



Grassroots

VOLUME 25 ISSUE 2

MARCH 2023

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Sandy Smart Receives Fellow Award from SRM for Decades of Contributions to Rangeland Education and Volunteerism By Pete Bauman



I'm very happy to offer this personal note regarding SDSU's Dr. Sandy Smart's recent recognition by the Society for Range Management (SRM) as a **"Fellow of the Society for Range Management"**. The title of Fellow is *"conferred upon an individual in recognition of exceptional service to the Society and its programs in advancing the science and art of range-related resource management. This high honor is granted in the belief that special recognition should be given for exceptional and dedicated service to the Society."* If you know Sandy, you know that this honor is well deserved. Before I highlight his national service, I'd like to share what his dedication has meant to South Dakota.

First off, Sandy has been involved with the SD Grassland Coalition for many years, serving as a liaison between the university and the Coalition while helping to direct resources to the Coalition's efforts. Much of Sandy's research over the last 22 years has reflected answering practical, ranch-level questions that are applicable to South Dakota's producers. In addition, he's served in the role of editor of this newsletter for nearly 20 years, and continues to do so selflessly. Sandy is a dedicated individual who is always looking to help. His passion, humor, humility, and leadership style are appreciated by all who know him.

Since joining SDSU in 2001, Sandy has been an incredibly agile team player, often agreeing to fill necessary roles in order to keep programs alive that he cares so deeply about. Some of the highlights include Sandy's contributions as an SDSU Range Management Professor under both the Animal Science and Natural Resource Management Departments, SDSU student Range Club advisor, Assistant Department Head, and his most recent role as Senior Program Leader for the Agriculture and Natural Resources branch of SDSU Extension. Sandy has recruited and mentored many graduate and undergraduate students over his long career, many of which are now placed in positions of influence within various agencies across South Dakota and the region.

As far as the SRM, Sandy has poured his energies into student education, training and shepherding range judging teams, volunteering at Rangeland Days, contributing academic advancement at state and national meetings, and serving in various volunteer roles within SRM leadership, including: SD state chapter President, Accreditation Program Committee Chair, Nominations Committee Chair, journal Editor, and most recently Chair of the Undergraduate Range Management Exam which enjoys student participation from across North America during the annual national meeting. Sandy has been honored with many awards and titles over the years. Most importantly Sandy is an exceptional employee, supervisor, colleague, mentor, teacher, volunteer and friend. We are privileged to have Sandy as a role model of effort and sacrifice in nurturing strong relationships between rangeland producers, agency staffers, and academic professionals. Congratulations Sandy!

The Green Side Up by Pete Bauman

Prescribed fire, youth education, grassland plantings, and eastern grazing education will be featured in 2023



Students learning to use prescribed fire (Photo by S. Smart, 2022).

As the Grassland Coalition continues to grow and respond to the needs of South Dakota's land managers, there are a few things that are worth highlighting in 2023 (see the Coalition's website and calendar of events for more information on certain education opportunities).

We've been busy in March offering our multi-partner prescribed fire classroom sessions in order to assist landowners and land managers in learning the basics of how to prepare for, plan, and conduct safe and effective prescribed fire for various objectives. Those objectives can include many things, but often revitalization of a native plant community, establishment of new grassland plantings or CRP, and control of invading woody plants are the most common reasons to use the fire tool. In addition, use of fire to control exotic grasses that tend to invade pastures is also very effective.

Upcoming classroom and field days will be offered for FREE in April and May in the Minnehaha and Brookings County areas and will feature hands-on burning skills and participation in actual prescribed fire focused on techniques for burning CRP, native grasslands, and woody species control. All are welcome. Pre-registration for field days is required. Contact Jan Rounds in my office at Janice.rounds@sdsu.edu for registration information for all events.

On Thursday, March 30th at 10 am CST (this week!) I'll be working with Jessica Michalski from NRCS and other staff persons from various agencies to host a webinar that will feature our multi-partner work related to grassland restorations. The webinar will focus on a variety of field trials where we incorporated cover crops and various management tools to explore new/innovative ways to establish permanent grasslands on old crop fields. This will be an interesting and interactive session that will help shed some light on various questions related to best management practices for establishing native seed mixes. Those wanting to join the webinar should contact Jessica at jessica.michalski@usda.gov and request a link to the webinar.



John Lentz and Rick Smith showing native planting in Hamlin County (Photo by S. Smart, 2004).

The Green Side Up Continued Page 4

Partner Update: The Nature Conservancy by Neal Feeken

The Nature Conservancy proudly works with landowners, ranchers and others to help keep South Dakota's waters clean and grasslands productive in ways that achieve wins for nature and people.

We work with private landowners, state agencies and nonprofit partners to restore and improve management of working lands, support the leadership of Indigenous Peoples as land stewards and conserve critical grasslands and other habitats rich in carbon and biodiversity. We do our best to be good neighbors, paying property taxes and working with other landowners to control noxious weeds, improve grazing and fire management and conserve South Dakota's open spaces. Our land stewards and conservation practitioners work directly with community partners to advance conservation outcomes that work for ranchers, landowners and communities.



Our Approach

The Nature Conservancy's nonpartisan approach, commitment to science and spirit of collaboration are critical components to helping us protect the lands and waters on which all life depends.

Places We Protect

In South Dakota, we've helped protect more than 174,000 acres including land within the Conata Basin, Missouri Coteau and Black Hills. TNC helped expand Badlands National Park for bison, rare black-footed ferrets and the thousands of families who visit each year. We also helped protect two natural springs in the Hell Canyon Basin, providing important source water protection for Jewel Cave National Monument. Our nine preserves across the state are open to the public for hiking, birding, hunting, nature photography and research. Explore some of our most popular sites like Whitney Preserve in the Black Hills or Ordway Preserve in the Leola Hills or go off the beaten path to a lesser-known preserve like 7-Mile Fen in the northeast. Consider exploring our preserves at [nature.org/preserves](https://www.nature.org/preserves)

Restoring Prairie Streams

Degraded grassland streams and altered hydrology have taken their toll in western South Dakota. That's why we are working with landowners to restore headwater streams by mimicking the effects of beaver. By building low-tech structures on degraded prairie streams, such as artificial beaver dams, we help to slow and hold water, which improves stream and rangeland health. TNC is also monitoring the impact of these structures in order to share our findings and advance stream restoration in the region.

Working with Ranchers

The Nature Conservancy is working within the beef supply chain to develop a sustainability framework that keeps grasslands ecologically intact and economically productive, safeguarding the future of ranching families and feeding a growing world. To achieve this goal, we are collaborating with ranchers and key partners within the supply chain to conserve intact grasslands and ensure our nation's grazing lands benefit from efforts that conserve natural resources, while producing food and sustaining ranching communities.

Working with Farmers

In partnership with South Dakota State University, the Natural Resources Conservation Service and South Dakota Corn Growers Association, TNC is demonstrating innovative tools that quantify the benefits of soil health practices, grassland protection and restoration to water quality and flood reduction in the Big Sioux River watershed. TNC is sharing the data and bringing stakeholders together with the goal of building new economic models to increase adoption of innovative land management practices.

The Greene Side Up Continued by Pete Bauman



Adult volunteers and parents watching students compete in range judging and plant identification at the 2022 Rangeland Days near Murdo, SD. (Photo by S. Smart 2022).

July 10 – 13th. This is a very popular program and a wonderful opportunity for young persons involved in any type of agricultural related business or agricultural finance. More information will be available on this program in the near future.

Finally, along with the western and Chamberlain grazing schools, the Coalition will again be hosting the 2nd annual Eastern Grazing School. While all grazing schools follow the same general format, each school is unique to the general geography of the area. Therefore, the eastern school addresses core grazing education while also including information on certain opportunities/challenges in this region including smaller-scale pastures, cropland integration, grazing opportunities on agency-owned land, among the host of topics. Along with this school is the opportunity to participate in the Ranch Consulting Follow-up Program managed by Dan Rasmussen. Under this program, the Coalition is offering 40 hours of business consulting for those who attend the grazing schools that includes coaching on resource allocation, ranch financing, grazing strategies, and a host of other topics. Join us for any grazing school to take advantage of this very affordable follow-up program.

For youth of all ages, Rangeland Days and Soils Days will be held near Watertown on June 14th and 15th at Joy Ranch. This annual event provides a great opportunity for youth of all ages to learn about rangelands and the importance of maintaining healthy grasslands. Information will be forthcoming on this event. Information will be available through your local USDA service center staff, SDSU Extension, and at the Grassland Coalition's website.

For early career young producers, Dan Rasmussen and the Coalition will be offering the 3rd annual young producers Ranching For Profit School near Sturgis



Stan Boltz teaching at the SD Grazing School in Chamberlain (Photo courtesy of Chuck Pyle, 2018).

Shortening the Calving Season by Garnet Perman

Whether the goal is having a uniform group of calves to sell or avoiding hot weather during late spring calving, keeping the calving season within a narrow window can add to the cow calf producer's bottom line. Kiernan Brandt, SDSU Cow Calf Field Specialist shared some observations.

Basic first steps include matching cows to the resources available. Record keeping and nutrition are also important. Keep in mind that cows calve at 283 days plus or minus 20 days. Separating consistent early calvers from the chronically late ones can help with initial implementation.

Nutrition is essential for breeding back. One of the down sides of calving later in the year is that when it's time to put bulls out in August, pastures may be starting to dry up. Especially under drought conditions, adding extra nutrition can be worth increasing conception rates. A bull's physiology is designed to perform optimally for about 60 days with best performance early in the breeding season. Taking them out early is a simple way of working toward a shorter season.

Estrus synchronization and AI are also tools that can be used. If uniform size calves is the goal, 10 days can make a big difference. SDSU research shows synchronization can pencil out. Prostaglandin shots are currently about \$3 a shot. Progesterone or CIDR implants are a well proven technology that is effective when cows that are thin or within 60 days postpartum. Implants are about \$13/head and can be reused twice according to Brandt. He is able to help design protocols.

About 10 years ago Rock Hills Ranch, Lowry, SD pulled the heifer bulls after 30 days and has done so every year since. More heifers are exposed than needed. The number of opens is fairly low. They don't lose much value as they can be marketed as feeder cattle. Last year the breeding season was shortened from 60 to 45 days for the two and three year olds. Calving records helped predict what to expect. Because the cows were exposed for only 30 days as heifers very few were open. Cows may eventually string out calving over the years and are dealt with accordingly. Older open cows are culled or bred later and sold as fall calving cows. Calving starts May 1 this year.

Luke Perman's observation is that calves born early in the season move with the herd better when switching pastures. "July calves just never seem to do as well," he said. A year round mineral program helps keep cattle in good condition. An effort is made to utilize a pasture with some new regrowth during breeding season.

Olivia Amundson, Crooks, SD, worked with Brandt on calving distribution research based on sale barn data and has advised her family's operation with shortening their calving season. They have simply pulled bulls earlier and also used natural service plus synchronization with CIDR protocol and a bull and CIDR with AI. Using all of the above, it took about three years to narrow calving to a 60 day season. She emphasized the importance of considering facilities, resources and labor when making breeding and calving decisions. Every method of shortening calving takes time. The "fancier" methods take more labor and facilities but may shorten the season quicker. If calving typically strings out over 3 months, it's probably best not to pull bulls after 45 days this year unless one is willing to deal with a large number of open cows.

The following podcasts by Brandt and Amundson talk about calving distribution and can be found on most podcast services or on the university websites: <https://extension.sdstate.edu/sale-barn-data> and <https://extension.sdstate.edu/calving-distribution-and-herd-health> or the University of Minnesota Moos Room podcast, episode 124.

Garnet Perman is a freelance writer and ranches with her husband, Lyle, near Lowry, SD.

Poll Reveals South Dakotans Value Healthy Grasslands by Ron Nichols

Clean water, resiliency, healthy soil among top-cited benefits

South Dakota registered voters overwhelmingly value the on- and off-ranch benefits of healthy grasslands according to a recent poll sponsored by the South Dakota Grassland Coalition (SDGC) and conducted by the nationally renowned polling firm, Selzer & Company.

The telephone poll of 505 randomly selected voters in South Dakota also reveals strong majorities support efforts to protect and enhance those grasslands. The poll has a margin of error of plus or minus 4.4 percentage points and was sponsored by SDGC to guide the organization's efforts to educate South Dakota residents about the benefits of, and on-going threats to, healthy grasslands.

By wide margins, South Dakota voters indicated support for programs and activities to encourage farmers, ranchers and state and local officials to "pay more attention to preserving and expanding South Dakota's grasslands." In what veteran pollster J. Ann Selzer describes as "broad bi-partisan support," strong majorities of respondents cited the following top-five healthy grasslands benefits as "excellent" or "good" reasons to support such efforts.

Clean water (93%) Well-managed grasslands slow water movement which minimizes runoff of topsoil and fertilizers into waterways, improving water quality and reducing downstream flooding.

Land, food production resilience (88%) Unlike crops such as soybeans and corn, grassland plants have deep roots and so are resilient to extreme weather events.

Naturally grown food (86%) Grassland-fed beef is increasingly desirable to consumers, with an added benefit that manure enriches the soil, replacing some commercial fertilizer.

Carbon sequestration (84%) Preserving and expanding healthy grasslands removes carbon from the air and so has benefits in addressing climate change.

Plant species preservation (83%) Preserving grasslands means protecting more native species valuable to Native Americans for traditional medicines and ceremonies.

"The polling data reveal strong, across-the-board demographic support for protecting and enhancing grasslands—the most threatened ecosystem in North America," SDGC Chairman Brett Nix, said. "The results also show that while voters have some general knowledge of the basics and benefits of grasslands, more education is needed, along with the identification of clear actions interested citizens can take to help ensure the health and preservation of Dakota grasslands."

To address those awareness and education needs, the SDGC recently received funding through a USDA-Natural Resources Conservation Service cooperative grant to develop a healthy grasslands public service and education campaign.

"These polling results provide critical insights about South Dakotans' awareness of, and their associated values with, healthy grasslands," Nix said. "The new public service campaign we're developing will further inform South Dakota residents about key facts regarding the basics, benefits and threats to Dakota's healthy grasslands and their connection to management practices that improve the health and resilience of those living grasslands."

A complete summary of the survey is available at www.sdgrass.org.



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- News from the SD Section of the Society for Range Management
2023 Annual Meeting Recognitions by Sandy Smart

Last month the parent society of SRM held it's 76th Annual Meeting in Boise, ID. The meeting was attended by over 1,500 people ranging from students, agency personnel, and industry professionals. This year there were nearly 70 technical sessions and 140 posters on range topics like targeted grazing, prescribed fire, and virtual fencing among others. The student contests were well attended with near pre-pandemic attendance levels. South Dakota State University Range Club had 11 students participate in the Undergraduate Range Management Exam (URME) and placed 2nd.



Left to right, front row: Annie Feden, Sierra Sattler, Elise Anderson, Dr. Lora Perkins (URME coach); Tyler Geltmacher, Kaitlyn Preszler. Left to right, back row: Alexandra Medvec, Sarah Hayden, Kaitlin Schieuer, John Sump, Landon Wolter, Rachel Savage. Not pictured Dr. Maribeth Latvis (Plant ID Coach). Competitions were held at the 76th Annual Society for Range Management meetings in Boise, ID on Feb 12-16th. The URME Team placed 2nd out of 21 teams.



Jonathan Neuharth, presenting at the HSYF in Boise, ID. (Photo courtesy of Crystal Neuharth).

The High School Youth Forum (HSYF) representative for South Dakota was Jonathan Neuharth, Ft. Pierre, SD. Jonathan placed 4th with his talk entitled "Our Broken Grasslands".

South Dakota was well represented at the meeting with 35 section members in attendance. Tate Lantz and Dave and Holly Ollila were presenters at the opening plenary session. Tate's presentation was entitled "Value of Working Landscapes" and the Ollila's presented on their livestock operation near Newell, SD entitled "Our Piece of the Puzzle".

The meetings concluded with the awards ceremony with Sandy Smart being recognized with the Fellow Award. We are very proud of our student competitors and members of our section who's passion for rangeland management shows in everything they do! To view more information on the SD Section of SRM visit our website at <https://www.sdrangelands.com/>.



Ollila's (Tate, Holly, and Dave) presenting at the Plenary Session at the SRM Meeting in Boise, ID. (Photo courtesy of Nicole Strong).



Sandy Smart
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Calendar of Events

Event	Date	Location	Contact Person	Phone/email
Agency/Landowner Burn Training	April 18-19	Brandon	Pete Bauman	peter.bauman@sdstate.edu
Agency/Landowner Burn Training	April 25-26	Astoria	Pete Bauman	peter.bauman@sdstate.edu
Agency/Landowner Burn Training	May 16-17	Astoria	Pete Bauman	peter.bauman@sdstate.edu
National Land and Range Judging	May 4	Oklahoma City, OK	Sandy Smart	Alexander.smart@sdstate.edu
Bird Tour	June 2-3	Brandon	Judge Jessop	605-280-0127
Rangeland and Soil Days	June 14-15	Watertown	Deanna Kunkel	605-882-4989 ext 3
Professionals Range Camp	June 27-29	Deadwood	Krista Ehlert	605-394-2236

Please remit any comments, suggestions, or topics deemed necessary for further review to: Sandy Smart, SDSU Box 2207D, Brookings, SD 57007, alexander.smart@sdstate.edu, (605) 688-4940

