

AGRICULTURE & NATURAL RESOURCES

Gallatin County Farm News'n Such

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Timely Tips

Dr. Roy Burris, University of Kentucky Beef Specialist

Spring Calving Cow Herd

- Continue to watch cows and calves closely. Identify calves while they are young and easy to handle. Commercial male calves should be castrated and implanted. Registered calves should be weighed at birth.
- Continue to feed cows that have calved on an adequate nutritional plan to rebreed. Don't let them lose body condition.
- *Prevent grass tetany!* Continue providing magnesium in the mineral mix until daytime temperatures are consistently above 60°F. Mineral supplement should be available at all times and contain a minimum of about 14 percent magnesium. Make sure that your mineral mix also contains adequate selenium, copper and zinc or you can ask your feed dealer for the UK Beef IRM High Magnesium Mineral.
- Don't "rush to grass" although it will be really tempting this year. Be sure that grass has accumulated enough growth to support the cow's nutritional needs before depending solely upon it. Cows may walk the pastures looking for green grass instead of eating dry feed. This lush, watery grass is not adequate to support them. Keep them consuming dry feed until sufficient grass is available to sustain body condition. We've spent too much money keeping them in good condition to lose it now!

- Purchase replacement bulls at least 30 days prior to the start of the breeding season. Have herd bulls evaluated for breeding soundness (10-20% of bulls are questionable or unsatisfactory breeders). Get all bulls in proper condition for breeding.



- Make final selection of heifer replacements. Be sure that yearling heifers have attained their "target" weight (2/3 of mature weight) before breeding. Obtain measurements for pelvic area in heifers and cull those which have small pelvic areas. Consider vaccinating with a modified-live BVD vaccine.
- If you are going to use artificial insemination and/or estrus synchronization, make plans now and order needed supplies and semen.
- Prebreeding or "turn-out" working is usually scheduled for late April or May - between the end of calving season and before the start of the breeding season (while cows are open). Consult your veterinarian about vaccines and health products your herd needs. Make

arrangements now for products needed and have handling facilities in good working order. Dehorn commercial calves before going to pasture.

- Start breeding heifers 1 heat cycle before cows so that they have extra time to recover from calving next year.

Fall Calving Cow Herd

- You may let calves creep-graze wheat or rye, if it is available. Calves will benefit from extra feed until spring grass appears.
- Pregnancy check cows now and cull open ones at weaning or move to the spring-calving herd.
- Reimplant feeders.
- Consult with your veterinarian about a preweaning working of the herd.
- Plan marketing strategy for feeder calves.

Stocker

- "Condition" purchased calves prior to grazing. They should be processed and fed a conditioning diet prior to being placed on pasture. You can also use this time to introduce them to electric fences which are used in rotational grazing.
- Don't go to pastures too soon, give plants some growing time. Then stock at two to three times the July rate and rotate rapidly.
- Provide a good mineral supplement which contains a rumen modifier (Rumensin, Bovatec, etc.) along with adequate levels of copper and selenium. The UK Beef IRM Stocker mineral with Monensin will work well in this case.

General

- Prepare for the grazing season. Check fences and make necessary repairs.
- Get everything ready to make high quality hay in May! Have equipment serviced and spare parts on hand. Order baler twine now. Be prepared to harvest an adequate supply of

hay when you have the opportunity. Re-supply the extra hay that you fed out of storage.

- Plan now for fly control ... decide what fly control program that you will use but don't put insecticide eartags on cattle until fly population appears.
- Make plans to improve hay feeding areas to avoid muddy conditions like we have faced this winter. Consider geotextile fabric with gravel.



“We Have Met the Enemy...”

*Dr. Roy Burris, Beef Extension Specialist,
University of Kentucky*

The recent beef recall, which was the largest in U.S. history, has made the entire beef/dairy industry take an introspective look at itself. As the Scottish bard, Robert Burns said, “O wad some power the giftie gie us, to see oursels as ithers see us!” We have to be concerned with public perception because it affects demand and demand is a major determinant of price. We simply can't keep handing ammunition to the very people who want to put us out of business. Maybe the cartoon character, Pogo, said it best “We have met the enemy and he is us.”

What might happen if we allow people outside of agriculture to make decisions for us? You can ponder the effects of the U.S. ban on horse slaughter. Has it made life better for horses that are now becoming old, debilitated and starving? Is it more ethical to ban slaughter or to permit humane harvest of animals and their use for

food? Would it be more ethical to allow this meat to be consumed in third world countries if we don't want it? What will be banned next?

The videos from the Hallmark/Westland Meat Company in Chino, California gave the industry the proverbial "black-eye". This wasn't really about food safety. It was a public reaction to animal handling practices which are not defensible and are not characteristic of our industry.

So what went wrong with the slaughter/harvest of those cull cows in California which were non-ambulatory (downers)? First of all, we shouldn't overlook the use of untrained, perhaps uncaring, personnel. The "stars" of that video were not what we would have chosen to represent the industry. Yet represent us they did. The workers were not an asset to Hallmark/Westland Meat Co. either. Hallmark/Westland had 250 employees and sales which totaled \$100 million per year. As a result of the recall, it is not expected to reopen and will probably go out of business. The Humane Slaughter Act of 1958 was enacted to prevent situations like this by using the USDA-Food Safety and Inspection Service (FSIS). After the BSE occurrence in December 2003 (another "downer" cow), there was an edict which banned all downer cattle. This was eventually relaxed to allow cattle that were recently injured, perhaps in transit, to be labeled as suspect and re-inspected after harvest. Although well intended, considering the salvage value of cull cows, this left a loop-hole that you could drive a truck through. The result could be not paying enough attention to downers and relying on the post-harvest inspection to catch any food safety problem. This might be enough to safeguard the food supply but, if abused, leaves the industry vulnerable to public perception. The dragging of conscious animals is not defensible and should not be tolerated.

Now, what can we do about the problem? First, everyone must realize that cull dairy cows are beef, too. Temple Grandin (Animal Welfare Information Center Bulletin Vol. 9, no. 1-2)

stated that "about 5 percent of the dairies are responsible for 95%" of the occurrences of crippled downer cattle. No one denies the importance of salvage value of cattle but cull dairy and beef cows must be presented for harvest in acceptable physical condition. Market them sooner. For most of us, a short feeding/conditioning period prior to marketing is a viable economic practice which can improve the value of cull cows, especially at weaning time. Safe handling practices are also necessary during shipment.

What do I think will happen in the future? Probably more integration among all phases of the beef/meat industry. The cow-calf, backgrounding, finishing, packing, etc. segments are pretty independent of each other. In my opinion, we will see more alliances which will guarantee that best management practices have been used in animal production. In other words; wholesome, healthy, traceable beef which is produced in environmentally friendly systems and handled humanely in every phase of production. We may have a two-tiered system. On one level we might have premium beef, on the other – commodity meat. We must have a marketing system that protects us ... from us.

Begin Planning The Breeding Season *Dr. Les Anderson, Beef Extension Specialist, University of Kentucky*

Now is the ideal time to prepare for the breeding season. Mark on your IRM calendar the dates you will turn in and remove your bulls from the herd. Producers should consider synchronizing estrus. If natural service is to be used, producers can synchronize estrus either by feeding MGA for 7 days prior to the breeding season or by inserting a CIDR device for 7 days before the bulls are turned out. Below is a little article on estrus synchronization with natural service.

Estrus synchronization can greatly improve reproductive efficiency and profitability in cow-calf operations. Estrus synchronization increases profitability by improving pregnancy rate,

increasing weaning weights, enhancing calf uniformity, and improving cow productivity. Cow productivity is increased because more early-born heifers are available for use as replacements. Research has demonstrated that early-born heifers become more productive cows because they are more likely to conceive early in their first and subsequent breeding seasons and therefore wean older, heavier calves. Estrus synchronization has been used mainly to enhance the use of artificial insemination. Data from the University of Kentucky illustrates that estrus can be synchronized before a natural service season. In this trial, mature cows and 2-year-old cows approximately 65 days after calving were assigned to one of three treatments. The cows in the first group were not treated (CONT) and were exposed to natural service for 60 days. The cows in the second group (MGA) were fed the orally active progestin melengestrol acetate (MGA, .5 mg/hd/d) for 7 days and were exposed to natural service for 60 days beginning the day after MGA feeding ended. Cows in the third group (CIDR) had a EAZI-BREED CIDR device inserted for 7 days before being exposed to a 60-day natural service season. All bulls used in this experiment were mature and were subjected to breeding soundness exams approximately 30 days before the breeding season. Bull-to-cow ratios (BCR) ranged from 1:23 up to 1:42. Date of conception was determined using rectal palpation approximately 30 days after the end of the breeding season. The results of this experiment are illustrated in Table 1. More cows conceived and conceived earlier in the treated than in control groups. Treatments did not differ because of BCR.

Treatment	Number of Cows	Pregnancy Rate (%)	Pregnant in the First 30 Days (%)
CONT	1,040	83	46
MGA	614	93	78
CIDR	421	91	80

Table 1. Effects of estrus synchronization prior to natural service on reproductive response in postpartum beef cows.

Synchronization prior to exposure to natural service markedly enhanced the rebreeding performance in this experiment. The use of estrus synchronization prior to natural service certainly improved pregnancy rates, should improve weaning weights (because the calves will be older), and should improve uniformity of the calf crop. Rough estimates indicate that based on the predicted reproductive response, cows in the treated groups returned approximately \$121 more profit than cows in the control group. Therefore, inclusion of estrus synchronization should be recommended

If AI is to be used, contact your technician to set up the dates and order semen and other supplies. Contact your local veterinarian to set up a date for a breeding soundness exam for your herd sires. Remember, every bull needs to be subjected to a breeding soundness exam about 30 days before the breeding season. One infertile cow means one fewer calf at weaning while one infertile bull means zero calves at weaning.

Analyzing the Cost of a Bull

Scott P. Greiner, Extension Beef Specialist, VA Tech and Matthew Miller, Extension Farm Business Management Agent, VA Tech

With the steady increase in input costs for cow-calf operations, beef producers will look to save money and cut costs in multiple fashions. One area often targeted for cost-cutting measures is money spent on bulls. Often producers focus on the initial cost of a sire, and realize "sticker shock" when purchase prices move upward.

Considering that the herd sire has significant impact on numerous of traits with economic importance (coat color, calf vigor, weaning weight, carcass grade), an individual sire has a pronounced impact on profitability. Bull purchase price needs to be put in perspective by evaluating price relative to years of useful service the cost per cow exposed.

Table 1 compares the cost per cow or a bull with a \$2500 purchase price and one with a \$1500 purchase price. Assumptions are as follows: 4 years of service, salvage weight of 2000 lbs,

Table 1. Impact of Bull Purchase Price on Cow Breeding Cost

		Number of Cows					
\$2500 Bull		15	25	30	40	60	80
Per Cow Exposed Expense		\$57.65	\$34.59	\$28.83	\$21.62	\$14.41	\$10.81
		Number of Cows					
\$1500 Bull		15	25	30	40	60	80
Per Cow Exposed Expense		\$39.82	\$23.89	\$19.91	\$14.93	\$9.95	\$7.47

salvage price of \$50 cwt. Cost per cow exposed is shown for each purchase price given the number of cows exposed. This table considers all annual costs for the bull, and includes purchase price, annual carrying cost, and health/veterinary expenses. It is important to note that initial purchase price typically only represents 20-40% of annual bull costs, and this percentage decreases the longer the bull is in use. The majority of bull costs are incurred in feed costs. No consideration is given to genetic merit differences between the bulls. While it is unrealistic to assume a bull will breed 60 to 80 cows in a given breeding season, many producers utilize two calving seasons and therefore the higher number of cows exposed apply to breeders calving in both the fall and spring and utilizing the same bull for two separate calving seasons.

Assuming an average herd size of approximately 30 cows we see that there is a \$9 per cow exposed cost difference between the bulls. Does this mean that the cheaper bull saves you approximately \$270 a year (\$9 x 30 cows per year)? If the bulls are identical in genetic merit this may be the case, however the difference in purchase price is likely attributable to superior genetics offered by the higher-priced bull. As an example, if we assume a weaning weight advantage of 15 lbs on 25 calves for the \$2500 bull, and an average value of \$0.80 for each additional pound of weight, this equates to a \$12 per head advantage. This \$12 per head advantage more than offsets the difference in breeding costs, and quickly puts into perspective the minor

difference in the real cost between the bulls. In fact, the less expensive bull actually costs more money, all things considered in this scenario.

Quality of the herd sire almost always is undervalued. The differences described in the table above are very small considering the many opportunities to derive return on investment for the superior bull. If the \$2500 bull is superior in calving ease, which results in one more live calf to market, the difference in purchase price has paid for itself.

Although more difficult to measure, daughters of a superior sire have favorable impacts on future calf crops. Thus the compounded effects a sire has on his calf crops and those of his daughters warrant consideration.

In most situations, sound investments in superior bulls 'don't cost, it pays.' As we embark on what many consider a new era in the cattle business, which will partly be defined by producers' ability to control costs, a close examination of opportunities to do so is warranted. Costs associated with genetics is likely not an area to cut corners. In fact, it is likely that the market differentiation between the "good ones" and "average ones" will continue to grow, and the ability to produce the "good ones" is directly related to genetics and management.

BALING AND FEEDING CORNSTALKS A DOUBLE EDGED SWORD

With last year's inclement weather, many livestock producers across the United States were faced with a shortage of forages. Some decided to bale or purchase bales of corn stover to extend their feed supply through the winter.

When corn stover was removed from the fields, potassium and phosphorus also were removed. With the cost of fertilizer on the rise, replacing those nutrients could be an additional expense for some farmers this spring, if they did not replace them last fall.

If a farmer pulled off corn stover, and this is a practice they don't normally do, they need to anticipate applying more potassium and phosphorus. One ton of corn stover will remove about \$22 of potassium and phosphorus. We expect most baling equipment to have removed about 40 percent of the stover in the field. So, if a corn crop yielded about 150 bushels per acre in grain, we would expect about 1.68 tons of corn stover removed per acre, or about \$37 in phosphorus and potassium.



Before applying any nutrients, producers should have their soil tested for nutrient deficiencies. Producers who have had their soil tested in the past couple years need to account for and replace nutrients removed by the stover. Most of the time when we give our fertilizer recommendations, we are assuming the farmer has left the residue on the soil.

While last winter may have been some producers' first experience with feeding corn stover to cattle, it is not an uncommon practice for cattle to annually graze crop residue. There are many nutritious parts to corn stover including the ears, dropped grains, leaves, shuck and the top 25 to 30 percent of the stalk. The bottom 75 percent of the stalk is not easily digested, said John Johns, UK extension professor for beef nutrition and management. Feeding livestock baled cornstalks makes it harder for them to get the nutrition they need, because most of the bales

are comprised of the 75 percent of the stalk that is not digestible.

"If you have to feed your cattle baled cornstalks, it is better to unroll it, and let the cow get what she wants," Johns said. Instead of baling cornstalks, Johns recommends that producers allow cattle to selectively graze crop residue on the field.

He said cattle will consume a greater amount of dry matter when grazing cornstalks compared to when the stalks are baled and fed to the cows. An additional advantage is much of the residue material is not removed from the soil surface and much of the potassium and phosphorus the cow consumes in stalk residue will return to the soil in the manure she leaves in the field while grazing.

UK COOPERATIVE EXTENSION SERVICE
UNIVERSITY OF KENTUCKY — COLLEGE OF AGRICULTURE

Beef Quality Assurance

(BQA) Meetings

**Now REQUIRED in order to
receive any cattle-related
Phase I Cost Share Money**

Meeting Dates (you need only attend one meeting)

April 29, 7:00 PM

May 12, 7:00 PM

All meetings will take place at the
Gallatin County Extension Office

**Please bring a check in the
amount of \$5 made out to the
Kentucky Beef Network.
NO cash can be accepted.**

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