



GRASSROOTS

DR ALEXANDER "SANDY" SMART, INTERIM-EDITOR • SDSU • BOX 2170 • BROOKINGS, SD 57007 • alexander.smart@sdstate.edu • (605)-688-4017

VOLUME 14, ISSUE 7

OCTOBER 2012

Board of Directors

Lyle Perman, Chair

30872 143rd Street
Lowry, SD 57472
(605) 649-7629

James Faulstich, Vice Chair

33795 186th Street
Highmore, SD 57345
(605) 852-2622

Ellen Reddick, Secretary/Treasurer

1611 Reddick Lane
Saint Onge, SD 57779
(605) 642-3272

Dan Rasmussen

26151 Cedar Butte Road
Belvidere, SD 57521
(605) 344-2250

Larry Wagner

26314 350th Avenue
Chamberlain, SD 57325
(605) 894-4448

Dale Paulson

21757 375th Avenue
Wessington, SD 57381
(605) 458-2376

Dale Boydston

PO Box 248
New Underwood, SD 57761
(605) 484-3027

Low Stress Livestock Handling

Garnett Perman

Remember Clint Eastwood's Rowdy Yates character from the old TV series Rawhide? He cracked a whip to keep them doggies movin'. Handling livestock has changed since Clint had a full head of hair!

The mentors listed for low stress livestock handling are Bill Aeschlimann, Ed Blair, Jim Faulstich, Dan Rasmussen, Ellen Reddick and Larry Wagner. Each was asked his/her top tip for handling livestock using low stress methods.

Reasons cited for making the effort to learn low stress methods include: 1) lower vet bills both in terms of fewer sick animals to treat and fewer injuries, 2) A reduced need for labor. Ellen Reddick said, "Without these methods, I wouldn't be able to do lots of things by myself." Ed Blair says they don't need as many cowboys once they instituted low stress methods, and 3) a more enjoyable, safer working experience for both cattle and humans.

The following are suggestions from the voices of experience in implementing low stress methods.

(1) Go to a class. Several mentors mentioned Bud Williams and Dr. Tom Noffsinger's classes. Williams' school is three days. Noffsinger runs one day workshops (one will be held in Pierre on Nov 15th). Ellen Reddick first attended one of Noffsinger's low stress clinics about 15 years ago. What she learned took time and practice, but was worth the effort. She said, "One class gets you started, two gets you going and with the third you're on your way."

In this Issue...

**LOW STRESS LIVESTOCK
HANDLING**

SALT CEDAR RESEARCH UPDATE

MOB GRAZING RESEARCH UPDATE

CALENDAR OF EVENTS

For more information or other events the **SOUTH DAKOTA GRASSLAND COALITION** is involved with please feel free to contact Sandy Smart or visit the website: <http://sdgrass.org>.

(2) Rethink handling facilities. For Bill Aeschlimann low stress is all about setting up his sheep handling facilities to be as hands off as possible. The less lambs are handled, the healthier they are. Aeschlimann's utilize a narrow, circular chute with solid sides. The sheep see only the animal in front of them and the solid sides help prevent injuries from getting legs caught. The end of the chute fans out three different ways. Bill and his border collie are able to sort 1,000 lambs in about an hour with that set up. He keeps the noise level down by training dogs not to bark. The narrow loading chute is on a winch so it can be raised or lowered for loading a semi. Self feeders in the feedlot hold up to a week's worth of feed, so no one has to enter the pen on a daily basis.

Different species may require different setups. Temple Grandin's website www.grandin.com has information on handling and facilities for several different species.

Dan Rasmussen and Ed Blair both use what is known as a "Bud Box" to bring cattle into an alley way. Designed by Bud Williams, the cattle enter one gate, circle around and enter the alleyway through a gate next to the entry gate. The cattle think they're headed out the way they came in. Rasmussen also utilized Williams as a consultant in designing his handling system.

Jim Faulstich noted that low stress handling involves much more than just sorting, handling and cross fence weaning. It includes the setup for moving cattle from pasture to pasture and water and feed placement for bringing them in during calving. "It's not an overnight change, but it's very rewarding to see the results of the changes," he said.

(3) Fence line weaning is a good place to start. Rasmussen says, "It gives you the biggest bang for the buck as far as low stress on calves." Because of the drought Blair Bros. weaned their

calves on August 7 using a variation on fence line weaning. They lock the cows in the corral with the calves in the pasture next to them. "They weaned so easy," said Blair. They rarely treat sick calves since they started weaning this way.

(4) Think like a cow. What scares them? Ed Blair learned to pay attention to overcrowding when working cattle. If cattle see shadows or something flapping they're more apt to balk. Animals can be trained by running them through a squeeze chute when they're young just for the experience. They won't be as nervous the next time. Larry Wagner recommends moving slowly and keeping noise to a minimum.

(5) What breeds are you using? Aeschlimann finds that his crossbred sheep are easier to manage than some purebreds.

Salt Cedar Research Update

Michelle Ohrtman

Saltcedar is a non-native tree/shrub that has caused billions of dollars in economic and environmental losses in the southwestern U.S. Cold temperature extremes were previously thought to limit saltcedar expansion in northern regions. However, saltcedar has invaded South Dakota, becoming a state noxious weed in 2004. Despite success of some of the efforts by several agencies (e.g. SD Department of Ag, US Forest Service and others) to eradicate saltcedar in South Dakota, this plant is projected to invade new areas across the state.

Expansion of this drought tolerant weed may be even greater if climatic conditions continue to become progressively warmer and drier. The best way to protect agricultural and natural resources in South Dakota is to prevent saltcedar spread beyond its current infestation boundaries.

Early detection and rapid removal are important for minimizing the damage caused by invasive

weeds and reducing the cost of their control. Limited information is available about factors that initially led to saltcedar invasion in South Dakota and many land managers are unaware of this threat.

South Dakota State University has initiated a saltcedar research and education program that began with examining how land management strategies such as prescribed fire and grazing influence saltcedar invasion potential in South Dakota's grasslands (See iGrow Insert).

This information can also be used to better understand how invasive plants expand into new ranges and how climate change can influence their invasiveness. Specifically, we will examine (1) environmental conditions (e.g. vegetation, soils, hydrology) associated with saltcedar invasion across South Dakota, (2) temperature and moisture requirements necessary for establishment of northern saltcedar ecotypes, and (3) effectiveness of new field techniques (e.g. spot burning) for removing young saltcedar plants.

Mob Grazing Research Update

Sandy Smart

Ranchers are highly motivated to shift to more productive grazing systems because of increasing feed and land use costs. Mob grazing, or ultra high stocking densities in rotational grazing, is a principle of holistic land management that more closely mimics natural grazing associated with large herds of bison that were once abundant on the Great Plains. The animal impact placed on the grassland with mob grazing has been anecdotally reported to increase forage production by 2 to 4 fold and increase grassland diversity. At ultra high stocking densities, nutrient cycling is increased as the aboveground portions of plants are either recycled as manure or urine or trampled into the ground by the hooves of grazing animals; thus stimulating topsoil development. Subsequently, increased herbage production under mob grazing will allow

increased stocking rates and greater profitability for the livestock producer.

Practitioners and advisors are claiming the best responses from stocking densities of more than 200,000 pounds of beef per acre and moving grazing animals several times daily. However, high stocking rates require increased labor to accommodate the frequent movement of cattle, and infrastructure costs for fencing and water sources. There may also be environmental consequences to using high stocking densities. The trampling effect may reduce water infiltration and increase water runoff and erosion due to increased soil compaction. At this time it is unclear if, and in which environments, mob grazing will induce any adverse environmental effects and be cost-effective.

South Dakota State University has partnered with University of Nebraska-Lincoln and more than a dozen producers across South Dakota and Nebraska to perform a regional study on the effects of mob grazing on harvest efficiency, grassland production and health, and practice feasibility. Producers are located across the state from dry sites in the west and central South Dakota and more productive eastern South Dakota and central Nebraska sites. Producers demonstrate a wide range of stocking rates, between 20,000 and 1 million pounds of beef per acre with 1 to >10 moves per day. We seek to examine the impact of stocking rate on harvest efficiency, forage production, species diversity, and soil and water quality across sites. At each demonstration site, a cost analysis will be performed to assess mob grazing feasibility. By measuring these variables at each location, the profitability of mob grazing can be calculated and compared with more traditional grazing systems and provide producers with information needed to determine if mob grazing is suitable for their needs.



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

Calendar of events:

<u>Event</u>	<u>Date</u>	<u>Location</u>	<u>Contact Person</u>	<u>Phone</u>
NRCS State Tech Mtg	Nov 7	Huron, SD	Kathy Irving	605-352-1205
Tom Noffsinger/ livestock handling	Nov 15	Pierre, SD	NPSAS	701-883-4304
Winter Road Show/ Annual Meeting	Dec 3-7	Chamberlain, SD	Judge Jessop	605-280-0127
HRM Workshop	Jan TBD	TBD	Judge Jessop	605-280-0127

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