



Vet Call

► by **Bob Larson**, professor of production medicine, Kansas State University

Winter care of bulls

In most breeding programs, bulls are not in the pasture with open cows during the coldest months of winter and, in some situations, are largely ignored during this time of year. While it is true that bulls, because they are never pregnant or lactating, have lower nutritional requirements than cows of the same age, it is important that bulls not lose excessive weight during the winter and that they are protected from the negative effects of cold weather. Cold temperatures and environmental stress can have several negative effects on bulls.

Dietary requirements

Cold temperatures increase the maintenance requirement for bulls because calories are being burned to maintain body temperature. If bulls are grazing dormant forage, or being fed poor-quality forage, they may not be consuming enough feed to maintain their body weight even if they have more feed than they can consume.

Bulls that lose weight in the winter are being stressed, which can adversely affect sperm production. Semen evaluation of bulls that are stressed due to cold temperatures or weight loss will reveal decreased motility and a greater number of abnormal sperm cells. If the bulls do not have adequate time to recover before the start of the breeding season, a hard winter can result in poor breeding success in a spring breeding season.

Adequate feeding of yearling and 2-year-old bulls is particularly important because they are still growing and if fed with older bulls do not compete successfully for space at the feedbunk and hayrack. Older bulls can maintain body weight with a diet of good-quality forage or a combination of moderate-quality forage and a grain or byproduct supplement. Young bulls are less likely to meet their nutritional needs with forage alone and often require supplementation to maintain adequate weight gain.

Because young bulls do not compete well against older bulls, and because they usually require a higher-energy diet than older bulls, it is wise to winter young bulls and mature bulls separately.

Physical protection

Another winter concern for bulls is the risk for frostbite of the scrotum — particularly in situations of very low wind chill or a combination of mud and cold. If a bull's scrotum is in contact with cold ground, it is possible for the skin to be severely damaged, and the underlying testicular tissue will be damaged, as well. In severe situations, scar tissue forms between the unhealthy skin and the testicle. If the testicle adheres to the scrotum, a return to normal fertility is not likely. Less severe cases of scrotal frostbite may allow the bull to return to breeding soundness, but it may take a few months before sperm production is acceptable.

Veterinarians performing breeding soundness examinations of bulls in the spring may notice some bulls with scabs on the bottom portion of the scrotum, which formed as a result of frostbite. If the damage was mild enough, and if enough time has passed to allow healing, the bulls may have good-quality semen. But evidence of scrotal frostbite should be taken as a warning to address the winter housing of bulls on the ranch. In many parts of the United States and Canada, bulls should be provided dry bedding and protection from wind in order to assure a successful breeding season the following spring.

Summary

Bulls are an important investment for both commercial and purebred cattle operations. And although they appear to be big and tough, sperm production and fertility can be quickly compromised if they are not given adequate care and attention during the long, cold winter.

Some of the critical management considerations for bulls in the winter include monitoring body condition score and assuring the availability of good-quality forage and possibly a few pounds of a concentrate or byproduct supplement, and providing dry bedding and protection from the wind to reduce the risk of frostbite.

E-MAIL: rlarson@vet.ksu.edu

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