

YEAR-ROUND



BULL MANAGEMENT

BY LORI GILMORE

Think of your bull battery as a professional sports franchise. When opening day of breeding season arrives, your herd sires should be at the top of their game. Much like trained athletes, your players in the pasture need to be in the best physical shape and condition. This requires management's continuous commitment to sire care. Year-round bull management can make a major-league difference.

"A bull is one of the most important investments in a cow-calf program," says Rod Christmas, Kansas State University (K-State) assistant professor of clinical sciences. "Each cow's productivity relies on the satisfactory reproductive performance of the bull."

National Cattlemen's Beef Association Standardized Performance Analysis (SPA) program numbers show that cow-calf operations running 100-500 head have a \$2,000 average investment per cow. This takes land, equipment, facilities and animal unit price into account.

"If a bull is expected to breed 25 cows, it could have a \$50,000 impact in one breeding season," he says of the economic importance of proper bull management.

Although many Angus breeders routinely step up bull management efforts prior to breeding season, a year-round commitment can prove profitable.

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Prior to breeding season

Doug Zalesky, South Dakota State University (SDSU) Extension beef specialist, says a herd sire should be in adequate body condition prior to breeding season. He recommends using a body condition score as a management tool to evaluate a bull's status and the effectiveness of a nutritional program. This visual appraisal, measuring the relative fatness of an animal, can be performed several times throughout the year, but should be done prior to pasture release.

The nine-point scoring system most commonly used by cattle producers, nutritionists and Extension personnel designates a body condition score (BCS) of "1" to represent very thin body condition and BCS 9 to represent extreme fatness. The SDSU Extension beef specialist recommends bulls be a BCS 5 or 6 -having adequate flesh, but not appearing overly fat— prior to breeding season.

Properly maintaining a bull's body condition throughout the entire year can minimize stress for both man and beast. Pushing a bull to gain weight just before breeding season can not only cause problems, but requires additional feed expense, he says. Conversely, too much fat on an animal can have a negative effect on the bull's breeding ability.

"A bull produces semen year round, and drastic fluctuations in weight and health can impact fertility," Zalesky says.

A mature bull, kept in good body condition throughout the year, requires little feed before being sent out with the cows. However, Zalesky says it's crucial that a younger bull still growing and developing receive adequate nutrition.

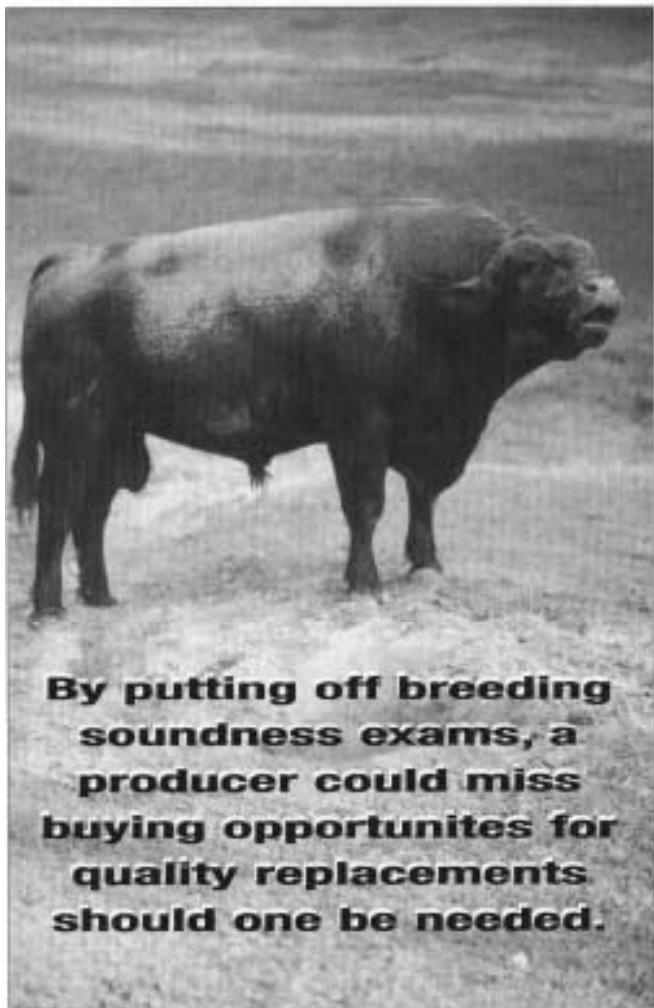
Exercise is also important

for sires in training. "When bulls exercise prior to the breeding season, they are less likely to injure their backs and feet once in the pasture," Christmas explains.

Foot rot, overgrowth, swollen

abnormalities are detected.

Producers should work closely with a veterinarian to develop a herd health program. To keep a bull disease free, vaccinate at least 60 days prior to breeding season or when other herd work is scheduled.



joints and interdigital dermatitis or corns are feet-related problems that may impede a bull's ability to move across the pasture. Hoof trimming can relieve overgrowth and should be done at least two months before breeding season.

Prior to sending a bull to pasture, he suggests placing him in a larger lot to promote movement. Regularly check the bull for soundness and contact a veterinarian if any feet

A breeding soundness exam (BSE) should be performed a few months prior to breeding season, says Don Boggs, also an SDSU Extension beef specialist. This test is more than just a "semen check" and can provide a cow-calf manager with an accurate diagnosis of a bull's overall reproductive ability.

Boggs recommends every herd bull be evaluated each year. The cost of the annual exam is insignificant, ranging from \$15

to \$30 compared to the potential economic risk of sending a subfertile animal to pasture.

The checkup, performed by a veterinarian, involves a routine physical examination and a detailed fertility test. In order to identify fertility and testicular problems, a veterinarian must palpate reproductive organs, measure scrotal circumference and collect semen, says Boggs. Semen samples are inspected for sperm motility (percent of sperm moving in linear progression) and morphology (normal sperm percentage).

All factors are considered before designating a bull a sound breeder. Standard results are one of the following: satisfactory — ready to breed, deferred — a problem has been detected, but it can be corrected or unsatisfactory.

By completing the BSE at least 60 days prior to pasture release, a bull identified as "deferred" has adequate time to respond to treatment, recover and be reexamined. However, a bull receiving an unsatisfactory grade should be culled immediately and a replacement must be purchased.

By putting off this important exam, Boggs says, a producer could miss several buying opportunities for quality replacements. He encourages Angus breeders to plan ahead and test for breeding soundness in advance of scheduled bull sales.

■ **Breeding season**

When the day finally arrives to put the bull out with the cows, a producer faces the next crucial phase of year-round management. Checking pastures periodically and observing mounting activity should be the top priority at this time.

Even though an animal has been designated a sound breeder with a soundness exam,

this still does not guarantee that the bull will service cows. "Just because a bull is fertile and has the tools doesn't mean he has the desire," Boggs says, referring to the animal's libido.

Don't let open cows months later be your first sign of breeding difficulties, he warns. While visiting the pasture, watch for signs of penile injury or other physical problems. Breeding problems can be identified early and sometimes corrected with careful surveillance.

Zalesky adds that constant monitoring is critical, particularly in single-sire breeding pastures. He recommends rotating another bull into the pasture, if needed.

During these routine pasture visits, take note of the bull's body condition. In an average breeding season a bull can drop one condition score and sometimes two depending on the number of cows serviced, says Zalesky.

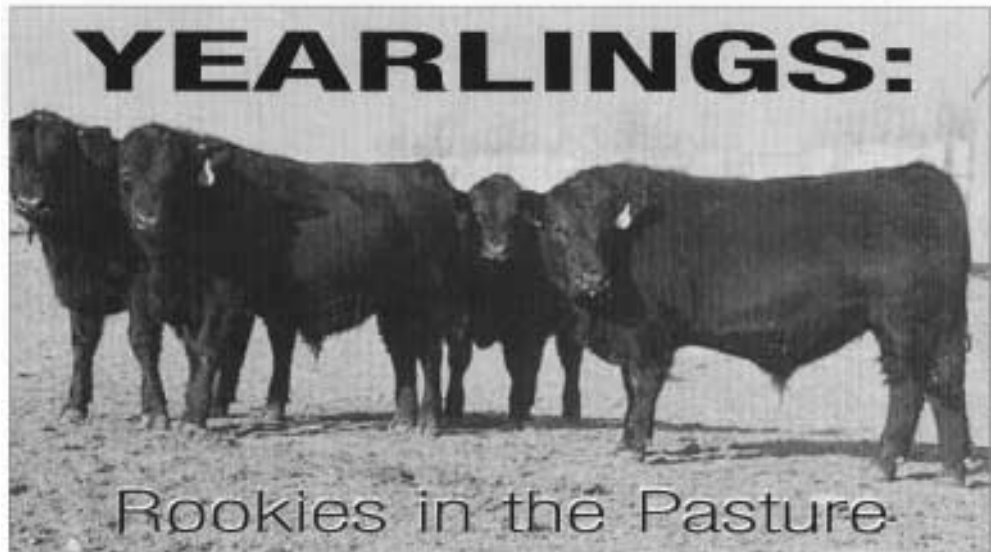
"A bull could lose 150 pounds in a 60-day breeding season," Christmas says. "And, excessive weight loss could have a negative effect on the bull's breeding ability."

In fall-calving herds, reduced forage quality and the aftershock of a hot summer can have an impact on sperm production. Manage your bull battery accordingly. A poorly conditioned sire may require supplemental feeding at this time.

Fly and external lice control is significant in all livestock programs, but is of particular importance to spring-calving herds. According to Christmas, flies must be kept from biting a bull's scrotum. Otherwise, the resulting damage could cause inflammation and lead to possible reproductive damage.

A manageable calving season should be the only limiting

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Just like young players breaking into the major league, it's crucial to properly prepare "rookie sires" for their challenging new role.

After purchasing a herd sire, first allow ample time for the bull to acclimate to his new surroundings, says Don Boggs, South Dakota State University (SDSU) Extension beef specialist. Practice good biosecurity by isolating the animal as soon as he's brought to the farm or ranch. This measure prevents possible disease outbreak and provides an acclimation period.

Rod Christmas, Kansas State University (K-State) associate professor of clinical sciences, agrees with Boggs about the importance of properly managing young bulls. "If a bull doesn't adjust well to a new environment this could have an impact on a number of parameters, including sperm production and libido," he says.

Christmas believes a yearling bull, just released from a bull test station or purchased in a sale, poses a huge challenge for the owner. A young bull can become stressed when suddenly removed from a high-concentrate ration. This "rookie" needs time to adjust to a lower-energy diet, one primarily consisting of forages.

Always avoid abrupt shifts in diet and slowly back a bull off a ration loaded with grain, says Boggs. However, adequate nutrition is still important to the growing animal at this time. A yearling will require supplementation to continue gaining a couple of pounds per day.

Younger bulls need to be in slightly better body condition than mature bulls, says Boggs. At the same time, he cautions against letting these bulls become too fat. Excessive condition can not only limit the amount of ground a bull covers, but fat in the scrotum

can negatively affect fertility.

Christmas also recommends, based on research focusing on seasonal bull care conducted at K-State, that a producer take 30-60 days prior to the first breeding season to "harden" yearlings. This "hardening" process is a time for a young sire to develop muscles and toughen feet. It requires placing a bull in a separate lot, preferably on a hill, to promote exercise.

Once out in the pasture, watch closely to make sure the newcomer is servicing cows. Be prepared, if needed, to pull a young bull suffering from severe weight loss out of the pasture. In single-sire pastures, rotate veterans in to complete the job.

Boggs recommends that with multiple-sire groups producers match bulls in each pasture by age. Older bulls will establish a pecking order and often keep inexperienced sires from breeding cows.

A yearling should not be required to spend as much time in the pasture as an older, more mature bull, according to Christmas. Depending on the situation and conditions, restrict the young bull to 45 days in the pasture and hold the number of females serviced to 15.

At the conclusion of the breeding season, take the younger bull away from the cows and place him in a separate pasture with similar-aged animals. Since younger bulls have not yet reached mature size, supplemental feeding will be required, says Boggs. By placing bulls in lots with similar-aged animals, competition for grain is eliminated.

Throughout the entire year, the special needs of younger bulls should always be addressed. With management's careful attention, these rookies can develop into dependable veteran sires.

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factor for the amount of time a mature bull is left in the pasture. According to Christmas, a seasoned sire should breed the required number of females, preferably no more than 35, in a 60-day period. (See *sidebar for recommendations on how to manage yearling bulls.*)

■ Post-breeding

After the conclusion of breeding season, a bull's needs are often overlooked. Proper bull management should not end in the pasture. Keeping bulls in good condition the remainder of the year can help protect future breeding ability. It also offers an additional marketing advantage, says Boggs, particularly when prospective buyers visit your operation and look at your

entire herd.

After finishing breeding duty, remove a bull from the pasture and place it in a separate pasture with similar-aged animals of comparable body condition, Zalesky says.

Complete a thorough post-breeding evaluation, monitoring nutritional needs, as well as assessing a bull's overall physical shape. After regrouping the animals, look for signs of lameness, lump jaw and bad eyes. Cuts or scratches may signal possible scrotal injury. A breeding soundness exam may be needed for immediate diagnosis.

It's important at this time to maintain adequate nutrition. A bull should have access to good grass and complete mineral salt. Following breeding season, a

yearling bull will require supplemental feeding.

Seasonal issues, such as temperature extremes, may also have a long-term effect on bull health. Extreme winter conditions, consisting of freezing temperatures or sub-zero wind chills, can lead to scrotal frostbite. The slightest amount of damage can affect sperm production and severe damage can result in permanent infertility, according to Christmas. Provide adequate protection from the winter elements with windbreaks and straw bedding.

Take action if any problems arise; don't wait until the following breeding season.

Boggs encourages Angus breeders to have a replacement plan in place. He suggests that

producers write a "job description" or identify objectives for buying a replacement.

"It is time to look for another bull when the sire is not meeting your original objectives," Boggs says. Physical unsoundness or injury, infertility and inadequate performance of offspring are all factors contributing to management's decision to replace a bull.

Properly managing a successful team is a year-round endeavor, be it your herd bulls or the Chicago Bulls. Bull management needs to be a year-round issue. Steps taken throughout the year can prove profitable and provide a jump-start for the next winning season.

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The following list of timely tips can help improve the value of your breeding team. Year-round bull management may ensure that your player in the pasture will be in the best possible shape and condition for opening day of breeding season.

Prior to breeding season:

- ✓ Check the bull's condition by body condition scoring
- ✓ Eliminate a high-concentrate ration gradually
- ✓ "Harden" yearlings by placing them in a lot with plenty of room to exercise
- ✓ Trim hooves
- ✓ Vaccinate (check with your vet for recommended shots)
- ✓ Perform a breeding soundness exam
- ✓ Provide adequate winter protection with windbreaks and straw bedding

During breeding season:

- ✓ Check pastures regularly
- ✓ Observe mounting activity and assess the bull's ability to service cows
- ✓ Watch for physical abnormalities, specifically for signs of penile injury
- ✓ Assess the bull's body condition
- ✓ Provide supplemental feeding if needed
- ✓ Carry out fly and external lice control program
- ✓ Restrict yearlings to 45 days in the pasture
- ✓ Limit a yearling to servicing 15 females
- ✓ Remove mature bulls from the pasture after 60 days

After breeding season:

- ✓ Pull bull out of the pasture after breeding season
- ✓ Place in a pasture or lot with animals of similar age and condition
- ✓ Provide access to good grass and complete mineral salt
- ✓ Furnish yearling bull with additional feed
- ✓ Conduct a post-breeding evaluation
- ✓ Protect from extreme temperatures