



# Grassroots

VOLUME 19 ISSUE 3

MAY 2017

## BOARD OF DIRECTORS

**James Faulstich,**  
Chair

**Dan Rasmussen,**  
Vice Chair

**Larry Wagner, Sec-  
retary/Treasurer**

**Jim Kopriva**

**Doug Sieck**

**Bart Carmichael**

**Pat Guptill**

**Mike McKernan**

**Josh Lefers**

## INSIDE THIS ISSUE:

**Range 101: Drought Plan-  
ning** 2

**New Executive Officer** 3

**National Land and Range Judging Contest** 4

**Various Summer Events** 5

**Bugs-n-Grubs** 6

**Pasture Leases** 7

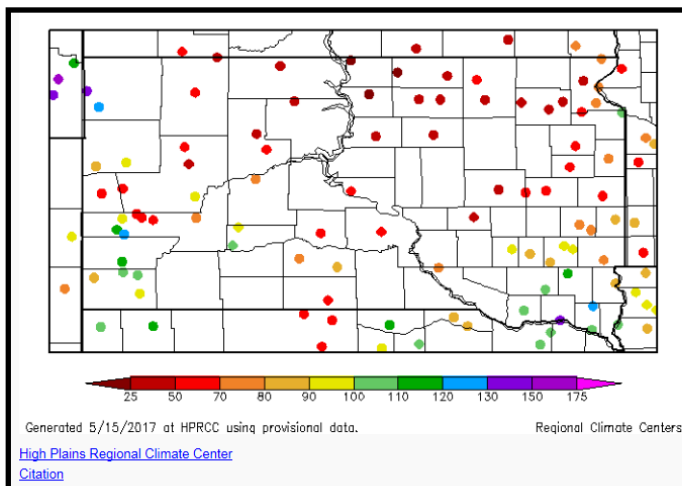
## Range 101: Drought Planning by Sandy Smart

Periodic drought is a common occurrence in the Great Plains. On average, spring drought (April-June) occurs about once every five years. Spring drought is especially significant to ranches in the northern Great Plains because the majority of the forage production comes from cool-season grasses. These cool-season grasses produce most of their annual biomass by July 1st. Summer rainfall after July 1st does little to grow forage except for warm-season grasses. Unfortunately, the most predominant warm-season forage grasses west of the 100th Meridian are of short stature and don't produce much biomass.

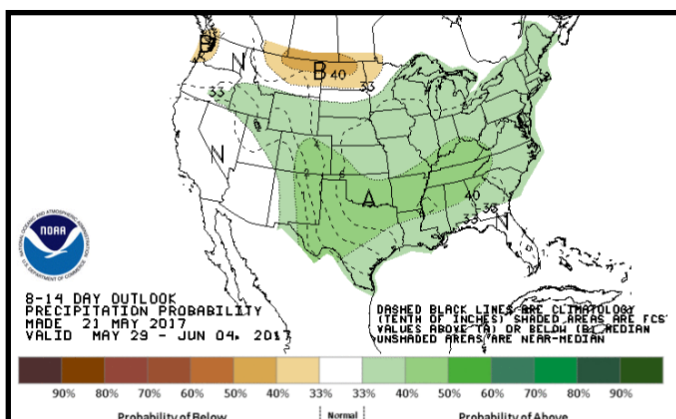
Most of South Dakota has experienced a dry start to the growing season (see figure to the right). In fact, many locations in South Dakota have been quite dry since the beginning of the new water year (starting in Oct 2016). April-June precipitation is critical for forage production as stated above. Many parts of the state are going to need above normal May and June rains to catch up.

The 8-14 day outlook from the Climate Prediction Center looks better for the southern half of South Dakota. The northern half of the state will receive equal chances for precipitation (below, normal, or above normal), and North Dakota has a chance to be much drier.

The bottom line is that things are probably shaping up for a lower than normal forage production year.



Percent of normal precipitation (%) from 4/1/2017 through 5/14/2017 ([www.climate.sdstate.edu](http://www.climate.sdstate.edu)).



The 8-14 Day Outlook. National Weather Service Climate Prediction Center (<http://www.cpc.noaa.gov/>).

## Range 101: Drought Planning Continued by Sandy Smart

Since this year's lack of spring moisture has heightened our awareness of the distinct possibility that 2017 will be a low forage year, it is important to review your drought plan or make a drought plan if you haven't already prepared one. Below is one example plan. I include important "trigger" dates that one assesses moisture levels to date and outlines actions to be taken in response to conditions.

Date	Climate	Action
<b>Dec 1</b>	Did you receive adequate fall moisture?	NO: spring rain will be necessary to replenish soil moisture. YES: in good shape, keep an eye on spring moisture.
<b>April 1</b>	Did winter snowfall help fill stock dams?	NO: prepare for alternative watering strategies. YES: in good shape, keep an eye on spring moisture.
<b>May 1</b>	Did we receive normal April rainfall?	NO: don't graze flexible livestock; be prepared to lower the stocking rate. YES: plan on grazing flexible livestock.
<b>June 1</b>	Did we receive normal May rainfall?	NO: consider future options for main herd - feeding, culling, early weaning; perhaps investigate purchasing hay. YES: if cumulative rainfall is normal keep grazing flexible stock; if cumulative rainfall is still short be prepared for options.
<b>July 1</b>	Did we receive normal June rainfall?	NO: we are in a drought if cumulative is <75% of normal; take action now - acquire additional feed resources, cull, be prepared to wean early. YES: if cumulative rainfall is normal consider destocking flexible stock; if cumulative rainfall is still below normal take action now - investigate hay purchase, cull, be prepared to wean early.
<b>August 1</b>	Was spring dry?	Consider early weaning soon, cull hard, remove cows from pasture and feed hay.
	Was spring normal?	Okay to continue grazing.
<b>September 1</b>	Was spring normal?	NO: should have weaned by now, culled, and should be feeding hay. YES: okay to continue grazing
	Was summer rainfall below normal?	If below normal, the drought will likely carry over to next year. Make preparations for another drought
	normal?	If normal, it will help a little but not enough to impact this year.
	or above normal?	If above normal, it will help to heal the impact of drought for next year. Could get fall regrowth. Be careful not to overgraze fall growth or it will negatively impact forage production next year. Best to not graze in the fall if it is possible.

## SDGC Newest Addition: On Conservation and Community by Kate Rasmussen

Marbled godwits, jackrabbits, and upland sandpipers are just a few of the species Rex enjoys spotting while spending time in the field as a wildlife habitat conservationist. Rex Johnson, the South Dakota Grassland Coalition's newly hired Executive officer, currently lives with his wife in Sioux Falls near their three kids and two grandkids. Born in Iowa and attended high school in Indiana, Rex's small town upbringing fostered his hunting and fishing hobbies that would later inspire him to dedicate his life to conserving plains ecology. His deep appreciation for land and the life it supports has motivated an extensive career in natural resource conservation.



With a BA from Ball State University, a Masters from Iowa State University, a PhD from South Dakota State University, and many years of teaching experience in his back pocket, he put his education to use with the U.S. Fish and Wildlife Service. Rex brings a deep well of experience in grant writing to the Grassland Coalition. He has written a number of grants over the years on the local, state, and regional level for grassland and wetland conservation. He worked primarily on wetland, grassland, and migratory bird projects where he developed his mission to "institute better science into management programs." Rex hopes to implement this mission by working directly with landowners to promote worthwhile grazing management tactics.

Although wildlife moved Rex to pursue a career in conservation, the idea of helping rural communities through effective natural resource management prompted him to stay in South Dakota: "my primary motivation now is healthy, diverse landscapes that allow the people on it to have a high quality of life." His experience in conservation work has opened his eyes to the many rewards that land stewardship has for both wildlife habitat and rural community preservation. During part of his career, Rex studied the links between the health of rural communities and the plains ecosystem surrounding them. He found that stewardship on the landowner level is a crucial element in maintaining the health of both productive land and small towns for generations to come.

Rex believes that successful natural resource management relies on "strategic, landowner based conservation." Reaching out to landowners with focused conservation practices, Rex explained, supports rural communities in a way that encourages both ecological and economic diversity. He recognizes that healthy grasslands provide wildlife habitat and clean water as well as opportunities for beef producers to operate profitable businesses. By helping make grazing profitable through sustainable land management, the new Executive Officer hopes to preserve both the wellbeing of grasslands and the people they support. Rex looks forward to working with the South Dakota Grassland Coalition's landowner operated board, assisting them in the promotion of stewardship on farms and ranches across the state. Jim Faulstich, chairman of the South Dakota Grassland Coalition, stated "It is a real pleasure to have Rex join the Coalition and we are looking forward to his assistance and experience to move the Coalition to a higher level of grassland conservation leadership in South Dakota. We are very lucky to have an Executive with his knowledge, experience, and leadership join the excellent team we already have. We are excited to have Rex on board."

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

## South Dakota Shines at 66th National Land and Range Judging Contest

by Sandy Smart

South Dakota 4-H teams did well at the 66th National Land and Range Judging Contest held in Oklahoma City, OK on May 4, 2017. Day County 4-H Range Judging Team lead by Fred Zenk, placed 2nd. Team members were Levi Johnson, Sara Hemmingson, Riley Johnson, and Sydney Swanson. Levi Johnson placed third overall, Sara Hemmingson was 7th, Riley Johnson placed 10th, and Sydney Swanson was 16th overall.



South Dakota range legends: (left to right) Brandy Knutson (Kadoka Ag Teacher), Dave Ollila (SDU Extension, Rapid City) and Craig Shyroch (Wessington Springs Ag Teacher). (Photo by S. Smart, May 2017).

The Jerauld County 4-H Land Judging Team placed 2nd. Team members included Keah Munsen, Alicia Jackson, Landon Wolter, and Chandler Flowers. They were coached by Lance Howe. The Hyde County 4-H Homesite Judging Team placed 5th. Team members included Taylor Ashdown, Chesney Effling, Riley Aasby, and Lainey Aasby. They were coached by Ken Jones.

In addition to the SD Ag Teachers, Dave Ollila (SDSU Extension), Sandy Smart (SDSU), Mitch Faulkner (NRCS), and Christi Koehler (NRCS) attended to assist the students in preparing for the contest.

## New Healthy Grassland Publication by Sandy Smart

The Coalition recently published the 2nd version of Greener Pastures called "Healthy Grasslands". The publication expands the content previously covered; including information on haying, planting cropland back to grassland, contract grazing, winter grazing, drought planning, and fire management. The publication will be delivered to NRCS, SDSU Extension, and Conservation District offices across South Dakota over the next few months. Thanks to Sandy Smart, Pete Bauman and Josh Lefers for editing and contributing to the new publication.



Healthy Grasslands (Photo by S. Smart).



## Summer Pasture Tours with Randy Holmquist by Sandy Smart

The Coalition is working with Randy Holmquist, an associate certified educator with Holistic Management International, to put on six Pasture Walks this summer. The first Pasture Walk is going to be at the 777 Bison Ranch near Hermosa. Randy plans on having an afternoon program from 1-4 pm where he will cover planned grazing, buffalo handling facilities, and holistic management.

The remaining tours are tentatively planned for ranches run by Phil Jerde (Reva), Jody Brown (Faith), Gary Howie (New Underwood), Brett Nix (Murdo), and Sisseton-Wahpeton Sioux Tribe (Sisseton). Check the Coalition website for upcoming information about each tour over the next several weeks.



Randy Holmquist (Photo S. Smart)

## Bird Tour at Anderson Ranch near Meadow, SD by Sandy Smart

The 11th Annual Bird Tour is scheduled to be held at the Anderson Ranch near Meadow, SD on June 9-10. Presenters from SDSU, DSU, NRCS, American Bird Conservancy, and the USFS will provide information on bird identification, bird ecology, and grassland management. Come learn how ranchers take care of grasslands for cattle production that complement grassland birds. The cost is \$20 per person; students are free. Lodging can be found in Bison, Lemmon, Isabel and Faith. Go to [www.sdgrass.org](http://www.sdgrass.org) to download the brochure.



## Professional and Youth Range Camps June 7-9 by Sandy Smart

SD Society for Range Management and SDSU Extension is hosting their annual Range Camp in Sturgis, SD. Registration is due May 23rd. See the SD SRM website [www.sdrangelands.com](http://www.sdrangelands.com) or the Coalition website [www.sdgrass.org](http://www.sdgrass.org) for more information.

## Rangeland Days June 20-21 by Sandy Smart

SD Society for Range Management is hosting their annual Rangeland Days on June 20-21 in Wall, SD. The \$30 registration includes two lunches and an evening meal. Contact Lesa Stephens, East Pennington Conservation District. Registration is due June 20th. See the SD SRM website [www.sdrangelands.com](http://www.sdrangelands.com) or the Coalition website [www.sdgrass.org](http://www.sdgrass.org) for more information.

## The Green Side Up Bugs-n-Grubs Road Show by Pete Bauman

In late April, the Coalition once again expanded its educational format by partnering with SDSU Extension, NRCS, and others to sponsor the Bugs N' Grubs Road Show. Bugs N' Grubs featured a slate of invited speakers that sharing information on overall insect and parasite management on farms and ranches. Topics focused on five key areas including: holistic management and diversity, dung beetles, pasture grubs, pollinators, and livestock parasites. I had the privilege of kicking off the workshops with a general overview of the importance of insect, plant, and animal diversity in grassland systems. I discussed how management decisions can drive systems away or toward health and profitability, and how indicator species, such as pollinating insects, can help a manager understand the direction they are headed.

SDSU Extension Entomologist Pat Wagner and SDSU Grad Student Jacob Pecenka then captivated the crowds with their presentations on the ecology, importance, and management of dung beetles in South Dakota. The ultimate take-home message was that we have great potential to utilize these natural nutrient recyclers in our pastures simply by allowing them to exist and by creating a hospitable home through healthy grazing rotations, selective use of non-systemic products, and elimination of systemic products in livestock parasite control. Ultimately, producers who have moved away from systemic products have better fly and parasite control in pastures simply because the dung beetles and other beneficial insects are no longer harmed by systemic pesticides excreted in the manure, thus making manure less hospitable to flies.

SDSU Extension entomologists Adam Varenhorst and Amanda Bachmann, along with NRCS Range Specialists Merissa Dominguez and Rod Voss led an in-depth discussion on the impact of May/June beetle grubs on pastures and grasslands. While much was shared on what is known regarding the life cycles, habits, and impacts these 'true white grubs' can have, it was generally concluded that there is little active management that can be initiated to avoid or 'fix' an infestation. The heart of the grub issue lies primarily in south central South Dakota, and SDSU and NRCS will continue to monitor and collect feedback on this issue across the state. Jon Lundgren, founder and manager of the Ecdysis Foundation highlighted the devastating impacts that modern land management is having on pollinator species such as honeybees. Jon also reminded the crowd that we can manage with balance in cattle operations, showing a captivating YouTube video entitled "Soil Carbon Cowboys" that demonstrates how managing with natural processes can be profitable (<https://vimeo.com/80518559>).

Dr. Mike Hildreth from SDSU spoke on the importance of internal parasite management. He demonstrated simple and effective methods producers can use to identify and reduce parasite loading in herds. Dr. Hildreth, through highlighting the life cycle of worms, demonstrated how planned livestock grazing rotations and removal of individuals with a propensity for parasites can positively impact herd health. Quinn, SD rancher and Coalition board member Pat Guptill wrapped up each session with his real-life experiences on his ranch. Pat shared his insight and experiences related to working in harmony with natural process, managing for dung beetle health, reduced chemical inputs, improved nutrition, and a willingness to be innovative and try new things. SDSU Extension is hoping to distribute recordings of the presentations in the near future, stay tuned!!

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



# Some Ideas Regarding Pasture Leases by Garnet Perman

Agricultural prices are in bust mode. A good share of the state experienced dry conditions in March and April. Is leasing pasture a good idea and what constitutes a good rental agreement? In South Dakota, rent values for grass have remained fairly steady overall. Will Walter, Farm Business Management Dept. Head/Instructor at Mitchell Technical Institute reported that the higher land values of the past few years contributed to higher prices. The cow herd in the state hasn't dwindled, but the supply of grassland has decreased. CRP has also become more competitive for marginal acres that might otherwise be used for forage. Substantially lower rental rates in the near future are not likely.

Oral vs. Written Leases: In South Dakota, an oral lease for agricultural land over 40 acres is good for one year. It automatically renews unless the landlord notifies the lessee in writing by September 1 of the current year. Written leases specify the length of the agreement and terminate at the determined date. No notice for non-renewal is necessary. Leases commonly run from one to three years. Walter highly recommends written leases, "they eliminate surprises." These surprises include options for removing cattle or extending grazing depending upon weather conditions during the season and compensation for missing cattle or death loss. Who is responsible for fixing the fence? Who will check the cattle and how often? Who is liable for damages caused by cattle that got out? Payment amounts and dates as well as penalties for late payments should also be included.

The Landlord's Perspective: Rates for leased land can be determined in several ways. They can be based on current market rates, a return on investment in pastureland, forage value, rent per head per month (AUM), carrying capacity or rent per pound of gain. The MTI program typically sees more per acre leases in the eastern part of South Dakota and rent per head per month (Animal Unit Months or AUMs) in the west. An animal unit is typically described as a 1000 pound cow with a calf four months or younger. The quality of stand, type of forage species, presence of trees and/or wetlands, condition of the fences, availability and type of water, and previous fertility practices on the pasture can also enter into determining rates. According to Walter, sustainability should be the landlord's first concern with carrying capacity being an important consideration.

Rick Rausch, a Coalition member from Onaka, SD has leased grass for his cattle and also leased grass to others. Based on that experience he has developed a contract grazing business. He markets his grass plus his experience and expertise as a grass manager as a service for a defined period of time and a defined number of animals, 1200 pound AUMs. His basic contract guarantees good grass, good water, good fences and good minerals. Other considerations such as herd health services, liability, or death loss coverage are offered as options in the contract. Rausch's operation is part of the Happy Cow Tour sponsored by the SD Cattlemen's Association and SD Grassland Coalition on July 28. More information will be in the next Grassroots issue.

The Tenant's Perspective: Knowing the cost of production per animal is essential to making an agreement that works for that operation. Rausch advocates knowing what you're buying in terms of how to get the most benefit for the type of animal. For example, yearlings may need better quality forage than cow/calf pairs in late summer. Fresh water sources are more desirable than dugouts. Inspect the fence. Anticipate potential problems and address them in the lease agreement prior to turning cattle out. This is especially important if the pasture is a long distance.

Good lease arrangements can benefit both the landlord and renter for years and are worth the time it takes to consider them.

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



Sandy Smart  
Box 2170, ASC 219, SDSU  
Brookings, SD 57007

## Calendar of Events

Event	Date	Location	Contact Person	Phone
Professional Range Camp	June 7-9	Sturgis	Dave Ollila	605-569-0224
Bird Tour	June 9-10	Lemmon	Judge Jessop	605-280-0127
Rangeland Days	June 20-21	Wall	Lesa Stephens	605-279-2451 Ext. 3
Happy Cow Tour	July 28	Wecota	Judge Jessop	605-280-0127
Leopold Conservation Award Tour	Aug 1	Clear Lake	Judge Jessop	605-280-0127
Pasture Walks	Various	Various Locations	Randy Holmquist	605-730-0550

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](mailto:alexander.smart@sdstate.edu), (605) 688-4017