

# Agriculture Notes

Fall 2009 Duchesne County (435) 738-1140 [extension.usu.edu/duchesne](http://extension.usu.edu/duchesne) Troy Cooper

## Importance of Body-Condition in Beef Cows

Variation in the condition of beef cows has a number of practical implications. The condition of cows at calving is associated with length of postpartum interval, subsequent lactations performance, health and vigor of the new born calf and the incidence of calving difficulties in extremely fat heifers. Condition is often overrated as a cause of dystocia in older cows. The condition of cows at breeding affects their reproductive performance in terms of services per conception, calving interval and the percentage of open cow.

Body condition affects the amount and type of winter feed supplements that will be needed. Pregnant cows may need only mineral and vitamin supplementation. Thin cows usually need very good quality forage or large amounts of supplements high in energy (+70 percent TDN), medium in protein (15 to 30 percent), plus mineral and vitamin supplementation.

Body condition or changes in body condition, rather than live weight or shifts in weight, are a more reliable guide for evaluating the nutritional status of a cow. Live weight is sometimes mistakenly used as an indication of body condition and fat reserves, but gut fill and the products of pregnancy prevent weight from being an accurate indicator of condition. Live weight does not accurately reflect changes in nutritional status. In winter feeding studies where live weight and body condition scores have been measured, body condition commonly decreases proportionally more than live weight, implying a greater loss of energy relative to weight.

Two animals can have markedly different live weights and have similar body condition scores. Conversely, animals of similar live weight may differ in condition score. As an example, an 1,100 pound cow may be a 1,000 pound animal carrying an extra 100 pounds of body reserves, or a 1,200 pound cow which has lost 100 pounds of body reserves. These two animals would differ markedly in both biological and economical response to the same feeding and management regime with possible serious consequences.

In commercial practice, body condition scoring can be carried out regularly and satisfactorily in circumstances where weighing may be impractical. The technique is easy to learn and useful when practiced by the same person in the same herd over several years.

BCS are numbers used to suggest the relative fatness or body composition of the cow. Most published reports are using a range of 1 to 9, with a score of 1 representing very thin body condition and 9 extreme fatness. Scoring done by different people will not agree exactly; however, scoring is not likely to vary by more than one score between trained evaluators, if a 1 to 9 system is used. Keep the program simple. A thin cow looks very sharp, angular and skinny, while a fat one looks smooth and boxy with bone structure hidden from sight or feel. All others fall somewhere in between.

Fat deposits are visible over the back, tail head, pins, hooks, ribs and brisket of cattle. A BCS of 5 should look average – neither thin nor fat. Once you have established what a BCS 5 looks like, it is much easier to determine variations from this. For cattle with long hair, handling the cattle over the

back and ribs and feeling the flesh over the transverse processes can be helpful. Keep in mind that shrink can alter the look and feel of the cattle as much as one score. Animals in late pregnancy also tend to look fuller and a bit fatter.

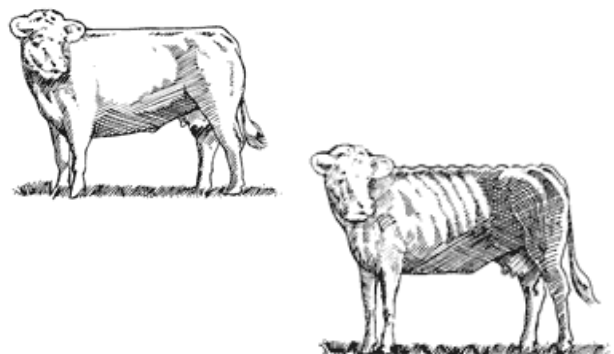
Proper management of cattle and feed resources is the key to successful cattle production and profit. Several management strategies that may help maximize profit include:

- Target a calving season that fits the forage, supplements, marketing plan and management.
- Adjust stocking rate to ensure adequate forage during the stocking rate limiting months.
- Provide a good mineral free-choice all year.
- Control parasites and diseases.
- Cull open and poor producing cows.
- Group cattle by age and nutritional needs. May need to separate the following groups for part or all of the year.
  - Weaned heifers
  - Yearling heifers
  - First-calf heifers
  - Young cows
  - Mature cows
- Test forage, especially hay, for nutritive value. Provide highest quality forage to animals with the greatest nutrient needs. Supplemental protein and energy may also be needed.
- Develop replacement heifers to BCS of 6 by calving time. Provide adequate protein and energy (TDN) to young cows to improve breeding rate. This may require managing first and second calf cows in separate herds during the winter.
- Evaluate body condition of the herd at various times throughout the year, and make needed nutritional management changes. Special consideration should be given to evaluating body condition at the following times:

- One month prior to weaning calves. If cows are thin, consider weaning the calves earlier than normal.
- At calf weaning time, cows with a BCS less than 5 should be assigned to one or more groups based on BCS. Provide high quality forage or supplemental energy and protein as needed to reach BCS 5 by calving. Cows with a BCS greater than 7 should be fed to lose condition to BCS 7 by calving time.
  - 60 days prior to calving. Fine-tune the feeding program for cows to reach BCS 5 or greater by calving. Maintain BCS 5 or above through the breeding season.

A BCS of 5 to 7 at calving and through breeding is required for good reproductive performance. Overstocking pastures is a common cause of poor body condition and reproductive failure. Proper stocking, year-round mineral supplementation and timely use of protein supplements offer the greatest potential for economically improving body condition scores and rebreeding performance of beef cows. Sorting cows by condition 90 to 120 days ahead of calving and providing adequate nutrients so that all cows will calve in BCS 5 to 7 will maintain high reproductive performance and increase income. Nutritional and reproductive decisions, so important to profitability, are made with more precision and accuracy when a body condition scoring system is routinely used.

Information from Feeding Beef Cows Based on Body Condition Scores, by Shane Gadberry, Ph.D. Extension Livestock Specialist



# Daily Horse Observations

When responsible for a horse, an owner must be very observant. Knowing what is normal and what is not for each individual horse can alert the owner or caretaker to a problem before it becomes a big issue. Owners that have a routine, which can be followed at each feeding, can better observe their horses for any indications of a problem. Finding a problem early may save owners major veterinary expenses or the loss of a horse.

When feeding, it is important to get an initial impression of the horse's overall wellbeing. If the horse is stalled individually there are many aspects one can evaluate. If housed in a group it may be difficult to monitor some aspects of an individual horse; however, if a group housed horse does not come up with its herd mates, it is definitely cause for concern.

## **WATER**

When a horse is watered by a water bucket, the amount left should be evaluated at each feeding. If the horse usually has a 1/4 of a bucket left in the morning, any change in that amount should raise some questions. If there is more than 1/4 bucket left, ask yourself if it is due to a weather change, such as cooler weather. A drop in air temperature can decrease water intake, but even if due to weather it should not be taken lightly, as a drop in water intake can cause digestion problems. It could also be caused by a decrease in work load or a change in feed to one higher in moisture content. It can indicate an ill horse so further investigation is warranted. Sprinkling a tablespoon of loose salt (table salt) onto grain, if the horse receives grain, or onto wet hay typically increases a horse's water consumption. If water intake increases from normal, it could be due to warmer than normal weather, increased work load, or a change in diet to a drier feed.

It is more difficult to determine if a particular horse is drinking when housed in a group setting. If the horse drinks from an automatic water system, it can be more difficult to determine water intake. Some automatic water systems have meters that measure

intake. If no meter is attached, any indication of a problem requires the automatic water be turned off and a bucket hung so water intake can be monitored. Checking the horse for dehydration can be helpful in determining water intake concerns. The skin pinch test is performed by pinching the skin on the neck or shoulder between the thumb and pointer finger. If the skin snaps back to normal the horse is adequately hydrated. One can also lift the upper lip and check the horse's gums for moisture. Looking at the flank area will also indicate if the horse is drinking, as a horse that is not drinking will have flanks that are drawn in.

## **Manure**

The number of manure piles and manure consistency can be evaluated for individually housed horses. Knowing how many piles are in the stall each morning or feeding is very helpful. If the number decreases it can indicate a digestive problem developing. Consistency and color is also important. The manure should be soft round balls (road apples) with a greenish color if on grass or good quality alfalfa hay but a brownish color if on older hay. If the manure is soft, like cattle piles, it can indicate some kind of digestive upset. A horse that is switched too quickly from hay to pasture or from one type of feed to another will usually exhibit this soft manure. Shooting diarrhea is an emergency as a horse will become dehydrated very quickly with extreme diarrhea.

## **Feed Intake**

A horse's interest in hay/concentrate provides valuable information. A horse should come up to eat with interest and eat steadily. If the horse comes up and wants to eat but does not continue, it is a strong indication of ill-health. If the horse is in a group, the person feeding should make sure each horse comes to eat and stays and continues eating. It is a good practice to put out one more feed pile than number of horses so that even the most submissive can access feed. Feeding is more than just putting feed out; it involves checking that each horse has access to and eats its feed.

## Body Check

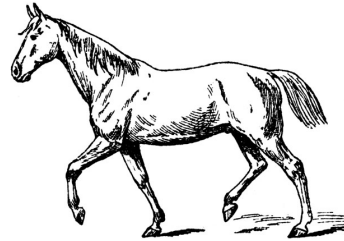
Other than feeding and making sure the horse eats and looks bright, the horse should be checked over for any obvious signs of wounds or swellings. Check both sides of the body for any cuts or signs of irritation. Look at both eyes for brightness or any signs of drainage or irritation. Look and feel the legs for heat or swelling. When housed in a group, these evaluations should be performed on each horse. When housed in a large paddock or pasture, watch the horses walk or trot to the feed area. This can show signs of lameness or hesitancy to move.

## Summary

Observing a horse for potential problems during normal feeding times can help owners find concerns before they become even larger problems. Anytime a horse deviates from normal behavior it is cause for a closer look. Performing these observations only takes minutes but can keep small problems small and help

prevent problems from becoming life threatening or expensive. If the horse does not appear to feel well, its vital signs should be taken and possibly the veterinarian contacted.

Information from: Daily Horse Observations for Horse Owners, By Dr. Patricia A. Evans, Assistant Professor/Extension Equine Specialist, Utah State University and Dr. Karen Waite, Academic Specialist, Michigan State University.



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