



JULY 2009

Dear Farmers and Ranchers,

**Wibaux County
Extension Office**

This newsletter focuses primarily on the EARC Field Day, Weed and Crops Tours. We hope you will mark your calendar – the date of July 13th for the Tri-County Weed Tour, and July 23rd for the Wibaux and Golden Valley County Crops Tour. We hope you will be able to attend.

As in the past, if you have weeds that you would like the county to spray and J.D. is out in the field, you may contact the Wibaux County Extension Office and we will get the information to him.

If we can be of help in any way, please let us know.

Sincerely,

David L. Bertelsen
County Extension Agent

DLB:pag

*Montana State University,
U.S. Department of
Agriculture and Montana
Counties Cooperating.
MSU Extension is an equal
opportunity/affirmative
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HAVE A SAFE AND HAPPY 4TH OF JULY

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Beef Talk: I'm Getting Too Old for the Chicken Dance *By Kris Ringwall, NDSU Extension Beef Specialist*



North Dakota Beef Cattle Improvement Association members have recorded an average daily gain of 2.52 pounds for calves on summer pasture. This means the 70,000 calves measured through the NDBCIA's CHAPS program cumulatively gain on a daily basis 176,400 pounds, 1,764 hundredweight or roughly 88 tons.

These statistics are especially pertinent following the tough winter and spring we experienced. These challenging weather conditions translate into more work and, for many producers, higher than normal calf death loss.

The natural reaction is to pull back and delay bull turnout so calving will take place later. A look at data from the 2003 through 2007 CHAPS program shows the average bull turnout date was June 9, with a predicted beginning calving date of March 19 (based on a 283-day gestation). The actual average calving date for those herds was April 3.

Producers surveyed this spring anticipate delaying bull turnout this summer by nine days. Is that a good thing to do?

We already know the average daily gain for summer calves is 2.52 pounds. The net result is that for every day that bull turnout is delayed, producers will have one less day of calf growth.

The delay means 176,400 pounds of beef for these 70,000 calves will not be realized. CHAPS benchmarks show a producer with 100 cows usually weans 90 calves (6 percent open cows, 3 percent calf death loss and 1 percent abortions and other losses).

If the bulls are turned out nine days later, a producer gives up an estimated 2,041 pounds of calf in the fall (nine days times 90 calves times 2.52 pounds). Imagine a producer with a 9 percent calf death loss because of tough weather. A producer needs to sit down and think through the numbers.

The additional 6 percent loss, or approximately six calves for this 100-cow herd, is actually six times the average weaning weight for each calf. The benchmark value for the 70,000 calves in the CHAPS program is 560 pounds, which means producers would lose 3,360 pounds because of the six additional calves that were lost.

Producers need to evaluate if the risk of losing 3,360 pounds of calf reoccurring is greater than the planned management change of moving the bull turnout date back nine days. If we have a similar winter and spring next year, backing up the calving date to avoid difficult weather would be good.

However, if these events only happen once every 10 years, backing up the calving date would amount to an estimated 20,410 pounds of lost calf gain (10 years times 2,041 pounds), while the one bad year resulted in 3,360 pounds of lost calf gain for that particular year. In that case, the answer would appear to be to leave the calving date as is.

No simple answer exists. One could back up the calving date nine days and wean nine days later and actually wean the same amount of calf. This sounds good, but an early snowstorm on a bunch of bawling, freshly weaned calves is no good, either.

Page Two

"Chicken Dance" Continued...

The bottom line is that ranching and farming is a dance with Mother Nature. We asked for the dance.

I would like to think the dance is a nice, refined waltz, but a fast two-step or maybe a wild polka is to be expected. Unfortunately, the "chicken dance" is thrown in every so often. Hold on to your hats because no one really knows just when and where the dance will end.

At the Dickinson Research Extension Center, we are settling on bulls going out the week of June 15 for the mature cows. The bulls will go out to the breeding heifers the last days of May. That puts next year's mature cows on a schedule to start calving March 25, which is a few days later than we have been.

I guess I'm getting too



old for the "chicken dance."

Joint Crops Tour **Thursday, July 23rd**

The Annual Wibaux and Golden Valley County Crops Tour will be held on Thursday, July 23rd, beginning at 3:00 p.m. The tour will begin at the Golden Valley County Fairgrounds. Transportation will be provided. For those going from Wibaux, the bus will leave the USDA building at 2:30 p.m. After the tour, a supper will be served at the Golden Valley County Fairgrounds sponsored by the Beach Co-Op Grain Co. and Golva Co-Op Elevator.

Stops on the tour will include cover crop trials, alfalfa salt tolerance trials, salt tolerant grass trials, sawfly test plot, Eastern Ag Research Center Off-Station Spring Wheat & Durum Nursery, buckwheat, garbonzo beans, and more.

Sponsors on the tour include the Wibaux and Golden Valley County Extension Offices, the Beach Co-Op Grain Co., Golva Co-Op Elevator, and the Wibaux and Golden Valley Conservation Districts. Refreshments will be served throughout the afternoon.

If you have questions or would like additional information, please call the Wibaux or Golden Valley County Extension Offices at 796-2486 or 872-4332.

Cow Production Costs Continue to Escalate

By Greg Lardy, NDSU Extension Beef Cattle Specialist

The challenges for cow-calf producers seem to just keep coming. The extremely difficult winter has only added to the cost escalation that has occurred over the past 10 years or more. This escalation in costs has recently been magnified by the rapid escalation in feed and energy costs.

The data for Figures 1 and 2 is compiled by the North Dakota Farm Business Management program. Figure 1 details data on cow production costs in North Dakota. It indicates a steady increase in both feed costs and total costs in cow herds across the state. As you can see, from 2003 to 2008 feed cost per cow increased from \$234 to \$288 while total costs increased from \$361 to \$454 per cow.

There has been a steady escalation in feed costs over the last 5 years. These trends in increased total costs have been with us for some time, and are certainly not all related to increases in the cost of feed. Other costs such as labor, fuel, and miscellaneous inputs have also increased over this time period. In fact, fuel costs have increased by over twofold in this time period as well as shown in Figure 2.

What Figure 2 doesn't tell us is the effect on increased fuel cost on the calf revenue side. Someone has to pay for the fuel to get the feeder calves you produce to a feedlot. In the past this was a relatively small cost in the overall picture, but with higher fuel costs, feedlots will pay less for feeder calves due to increased transportation costs. The further you are from feedlot country, the larger the impact on your operation. Expect lower bids on feeder cattle in remote areas located considerable distances from major feeding areas.

The key to managing through these cost increases is the ability to measure your cost of production. There is no way to know which costs to cut if you aren't measuring all of the cost categories for your ranch. History tells us that this business follows logical economic principles over the long term. That means that high cost producers exit the business, while well managed operations with lower production costs find creative methods to make money, even under very trying economic conditions. I would encourage each of you to work at measuring your cow production costs and then to manage those costs effectively.

Expenses in North Dakota Cow Herds

On-Farm Study Measures Ammonia Volatilization Losses from Urea Fertilizer

Montana farmers frequently fertilize small grains by broadcast applying urea to the soil surface. This application strategy makes urea susceptible to nitrogen losses as a result of ammonia volatilization (lost to the air). It is not known how much nitrogen might be lost as a result of this practice.

Rick Engel, associate professor in the Department of Land Resources and Environmental Sciences at Montana State University, initiated a study last year to quantify the magnitude of these losses for applications made to no-till winter wheat.

Ammonia losses are measured using the integrated horizontal flux method. This method provides for continuous collection of ammonia emissions from soils with little disturbance to the field site. The system consists of a mast with shuttles, or passive samplers, placed at five heights above the soil surface. Each shuttle consists of a cone front, a cylinder made of PVC pipe with mounting pivots, and fins to keep the shuttle aligned into the wind. The inside of each shuttle contains a stainless steel spiral that is coated with oxalic acid. As ammonia escapes from the soil surface and into the air, it is moved by wind into the shuttle via the entrance hole. Once inside shuttle, the air is stripped of its ammonia by binding to the oxalic acid-treated spiral.

The trapped ammonia is later analyzed in the lab. Ammonia losses are followed over an 8-week gas sampling campaign following urea fertilizer applications.

This system was employed last year at two farms near Havre, Montana. Results to date indicate that ammonia volatilization losses are quite variable and dependent on the soil moisture and rainfall amounts following fertilization.

Conditions which contribute to high ammonia losses are wet or damp surface soil conditions sufficient to dissolve fertilizer prills, without any accompanying rain or snow to move the fertilizer into the soil. Conditions which minimize ammonia losses are significant rain ($\frac{1}{2}$ inch or greater) over a short period of time following urea applications. Although warm temperatures are known to promote ammonia losses, applying urea to frozen soils does not guarantee losses will be insignificant. Engel was surprised to find that some of the greatest ammonia losses occurred when urea was applied to moist surface soils near 32 degrees Fahrenheit. These conditions existed this spring at the two farm sites where tests were run.

Ammonia losses equivalent to 36 and 40 percent of the applied nitrogen rate occurred over an eight-week period following applications on March 25 and 26. In contrast, ammonia equivalent to three percent of the applied nitrogen rate occurred at one of the field sites the previous fall. These small losses were a result of a significant three-day rainfall event (one inch) that was sufficient to dissolve the urea granules and move the urea into the soil where nitrogen was no longer susceptible to volatilization losses.

Engel hopes to attain further funding so that yield and protein can be measured in plot studies under different urea management strategies to validate the effects of these measured losses. Commercial products that stabilize urea, such as Agrotain, are also being tested in his field trials.

Results to date have shown the Agrotain provides two weeks of protection against ammonia losses and reduces volatilization losses by about 60 percent over untreated urea.

Results from this project and an explanation of the methodology are posted at <http://landresources.montana.edu/ureavolatilization/> and will be discussed at the MSU-Northern Agricultural Research Center Field Day on June 30.

This project is entering its second year and is being supported by the Montana Fertilizer Advisory Committee, Montana Wheat and Barley Committee, Natural Resources Conservation Service and International Plant Nutrition Institute.

Tri-County Leafy Spurge Tour

Monday, July 13th

The Fallon/Carter, Prairie and Wibaux County Extension Offices and Weed Districts are again hosting a Tri-County Weed Tour on Monday, July 13th, beginning at 2:00 p.m.

The tour will begin at the Tri-County sign at the intersection of Cabin Creek Road and Fallon County Road #628. Tour highlights will include New Herbicide Options for Leafy Spurge Management, Leafy Spurge and Ruminants, and Biological Control of Leafy Spurge. Private and commercial pesticide applicators will receive recertification credits for attending.

New Herbicide Options for Leafy Spurge Management: Steve Saunders, Dow AgroSciences, will discuss some new Tordon herbicide combinations that can be used to treat leafy spurge. Saunders will talk about different kinds of herbicides, rates, and proper application.

Leafy Spurge and Ruminants: Dr. Richard Waterman, Fort Keogh Research Animal Scientist, will discuss his research that is investigating the relationships between grazing livestock and noxious weeds. He is examining the rumen effects when leafy spurge is consumed and tracking rumen microbial populations.

Biological Control of Leafy Spurge: Flea beetles have been used as a tool to fight leafy spurge in the Tri-County Area since 1990. John Gaskin, Research Leader for the Biological Control Unit at the Ag Research Service in Sidney, will discuss site selection and suitability of biological control species for control of leafy spurge and other noxious weeds, including Canada Thistle and Saltcedar.

Leafy Spurge Flea Beetles *Apthona Lacertosa* will be released during the tour. Following the tour, supper will be served by the Cabin Creek Homemakers Club, sponsored in part by Dow AgroSciences.

MSU Eastern Agricultural Research Center Field Day

Thursday, July 16th

The annual field day at the Eastern Agricultural Research Center in Sidney will be held Thursday, July 16th. Research staff, Extension specialists, cooperating farmers and industry representatives from Montana State University, North Dakota State University and the U.S. Department of Agriculture-Agricultural Research Service will lead discussions on various topics, including:

- θ Irrigated/dryland malt and ethanol barley improvement/management
- θ Sugarbeet / safflower / annual legume disease control
- θ Irrigated/dryland durum improvement and management
- θ Value-added crop research, production and marketing
- θ Oilseeds and biomass for bio-energy and value-added products
- θ Irrigation research
- θ Dryland/irrigated small grain varieties
- θ Sugarbeet varieties and management
- θ MonDak Region Economic Development

Coffee starts at 8:30 a.m., and the field tour begins at 9 a.m. Lunch, sponsored by local agribusiness, will be served at noon.

Private and commercial applicator credits will be awarded to field day attendees. The general public and all ag producers are cordially invited to attend and participate in the EARC Field Day activities one mile north of Sidney on Highway 200.