



Develop bulls so they are not overly fat or too thin.

# Getting Bulls Ready

*Nutrition considerations before, during and after the breeding season.*

by Kindra Gordon

“What should I be feeding my bulls?” South Dakota State University (SDSU) Extension beef specialist Julie Walker says that is a question she is commonly asked by seedstock and commercial producers alike.

Her advice to them is this; “The goal is to have bulls that have been developed on a balanced ration that are not too thin or overly fat.” She further explains that research has shown bulls with too little or too

much condition can have poor reproduction and fertility.

To that end, she emphasizes, “Nutrition is very important for bulls.” To put it into context, she uses an example that while a cow produces one calf per year, a bull can potentially sire 25 to 60 calves per year — which means bulls should command some special management and care during the year.

Walker encourages producers to pay special attention to bull nutrition before, during and after

the breeding season, with the following guidelines:

## Prior to breeding season

Yearling bulls should have a body condition score (BCS) of about 6 at the start of the breeding season, Walker recommends.

To achieve that goal, she suggests accessing each bull’s body condition at least 30-60 days prior to turn-out to determine what management action should be taken.

Thin bulls should be put on a ration with a higher level of energy to increase rate of gain.

Overconditioned bulls should be transitioned to a ration that will help reduce their body condition to the target BCS of 6 to prepare them for the breeding season.

In either of these scenarios, Walker emphasizes that when you are changing diets to be more or less concentrated, the change in ration should be made gradually. Gradual change reduces the possibilities of metabolic disorders and impaired breeding performance, she explains. She also points out that ration changes prior to breeding can have an effect on reproductive performance because mature sperm is produced during a 60-day period before ejaculation. Thus, Walker says, “The nutritional effects of over- or underfeeding on sperm quantity and quality will have some carryover effect.”

For bulls that are deemed “in good condition” 30-60 days prior to breeding, Walker says the key is to begin adapting them to a high forage ration prior to turn-out on grass.

She explains that the general method of stepping-down bulls is to gradually replace a portion of the concentrate in the ration with forage over several weeks until the bulls are consuming forage or forage plus a supplement, if needed. As a rule of thumb, she suggests reducing 10% of the concentrate in the ration per week with forage. “Ideally, this should start at least 30-60 days prior to turn-out and yearling bulls should continue to gain 1.5 to 2 lb. per day,” Walker says.

Walker also says some special consideration should be given to purchased bulls and transitioning them to a new ration once you get them home.



PHOTO BY BECKY HARELL

Bulls can naturally sire 25-60 calves per year, so it is important to keep them in good condition and health.

## Nutrition for bull calves

For seedstock producers raising bulls, South Dakota State University Extension Beef Specialist Julie Walker offers this nutritional advice pre and postweaning:

**Preweaning:** Under normal environments, the plane of nutrition from dam’s milk and forage should be adequate for normal growth rates of bull calves up to weaning at 6-9 months of age. “It is important that adequate nutrition is available to the dam during this time,” Walker says.

She says early weaning or creep feeding could be considered when the calves’ plane of nutrition is less than desired; however, the cost must also be evaluated when making this decision.

**Postweaning:** She suggests developing bulls at moderate rates of gain instead of high rates of gain and says there are many possibilities for rations — the best ration for each situation should be determined based on availability and cost of feed ingredients, she suggests.

Walker reiterates that the key is developing the ration to meet the desired animal performance without over- or under-developing the bull. “Under-nutrition results in delayed puberty and over-nutrition can reduce semen production and quality,” says Walker. (Nutrient requirements for growing bulls can be found through the Extension service.)

As a guideline, Walker says, typically, many of the diets to develop beef bulls contain from 40 to 60% concentrate. Higher planes of nutrition may overcondition bulls, she cautions. **HW**

“The key is to have consistency. Talk to the person you bought them from and see what they were feeding to help in deciding your ration and how to transition them,” she suggests.

#### **During breeding season**

Walker admits that there is limited opportunity to manage bull nutrition during the breeding season. “They are basically on the same plane of nutrition as the cows,” she says.

However, she says producers should still monitor the body condition score of bulls during the breeding season as well as observe the bulls’ ability to service the cows. She says it is normal for bulls to lose from 100-200 lb. during the breeding season. She adds, “If a bull gets extremely thin during the breeding season, you may want to replace him because his ability to service cows will probably be reduced.”

#### **After breeding season**

Once the breeding season is over, Walker stresses that the need for bull nutrition continues – especially for young bulls that are still growing.

“Nutritional management post-breeding is influenced by both age of bulls and amount of weight loss

during the course of the breeding season,” Walker says. She recommends producers evaluate each bull’s condition again and sort them into three groups:

**1) Mature bulls in fairly good condition.** These bulls can be managed on pasture or an all-roughage diet without supplements during the winter, says Walker. Hay quality should be 8-10% crude protein and fed at 2% of body weight. Rations should be modified in order to use available feed ingredients and to manage the bulls to maintain moderate body condition.

**2) Growing young bulls and thin bulls that need extra care.** Because young bulls are still growing, their ration should be formulated to ensure a gain of 1.5 to 2 lb. per day depending on the magnitude of weight loss during breeding. The need to supplement young bulls on summer/fall pasture will depend on the quality and quantity of forage available, says Walker. She adds that the best method for developing a diet for bulls is to test potential feeds and formulate a ration based on age, size and desired performance. As an example, in

### **Additional tips**

In managing bulls for a successful breeding season, South Dakota State University Extension Beef Specialist Julie Walker also emphasizes:

- Conduct breeding soundness exams prior to breeding season each year for each bull. “This is important each year because a lot of things can impact fertility from one breeding season to the next,” she says.
- Make minerals and vitamins available to bulls year-round to ensure successful animal growth and breeding performance.
- Before and after breeding season, keep bulls in pens or pastures that are large enough to ensure adequate exercise to prepare bulls for the breeding season. “Bulls will remain sound longer and have more sex drive (libido) if they’ve had exercise,” Walker says. As a tip she suggests locating feeding areas away from water to encourage bulls to move around. Additionally, bunk space should be 24-30 inches per bull if all bulls are being fed at the same time.
- Develop a health protocol for herd bulls with your local veterinarian that addresses yearly vaccinations, parasite control and biosecurity. **HW**

the winter, feeding roughage at 2% of body weight plus 3-6 lb. of grain so total diet protein content is 10-11% will often provide the targeted rate of gain in young bulls, according to Walker.

**3) Salvage bulls to be marketed.** With special management and the proper ration, salvage bulls can gain 3-5 lb./day over 60 days, which can add some weight and extra value before they are taken to market.

For producers who may use bulls for two breeding seasons for both spring and fall calving herds, Walker says some extra nutritional management may be needed to ensure that bulls will be prepared to serve cows during each breeding season.

“Bulls have a shorter time to replenish their weight loss before the next breeding season, so young bulls may need to be on a ration that allows them to gain 2 to 2.5 lb. per day to recover from weight loss,” she says. **HW**