



# Beef Tips

January 2009

Department of Animal Sciences & Industry

[www.asi.ksu.edu/beeftips](http://www.asi.ksu.edu/beeftips)

## Upcoming Events

### Calving Management Schools

Jan. 5 - 8  
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### KOMA Beef Conference

Jan. 8, 2009  
Oswego, KS  
620-431-1530

### Four-State Beef Conference

Jan. 14, 2009  
Washington, KS  
785-325-2121

### Kansas Hay and Forage Conference

Jan. 14, 2009  
Manhattan, KS  
620-431-1530

### KSU Cattlemen's Day

March 6, 2009  
[www.KSUBeef.com](http://www.KSUBeef.com)

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## Evaluate management strategies for cost effectiveness

*K.C. Olson, cow-calf nutrition and management*

There is a simple two-part formula for success in the cow-calf business: 1) produce cattle that will succeed reproductively, grow efficiently, and yield a valuable carcass and 2) produce those cattle inexpensively. The formula may be simple but putting it into practice is not.

A beef herd that consistently performs well in all economically relevant areas is the result of decades of work. Improvements in any performance trait come only after the trait is measured over time and steps are taken to move the herd average for that trait to a more economically attractive level. One of the most effective ways of improving a herd average for any trait is to identify and cull animals that are consistently poor performers.

The second part of the formula for success is arguably the hardest to accomplish. Cow-calf production is typically a capital-intensive, low-margin business. Moreover, it is a tradition-bound business in which habit and experience, and not necessarily least-cost, determine management practice. One way to produce cattle less expensively is to audit the performance of individual management practices and cull those that are least cost-effective in the same way that producers cull under-performing animals.

The management issues discussed below are those identified in 4 separate audits (USDA-APHIS, Iowa State University, University of Missouri, and Texas A&M) as being most critical to the financial success of cow-calf enterprises.

- **Develop Business Sense** – Producers must commit themselves to making their operations financially successful. They must

measure and monitor progress toward production goals and financial goals. Their production and marketing strategies will not remain static but must continually evolve with the marketplace.

- **Monitor and Control Feed Costs** – Feed costs explain over 50% of the variation in herd-to-herd profits according to an Iowa State University study. High-cost, low-return feeding management options at the cow-calf level include calving at seasonally inappropriate times, allowing calves to suckle dams too long, unnecessary grain processing, creep feeding, self feeding, and over-reliance on harvested forages. Consider abandoning these management options or replacing them with these higher-returning alternatives:

- 1) schedule your calving season so that calving and lactation coincides with peak forage quality,
- 2) wean calves before body condition of cows slips below a moderate level,
- 3) avoid feeding harvested forages during winter,
- 4) graze cool-season forages or graze dormant warm-season forages and supplement with ruminally-degradable protein during winter; and
- 5) offer supplements on an alternate-day basis.

- **Minimize Machinery Investment** – Minimize investment in high-cost assets that depreciate rapidly. Consider leasing needed equipment (e.g., tractors) or hiring machine work done on a custom basis (e.g., haying, silage making, earth work, etc.).

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*“Unfortunately, adding value is not synonymous with value capture.”*

- **Specialize Production** – Most beef herds in the United States (> 90%) are composed of fewer than 100 cows. Managers of small beef herds typically find it very challenging to raise both quality replacement heifers and quality terminal-type feeder cattle. The reason for this challenge is that herd improvement comes very slowly when selecting for both maternal and terminal characteristics within the same small herd. Managers of large beef herds (> 400 cows) minimize this problem by dividing their herds into maternal and terminal breeding programs. Managers of small beef herds can take a similar tack by specializing in either terminal- or maternal-type calf production. In the former case, replacement heifers are purchased and the majority of revenue is generated through the sale of calves that excel in terminal traits like growth and carcass merit. In the latter case, the majority of revenue comes from the sale of replacement heifers.
- **Control the Breeding Season** – Confining the breeding season to 45 or 60 days greatly improves calf crop uniformity and marketing opportunities.
- **Avoid Industry Fads** – There is seldom a shortage of novel nutritional supplements, management techniques, or animal health products on the market. Invest only in those that have been scientifically evaluated and found to have a reasonable likelihood of enhancing profitability.
- **Avoid Tax Shelter Investments** – All investments should be made with the expectation of an increase in after-tax equity.
- **Be Willing to Accept Additional Risk** – It is relatively easy to add value to beef calves through health programs, improved genetics, and special nutrition. Unfortunately, adding value is not synonymous with value capture. Most of the value added by the cow-calf producer through management and breeding is harvested after weaning. It is nearly impossible to significantly improve value capture without retaining ownership for some length of time past weaning. Backgrounding, retaining ownership through finishing, and marketing alliance membership each offers a means to improve value capture; however, all come with increased investment risk.
- **Consider Alternative Income Streams** – Even well managed cow-calf herds offer only modest returns on investment. Cow-calf operators should consider dual-purpose land management as a means to generate additional revenue. Things such as fee hunting and the carbon-credit market are two possible income streams that can complement a cow-calf operation. Imagination and entrepreneurial spirit are the only factors limiting other possibilities.

## Calving Management Schools Scheduled

With a goal of helping producers wean more and healthier calves, K-State Research and Extension will host a series of calving management schools across the state from January 5 to 8. Dr. Robert Mortimer, one of the country's most knowledgeable and experienced veterinary practitioners on this topic, will be the keynote speaker. For over 20 years Dr. Mortimer has assisted with calving out thousands of heifers each year training Colorado State University veterinary students.

Management of cows prior to and at calving can have a big impact on preventing calf sickness and improving growth rate. Dr. Dale Grotelueschen, DVM, Pfizer Animal Health will be discussing management choices to improve calf health at the meeting.

The dates, times, locations and contact telephone numbers for each school are:

- Jan. 5 – 1:30 p.m. – Rawlins County Fairgrounds – 785-626-3192;
- Jan. 6 – 10:00 a.m. – Q-Inn – Quinter – 785-928-4480;
- Jan. 6 - 5:30 p.m. – Pottorf Hall – Manhattan – 785-537-6350;
- Jan. 7 – 10:00 a.m. – Methodist Church – Eureka – 620-583-7455;
- Jan. 7 - 5:30 p.m. – Ellsworth Public Library – Ellsworth – 785-472-4442; and
- Jan. 8 – 10:30 a.m. – CAB Building – Sharon Springs – 785-852-4285.

Reservations are requested to allow organizers to prepare for materials and food to be offered at each school.

## Improper fetal extractor use can injure calf and/or cow

Larry C. Hollis, D.V.M., M.Ag. *extension beef veterinarian*

As most cows are now out on stalks or winter pasture and in the stage where they don't require much labor other than feeding supplement and/or hay, and making sure they have access to open water, now is the time to begin planning for the calving season. Check your inventory of calving-related equipment and supplies to ensure that you have the right items available and in good working order.

Obstetrical chains and handles should be clean and rust-free. A bucket or plastic tub and disinfectant should be available for soaking these items prior to or during use. Obstetrical lube and a cattle-friendly disinfectant such as chlorhexidine should be purchased. Obstetrical sleeves should be checked to see if they are clean and still pliable. And, if you have a fetal extractor (commonly called a calf jack), it should be checked to ensure that it is clean and in good working order.

There are several different fetal extractors available for purchase by cattle producers today. Each has different features and benefits, but all provide a method for helping get a calf out of a heifer or cow when there is incomplete relaxation of the pelvic ligaments or cervix, or a slight disproportion between calf size and maternal pelvic size.

Before using a fetal extractor, the producer should do a pelvic exam to make sure that there is not a major disproportion between the size of the calf and the size of the pelvis. In cases where the calf is obviously too large to be delivered vaginally, a Cesarean section is the procedure that is needed to save the lives of the dam and calf. Getting the dam to a veterinarian quickly will give the best opportunity of saving the lives of both.

If it is apparent that there is no major disproportion in size involved, then the producer may want to assist the delivery. Many calves can be pulled manually by hand; however, if the producer is unable to perform a manual extraction, a fetal extractor can be used to provide a little extra assistance. As a rule of thumb, no more pressure should be applied with a fetal extractor than could be supplied by two average-sized men pulling by hand (approximately 400 pounds of pressure).

Work done at the University of Nebraska Great Plains Veterinary Educational Center several years ago showed that with the average fetal extractor, a small person can easily exert up to 2000 pounds of pressure on a calf. Obviously, calves and cows were not created to withstand that much pressure! In addition to a broken leg on a calf and an occasional prolapsed uterus on a cow, other things can go wrong. Crushing of the chest cavity of the calf is one common result when there is a significant disproportion between the size of the calf and the size of the female's pelvis and too much pressure is exerted. It is really disheartening when you start with a nice, large, live calf and end up with a calf that gasps once or twice before dying after you get it out!

Obturator paralysis of the dam is another common result that occurs when the hips of the calf are too wide to pass easily through the pelvis of the dam. In this situation, the calf's hips press on the obturator nerves of the dam, and this pressure damages the nerves either temporarily or permanently. The fetal extractor operator may eventually get the calf out, and the calf may be alive, but the dam is not able to rise.

Occasionally the dam can be treated and regain her ability to rise, but in most cases the paralysis is permanent and she will eventually have to be destroyed. If she cannot rise, the producer will need to milk out her colostrum and get it into her calf, and either bottle or bucket feed the calf or graft it onto another cow that has lost her calf.

The bottom line: fetal extractors should be used judiciously or they can become a weapon rather than a calving management tool. Have a great calving season!

***“As a rule of thumb, no more pressure should be applied with a fetal extractor than could be supplied by 2 average-sized men pulling by hand.”***

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## Private treaty sales should include origin documentation

Mandatory country-of-origin labeling (COOL) became law September 30, 2008. The legislation is a retail labeling law that requires retailers of beef, pork, lamb, chicken and goat to indicate the country of origin on the product label. While the retailer bears the most obvious responsibility in providing information to consumers, ultimately that information has to begin with the producers and be transferred to others in the production chain.

An industry coalition developed several universal affidavits to simplify the movement of origin claims along the production chain. Among other sites, these documents are available on both Kansas Livestock Association and Kansas Cattlemen's Association web sites. Many producers have already been introduced to this type of documentation if they have sold cattle through a sale barn or to feedlots.

Producers that have signed documents at a sale barn or other location should read them and take them seriously. If information provided in sales contracts is false, the contract may be breached and liability incurred.

An important step for producers buying or selling breeding stock or any private treaty sale is to include origin information with sales transaction documents. The following statement signed and dated by the seller along with the buyer's name, identification of the specific animals involved in the sale and number of head should be included. "*I attest that all livestock referenced by this document and transferred are of \_\_\_\_\_ (country) origin.*"

The interim final rule for COOL states that all livestock present in the U.S. on or before July 15, 2008, that have remained here continuously are considered of U.S. origin. Therefore, producers should have an inventory record of all animals in their possession on July 15. This would eliminate the need to recreate the paper trail associated with these animals at a later date.

The USDA web site for COOL information is [www.ams.usda.gov/cool](http://www.ams.usda.gov/cool).

## Hay feeding method will affect stable fly numbers next spring

*Alberto B. Broce, emeritus professor, livestock entomologist*

It is the time of year to remind cattlemen that the high levels of stable flies that will attack pastured cattle next spring and early summer most likely come from winter round bale feeding sites. Over the last three decades we have seen a dramatic increase in the population levels of these bloodsucking flies. Whereas before they were a major pest of livestock in confined feeding operations (dairies and feedlots), they have now extended their host range to effectively attack pastured and range cattle.

When feeding on round bales, cattle waste up to 50 percent of the hay, which when mixed with cattle feces develops into an ideal habitat for the larvae of stable flies in the spring and early summer. The resulting populations of stable flies reach economically damaging levels during a period of about 8 weeks (spring - summer) causing a loss of 0.5 pounds per head per day; the lower fly densities before and after this period also detrimentally affect cattle performance. Recent estimates of the combined economic impact stable flies have upon dairy, and pastured and confined cattle production indicate it to be greater than \$2 billion per year in the USA.

Because there is no effective control method for stable flies attacking pastured and range cattle, cultural methods are recommended for reducing the availability of larval media by decreasing the

amount of wasted hay at the round bale feeding sites, as follows:

- a) frequently move the feeding tubs to prevent the accumulation of the hay-manure medium over one spot;
- b) use modified feeders, such as the cone feeders, demonstrated to reduce the amount of wasted hay;
- c) unroll the round bales on pastures, but not over the same site, and
- d) spread out the accumulated hay-manure medium to dry.

Although stable flies are good fliers, capable of dispersing up to 155 miles, the population levels pestering a given herd are correlated to the number of flies emerging from round bale feeding sites in the vicinity. Therefore, implementation of cultural control methods can be a waste if neighbors do nothing to prevent the development of large populations of stable flies in their premises. Working together to address the issue will be beneficial to all.

***“The resulting populations of stable flies reach economically damaging levels ...causing a loss of 0.5 pounds per head per day.”***