



# Checkpoint®

Management & Nutrition  
Tips For Beef Producers

## CALVING: KNOWING WHEN TO HELP AND WHEN TO LET NATURE RUN ITS COURSE

The vast majority of births occur normally and right on schedule, according to Kerry Rood, Extension Veterinarian at Utah State University.

"A lot of times the cow just has the calf, and you discover it after the fact," he said.

Sometimes, though, cows need help with calving. But, how do you know when they do—and when to intervene versus calling a veterinarian?

### OBSERVE PREGNANT COWS ON A REGULAR BASIS

Rood says the first thing all producers should do is keep an eye on pregnant cows. Ideally they should be observed once every three hours if they are experienced, have acceptable body condition scores (BCS) and are generally healthy.

First-time heifers and cows with low BCS (3 or less) or high BCS (8 or higher) are more likely to have calving problems, so they should be observed every hour, 24 hours a day.

That's a tall order, Rood, admits. But, he says, "We don't have to bring each cow in; we can check them out from the side of the corral or with binoculars from a pickup truck."

### MAKE SURE THE ENVIRONMENT IS CONDUCTIVE TO DELIVERY

The environment can often inhibit calving, Rood says. Producers can nip that problem in the bud by providing a natural, comfortable setting.

"In nature, cows like to go away from the herd to calve," Rood points out. "Some cows may be apprehensive about delivering in a corral. If you remove them from that and let them settle down, often they will progress into labor."

If that does not occur, intervention may be necessary.

### STAGE ONE INTERVENTION—THE STERILE EXAM

"In the first stage of labor, the cow is beginning to get restless and you may start to see the fetal membrane emerge," Rood said.

"Normally that stage lasts 2 to 6 hours. If it goes on longer, we need to intervene."

An exam is the first step. Rood emphasized that this must always be performed using gloves and sterile technique. An exam will help determine if the vaginal tract is intact and the cervix is dilated. It will also help identify problems such as obstructions or a twisted uterus.

If the cervix is not dilated, Rood encourages producers to call a veterinarian.

The examination will also reveal if the calf is alive and in the correct position in the birth canal. You'll know the calf is alive if you feel it move when you put a finger in its mouth or near its eye—again using clean, sterile gloves. If you don't feel movement, you should contact your veterinarian. A dead fetus is much more difficult to remove, Rood said, and it sometimes requires surgery.

During stage one of labor, the head and front feet should be in the birth canal, with bottom of hooves pointing to the ground when the cow is upright. If the bottom of the hooves are pointing toward the back of the cow, that is typically the back legs. If the calf is coming out backward, with legs not coming first or tucked up under the animal, labor cannot proceed due to the malposition.

Rood said some producers know how to reposition the fetus in these situations, but added they should call their veterinarians if progress is not seen after 30 minutes. Likewise, if a calf is upside down with legs extending different directions, a vet should be summoned. S/he can administer drugs to block pain and assist with delivery.

### STAGE TWO INTERVENTION

When the calf's feet and head start to appear, stage two begins.

"We like to see two front feet with hooves pointing down toward the ground," Rood said. "Shortly thereafter, we want to see the nose. Depending on the size of the calf, the nose should appear when the feet are out about 6-8 inches."

If the calf's feet and head have appeared, and the cow has been straining 1-2 hours with little progress, it's time to intervene, Rood ad-

*(Continued Inside)*



*Continued from Cover*

vised. Traction is one common intervention, but should be applied judiciously.

“The rule of thumb is that if you are applying gentle traction and the calf’s shoulders do not progress through the pelvic canal, you need to stop—and call a vet—before the calf gets locked,” he explained.

Rood said calves with unusually high birth weights are especially vulnerable to becoming locked in the birth canal if too much traction is applied.

Determining if a calf can be delivered vaginally or requires a C-section can be difficult, he added; so when in doubt, call your veterinarian.

### **A WORD TO THE WISE: SLOW DOWN AND BE GENTLE.**

One last piece of advice from Rood relates more to attitude than technique.

“Sometimes we are awfully rushed when we intervene, and we can be a little bit rough trying to get the calf out. You can do harm that prevents the cow from being productive, not to mention the pain and discomfort. I tell producers to think of the cow as a member of their family ... and remember, the cow only has one reproductive tract.”

It’s important to remember that after calving, the next step is to get the cow bred back. Proper assistance during calving will help to assure you have a healthy calf and the cow is safe, healthy, and ready to re-breed. Regardless of the stage in the reproductive cycle, the proper mineral balance is an important element in the total nutrition package. You can optimize overall herd health, breed back rates and profit potential with new Wind and Rain® Minerals from Purina. The specialized formula encourages intake consistency without overeating – all while standing up to wind loss and rain damage. Contact your Purina dealer today to develop a nutrition program specific to the needs of your herd.

## **WEED CONTROL PLANNING NOW CAN PREVENT A SUMMER OF DISCONTENT**

We’re still in the dead of winter, but Mississippi State University’s Rocky Lemus already is reminding cattlemen to protect their pasture grasslands from runaway broadleaf infestation this coming spring.

Lemus, who joined the university’s staff of extension forage specialists seven years ago, urges producers to avoid the understandable temptation caused by other pressing early spring tasks to eliminate pasture weed control monitoring chores or cut corners by relying upon “drive by” scouting. He said producers can’t gauge the severity of weed infestation without thoroughly walking pastures throughout the growing season.

“One producer told me that he thought his broadleaf population was under control when he checked the pasture’s edges,” Lemus remarked. “But he was wrong. He returned three or four days later to discover severe weed infestation.”

### **WEEDS STEAL NUTRIENTS**

If highly competitive broadleaf weeds seize control, nutrition-rich grasses are crowded out, robbing grazing cattle of inexpensive and nutritious forage essential to achieving optimum performance. As a rule of thumb, research data reveal up to a pound of forage is lost per pound of weeds.

That loss comes at the expense of the producer’s profit margin, Lemus observed. Poor scouting or failure to pay attention to weed control can become a very costly issue. Data show a 450 to 500 pound calf can achieve around 800 pounds feeding on good pasture forages.

In warmer Southern regions where winter grazing exists, scouting is a year-around job. Elsewhere, cattle producers should regularly walk their pastures starting in early spring and continue until the first hard frost. Scouting fosters early detection of correctable environmental conditions that favor troublesome weeds.

### **EARLY WARNING PROTECTION**

Early evidence of so-called “indicator” broadleaf plants can help identify looming weed control problems, much like coal miners once used canaries to guard against odorless and deadly gasses. Broom sedge plants, for example, provide an early warning of low pH conditions or fertility deficiencies that inhibit vigorous grass growth. Other correctable problems where weeds gain a critical toehold in early spring range from poor drainage to overgrazing.

Lemus, who earned his PhD from Virginia Tech, said pasture grasses require the right pH level. Therefore, he recommended that producers conduct soil testing in early spring and again in early fall. Furthermore, sample timing must be consistent to prevent skewing results due to different seasonal weather conditions. Lemus said producers can get by with soil testing once every two or three years in pastures, but hay fields should be tested annually due to higher nutrient removal.

If producers don’t control weeds in early spring, the undesirable plants will steal precious nutrients and moisture needed by pasture grasses and grazing cattle, leading to losing a season-long struggle. Lemus said 50-60 percent of summer’s pasture foliage is produced from May through July.

Either mowing or spraying herbicides provides another opportunity to halt encroachment of aggressive weeds this spring. If producers elect to spray broadleaf herbicides, Lemus stressed the need to be certain the chemical’s label permits forage application. If mowing is preferred, Lemus suggested that producers not clip shorter than four to six inches in height. Tall grasses can outshine competitive weeds by capturing sunlight while shading out normally shorter stature broadleaf weeds.

If time permits, Lemus said the seemingly endless winter months represent an excellent season to check and calibrate spray equipment, be certain you’re using the right nozzle pressure and map out your entire pasture weed control strategy.

“A producer can really benefit financially by having his equipment and plan in order now,” Lemus concluded, “and by getting off on the right foot in early spring.”



**PURINA**

# PROPERLY MANAGED FORAGE CAN FEED MORE THAN YOUR HERD

*No matter what area of the country you are in and what types of grass or hay you grow, getting the best yield from your forage is a critical element in your profit equation. Proper management can help you tilt that equation in your favor.*

The forage you utilize in your cattle operation depends on your climate and soil, to be sure. What grows well in Wisconsin is quite different than what thrives in dry Western states or warmer southern climates.

In general, though, cool season grasses are more palatable and have higher nutritional quality than warm season grasses, according to Clif Little, extension educator at Ohio State University. In the eastern United States, for instance, cool season grasses, such as perennial rye and orchard grass are high yielding and very palatable. Cattle prefer those varieties to tall fescue. And, Little stresses, palatability is important, because it affects rate of gain and cost per pound of gain.

However, less palatable varieties still have uses. Kentucky 31, for instance, retains its nutritional value into the winter, so it makes excellent forage for fall and winter grazing.

“Animals do like it during the winter,” Little said, “It remains greener and doesn’t break down as rapidly as other grasses.”

Another advantage of native warm season grasses, such as Switch Grass, Blue Stem, Indian Grass, and Eastern Gamma Grass is that they can grow in very warm, dry weather, without irrigation.

You can’t change the inherent characteristics of various grasses, but you can capitalize on their value through sound pasture management practices.

## TIMING IS EVERYTHING

One of the most important ways you can control the quality and usefulness of forages is by managing the maturity of the plant at harvest or ingestion.

“Maturity is the greatest factor influencing palatability and quality,” Little said. “When plants mature, they often develop more fiber, which makes them harder to digest. When that happens, total dry matter consumption can be limited.”

In addition, as grasses and legumes mature, the protein content decreases. The closer a plant gets to maturity, the lower the protein content will be.

So, it’s important to harvest quality forage at the correct stage to meet the animals’ needs. Because cool weather grasses grow rapidly, especially in the spring, it can be a challenge to keep up with them, Little said. But in general, when seedheads start to appear, it’s time to cut excess forage for hay, and let it regrow.

## GRAZING TECHNIQUES

Effective pasture rotation is another important way to enhance forage quality. When grasses are growing rapidly, rotate animals more quickly through fields or paddocks to keep pastures vegetative.

This same technique can be used to manage pasture residual. By knowing the optimum height for the grasses you have, and rotating grazing to maintain that height, you control pasture productivity.

## FERTILITY AND NUTRIENTS

Soil fertility is another factor that influences the nutritional quality of your forage. Soil analyses can be obtained through labs that do soil and forage testing. Little said most producers don’t take advantage of these analyses, which are quite inexpensive. He offered that broom sedge growing in your pastures can be an indicator of poor fertility.

Mineral deficiencies are often related to geography, as well as soil. While phosphorus is nearly adequate in his area of the country, Little said, “In Ohio and the eastern United States, selenium is often deficient, as well as zinc and copper.” He added that levels can vary depending on the season, offering that “Copper is often found at higher concentrations in the spring than in the fall in Ohio.”

Nutritional value also differs by type of grass, season and maturity. Little said protein is adequate for most species in cool season grasses but can be marginal in warm season grasses. And, energy is often deficient in grasses and legumes, requiring supplementation.

Mineral deficiencies are common and unpredictable in almost all forages. Due to these deficiencies forages should be supplemented with a complete balanced mineral program. Purina’s Wind and Rain® Minerals are palatable forage supplements that will make up these deficiencies in a convenient free choice feeding program.

## WHAT’S THE RIGHT FORAGE FOR YOUR OPERATION?

When considering changing the type of forage in your pastures, Little recommends an analysis of not only the soil and drainage conditions, but also of management practices. He said that is crucial to avoid wasting time and money.

“Generally speaking, what is right for each producer is what is in their fields right now. Whatever they have today, they have for a reason, because of their management practices, grazing techniques, fertility program, soil type and depth, harvesting program and drainage.”

Often producers want to change the type of forage they have. But, before making a change, Little recommends looking at what they have and evaluate why it is there.

“If they don’t change their management and those other factors, they will end up with exactly what they have right now. Whatever you choose has to have the characteristics that will survive under your management style.”

Regardless of the type of forage on your farm or ranch, Purina has a complete line of supplements and minerals to help your herd get the most from your forage. Through the advantage of Intake Modifying Technology® included in many of Purina’s products, your cattle will only eat the amount of supplements and minerals they need, resulting in maximum utilization of your home grown forage. Contact your Purina representative or your local Purina dealer today.



PURINA

# SEASONAL TIPS FOR COW-CALF MANAGEMENT

## PREVENTING AND MANAGING CALF SCOURS

The spring calving seasons of 2009 and 2010 sent a huge number of calf scour cases to the Iowa State University Diagnostic Lab. Most of these occur in calves 5 to 10 days old, and we often find three different infectious agents in the same animal.

These outbreaks are particularly frustrating because calves may require intensive care at a time when they are particularly difficult to handle. You also have the added expense of medicine, labor and death loss. On top of all that, research indicates that every calf treated during the suckling period weighs nearly 35 pounds less at weaning. Therefore, it becomes critical to understand what puts our herds at risk for an outbreak.

**A management disease.** It is important to understand that calf scours is driven by how we manage and handle the cow herd. We can find calf diarrhea pathogens in almost every herd, but not all herds have calf scours problems. As we investigate these outbreaks, we find common management practices that enable the organisms to reproduce and reach high concentrations. So, newborn calves get a big dose of the organisms, leading to calf sickness and even more contamination. So, it is very useful to identify these management practices—or risk factors—that increase the likelihood of calf scours in your operation.

**Cow Herd Nutrition.** Females must calve in moderate body condition (BCS score of 6–7). Thin cows have weaker calves and produce less colostrum. They have more calving difficulty (dystocia), and their calves

will be slower to stand and nurse. Calves that don't get enough colostrum will most likely get scours. Proper mineral supplementation is also critical. Do not calve heifers with mature cows; they can't compete at the feed bunk.

**Dystocia.** One of the main drivers of calf death loss is dystocia. Those calves that survive are at risk of not getting enough colostrum since they are now weaker. Heifers that are too small at calving or bred to high birth-weight bulls will suffer higher levels of dystocia. So, it's important to consider how bull selection and heifer development affect the incidence of calf scours.

**Animal Density in the Calving Area.** This is the most common risk factor that leads to outbreaks. All organisms that cause calf scours are spread through the feces of sick calves. Try to give the cow herd as much space as possible in order to stop

transmission. Consider splitting cows into early and late calving groups (based on palpation) to decrease contamination of your calving area. The late calving group can be held on stalk fields or pasture away from the calving area until they are ready to calve. Work with your veterinarian to adopt the principles of the "Sandhills Calving System" in your operation.<sup>1</sup>

**Management of the Calving Area.** How many times have you seen five or six calves crowded around the edge of the bale feeder because it was the only dry spot in the calving pen? No amount of vaccine or antibiotic will overcome calving under those conditions. The calving area needs to be sloped to allow for water runoff and drying. Calf sheds should be moved to fresh ground on a weekly basis, and feeding and bedding areas need to be rotated.

References 1. <http://vetext.unl.edu/stories/200703050.shtml>

INSIDE THIS ISSUE  
WEED CONTROL PLANNING NOW CAN PREVENT  
A SUMMER OF DISCONTENT  
PROPERLY MANAGED FORAGE CAN FEED MORE  
THAN YOUR HERD

Change service requested

PURINA  
7113 W 135th St, #305  
Overland Park, KS 66223  
CheckPoint



RETURN TO:

For more information, call or visit your local Purina dealer.

