gain or milk production, we're making sure that we're grazing the forage at its right maturity stage," he said. "So we want to make sure that things aren't too mature and the protein content is still good."

Moving the livestock often is also important, he said, so that the cover crops aren't overgrazed and have the potential for regrowth.

When well-managed, cover crops can offer a high-quality feed which can improve animal nutrition.

"The nutritional value of cover crops can be similar to high quality hay if cover crops are grazed in a timely fashion," Dakota Lakes Research Farm Consulting Scientist Cody Zilverberg said. "However, as cover crops mature, their crude protein and digestibility will decrease."

The payoff

There are different scenarios in which cover crops can be incorporated into an operation.

Full-season, or warm-season, cover crops are planted earlier in the year, and they can be a useful option in a prevented planting situation or when grain prices are lower.

The economic return on grazing a full season cover crop will vary with a number of factors, but Fruechte offered some numbers for an example budget. He said that a full season cover has a potential yield of 8 tons of green forage per acre. On a 160-acre field, that will support 223 cow-calf pairs of a total weight of 1,500 pounds per pair for 90 days. Assigning a grazing value of $3.00 per pair per day, he said the full season cover crop has a value of $376 per acre.

This scenario becomes even more profitable if the producer is grazing stockers, Fruechte said. If an 800-pound steer gains 2 pounds per day in the same field and each pound is valued at $2.50, then each day a steer grazes is worth $5.00.

In the current cash crop market, Fruechte said a full season cover crop can be the most valuable option for some producers. "If you're in the stocker game already, you can plant a full season cover crop, and your gross revenue is going to be higher than any other cash crop that you can produce," he said.

While full season cover crops may not be feasible for some producers, there are still options for including a forage cover crop in the rotation.

In South Dakota, cover crops planted after corn harvest are unlikely to develop sufficient biomass for grazing before winter. However, producers have the option of including a small grain crop, such as wheat or oats, in their rotation and then planting the cover crop after the small grain harvest.

Fruechte said that a fall cover crop planted after small grain harvest has a potential yield of 2 tons per acre. A 160-acre field of such a crop can support 98 cow-calf pairs of 1,700 pounds per pair for 45 days. Assuming a $3 per pair per day grazing value, that works out to $82.68 per acre of additional value on top of the small grain revenue.

There are other benefits to the fall cover crop, Fruechte said.

"What we've seen in terms of benefits to the farmer in terms of his cows is increased body condition scores just because we're coming off of grass pasture that's decreasing in quality, and we're coming to a cover crop that's fantastic in quality," he said. "And so people are able to hold calves on pairs later. So heavier calves at weaning is a benefit and just less stress late in the year to your perennial pastures."

Other opportunities

For producers who don't have livestock or are unable to grow a forage cover crop after their corn harvest, there are other opportunities to incorporate livestock onto their cropland.

Producer and South Dakota Soil Health Coalition Board Member Don Nickelson of Frederick, S.D., grows corn, soybeans, oats, alfalfa, teff grass, and cover crops, and he has a cow-calf operation.

Nickelson also custom grazes some of his neighbors' cattle, and he lets them graze on corn residue after harvest in addition to his cover crops.

"I've taken on a couple of different neighbors' cattle just to get more numbers out there for me," he said. "So, then it makes it cheaper for them because they're not having to start feeding bales where they can graze my fields."

Nickelson charges between $0.50 and $0.75 per head per day to graze his neighbors' cattle on corn residue, and he charges $1.75 per head per day to graze on cover crops.

Nickelson said a neighbor who owns a feedlot spends $2.75 per head per day to feed his cattle in bunks, including labor costs and tractor time.

"So, each day someone can be grazing instead of feeding can potentially save themselves $1 per head each day in feed costs as well as being a source revenue for someone else through custom grazing. It ends up being a win/win," Nickelson said. "If you are able to integrate your own cattle on your own land, the savings can be even better."

While grazing livestock on cropland can provide an extra revenue stream, the practice also provides important soil health benefits.

"My soil organic matter has improved," Nickelson said.

Zilverberg estimated that over the course of 6 months of grazing, a 500-pound calf returns 47 pounds of nitrogen, 4 pounds of phosphorous, and 1,000 pounds of organic matter to the soil. Grazing a cover crop offers producers a chance to reap the soil health benefits of the cover crop, see an economic return from the forage, and quickly cycle nutrients in the cover crop back into the soil.

Producers and landowners who wish to find available forage or livestock can use the free website www.sdgrazingexchange.com to find resources near them and form private grazing agreements.

Transition Workshops held in two locations

Transitioning a farming or ranching operation from one generation to the next, or even from one operator to another can be complicated. The Nebraska Grazing Lands Coalition recently teamed up with Nebraska Extension to host workshops, Enhancing the Grasslands of Nebraska Through Generational Transition in Bassett and Ord.

These educational workshops provided participants an opportunity to listen as Pamela Epp Olsen, an estate planning attorney, discussed the mechanics of estate and transition planning. Each workshop provided a unique opportunity to learn. Producers were given an opportunity to visit one-on-one with Olsen in Bassett, and a panel of local producers shared about their own personal experience with transition planning at the Ord workshop.

"Succession planning is such an important topic, planning for the next generation increases the likelihood of success" said Angela Redman, NGLC Assistant Director. "These workshops allow participants to connect and be inspired to work on their own succession plans."

These workshops and opportunities were made possible through a grant received by the Nebraska Grazing Lands Coalition through the National Fish and Wildlife Foundation. "The Nebraska Grazing Lands Coalition is extremely grateful to have been able to provide this educational opportunity for producers to help enhance the grazing lands of Nebraska," said Redman.

For additional information about this program and other upcoming educational events visit the Nebraska Grazing Lands Coalitions website at nebraskagrazinglands.org.

This spring, transition workshops were held at two locations in Nebraska to help farm and ranch operators plan for the next generation in their operation.