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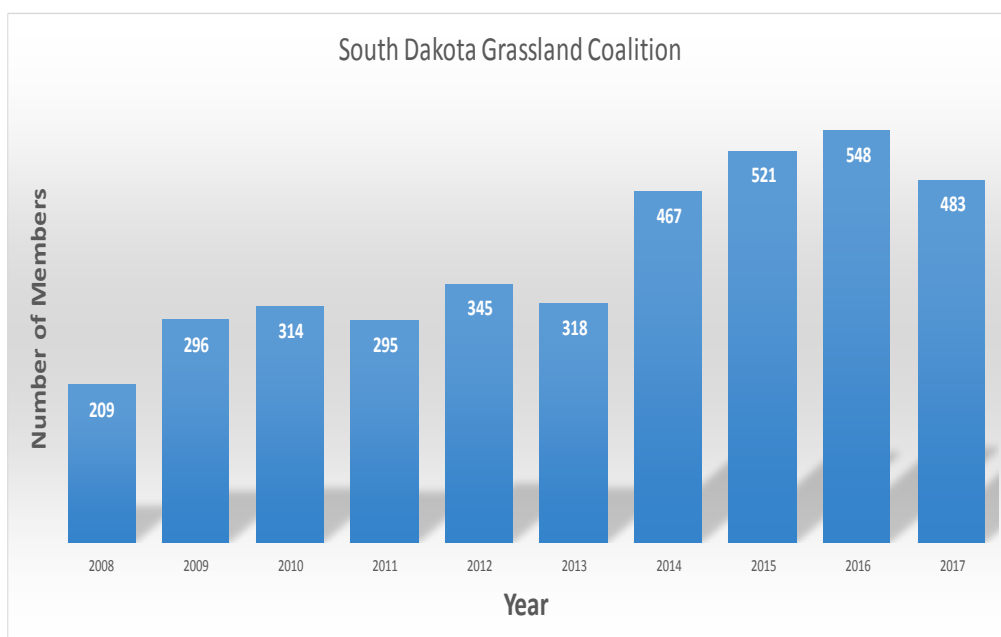
Grassroots

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Celebrating 20 years: Membership and Communication by Sandy Smart

This year the South Dakota Grassland Coalition is celebrating its 20th year. Notice the volume number of this newsletter! This is quite an accomplishment and I must say I am very proud to be a member and a contributing editor of *Grassroots*. If my recollection is correct Barry Dunn, Wayne VanderVorste, and Dave Schmidt served as editors early on followed by Mark Ullerich, Kyle Schell and then myself, more recently. It has been a pleasure to use *Grassroots*, our website (www.sdgrass.org), and Judge Jessop's and Pete Bauman's email lists to communicate information to our members, partners, and the general public. In recent years, with the help of many partners, we have been able to publish an annual planner and an informational trifold. In 2017, we published Volume 2 of *Greener Pastures* called *Healthy Grasslands*. Our website got a new facelift and now we can accept online membership applications using a credit card. I just checked our website analytics and we have been averaging about 50 visits per day which equates to over 18,000 visits per year. Our membership has steadily grown the last 10 years (see figure). We feel the efforts put in place over the last few years and the new website should help us retain more members. Since the existence of the Coalition we've had close to 2,000 individuals that were members at one time. Increasing membership is important to achieve greater impact and hopefully we can continue to grow. We appreciate our members' enthusiastic voice to protect and enhance South Dakota grasslands.



South Dakota Grassland Coalition membership from 2008-2017.

Range 101: Rangeland Ecosystems of the World -

Mediterranean Grasslands of Israel by Sandy Smart

In this series I thought I would take the opportunity to describe the major rangeland ecosystems of the world in terms of the types of plants, livestock, and wildlife found there; the climate that creates these systems; and nuances regarding how to manage them. If you are interested in reading more about these ecosystems, I recommend reading Chapters 1-5 of Jim Howell's book entitled "For the Love of Land: Global Case Studies in Nature's Image" and Chapters 1-4 of Holechek, Pieper, and Herbel entitled "Range Management: Principles and Practices". You can find used copies through Amazon.

During my recent trip to Israel I was fortunate to travel through several major ecosystems, ranging from desert to grassland to pine forest, all in a country roughly the size of New Jersey. Mediterranean grasslands are located in northern Israel in the Galilee and Golan Heights regions (see map). A Mediterranean climate is characterized by wet and mild winters (snowfall is rare) and hot and dry summers. This pattern of precipitation and temperature is also found in southern California, where annual grasslands and oak savannas are found. Our tour bus traveled north from Tiberias, along the western edge of the Sea of Galilee (which is just a big lake), up into the Golan Heights near the Syrian border. The 1 ½ hour drive took us through rolling grassland strewn with limestone rocks and scattered trees. More than 80% of the annual production comes from annual grasses and forbs with about 20% coming from perennials (small shrubs and a few perennial grasses). Most of the annual grasses are of the genus *Crithopsis*, *Aegilops*, and *Bromus*. Common legumes are from the genus *Trifolium* (clover) and *Medicago* (medics), and other forbs are *Plantago* (Plantain), *Eryngium*, *Linum*, and *Hedypnois* (dandelion like). Try copying and pasting the genus names into Google and see what they look like. Most have wicked awns or spikes on them that are characteristic of many Mediterranean plants.



<https://touristinisrael.wordpress.com/2016/10/08/crossing-the-borders-with-egypt-jordan-syria-lebanon-and-israel/>



Typical grassland in the Golan Heights of Israel. Lots of rocks everywhere (Photo by Sandy Smart, 2017).

Mediterranean Grasslands Continued Page 3

Mediterranean Grasslands Continued

by Sandy Smart

The few livestock that I saw looked like English breeds and were being fed supplements because the region had been experiencing drought the past few months. There are roughly 150,000 beef cattle in Israel and many feeder calves are imported from Hungary and Australia.

I met with a governmental researcher (equivalent to our USDA Agricultural Research Service) that told me that the standard practice is to provide a spring deferment and then graze the pastures hard for 6 months. He said that the annual grassland is very resilient to heavy grazing as long as a spring deferment is provided. Producers feed livestock straw from barley and wheat fields mixed with poultry manure to increase protein and digestibility. All hay and other concentrates are imported from other countries and are very expensive. I also noted that the fields of small grains did not have any residue on them and everything was conventionally tilled (which surprised me since rainfall is scarce).

In other parts of the country, especially the more arid and brushy regions, goats and sheep are the predominant livestock. Goats were given a bad rap early in the young nation's history. In 1950, Israel passed the "Black Goat Law" which limited the number of goats grazing on Israel land. All of the land is owned by the state and farmers pay a rental fee to graze and grow crops. The law allowed the government to confiscate excess goats if numbers were above the allotted stocking rate.

I didn't see a lot of wildlife on the trip except for birds, a few hyrax (looks like a big woodchuck), and some Nubian ibex (desert dwelling goat type species with curved horns). Israel, with its numerous biomes, has rich diversity of wildlife, especially birds as it is a pathway for migrating populations from Europe to Africa and Asia. At one time there were bears, wolves, and lions in Israel (recall your Sunday school lessons about young King David tending his father's sheep).

One highlight of the trip was standing on top of an outpost in the Golan Heights. From this vantage point you can see Syria and Lebanon, just a few miles in the background. The photo of me shows Mt. Hermon in the background, where some biblical scholars say is the site where Jesus was transfigured before Peter, James, and John. Israel is a fascinating place to visit. I was blessed to have the opportunity to see this country and meet its amazing people. The Mediterranean climate is beautiful, especially in the winter, and the food is awesome too!



Hereford cattle in the Golan Heights of Israel. (Photo by Sandy Smart, 2017).



Me in the Golan Heights with Mt. Hermon in the background. (Photo by Sandy Smart, 2017).

Diversity and Efficiency: Jim Faulstich's Survival Strategy by Kate Rasmussen



Jim Faulstich (Photo by Kate Rasmussen, 2017).

Jim Faulstich, Chair of the South Dakota Grassland Coalition, began his work on the board in 2000 after experiencing the value of grassland on his own operation. From migratory bird habitat to prime hunting ground, the benefits of Jim's land stewardship stream from his place like tributaries. Jim hasn't always run a business that can be described with labels like "wildlife-friendly" and "conservation-focused." He adopted his land ethic not to jump on a marketing bandwagon but as a means of holding onto the family business.

The tough economic climate of the 80's pushed Jim to take a critical look at the way he ran his place: "It's easy to spend a lot of energy trying to put a square peg in a round hole. We were putting up feed and hauling it out, spraying chemicals on the ground, pouring for flies, calving in April." In the name of efficiency, Jim cut costs by shifting his focus toward supporting the natural resources he had available.

hired a range consultant who pointed out the diversity we had lost." Since then, Jim has made plant and animal diversity a major priority. He planted marginal crop ground back to native grassland and keeps his inputs low by letting the cattle do the harvesting. "We've improved our land by rotating the cattle from pasture to pasture and figuring out the best timing for grazing. We started calving later and bringing in less feed. Our cropland is 100% no-till and we plant full season cover crops that the cattle graze over the winter." Among many others, these changes helped make Jim's place a lower stress, higher performance operation for both the cattle and the land.

I visited the Faulstich family operation over the summer where Jim's visionary ideals are hard at work. His bird dogs piled in the back of the pickup and we set off on a tour of Day Break Ranch. Jim pointed out grasshopper sparrows and bobolink as we passed stretches of native grasses rarely seen in the Corn Belt. He doesn't hire range consultants anymore. Instead, he uses the winged versions: "If the birds and pollinators aren't doing well, we're doing something wrong. Not enough producers pay attention to pollinators."

One of his first steps toward focusing on the land was to get an outside perspective: "We

Faulstich Continued on Page 5

Faulstich continued by Kate Rasmussen

Soon after making major land management changes, his place began to team with wildlife. He noticed increasing numbers of endangered songbirds making a home in his pastures along with migratory birds and white tail deer. This welcome unintended consequence opened up the opportunity to add a hunting enterprise to the ranch, giving his daughter and son-in-law the chance to come back to the family business.

“Diversity,” Jim said “is the key, whether it’s enterprises or grass.” Hunters come to Day Break Ranch for the deer and game birds, but also for the opportunity to be a part of the type of landscape their grandfathers hunted on. “It blows my mind how much these guys appreciate the land and wildlife and quiet,” he said as we approached a grove of trees, “and it all fits with our management philosophy.” Jim slowed to a stop and pointed out a memorial stone near the base of a tree stand. The name across the stone belonged to a devoted hunter and marks his favorite spot, the place his family spread his ashes when he passed.

Jim’s first hand experience with the far reaching value of land stewardship has motivated his dedication to the South Dakota Grassland Coalition: “I feel obligated to do what I can for grasslands in this state.” The organization has expanded significantly in the past several years, growing in membership and catching the attention of organizations like World Wildlife Fund and The Audubon Society. Jim doesn’t seem to mind taking time away from the ranch to be on the board of the Grassland Coalition: “Talk about a dedicated bunch, these guys are it. It’s all volunteer work. They’re dedicated to the grasslands because they’re all producers.” In reference to his favorite part of being on the board, Jim said he felt “getting to work with all these people that are innovative and willing to buckle down and find solutions to problems on a regular basis is almost as gratifying as getting things done.”

Diversity and effective education are essential to the survival of the Great Plains. The Grassland Coalition has created a place to find guidance and information on farming and ranching in the Great Plains, run by producers dedicated to sharing what they’ve learned through their own experiences. Jim believes that the SDGC message is just as important to share with producers as it is for consumers: “Unless you don’t plan on eating, drinking, or breathing tomorrow, it’s important to understand what’s happening on the landscape.”

Kate Rasmussen is a freelance writer and ranch hand based near Belvidere, SD.



Faulstich’s hunting dogs eagerly ride along as I visit Jim’s pastures (Photo by Kate Rasmussen, 2017).

North Dakota Grazing Lands Coalition Winter Meeting by Garnet Perman

Chad Njos, Bowman, ND, the current chair of the North Dakota Grazing Lands Coalition told the attendees at their winter meeting on Jan. 17, “We’re here to stretch your mind”. Speakers included Pete Kronberg, Forbes, ND; Ken Miller, Rice Lake, ND; Deborah Clark, Henrietta, Texas; and Didi Pershouse, Thetford Center, Vermont. So here’s the scoop on what our neighbors to the north have to think about following their winter meeting.

Kronberg, along with his brother and father run 850 ewes on the North Dakota/South Dakota border near Forbes. He shared several successes and failures and gave pointers for those thinking about adding sheep to their operation. The Kronbergs started using 42 inch electric netting to contain their herd in 2014. The expense makes high density grazing a natural fit. They graze about an acre at a time and move the herd twice a day. This system has stopped predation and yielded a dramatic increase in forage diversity and production. They’ve found they need to pay close attention to nutrition as the mineral/nutrient balance can change during the season. They stagger their lambing dates and lamb in a barn prior to grazing. The family also markets produce from their greenhouse through a CSA and processes maple syrup. Kronberg is a NDGLC mentor and can be reached at 701-357-7171 or 701-710-1711.

Ken Miller and his wife, Bonnie are the North Dakota 2017 Aldo Leopold Award for Conservation recipients. Ken worked for the Burleigh County Soil Conservation District which has been a research leader in conservation and soil health practices and has implemented many of them on his 2,000 acre operation. He listed 16 different practices he’s used. “Some are just a band aid until you start healing the soil,” he said. They have a diversified cow/calf operation and dry land and irrigated cropland. Ken refers to himself as “a lazy rancher”, and shared techniques that have worked for them. Miller is also a NCGLC mentor. Contact him at 701-663-9350 or mandan@wildblue.net.

Deborah Clark and her husband, Emery Birdwell, own and operate Birdwell and Clark Ranch in north central Texas. Their labor force is Deborah, Emery, and a full time hired hand with occasional day workers. After purchasing the ranch in 2004, they implemented a rotational grazing program aiming to restore the native tall grass prairie. Paddocks are 45-120 acres in size. Carrying capacity has increased from 2000 head to 6000. They maintained a 5000 head stocking rate during the severe drought of 2011-2015 during which they switched from running three herds to a single herd. Clark noted that high density grazing has resulted in a sizable increase in forage production than when they ran three herds. Improved soil health has increased water infiltration and increased species diversity. Their main challenges have been how to manage a herd that size and how to get water to them. Pictures and videos added to her presentation. Clark is a Holistic Management Certified Educator.

Didi Pershouse (www.didipershouse.com) is an acupuncturist turned soil health guru, and author of “The Ecology of Care: Medicine, Agriculture, Money and the Quiet Power of Human and Microbial Communities”. She works with the non-profit Soil Carbon Coalition. Her presentation compared the sterile model of care that developed during the Industrial Revolution which includes much of conventional agriculture, and a fertile, regenerative model based on microbial activity in the soil. She explained how each model affects human health, landscapes and climate.

NDGLC Winter Meeting Continued Page 7

NDGCL Winter Meeting Continued by Garnet Perman

She emphasized that NDGLC members should communicate to their market that foods produced in a perennial grass based system have been intelligently sorted into the right concentrations, ratios and balances. “We need them to maintain intelligence and immunity,” she said. She also emphasized the importance of free information to schools and other influencers. She has developed high school curriculum that is in high demand by FFA instructors. There is also a shortage of data showing soil health practices that work, so she is involved in creating a free data base that anyone can upload pictures and information to showing the effects of soil health friendly practices: www.atlasbiowork.com. Quite a lot to ponder through a cold North Dakota winter!

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

The Green Side Up: New Grassland Management School Coming July 25-27, 2018 Will Fill the Gap Between Current Grazing School and Soil Health Schools by Pete Bauman

In 2003 the South Dakota Grassland Coalition, SDSU Extension, NRCS, and several other partners worked collaboratively to launch the South Dakota Grazing School. Since then, the school’s influence on the grazing and conservation industries in South Dakota and around the region are undeniably positive. The Grazing School has created a unique atmosphere where anyone interested in grazing management can come to learn. The school has hosted over 400 students that range from beginner to expert and from public employees to private producers. A key aspect to the grazing school is that the entire curriculum is delivered under an integrated format where students and instructors interact, learning and working cooperatively throughout the school. Under a similar format, the South Dakota Soil Health Coalition launched a new Soil Health School in 2016. As with the Grazing School, the Soil Health School focuses on collaborative and cooperative learning between instructors and students.

2018 will serve as the inaugural year for the new South Dakota Grassland Management School designed to bridge curriculum gaps between the Soil Health and Grazing Schools. The Grazing School is primarily focused on managing established vegetation with grazing for long-term ecological benefit and profitability. Similarly, the Soil Health School focuses on soil biology and soil health to ensure the soil provides the most receptive medium possible for plant growth and profitability.

The Grassland Management School is designed to tackle many questions coming from producers who desire to understand a more complete picture of: 1) preparing soils to receive new grass plantings, restorations, or enhancements, 2) rejuvenating existing grasslands, 3) proper management of new stands during the establishment phase, and 4) use of grasslands as either forage, hay, wildlife cover, or other goods and services that can return profits.

Specifically, the new school will take students through a brief history of what shaped grasslands and an understanding of where we are today in grassland management. Incorporated into the curriculum are sessions on soil health and conditioning soils, choosing grass mixes, proper equipment, grass establishment and maintenance, native vs. tame species, fire and mowing management, etc. In addition, a key feature of the school will be hands-on field trips where students and instructors will evaluate a variety of planted and restored grasslands, assessing goals, adjustments, successes, and failures of various methods. **The Grassland Management School will be held in Watertown July 25-27, 2018.**

Pete Bauman is an Extension Range Field Specialist in Watertown, SD.



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Calendar of Events

Event	Date	Location	Contact Person	Phone
NPSAS Winter Conference	Jan 25-27	Aberdeen	Jill Wald	701-883-4204
Ag Friday and Ag Fest	March 16-17	Pierre	Judge Jessop	605-280-0127
SARE 30th Anniversary 'Our Farms, our Future Conference'	April 3-5	St. Louis, MO	Sandy Smart	605-651-0766
National Land and Range Judging Contest	April 30 – May3	Oklahoma City, OK	Dave Ollila	605-394-1722
SD Professionals and Youth Range Camp	June 5-6	Sturgis	Dave Ollila	605-394-1722
Rangeland Days	June 26-27	Redfield	Dave Ollila	605-394-1722

Please remit any comments, suggestions, or topics deemed necessary for further review to: Sandy Smart, SDSU Box 2170, Brookings, SD 57007, alexander.smart@sdstate.edu, (605) 688-4017