

## SDSU Extension **To Host Forums During Dakotafest**

Extension will host several forums to benefit South Dakota growers and their families during 2015 Dakotafest held Aug. 18-20 inside the SDSU Extension Pavilion located on the Schlaffman Farm, Mitchell.

The topics range from Precision Ag Technologies, Climate and Grain Outlooks and Top Ten Ways to Run More Cows on the Same Grass to Tax Savings for Farm Families and new Opportunities for Beginning Farmers & Ranchers.

Organized in a discussion format, these forums provide participants with the opportunity to have their questions answered by SDSU Éxtension and South Ďakota State University staff as well as other industry experts.

"Dakotafest is a wonderful opportunity for our staff and faculty to interact directly with producers and discuss issues relevant to our state's agriculture industry," said Karla Trautman, SDSU Extension Associate

Forums will be held in the SDSU Extension Pavilion in its new location in booth 600, located on the corner of 6th Street and the West Entrance (for Dakotafest regulars, its the road which leads past the ribeye sandwiches on the way to the northwest

Also inside the SDSU Pavilion, the iGrow kiosk will provide digital information to the public on the wide range of SDSU Extension resources and tools available online through the iGrow

The 2015 SDSU Extension

#### Forum schedule includes: TUESDAY, AUG. 18

Show Hours: 9 a.m.-5 p.m. 9:30 a.m. — Rainfall Simulator and Pasture and Cropland Soil Health, presented by Jeff Hemenway (NRCS), Stan Boltz (NRCS) and Pete Bauman, SDSU Extension Range Field Specialist

10 a.m. — Daily Weather Briefing & Climate Outlook, presented by Laura Edwards, SDSU Extension Climate Field Specialist

Ag Technologies, presented by Nic Uilk, Ag & Biosystems Engineering Instructor and Aaron Franzen, Ag & Biosystems Engineering Instructor 11 a.m. — New Opportu-

10:30 a.m. — Precision

nities for Beginning Farmers & Ranchers, presented by Merlin Neumiller, SDSU Extension Beginning Farmer & Rancher Program Manager and Robin Salverson, SDSU Extension Cow/Calf Field Specialist 11:30 a.m. — Top Ten Ways To Run More Cows on

the Same Grass, presented by Warren Rusche, SDSU Extension Cow/Calf Field Specialist Noon — Free SDSU Ice

Cream 1 p.m. — Grain Market

Outlook, presented by Jack Davis, SDSU Extension Crops Business Management Field 1:30 p.m. — Current Top-

ics in Agriculture, presented by Alvaro Garcia, SDSU Extension Agriculture & Natural Resources Program

2 p.m. — Tax Savings for Farm Families, presented by TASC AgriPlan NOW

#### WEDNESDAY, AUG. 19

Show Hours: 9 a.m.-5 p.m. 9:30 a.m. — Rainfall Simulator and Pasture and Cropland Soil Health, presented by Jeff Hemenway (NRCS), Stan Boltz (NRCS) and Pete Bauman, SDSU Éxtension Range Field Specialist

10 a.m. — Daily Weather Briefing & Climate Outlook, presented by Dennis Todey, South Dakota State Climatologist & SDSU Extension Climate Specialist and Laura Edwards, SDSU Extension Climate Field Specialist

10:30 a.m. — Nozzle Selection for New Crop Technologies, presented by Amanda Bachmann, SDSU Extension Pesticide Education & Urban **Entomology Field Specialist** 

11 a.m. — Precision Ag Technologies, presented by Nic Uilk, Ag & Biosystems Engineering Instructor and Aaron Franzen, Ag & Biosystems Engineering Instructor

11:30 a.m. — Top Ten Ways To Run More Cows on the Same Grass, presented by Warren Rusche, SDSU Extension Cow/Calf Field Specialist

Noon — Free SDSU Ice 1 p.m. — Avian Influenza

Update, presented by Russ Daly, Professor, SDSU Extension Veterinarian, State Public Health Veterinarian

 $1:30~\mathrm{p.m.}$  — Grain Market Outlook, presented by Jack Davis, SDSU Extension Crops Business Management Field Specialist

2 p.m. — Current Topics in Agriculture, presented by Alvaro Garcia, SDSU Extension Agriculture & Natural Resources Program Director

#### THURSDAY, AUG. 20

Show Hours: 9 a.m.-4 p.m. 9:30 a.m. — Rainfall Simulator and Pasture and Cropland Soil Health, presented by Jeff Hemenway (NRCS) Stan Boltz (NRCS), Pete Bauman, SDSU Extension Range

Field Specialist 10 a.m. — Daily Weather Briefing & Climate Outlook, presented by Dennis Todey, South Dakota State Climatologist & SDSU Extension

Climate Specialist 10:30 a.m. — Nozzle Selection for New Crop Technologies, presented by Amanda Bachmann, SDSU Extension Pesticide Education & Urban Entomology Field

11 a.m. — Precision Ag Technologies, presented by Nic Uilk, Ag & Biosystems Engineering Instructor and Aaron Franzen, Ag & Biosystems Engineering Instructor

11:30 a.m. — Top Ten Ways To Run More Cows on the Same Grass, presented by Warren Rusche, SDSU Extension Cow/Calf Field

Noon — Free SDSU Ice Cream

1 p.m. — Grain Market Outlook, presented by Jack Davis, SDSU Extension Crops Business Management Field Specialist 1:30 p.m. - Water Man-

agement for Agriculture in South Dakota, presented by Chris Hay, Assistant Professor & SDŠU Extension Water Management Engineer

2 p.m. — Current Topics in Agriculture, presented by Alvaro Garcia, SDSU Extension Agriculture & Natural Resources Program Director To learn more, visit the

iGrow events page.

#### Jake Geis

## **A Look At Pre-Conditioning Programs**

BY JAKE GEIS, DVM

Every autumn, cattle producers are flooded with information about preconditioning fall weaned calves through a wide variety of media publications These articles and radio ads tell cattlemen about the increased prices they will receive at the time of sale, how two rounds of shots are better than one, and a host of other information. Unfortunately, the main reason why preconditioning is important often gets lost in this advice. If we know why we precondition, then the rest of the questions like what shots to give, how long to background them, when to castrate, etc., will make more sense.

The reason to precondition calves for weaning is to keep them from getting sick. This may seem like a no-brainer, but cow/ calf producers seem to forget the most important time to keep a calf healthy is when you still own the calf. Yes, cattle feeders will give you a premium price for preconditioned calves, but preventing sickness before they are sold means more to the ranchers' bottom line.

With the mindset that preconditioning is to keep your calves healthy for your benefit, we can structure your herd health program around the issues that will affect your calves. The three parts of preconditioning to consider are a well-timed vaccination program, surgical procedures such as castration and dehorning, and efficient bunk-breaking.

The stress of weaning is the primary reason calves break with respiratory disease. Therefore, if we want to prevent disease it is best to start the vaccination



**GEIS** 

are weaned. Although there is some utility with vaccinating calves with their first shots at weaning, vaccines work better if they are given before weaning.

There are two reasons vaccines work better given prior to weaning. The first is vaccines need time to stimulate the calf's immune system before the calf has any protection from the vaccine.

The calf needs to recognize the "bug" in the vaccine as bad and mount an immune response to it, which takes one to two weeks. This response allows the calf's immune system to remember the vaccine "bug", so when the calf encounters the real disease the immune system is ready The second reason is again related

to stress. Stress decreases the immune response. Therefore if calves are undergoing the stress of weaning while they are being vaccinated, their immune system does a worse job of remembering the "bug" we want to protect them against. Because of both these reasons, vaccinating the calf two weeks to a month before weaning will allow the vaccine to take full effect, leading to fewer sick calves after

In the same vein of thought, castrating and dehorning prior to weaning is advantageous. Both these procedures

add stress to the calf, so coupling this stress with the stress of weaning makes the calf more susceptible to disease. And conversely, separating these events gives the calf time to recover from castration before it faces the stress of weaning.

With all this talk about the stress of weaning, you might wonder why it would be worth taking the risk of owning the calves after weaning and not just selling them right off the cow, with their testicles, horns and no shots. Aside from the price dock you would receive at the sale barn, the 45 to 90 days after weaning are a fantastic opportunity to put extra pounds on the calves. Consider this—if you feed a calf to grow at two pounds per day for two months, you will have an extra 120 pounds of calf to sell. At today's cattle prices and today's feed prices, this is a very attractive proposi-

Although it may seem to be more convenient to vaccinate, dehorn and castrate at the time of weaning or not at all; that convenience comes at a cost. Not preconditioning increases the number of sick calves you have to spend time and money treating. Dehorning and castrating at weaning adds stress, creating more sick calves and preventing calves from growing. By preconditioning your calves, not only will they stay healthier and be more profitable, you will have a sharper looking group of calves to take to sale. And that honor is well worth the

Jake Geis, DVM, works out of the Tyndall Veterinary Clinic.

### **Cribbing**

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survey reported that cribbing horses had less anxious temperaments and were equally trainable when compared to non-cribbing horses.

"Another study found that cribbers tend to engage in oral activity when stressed, whereas non-cribbing horses toss their heads or paw when similarly stressed," Mastellar

When the cribbing horses were prevented from cribbing, some engaged in other oral activity.

"Cribbing may be a way that these horses cope with stress. Cribbing horses actually experience a slowing of heart rate during cribbing. Levels of plasma cortisol, a hormone associated with stress, in cribbers was found to be greater than that in non-

cribbers," she said. Mastellar added that researchers have conflicting opinions as to whether or not preventing a horse from crib-

bing is stressful for the horse. These differences should be considered when developthese horses," she said.

#### MANAGING A HORSE THAT CRIBS

The decision on whether or not to inhibit a horse's ability to crib should weigh the possibility of increasing stress on the horse against the risk of colic and other health issues associated with cribbing, Mastellar explained. Many managers also consider the destructive nature of cribbing behavior on barns and fences.

"Cribbers are motivated to crib and will work as hard for an opportunity to crib as they will for a chance to eat sweet feed," she said. "This motivation makes keeping an established cribber from engaging in cribbing behavior particularly difficult.

Many horsemen have tried to prevent horses from cribbing and their creativity can be seen through the sheer variety of methods for preventing a horse from cribbing.

The characteristic cribbing collar is the most commonly used method. These collars generally consist of two straps. One goes in front of the ears and the other behind. The straps hold in place a piece of galvanized steel under the horse's neck. "With the piece of steel in position, it is uncomfortable to flex the neck and perform cribbing behavior," Mastellar said.

She added that care must be taken that the collar is properly fitted to reduce tissue damage. "Cribbing collars are effec-

tive in preventing cribbing in

#### HARD HABIT TO BREAK

most horses, but they are only

effective when the horse is

wearing the collar," she said.

Horses that are allowed to crib, after being prevented from cribbing for some time, will have an increase in cribbing rate compared to before they were prevented from cribbing.

"It's as if to make up for lost time," Mastellar said.

#### **FEEDING MANAGEMENT**

Feeding management is another way that the horse's manager can affect how often a horse cribs.

"Cribbing rates increase after a concentrate meal, so if possible, formulating diets that contain more forage and less grain can help to mitigate cribbing behavior," Mastellar

Although feeding horses lit tle and often is recommended, Mastellar said cribbing horses fed many small concentrate meals may actually crib more because cribbing is associated with feeding time.

They actually fixate on the feeders and spend more of their time cribbing," she said. The energy and time spent

cribbing may make them

horses. Excessive tooth wear may also affect the ability of older cribbers to utilize their

harder keepers than other

Cribbers should have access to turnout and the opportunity to socialize with other horses. Although, cribbing behavior is not eliminated by providing turnout and companion horses, Mastellar said research shows that cribbing rates are reduced.

"Some cribbers are isolated for fear of the behavior spreading to other horses. It is unlikely for one horse to learn cribbing from another and the cribber's welfare will benefit from having other horses with which to socialize," she said.

If there is a need to keep a cribber stabled, providing a toy has been shown to reduce cribbing rates slightly. Turnout, socialization, and prevention of boredom are all forms of stress reduction for these horses. Other methods of prevent-

ing cribbing that are effective, but require intensive management include: elimination of cribbing surfaces, taste deterrents, electrification of cribbing surfaces, pharmaceuticals, oral antacids for foals, surgery, and increasing the

#### TAKE HOME MESSAGE Cribbing in horses is likely

a permanent behavior pattern once established. "The exact cause of cribbing in horses remains to be determined, but may be related to management, nutrition, and genetics. Therefore, consider not breeding to a horse that cribs, providing plenty of forage at weaning, and allow horses plenty of turnout and interaction with other horses to reduce the chances of a horse becoming a cribber," she said. Cribbers are more prone to

certain health issues, including colic. They may have differences in their learning and how they cope with stressful situations when compared to non-cribbing horses. Due to this, Mastellar said a horse owner's decision to inhibit a horse from cribbing should weigh the possibility of increasing stress against the possible health risks of "Besides inhibiting crib-

bing behavior, a manager can adjust feeding and turnout conditions to reduce cribbing rates," she said.

Learn how your business can boost productivity and reduce waste in this one-day, hands-on training!

# WORKSHOP

Wednesday, Aug. 19, 2015 8:00 a.m. to 4:30 p.m. at RTEC, 1200 W. 21st St., Yankton, SD

During this workshop, you will learn basic Lean Manufacturing terms, principles and tools through a combination of classroom instruction and four live simulations. By learning how to implement Lean concepts, you can make changes in your business (manufacturing or other) that will eliminate waste, maximize productivity and increase profits. Topics to be addressed include:

- Plant Layout
- 5S-Workplace Organization
- Standard Work Single Minute Exchange of Dies
- Batch Size Reduction
- · Quality at the Source Pull System
- Kanban
- Cellular Manufacturing Visual Management
- Takt Time
- Teams
- Kaizen

#### **Cost is \$200 + tax. Lunch** is included.

Please register by contacting RTEC at (605) 668-5700. Call today! Workshop is limited to 20 participants.





This workshop is offered through a special partnership between South Dakota Manufacturing & Technology Solutions (SDMTS) and the Regional Technical Education Center, Inc. (RTEC).

#### **Deadline Near For Recognition Program** PIERRE — The deadline is for a minimum of 100 years. Documentation of the original Quasquicentennial Farms and Ranches, those that have

quickly approaching to apply for the South Dakota Farm & Ranch Recognition Program. The South Dakota Farm & Ranch Recognition Program recognizes families who have run operations for 100 or 125 consecutive years. The application deadline is Thursday, Aug. 13, 2015.

acres of original farmland

To receive recognition as a South Dakota Čentury Farm or Ranch, a family must have retained continuous ownership of at least 80

been continually owned for 125 years or more, will also be recognized. Families will be honored at a ceremony on Thursday, Sept. 3, at the

South Dakota State Fair. Application forms are available online at www. sdfbf.org by clicking "All About Ag" and then "Century-Quasiquicentennial Farm & Ranch Program." Applicants thus far. can also call South Dakota Farm Bureau at 605-353-8052.

date of purchase for the land must be included with the application. The South Dakota Farm &

Ranch Recognition program was initiated in 1984 by the SDFB. Since then, the SDDA has joined in recognizing these South Dakota families. The program has recognized 2,770 century farms and ranches and 250 quasquicentennial farms and ranches