

Bull Checkup

Take steps to care for bulls prior to breeding season.

by Julie Walker, SDSU Extension beef specialist, courtesy of iGrow.org

Bull Management



Cattlemen can increase the breeding capacity of bulls through proper care prior to the breeding season. Because the production of sperm cells requires 60 days with several factors having a potential negative impact on breeding ability, it is time to begin evaluating bulls now to ensure they are ready for the breeding season.

Key components of a bull checkup are: 1) assessing body condition score, 2) conducting a breeding soundness evaluation and 3) evaluating physical soundness (structure and conformation).

Body condition score

A body condition score (BCS) is a free method which allows producers to evaluate the nutritional status of animals. Assessing a body condition score allows producers to determine if adjustment to the ration are required to ensure the bull is in breeding condition.

Bulls should be in a body condition score of 6 on a 9-point scale (1 = being emaciated and 9 = being obese) at the beginning of the breeding season, since bulls normally lose about 100 to 200 lb. during the breeding season.

Thin bulls (BCS ≤ 5) should be put on a ration with a higher level of energy by replacing some of the roughage with energy dense feeds. Gradually increase the percentage of concentrate by 10% per week until reaching a ration that will achieve a rate of gain that will increase body condition. This increase must



be a gradual process to avoid nutritional disorders associated with overfeeding grain such as acidosis, founder or bloat.

Over-conditioned bulls (≥ 7 BCS) should be provided less energy dense rations. Bulky feeds such as forages should be used to replace grain. Again, these changes should be made gradually. Remember yearling bulls should continue to gain 1.5 to 2.0 lb. per day because they are still growing.

Breeding soundness

An annual breeding soundness examination of each bull is the only way to predict bulls will be reproductively sound during the breeding season. These examinations are conducted by veterinarians.

The components of a breeding soundness examination include 1) measurement of scrotal circumference, 2) examination of sperm motility, 3) examination of sperm morphology, 4) testicle palpation, 5) palpation of seminal vesicles and 6) observation of physical problems.

Research has shown that bulls with a large scrotal circumference have greater breeding capacity and endurance. They also produce daughters that reach puberty at an earlier age. Palpation of the testicles and seminal vesicles looks for any possible infection

or defects that could impact the amount or quality of sperm.

Sperm motility and morphology are examined under a microscope at the time of collection. Sperm motility is measuring the percentage of sperm with a progressive (headfirst) movement, and sperm morphology is the percentage of normal sperm in the ejaculate.

Physical soundness

Evaluation of the physical soundness of bulls is critical for a successful breeding season. Bulls use both eyesight and smell to aid in detection of estrus, hence the importance of evaluating eyes. The structural soundness of the feet and legs is imperative due to the amount of exercise as well as the mounting of cows and heifers. Mobility evaluation within a squeeze chute is difficult, so it is key to observe bulls walking.

The bottom line

Producers invest a substantial amount of money in bulls to continue improvement in the genetics of their operation. Ideally, that investment can be utilized in multiple years. Taking steps now to ensure the bull battery will be ready for the breeding season allows producers adequate time to implement any required changes or the purchase of additional bulls. **HW**

Managing new herd sires

by Warren Rusche, SDSU Extension feedlot management associate, courtesy of iGrow.org

New bulls need to be managed carefully between delivery and the start of breeding season to maximize the return on the investment in new genetics.

New herd sires represent a sizeable investment to a cow-calf business. One of the major components of the cost of natural service is the number of years of useful life of the herd sires. Greater lifespan allows the initial purchase price to be spread out over more calves.

Dietary adjustments

In most cases, yearling bulls have been developed on higher energy diets than what will be available to them during the breeding season. Simply turning young bulls out to the breeding pastures increases the likelihood of excessive weight loss and a potential reduction in fertility and libido. Extreme weight loss could also impact longevity. Adapting bulls to lower energy diets prevents bulls from "crashing" and increases the odds of success.

Changes in diets should be made gradually. Sperm cells mature over a 60-day period, so avoid any drastic changes during the two months before the start of the breeding season. The concentrate portion of the ration would be gradually reduced in a series of steps until the desired level is reached. It's important to remember these bulls are still growing and not to restrict nutrient intake too much. They should be gaining 1.5 to 2 lb. per day and be in a body condition score of about a 6 at the start of the breeding season. As with any class of livestock, the necessary mineral and vitamin supplementation, as well as a high-quality water source, should be provided.

Physical and social considerations

Beyond the nutritional and dietary considerations of bull development, there are other factors that need to be considered, as well. Breeding bulls will have a high level of physical activity, especially early in the breeding season, seeking out and breeding cows in heat. Much like an early season "training camp," allowing for increased opportunities for exercise will help improve the bulls' physical condition and stamina levels, which should help ensure their ability to remain functional throughout the breeding season. Additional exercise on pasture also serves to reduce the potential for feet and leg problems.

Many producers will utilize more than one bull in a breeding pasture. If the bulls have not run together previously, they will very likely spend time fighting to establish a "pecking order" rather than getting cows bred. Grouping the bulls according to their assigned breeding pasture groups prior to the start of the breeding season allows those "social adjustments" to take place before breeding season starts.

Breeding soundness exam

Finally, a breeding soundness exam should be conducted by a veterinarian approximately 30 to 60 days before the start of the breeding season. This would include a physical examination of the bull, with particular emphasis on the reproductive organs, along with an evaluation of the semen and sperm cells. **HW**