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South Dakota/Nebraska Leopold Winners



The Nebraska Grazing Lands Coalition (NGLC) wants to assist farm and ranch families with the often daunting task of transition and estate planning. Over the last several years, the NGLC has hosted seminars with speakers highlighting topics related to transition planning, and now, NGLC has hired an individual who will work directly with families interested in taking estate and transition planning steps.

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Through grant funds, Bethany Johnston was recently hired as the NGLC Ranch Transition Task Manager. Johnston, who previously worked with Nebraska Extension, will be based near Burwell, Neb.

Of her new role, Johnston explains, "Ranchers are busy year-round! Too many times, the process to transition feels like a full-time job with compiling paperwork, drafting new legal documents, contemplating how to treat heirs fairly and with the family regularly providing retirement. Ranch life often prevents the time needed to plan for generational transfer. My job is to help keep the ball rolling for farm and ranch families - to facilitate and guide them down the path. We want to help them take this journey one-step at a time and keep them on task."

For families interested in working with Johnston, she will offer complimentary and confidential assistance. The process begins with a face-to-face meeting with Johnston where she will utilize their input to help the family create a roadmap and identify available transition and estate planning resources. She emphasizes, "The family will be in charge of the process and direction. They are in the driver's seat."

Once the family's roadmap has been developed, Johnston, who is certified as a farm succession planner, will then check-in to ensure that they are proactively completing tasks for effective transition and estate planning. Johnston anticipates this process will include helping direct families to several services and resources that already exist, such as Nebraska Rural Response legal and financial clinics, counseling, and family mediation.

Johnston says she will be similar to a personal trainer who keeps people accountable. She adds, "I think accountability is the biggest thing that's been missing from transition programs in the past. Participants get excited at a transition meeting, then go home and become too distracted to finish."

And she notes that it is important to transition farms and ranches for rural communities. "When we lose families on the land, it impacts businesses and schools in those local communities," she shares. "If a family farm or ranch doesn't transfer, the land is often absorbed by a bigger operation or an absentee landowner. Often a family leaves the land, but isn't replaced by a new family."

Johnston and her husband are in a transition of their own, moving from Thedford to Burwell and taking over the Angus cowherd that has been operated by Bethany's parents, grandparents and great-grandparents.

Farm and ranch families interested in transition planning are invited to contact Johnston at 308-348-2015 or ranchtransition@outlook.com. NGLC will also be hosting several ranch transition workshops in the coming months, which Johnston will be attending. She concludes, "My goal is to try to break the transition planning process down and not overwhelm people. As the saying goes: How do you eat an elephant? Start with one bite at a time."

Nebraska Transition Session and Tour is June 11-12

The Nebraska Grazing Lands Coalition (NGLC) -Nebraska Extension joint Generational Transition and Summer Grazing Tour is set for June 11-12, 2019 in Southwest Nebraska. The event will begin with the Generation Transition Session from 10 a.m. - 2:30 p.m. at the UNL West Central Research Extension Center near North Platte, featuring ranch estate

planning attorney, Pam ing intensively managed Olsen and a panel discussion by ranchers who have successfully made the transition to the next generation. A \$15 registration fee, which includes lunch, is payable upon arrival.

The 2019 Summer Grazing Tour will feature three southwest Nebraska ranchers that manage very different grazing resources includnative range and range rescued from invasive Eastern Red Cedar. A \$20 registration fee for this event includes boxed lunch and evening steak fry at the Nebraska College of Technical Agriculture in Curtis, Neb.

The tour will begin at Shamrock Ranches south of Wallace, Neb., with registration at 7:30 a.m. and the tour beginning at 8:30 a.m. The tour will also visit Deatrich Cattle Co. in the Loess Canyons south of North Platte and the Mortensen Farm & Ranch which is also involved with the Loess Canyon Rangeland Alliane.

Pre-register by June 7 by calling Randy Saner, Nebraska Beef Systems Extension Educator, at 308-532-2683 or e-mailing rsaner2@unl.edu. Specify which activities you plan to attend. For more information contact Ron Bolze, NGLC Coordinator, at 402-321-0067.



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Bethany Johnston Generational Transition Task Manager



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).

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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.



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On the Cover:

Photo by Matea Gordon

The bountiful beauty of a Nebraska pasture brimming with prairie grasses, milkweed in bloom and a stoic windmill is a summer scene to look forward to.

"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.



The coordinator behind the Coalition

Judge Jessop has spent the last 18 years managing SDGC projects

By Cody Littau, SDCA Communications Coordinator

For the past 20 years, the South Dakota Grassland Coalition has worked tirelessly to promote good stewardship of grasslands through sustainable and profitable management. The SDGC provides range and pasture planning, along with educational opportunities to assist grassland managers.

If you have attended an SDGC event, the chances are you've met Judge Jessop. Judge's passion for people shines through his work. "People, it is always about the people. I have met some really intriguing people in my various roles and that holds true for this role. You get on a producer's grasslands and hear their story and what makes them tick." This passion drove him to start working for the SDGC in October of 2001. For the past 18 years, Jessop has been the Project

Coordinator. He works with grassland managers to improve their land – making it both more profitable and healthier as an ecosystem.

Jessop learned the importance of good grassland stewardship at an early age. He grew up on a diversified farming and ranching operation southwest of Presho, S.D., with cattle, sheep, and cropland. Curious about his name? "My real name is Justin, the story is when I was three days old, a neighbor said that Justin stands for justice, why not call him 'Judge'. The name has stuck."

Jessop worked at Presho Livestock Auction, for his family, and a neighbor from junior high to college. He attended South Dakota State University and earned his degree in Agricultural Business. After graduation, he joined a harvesting crew and headed south. He would return home to combine and rent his family place. Jessop and his wife, Lisa, have three children Joslyn, Justice, and Josie.

Judge Jessop has been a longtime coordinator of programs hosted by the South Dakota Grassland Coalition. He is pictured here with his family – wife, Lisa and children Justice, Joslyn and Josie.

attended a meeting of the South Dakota Grassland Coalition in Pierre, during the South Dakota Cattlemen's convention. I attended some of their events. I was told of the project coordinator position and I applied and they hired me." Ever since Jessop has been spreading the word about grassland conservation and profitable management. 'Grasslands are neat, you don't have to replant them, and they grow providing a feed resource to livestock, wildlife and a host of critters that we cannot see that make the ecosystem go around."

Roughly half of South Dakota is native grassland. These grasslands not only support families and businesses but have many other roles in the ecosystem. Healthy native grasslands are comprised of, not just grasses, but also forbs and shrubs. They act as water and air filters and carbon sinks. South Dakota grasslands offer habitat and food for over 90 species of birds and various wildlife.

If you would like more information about the work of the South Dakota Grassland Coalition, please visit www.sdgrass. org.

He first learned about SDGC in 1997. "I first

SDGC 20th Anniversary Meeting

By Amy Blum

In mid-December 2019, the South Dakota Grassland Coalition (SDGC) commemorated its 20th anniversary with a special celebration in Chamberlain. The event also served as the coalition's annual meeting and aimed to educate the

SOUTH DAKO

more than 100 attendees about the many partnerships SDGC utilizes to reach a maximum number of urban and rural groups.

Barry Dunn, president of South Dakota State University, welcomed the large crowd and shared his pride in what the coalition has accomplished in two decades. "I watched this organization start in its infancy, and it's been a real pleasure to watch it grow," Dunn said. "You are making an enormous difference in the conversation about land use and agriculture in South Dakota and in the nation."

Dunn focused his comments on the impact the South Dakota Grassland Coalition has on regenerative agriculture, and he likened the group's core values to those also held by innovators like Theodore Roosevelt, Aldo Leopold, and Scotty Philips. *Continued on page 4*



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June 7-8 Home on the Range Bird Tour

<u>June 25-June 27</u>

West River Grazing School in Wall, SD

<u>July TBD</u> South Dakota Leopold Conservation Award Tour

Doan shares ideas for re-energizing your farm or ranch

By Amy Blum

The term regenerative agriculture can feel like a daunting ideal drafted in a boardroom. However, thanks to nationally recognized fourth generation rancher Jerry Doan those attending the South Dakota Grasslands Coalition 20th Anniversary Annual Meeting in Chamberlain this past December heard and saw regenerative agriculture in successful real-world practice.

Twenty years ago, Doan of the Black Leg Ranch near McKenzie, N.D. came close to throwing in the towel on the ranch established by his great grandfather. He was dappling in rotational grazing and no -till farming, calving in March, feeding hay for six months of the year, and financially struggling. His wife, Renae, recalls their inability to go anywhere or do anything and the couple's four children were all still in school.

On top of that stress, his father and their longtime hired hand both died.

"I told my wife something had to change or I was going to quit," Doan says. "I was tired and worn out. We were getting hit from all sides."

Doan says he regrouped and vowed to make every acre of the family's ranch profitable. To do that, he looked beyond what was considered normal and endured harsh ridicule along the way. He says, "It all changed when I decided to take a holistic management course. Allen Savory's practices are common sense, but I was so entrenched in doing things how they'd always been done that it took me twice through the course to really get it!"

According to Doan, learning to think in a new way and working in sync with nature became the first steps to a future



The Jerry and Renae Doan family were the first recipients of the Leopold Conservation Award in North Dakota in 2016. The family operation has diversified to involve all 4 of their children and their families.

the Doans couldn't have imagined. "The idea of holistic management and regenerative agriculture is black and white. It all works well and right from the start. Unfortunately, nothing about farming or ranching is black and white. Getting to where we are today was not easy or simple. We are still learning and changing, but taking those first hard, small steps was absolutely worth the challenge."

Building a **Quality Life**

In an effort to make every acre profitable, calving season on the Black Leg moved from March to May. Instead of putting up 6,000 bales of hay as a constant feed source, they now put up 600-800 bales as emergency reserves for rough weather. The ranch shifted from year-round grazing to intense rotational grazing.

Doan shares, "Many things like diversification and soil regeneration are important, but our overall quality of life and profitability are most important. We overlooked those last two for a long time."

Today, the Black Leg Ranch is home and work for three generations of the Doan Family. Each of Jerry and Renae's four children and their families fill important roles



Jerry Doan credits holistic thinking to bringing about positive changes to their multi-generation ranch.

in the highly diversified ranch.

"As the kids have come home, we've asked each of them, 'What do you bring?' We can't put all of these families on the backs of one cow herd," Doan says. "The kids keep me humble and have reinvigorated my passion for agriculture as a whole."

Each of the Doan's children returned home with unique perspectives and strengths; yet, their motivation for returning to the ranch was shared.

"We are all proud of our outlaw heritage and fueled by growing a legacy for the next generations," Doan says. "But mostly, we have a passion for the grasslands and working in spirit with nature in order to thrive."

Embracing Diversity

Doan says he never stands before a group of peers thinking what

Doan's Top 10 Tips for **Ranch Profitability**

the Black Leg Ranch near McKenzie, N.D. found himself worn out and ready to quit. But, holistic management became the first step to making dramatic changes for the better. The fourth-generation rancher shares his 10 tips for ranch profitability.

1. Holistic Management

"Holistic Management (the Savory tour) teaches you how to think again. Even if you never plan to run a cow, holistic management is the start of everything."

2. Planned Rotational Grazing

"Whatever level fits your operation, get into it. Rotational grazing will improve your rangeland. The benefits are too great to overlook."

3. Production per acre not production per cow

'True profitability lies in the big picture and is key to attracting and retaining young people in ranching. In my opinion, chasing production per cow or calf is killing us and has done us all a great disservice."

4. Calve in sync with nature

"I fought this for years, but the number one best economic decision I ever made on our ranch was moving to May and June calving. We can't brag about calf weights at the sale barn, but our profitability skyrocketed."

5. Right cattle for the system

"This is a challenge and something we still don't have right. But, the way we've increased cow size as an industry has increased input costs by 200 percent. That's not sustainable. My ideal cow is 1100-1200 pounds

works on his family's North Dakota ranch will work for anyone else. "So many people get caught up in what others are doing. We've been there too," he says. "But you have to find what works for you. What fits your profitability, your quality of life, your ability to regenerate? It's okay, even best, to take the process of change slow. We've been making changes for over 30 years. What we do today has taken a lot of mistakes."

The family believes each farm or ranch has

Twenty years ago. Jerry Doan of because I know she'll work for and with us."

6. Use low maintenance bulls

"Select for calving ease and longevity. Longevity is where profitability soars. Challenge your traditional thinking to increase profitability without sacrificing quality."

7. Use no-till

"At this point, no-till farming is a no-brainer if you're looking to improve marginal areas and make every acre profitable."

8. Regenerate soil health in range and cropland

"Cover crops and crop rotation are important and central to this. This is where planned grazing becomes important too. Cattle and livestock are to the benefit of farming and profitability.'

9. Winter grazing

"This is huge for us. This has brought big profitability back. Even peeling off two months of feed costs makes a difference. I look at our ranch generationally and winter grazing helps each acre be profitable now while regenerating for the next wave of our family.'

10. Develop niches

"Everybody has an unfair advantage. You probably can't tell me what yours is and I can't tell you either. But, bring in people you trust to help you find it."

Doan says, "More than anything, have fun. I don't think many of us really enjoy or have fun in agriculture any more. We have to find joy and fun in what we're doing because that's what gets us through the tough stuff."

an unfair advantage. The trick is often finding it.

For the Doans, realizing one of their greatest advantages is proximity to a major airport led to once-unimagined growth. According to Doan, the core of their operation remains farming and ranching. However, with the couple's four children bringing unique strengths and perspectives, the Black Leg Ranch has become a destination spot.

Today, the Black Leg Ranch operates several entities including a full-service hunting lodge, an event center especially attractive as a wedding venue, beef and buffalo meat sales and a brewery.

"I could never have dreamt all we'd have going on," Doan says. "We welcomed over 10,000 people to the ranch last year. With the kids' enthusiasm and commitment, we've been able to use our ranch as an educational platform for people across the nation. It's not perfect and can be overwhelming, but what a humbling adventure we are on."

Ranching for Profit coming to Sheridan, Wyo. in August

The event, only held every three years, will take place Aug. 1-3.

A Ranching for Profit Conference (RFP) will be held in Sheridan, Wyo., Aug. 1-3. Held every three years, the theme for the 2019 meeting will be "Creating a succession plan that works for everyone."

According to Dave Pratt, this generational theme is particularly poignant for him because he and his wife, Kathy, will be transitioning owner-

ship and management of their company, Ranch Management Consultants, which hosts the schools to RFP instructor Dallas Mount and his wife, Dixie, shortly after the 2019 conference. In addition to teaching RFP schools, Mount serves as a Rangeland Specialist for the University of Wyoming Extension in Platte County.

"I know he's going to make some changes, but those changes are just going to enrich the soul of the company," said Pratt about Mount's upcoming takeover.

Mount's vision for RMC going forward is to continue to have RFP be the go-to place for ranchers looking to improve their ranches and their lives. He plans to continue the work that Pratt started, developing products and systems that assist graduates in implementing their learnings from the RFP program.

In addition, Mount plans to bring new ideas into the fold. In 2017, he spent three months with RMC's sister company in Australia, Resource Consulting Service (RCS).

Creating a

succession

plan that works for

everyone

From that, Mount aims to implement the economic analyses tools they are taught at the school and a robust benchmarking dataset to identify areas of strength and weakness.

For more information visit: https://ranchmanagement.com/ranching-for-profit-conference/ Continued from page 3

The event was wrapped in nostalgia and gratitude, especially for the coalition's founding members, and that gratitude was expressed, in part, when the coalition presented Friend of the Prairie honors to past partners and continued advocates Dwavne Brever of Hot Springs and Carl Madsen of Brookings.

To cap the event and showcase some of the many possibilities in agriculture, Jerry Doan of the Black Leg Ranch near Bismarck, N.D. shared stories and examples of conservation and ily's six generation ranch.

"Nothing in agriculture is black and white, and I'm not here to tell you we have it all figured out," Doan said. "But, 20 years ago, I was tired and worn out. My dad and our trusted hired man both died. Something had to give and I knew it started with the way I managed and operated. Planned grazing and the common-sense approach of Allen Savory had immense impact on our success."

See more of Doan's comments in the feature article in this issue. For more information on the coalition's upcoming events and opportunities, visit www.sdgrass.org.

Conservation legacy runs deep on Deering Ranch

By Lura Roti, for Millborn Seeds, Brookings & Rapid City

Grandpa George Wurnig's words of wisdom are often on Gary Deering's mind when he makes grazing decisions on the family's ranch, located along the Belle Fourche River near Hereford. S.D.

"Grandpa always told me to pray for rain, because it seems like about the time you think you have too much moisture, it can turn into a drought," Gary, 44, recalls. "Out here, we're always about two weeks out from a drought."

Moisture levels and available water play a significant role when it comes to ranching in western South Dakota. "If you have grass and water, you can do a lot," Gary explains. "We've been here 16 years and had more dry years than not."

A seasoned cowboy, until his death in 2004, Grandpa George was also a conservationist. In fact, George was recognized for his conservation efforts by Elk Creek Conservation District. He practiced rotational grazing his entire 60-plus years of ranching, planted trees, and worked with Natural Resource Conservation Service (NRCS) to help with grazing strategies and dam locations to better distribute grazing throughout pastures.

"I was pretty fortunate, to look at how my grandfather had this place set up to begin with - fencing and everything," says Gary, who credits his grandpa with instilling in him a passion for ranching, which led him to pursue a degree in range management at South Dakota State University and eventually return to start a cattle herd on his family's ranch. Gary also credits his Grandma Marie with setting an example for fiscal responsibility. "She was integral in keeping this ranch afloat because she was good with finances."

Although t h e fourth-generation rancher continues the legacy of conservation and grassland management, until rain started falling last year, the previous three years of drought didn't make it easy.

The couple, who ranch in a partnership with Gary's parents, Pat and Frankie Deering, had to cull some cattle and shipped many cows to be custom grazed north of Aberdeen.

Typically, Gary rotates pastures, using the take half, leave half methodology and does not graze the same pasture the same season two years in a row. "My grandpa always talked about how different plants come up at different times, and I keep this in mind when I graze," Gary says. "But when you get into these kinds of droughts, there is no way around it; you will put stress on pastures unless you sell off cows right and left. Last year the dams were drying up, so I was trying to use the pastures before I lost water, whether it was beneficial or not."

This year, things will be different. Although it won't keep them from praying for rain, a new well and 9-and-a-half miles of pipeline, dug



South Dakota rancher, Gary Deering, implements seasonal rotational grazing and other conservation management practices to manage grazing and grasslands. Deering and his wife, Jessica, ranch near Hereford, S.D., on his family's ranch.

in last summer, means access to drinking water won't impact his grazing rotation moving forward.

To help fund the well and pipeline, Gary worked with Natural **Resources** Conservation Service and Farm Service Agency.

"Grassland management is all there is to it. I try to manage the grasses and pastures as much as I do the cattle. I have always enjoyed managing this way," says Gary, who also credits the two ranchers he worked for full-time after college with mentoring him in grassland management.

Abundant snowmelt this spring has water levels back up. "We are a lot better off than we have been for a lot of springs. I love to see the dams filling up," Jessica says.

With the additional soil moisture, Gary is eager to begin implementing more grassland management techniques. He plans to convert some acres back to native grasses. The land borders the Belle Fourche River, which runs through the ranch.

"There are many places along the river that

are just hardpan. We also have a lot of bottoms that were planted heavily into crested wheatgrass, but my thinking is, we need to go down and use native grasses to start building back organic matter,' Gary explains. "I know it's going to take a few years - five to 10 - to see a difference."

A few years ago, he tried planting cover crops into farm ground that was historically planted to wheat, but never received the necessary moisture to see results. This year, it's a different story.

Last May, they planted a cover crop blend into alfalfa/grass. And, to capture additional moisture, they also drilled in Sudangrass. Gary says by late fall the Sudangrass was 3 to 4-feet tall. "It caught a lot of snow, and I can see the other perennials we planted are starting to come up," he says.

The Deerings are eager to see how adequate moisture and 20 new water tanks impact grassland health.

"It's exciting, everything will be able to be



PHOTOS BY JESSICA DEERING PHOTOGRAPHY

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"Grassland management is all there is to it," explains Hereford rancher, Gary Deering. Pictured here with son, Porter, "I try to manage the grasses and pastures as much as I do the cattle. I have always enjoyed managing this way."

utilized completely different now," Jessica says.

Gary adds, "The water gives us the option to use different areas of pastures that didn't get much use before. We already experienced that this winter in a big pasture of ours. We turned the cattle and did not have to leave the fence open so they could get to the river to drink."

Advocates for South Dakota's cattle producers

In addition to caring for the land and cattle, Gary and Jessica are passionate about preserving the lifestyle of ranching for future generations. The couple has three sons, Porter, 12; Shea, 10; and Dawson, 8.

In 2007, Gary began serving on the board of the South Dakota Stock-

tainly manageable for the city to handle, removing about 3,000 trees per year. However, the real problem comes later. The curve quickly climbs after four or five years, and the remaining 75,000 trees will be infested and killed within the following three to four years, about 20,000 trees lost per year! This is far more than a city can handle and if they do not keep up with removals, they will have standing dead trees falling into the streets - not an acceptable situation. Sioux Falls is planning to get ahead of this curve by removing infested trees and healthy ash trees that no one is planning to treat. Doing so now will help them avoid being overwhelmed by removals five or so years from now. Other communities should consider beginning soon as well. A town with 2,000 street and park ash trees could start removing 200

growers Association. Today, he serves as president of the organization. He also serves on the South Dakota Beef Industry Council and the Federation of Beef Councils.

"Consumers want to hear our story. And, many misunderstand how cattle are raised and don't understand that managing land with cattle is the best way to manage grasslands," Gary explains.

This article was provided by Millborn Seeds. To better serve customers, Millborn Seeds opened a location in the Black Hills in early January 2019. The location is at 12040 J B Road, Black Hawk, SD 57718, and aims to serve clients in western South Dakota, Wyoming, Montana and beyond

Emerald Ash Borer: What it means for South Dakota communities

By Dr. John Ball, SDSU Extension Forestry Specialist

other states.

as quickly as it has in the by emerald ash borer munities across the state. have been described in Since the beetle will be While the borer has two words, brittle and found in every communionly been confirmed in unpredictable. The wood ty within the next 5 to 20 years, now is the time to begin removing unwanted ash trees. Sioux Falls is already beginning to remove ash trees that are not infested as well as the infested ones. The plan is to cut as many trees as possible now, so they can avoid having to remove thousands of trees in a short period. The "death curve" as it is called, the accumulative loss of ash trees in a community over time starts very slowly and speeds up. Sioux Falls has about 85,000 ash trees. They have lost about 300 trees to the borer so far. If they do nothing, they will lose about another 12,000 over the next four or five years. This is cer-

a year now and perhaps have the job completed before the borer arrives in their community or already made a significant reduction in numbers. That is far better than suddenly being faced with the removal of all the trees within five years or so, 400 to 500 a year and having many of those be dangerous fells as they are already infested. The beetle has arrived in our state and it will kill every untreated ash tree in every South Dakota community. Now is the time to begin putting plans into action. Here are some possible replacements for Ash, especially in windbreak plantings: Siberian Elm, Bur Oak, Hackberry, Honeylocust, Russian Mulberry, Amur Chokecherry, Black Cherry (use with caution, can be poisonous to livestock), Common Chokecherry and Ussurian Pear.

The emerald ash borer is a notable concern to South Dakota as our state has one of the highest populations of ash trees. Ash is about 30 to 40% of the shade trees in our towns and cities and about 20 to 30% of the trees in the shelterbelts across the state. We have planted far too many ashes in the state and are about to pay dearly for this mistake.

The emerald ash borer kills every tree it attacks, none survive the infestation. The insect is also adapted to our climate having come from a similar climate in Asia. There is no reason to think that our ash trees will be spared. It will kill them Sioux Falls, most likely it will spread into the surrounding counties within five years and be in the Black Hills and most of eastern South Dakota within a decade and cover the entire state within 20 years. In its wake will be thousands of dead ash trees. The emerald ash borer takes about five years of repeated attacks to kill a tree. They leave once the tree is dead as it no longer can provide suitable food for their young, the white, wormlike, larvae that feed just beneath the bark.

Once the tree dies, it falls very quickly, and this is a major problem when managing emerald ash borer. Trees killed

quickly dries out, much faster than what typically occurs with dying trees, and this dramatically reduces the wood strength. Cutting a dead ash down has generally been a relatively safe task, for those trained in tree felling, but now we will be faced with trees that may collapse when the saw first starts cutting into the wood, rather than after the notch and back cut have been finished. The only safe means of removing trees that are standing dead or have more than 50 percent dieback due to the beetles is to push the trees over.

Therefore, now is the time for action in com-

On Pasture newsletter proves on point for livestock producers

By Kindra Gordon

With an online archive of more than 2,000 grazing and livestock-related articles, "On Pasture" has filled a need and fueled excitement among livestock producers since being launched in March 2013. Six quick years later, today On Pasture boasts 114,000 readers checking out the articles each month. A driving force behind the effort has been Kathy Voth, current publisher and editor. Here, she highlights the history – and hopes for the future - for this venue that has created a unique, online community.

The Idea

Voth, who worked with the Bureau of Land Management for 12 years and in 2004 founded Livestock for Landscapes with the goal of helping communities find ways to live profitably and sustainably in their environment, is well-known among grazing circles for her efforts to teach producers to use livestock as a land management tool, namely training livestock to eat weeds.

She tells that in 2012 after attending lots of agricultural conferences, she observed that when scientists would present research findings, farmers' eyes would often glaze over. It was hard to see through the scientific jargon to the value the information had for their operations, explains Voth.

Voth thought to herself: "Somebody needs to translate science into articles farmers and ranchers could use and also share on-farm experiences." As Voth shared this idea with others, she was met with a positive response and even offers to contribute. Friend Rachel Gilker in New York, who had also focused her career efforts on sustainable agriculture, agreed to be co-editor with Voth.

The duo started their efforts by conducting a survey, gathering information on what livestock producers were currently reading and what content they were seeking. The positive response encouraged them to proceed and on March 17, 2013 On Pasture's first seven articles hit the internet. Today, On Pasture publishes six to seven articles a week, and sends emails out with links to each week's news. Facebook and Twitter are also used to share content.

Their initial goal was to reach 10,000 readers a month. Presently, 14,000 people subscribe to the weekly Tuesday e-newsletter, but nearly 10 times that actually visit the archived material on the website monthly. Voth reports, "That makes us the most read publication online in this niche."

Content Focus

All content published is focused toward people raising livestock "on pasture" - hence the name. Their tagline reads, "translating research and experience into practices you can use NOW!" Content is archived into eight categories including Grazing Management, Pasture Health, Livestock, Money Matters, Consider This, The Scoop (a letter from the editor), The Funnies, which offers a little comic relief, and The Classic, an archived article sponsored by the National Grazing Lands Coalition.

Voth, who became the sole editor for the project in June 2018, writes much of the content herself, but works with University Extension sources and a variety of contributing writers, many of whom are livestock producers, to also amass content. Each weekly newsletter contains articles, and occasionally videos or podcast links that is typically timed to coincide with the season and current management issues, from planning for spring pasture turnout to drought or winter.

Funding for On Pasture includes a Conservation Innovation Grant (CIG) from the Natural Resources Conservation Service as well as twice-yearly fund drives during which readers are asked to send support to match that grant. The National Grazing Lands Coalition is one of On Pasture's sponsors. Voth notes that all supporters share the mission of helping farmers and ranchers raise livestock.

Building Community

Ultimately, Voth says creating On Pasture was about building a community and she is proud of what has emerged as a result. Voth attributes much of their success in readership to the huge library of articles On Pasture now maintains – which is available free online 24 hours a day and is easily searchable by topic.

For the future, Voth aims to keep the tempo of On Pasture the same, but she is also always thinking ahead. She notes, "There are a lot of great potential books in several of my contributing writers. We've talked about starting On Pasture Publishing."

For future content, Voth encourages readers to share their ideas or topics they want more information on. If they don't find what they are looking for, she says, "We will try to cover it."

For individuals interested in subscribing to the weekly On Pasture e-newsletter, visit https://www.onpasture. com/ and look for the orange subscribe icon in the top right-hand corner.

Genome Editing: Helping agriculture meet new challenges

Source: Noble Foundation

Plant breeders are always on a quest to develop new and improved crop/forage varieties that can outperform the existing ones. At the Noble Research Institute, plant breeders work on behalf of agricultural producers to develop improved varieties that could have higher biomass, grain yield, or forage quality; greater heat tolerance and better performance in drought; stronger pest and disease resistance; and other traits.

Plant breeding is an old science and is sometimes considered an art.

Historically, plant breeders have depended on natural mutations, or variations, to develop improved cultivars. Plants naturally mutate and select for their survival in changing environments or to adapt to pressures, like pests and diseases.

Genetic variation in a species (plant or animal) occurs due to processes called recombination and mutation. These processes occur naturally and can also be artificially induced to create useful variations that a breeder can use for selection.

Breeding for an improved variety always starts with identifying

ORENZ

individual plants with properties or traits that allow them to perform better than other plants in the group. This is a very slow, laborious and expensive process, especially considering we are trying to meet the demands of changing global needs. The development process may take anywhere from 10 to 15 years or more, depending on the trait, its heritability (ease of passing the trait to the next generation), the amount of genetic variation present for that trait, etc.

Once better-performing plants are found, they are selected and crossed with other better-performing plants to create new populations or experimental varieties. These experimental varieties are evaluated for multiple years across different environments to test and compare their performance against existing varieties. The better-performing varieties are then released as improved cultivars or varieties.

About genome editing

Advances in biotechnology and genetic engineering have created new and promising techniques that complement a plant breeder's existing toolbox.

One such technology is genome editing, which can create variations in plants by editing DNA sequences in a very precise and targeted man-

Three Things in Development

The forage legumes and cover crops breeding laboratory, led by Suresh Bhamidimarri, Ph.D., is using genome editing tools to develop:

• Hairy vetch with hardseededness, which allows the legume to reseed in the fall without being replanted.

- Alfalfa that better uptakes phosphorus.
- Alfalfa with improved forage quality.

that could naturally occur in plants, just with much more efficiency and precision.

With genome editing, the variation is created in the exact trait that the breeder wants to improve. Therefore, a plant breeder does not have to wait for a natural mutation to occur, make hundreds of crosses to create a perfect recombination, or screen hundreds of thousands of plants to select and the primary genome editing tool used today.

Genome editing technology is currently used in major crops like corn, soybeans, wheat, rice, barley, alfalfa, sunflower, tomato, etc. The technique could yield better tasting, higher yielding crops that are more resistant to pests and diseases and are more tolerant of drought. Given the ease with which this technology can be used by plant

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Genome editing differs from conventional genetic engineering, which is used to develop genetically modified organisms, or GMOs, as the resulting plant does not include genes or DNA from unrelated or cross-incompatible species. Genome editing is doing the work

for that one good plant. Such precise editing of DNA is possible by using enzymes called nucleases. There are many different nucleases used in this technology, including meganucleases, zinc finger nucleases and TALENS. CRISPR-Cas9 is the latest innovation

breeders, there is great potential in this new breeding method.

As technologies continue to build new capacities for plant breeders, the hope is to identify and build varieties that help address common forage and crop needs through available, affordable and more resilient plants.

passed away unexpect-

Paying tribute to Nebraska: Homage to two NGLC leaders

By Kindra Gordon

It's hard to hear someone mention Nebraska these days without offering up a quick heartfelt prayer for their citizens and farming and ranching community. Not only

edly Wednesday, January 23, 2019 at the has Nebraska endured Regional West Medical unimaginable losses Center in Scottsbluff. from flooding, they've Beau Mathewson, age also recently lost two 37 of rural Potter, passed great leaders within away on Saturday April their grazing industry. 6, 2019, after a coura-Orval "Lynn" Myers, geous battle against 69, of rural Lewellen Continued on page 7

April 2019 First planting season

West River Research Farm getting ready

By Codi Vallery-Mills

Grazing mixed grasses, utilizing cover crops and conducting crop planting rotations is the goal of the new West River Research Farm located near Sturgis, S.D.

In summer of 2018, South Dakota State University acquired 111 acres near the Sturgis airport. The land has mixed grasses and a 30-year-old stand of alfalfa on it. It might not sound impressive but SDSU agronomist Chris Graham says there is a lot of potential for different research trials with crops and livestock to be conducted at the new station.

"Right now we are planning for a six crop rotation with sub rotations within that system. We would like to include cover crops and grazing cattle to add to the diverse mix too," Graham savs

While SDSU has a research station near

Cottonwood, S.D. it is more rangeland research based. This new station will allow for better understanding and planning for forage and livestock research trials.

For 2019, the crops to be raised will include winter and spring wheat, field peas, corn, millet and soybeans to have plants representing both cool and warm season varieties. Everything will be dryland farmed utilizing no-till methods. Eventually cover crops will be added, the first crops will be harvested and cattle will be brought in for fall grazing. Graham says the planned system will help producers know if different plants or animals are more valuable than others in a dryland scenario.

"The University lacks research west river where they can manage everything. We appreciate working with landowners but we aren't always able to try different things that might fail or be risky. This new research station is a plus because we can provide data to farmers so they don't have to make the same mistakes," Graham says. The West River Research Farm also has a



Morton building that will soon house offices, laboratory space, classroom and shop areas. Coming up yet this spring is a field school to be held on June 20. Producers will be able to spend the day

talking cover crops, herbicides, cropping systems and get a feel for what the research station will be able to offer them. You can see a full agenda and register online at extension.sdstate.edu.

Grazing management, stockmanship and family each key to ranching efforts

Neb. producer Ryan Sexson shares his ranching lessons and philosophy – and stockmanship examples on YouTube.

Source: Nebraska Grazing Lands Coalition

Determination, hard work and a willingness to learn have been key to Ryan and Jamie Sexson's ranching efforts. Ryan and Jamie both grew up in the Nebraska Sandhills with a passion for ranching, but were often told there was no future for them in ranching. After various jobs on and off ranches, in 2014, the couple was able to lease a small ranch near Nenzel, Neb. Today, they are raising their three young children - ages 11, 9, and 8 - in the ranching lifestyle as they custom graze and calve heifers and cows. Ryan also still does day work for area ranches.

Stewardship of the resources in their care including rangeland, livestock and relationships with people – are a top priority to the Sexsons. Ryan has strived to continuing learning throughout his ranching journey. He has participated in the Holistic Resource Man-

NGLC leaders

agement (HRM) course, as well as attended the Bud Williams stockmanship class and several other educational seminars and classes. Additionally, he is a board member of the Nebraska Grazing Lands Coalition.

Key to their approach is looking at their operation holistically, recognizing that their choices and management of grazing, animal handling, even family time, are all interconnected. Also integral says Ryan is recognizing that grazing management is only one part of the equation; stockmanship also has a role in efficient management of the range and animal performance and health.

Sexson describes stockmanship as a system of observation and mindfulness coupled with pressure and release that allows the stockman to better handle livestock by building relationships with the individual animals based on trust.

He explains that attending a stockmanship

school in 2005 prompted a different way of thought for him with regards to livestock and grazing management. Sexson says, "It was an epiphany for me; it changed my life." After the course he came home and moved 600 cattle, and reports, "That move, prior to the stockmanship course would have taken four to five hours by myself with a dog." He adds, "When I'd have finished with that move, I would have had unpaired cattle that I would have had to attend to, and I would have to come back in the afternoon or the next morning and fix some things."

After the stockmanship school, however, Sexson was able to get the move done in an hour and a half. Sexson began using the stockmanship skills he learned. It lessened his workload, but he also noticed it impacted the range. Notably, Sexson shares the story that in the drought years of 2005 and 2006 under similar growing conditions, he observed he had more grass reserves at the end of the 2006 growing season than the previous year. He says, "I had more range left." He attributes the difference to his change in handling the cattle and better use of stockmanship. As a result, Sexson believes the cattle were less stressed and could graze more efficiently.

He adds, "I believe when people are relaxed, they do better and livestock are the same. We've all seen cattle that are continually walking; they are not relaxed. Whereas, content cattle graze and utilize what they are eating more efficiently."

More recently, Sexson has come to recognize that stockmanship is also about handling people in a manner that is inclusive and not stressful. He states, "When you develop stockmanship skills, it can also take stress off the people... If you can't bring your family along...



Ryan Sexson, Nenzel, Neb. shared his tips on stockmanship and grazing management at the recent National Conference on Grazing Lands in Reno, NV. Sexson is a Nebraska Grazing Lands Coalition board member.

if they don't want to carry on your legacy, then what are you doing it for?"

Through stockmanship, Sexson reports his kids can often work cattle with minimal assistance. He and his family are able to load a lame bull into a stock trailer in the pasture without any corrals. And, the Sexson's have cut their cattle working days in half.

To document that stockmanship truly works and in an effort to share these positive examples of animal handling - Sexson has shared several videos of his real-life stockmanship examples on YouTube. View them at https://www.youtube.com/ channel/UC1UUgADwOcKgWkTeljm2GBA.

Author's Note: Sexson frequently shares his experiences and lessons learned as presenter at grazing and stockmanship workshops, and most recently spoke at the National Conference on Grazing Lands in Dec. 2018 in Reno, NV. Learn more about the conservation efforts of other landowners across Nebraska at www.nebraskagrazinglands.org.

Grazing Gi A calendar listing of pasture and range events 2019 July 26 Happy Cow Tour, Mud

June 4-6 South Dakota Professional Butte, SD

Continued from page 6

cancer. Both men were active members of the Nebraska Grazing Lands Coalition Board and wonderful examples of true land and livestock stewards.

and learning from these individuals for articles about grazing management and their personal stories of family transition/succession efforts. They were passionate about their roles as care-

privilege of interviewing Nebraska and they were selfless in sharing their time, talent and teaching with others. Nebraska and the world are certainly better because of their efforts. May we all strive to leave a similar legacy.

In past years, I had the takers of their piece of

Visit these organizations online:

Nebraska Grazing Lands Coalition www.nebraskagrazinglands.org

South Dakota Grassland Coalition www.sdgrass.org

& Youth Range Camp, Sturgis, SD

June 7-8 Bird Watching Tour, Hansen Ranch, Letcher, SD

June 10-14 SRM Youth Range Camp, NCTA, Curtis, NE, Visit http:// www.nesrm.org/YouthRangeCamp. html.

June 11-12 Nebraska Summer Grazing Tour

June 18-19 Soil Days & Rangeland Days, Spink County, SD

June 25-27 West River Grazing School, Wall, S.D.

July TBD South Dakota Leopold Conservation Award Winner Tour July 16-18 Soil Health Institute, Hyatt-Regency, Sacramento, Calif. July 23-25 Grasslands Management School, contact Pete Bauman at (605) 882-5140 or peter.bauman@sdstate.edu for more information.

Aug. 12-14 Nebraska Grazing Conference, Kearney, Neb.

Aug. 20 America's Grasslands Conference: Working Across Boundaries, Radisson Hotel, Bismarck, BD

Sept. 4-6 SD Soil Helth School. Learn more at sdsoilhealthcoalition.org Dec. 3-5 South Dakota Cattlemen's Convention, awarding of the SD Leopold Conservation Award

Dec. 9-11 SD Association of Conservation Districts Convention

2020

Feb. 16 – 20 SRM Annual Meeting, Technical Training & Trade Show, Sheraton Denver Downtown Hotel, Denver, CO

Oct. 25-30 International Grassland Congress (IGC) & International Rangeland Congress, Nairobi, Kenya

Have a Range & Pasture Event you would like others to know about? Send information to editorial@cattlebusinessweekly.com.

S.D. Leopold Conservation award winner is Johnson Farms

South Dakota Governor Kristi Noem announced that Johnson Farms of Frankfort has been selected for the 2019 South Dakota Leopold Conservation Award.

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Given in honor of renowned conservationist, Aldo Leopold, this award recognizes private landowners who inspire others with their dedication to the land, water, and wildlife resources in their care.

In South Dakota, the award is presented annually by Sand County Foundation, the South Dakota Cattlemen's Association and the South Dakota Grassland Coalition. Johnson Farms will be presented with the \$10,000 award and a crystal depicting Aldo Leopold at the South Dakota Cattlemen's Association's Annual Convention in December.

"Farmers and ranchers across South Dakota know how to balance agriculture production with conservation," said Noem. "The intentional innovation, stewardship, and land ethic of the Johnsons and other producers ensures that our natural resources will be available for future generations."

Alan and Mickie Johnson, with their son Brian and his wife Jamie, farm 1,800 acres of cropland and 500 acres of grassland in Spink County. Agricultural conservation practices and raising cattle make the Johnsons more efficient without buying more land. The farm's roots trace back to 160 acres that Johnson's Swedish immigrant grandfather homesteaded more than a century ago. The Johnsons use a mix of old school practices and modern technology to leave the land in better shape for the next generation.

Alan Johnson adopted no-till farming practices in 1986 when abandoning the plow, disk and cultivator was much against the norm. Despite what the neighbors thought, Alan saw that tilling a field to rid it of weeds was also depleting it of moisture. By mid-summer, if rain was scarce, crops suffered.

By coupling no-till practices with cover crops, the Johnsons have improved water infiltration and soil health, increasing productivity.

The Johnsons also find that a diverse rotation of their corn, soybean, wheat, oat and barley crops, and leaving crop residue in place, minimizes agricultural runoff, naturally eases pest management, and provides wildlife habitat. To further address soil erosion and salinity problems, the Johnsons enrolled land in the USDA Natural Resource Conservation Service's Conservation Stewardship Program.

Realizing that different areas of each field have varying productivity, the Johnsons switched to a variable-rate fertilizer system in 2004. Applying the precise amount of nutrients on the soil saves time and natural resources, and delivers a better return on investment. Since the switch, the Johnsons have won a yield contest held by the South Dakota Soybean Association.

The Johnsons also raise a herd of Angus beef cattle. Whenever possible, the herd is allowed to graze on mature cover crops and corn stubble, creating a cooperative relationship between the cattle and the land. The cover crops provide feed, and the cattle naturally fertilize the soil with their waste.

Grazing used to mean turning the cattle out to pasture for the summer and bringing them home in the fall. It was easy, but it took a toll on the quality and variety of the grass. The Johnsons now rotationally graze their cattle and closely monitor grazing conditions and the timing of their calving season.

While the longtime crop farmers admit that managing grass and cattle requires additional time, the results are healthier land and a stronger bottom line.

Finalists for the award included Bien Ranch of Veblen in Marshall County, Blair Brothers Angus Ranch of Vale in Butte County and Hefner Ranch of Whitewood in Lawrence County.

Sundstroms named 2019 Nebraska Leopold Conservation Award recipients

Russ, Angela and Cheyenne Sundstrom are the recipients of the 2019 Nebraska Leopold Conservation Award®. They own and operate Broken Box Ranch in Moorefield, Neb.

Nebraska Governor Pete Ricketts presented the Sundstroms with a \$10,000 award and a ranch sign recognizing them as Leopold Conservation Award recipients, at a special ceremony in the Nebraska State Capitol in Lincoln on April 18. The award was presented by Sand County Foundation, Alliance for the Future of Agriculture in Nebraska (AFAN), Cargill and the Nebraska Environmental Trust.

The Sundstroms are land stewards committed to productive, restorative and sustainable conservation practices on one of Nebraska's biologically unique landscapes. The native prairie rangelands, hardwood trees, flowering plants and abundant wildlife found on their ranch in the Loess Canyons are testaments to their conservation ethic.

The soil beneath the scenic, hilly landscape is highly-erodible. However, Russ Sundstrom's proactive use of prescribed burning and innovative grazing techniques have nursed back the oncetired pastures and cropland that he bought from others. Productive rangeland with diverse vegetation results in quality forage for his beef cattle, and provides an oasis for wildlife including more than 250 species of birds.

Not only has Russ removed hundreds of acres of invasive cedar trees from his Broken Box Ranch, but he and his brother, Neil, cooperate and educate neighbors on conservation land management issues. They volunteer with the Loess Canyons Prescribed Burn Association, a landowner-led effort to burn invasive species from the rugged canyon landscape.

Additionally, Russ intensely mob grazes an area to rid it of invasive species. This welcomes native vegetation to return to the landscape during the year-long rest period that follows. Intensive mob grazing around an area designated for a burn also reduces the risk of fire escape.

When Broken Box Ranch was accepted recently as a Rangeland Health Demonstration Ranch, it was further evidence of Russ' leadership and innovation. He will be responsible for collecting data and monitoring effects of various management strategies and their impacts on wildlife, beef production, and soil and plant health. This community-driven landowner will then share his findings through public access and tours of the property.

The Sundstroms share large swaths of their ranch with the public through its enrollment in the Nebraska Game & Parks Commission's **Open Fields and Waters** Program. Public hunting access provides wildlife population management of turkey, deer, prairie chickens, quail and elk, while other areas are managed for endangered species. In addition, he has established 20 acres of flowering pollinator habitat for bees and butterflies. Sometimes conservation success comes from what you don't do to the landscape. They do not aerially apply herbicides or insecticides out of concern that it will kill non-target species. Instead, they spot spray for noxious weeds only.

Russ has a sharp pencil when it comes to know-



Nebraska Governor Pete Ricketts presented Russ, Angela, and Cheyenne Sundstrom of the Broken Box Ranch in Moorefield, Nebraska the 2019 Nebraska Leopold Conservation Award.

ing the economic impacts of his decisions on his business. His tireless devotion to leaving the landscape better than he found it is making a positive impact on his ranch and far beyond the Loess Canyons.

Sand County Foundation, the nation's leading voice for conservation on private land, created the Leopold Conservation Award to inspire American landowners by recognizing exceptional ranchers, farmers and foresters. It is now awarded in 13 states.

The Leopold Conservation Award in Nebraska is made possible thanks to the generous contributions from Cargill, Nebraska Environmental Trust, Alliance for the Future of Agriculture in Nebraska, Farm Credit Services of America, Rainwater Basin Joint Venture, Sandhills Task Force, Tri-State Generation and Transmission Association, Audubon Nebraska, Nebraska Game and Parks Commission, Lyle Sittler Memorial Fund, McDonald's, World Wildlife Fund - Northern Great Plains and Green Cover Seed.



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Save the date for these SDGC events

Nature lovers always enjoy the annual bird tour hosted by the South Dakota Grassland Coalition. It proves to be a wonderful time to learn bout bird identification, habitat and nesting along with local ranching history.

This year's **At Home on the Range Bird Watching Tour** will be held at the Hansen Ranch near Letcher, S.D. on June 7-8. Registration is now open and due May 31 to SDGC at 605-280-0127 or judge.

jessop@sdconservation. net.

This year, SDGC added the Wall, S.D. location for a **South Dakota Grazing School**, June 25-June 27, 2019.

The Grazing School is designed for producers and anyone with an interest in learning how to best manage grasslands to benefit livestock.

The agenda features presenters from state and federal agencies and universities. Area producers

share their expertise about various topics related to grazing techniques and grassland management. Participants will hear presentations in the classroom and gain experience with hands-on activities in

the field.

Space is limited. Early registration is encouraged to participate. Contact SDGC at (605) 280-0127 or visit SDGrass.org for specific dates. Another school at Chamberlain is planned for September. More information to come on that specific school in the June Range & Pasture Journal. Recent graduates of a South Dakota Grazing School are eligible for a Bootstraps style range consultant visit. The range consultant may spend several days on the graduates ranch helping implement grazing practices. The cost is \$150. The remaining consultant fees are paid by grants from NRCS, SDSU Extension and other generous donors.

If you are interested in participating in the Grazing School Follow-Up program, contact Dan Rasmussen at dan.rasmussen@sdconservation.com.

Watch for the next Range & Pasture June 26.