

Protect Bulls From Winter Weather

Prolonged exposure to extreme cold and wind increases the likelihood of frostbite.

Producers need to protect their bulls from the extreme cold temperatures and blizzard conditions that have hit North Dakota this winter.

“The future reproductive success of the herd will suffer if herd bulls are not prepared for or protected from winter weather,” says Karl Hoppe, North Dakota State University Extension livestock systems specialist at the Carrington Research Extension Center.

As with the cow herd, herd bulls need to be maintained in a body condition score of 5 to 6 to be in ideal breeding condition.

“Low temperatures and windy conditions easily can increase feed requirements 25 to 30 percent above normal maintenance requirements,” says John Dhuyvetter, NDSU Extension livestock systems specialist at the North Central Research Extension Center near Minot, N.D. “Also, lack of wind protection and lack of bedding will increase the chance of frost damage to the scrotum and testicles.”

During normal winter conditions, frostbite is not a common problem with breeding bulls, but prolonged exposure to extreme cold and wind increases the likelihood of frostbite. It’s a problem producers must consider when planning for the breeding season.

Evidence of frostbite to the scrotum - noticeable inflammation and swelling - usually is apparent a few days after frostbite occurred. The heat generated from the inflammation directly affects the sperm that are maturing and stored in the epididymis, which surrounds the testicle at the lower end of the scrotum.

The resulting damage may cause temporary or, in more severe cases, permanent sterility in the bull. A scab may appear on the lower portion of the scrotum as healing occurs.

However, the absence of a scab does not indicate that frostbite injury did not occur. Severe frost damage to the testicle and epididymis may cause fibrous bands that affect mobility and circulation in the scrotum.

To determine if a bull suffered frostbite damage, a trained veterinarian should perform a breeding soundness examination prior to the breeding season, according to Janna Block, NDSU Extension livestock systems specialist at the Hettinger Research Extension Center. The process of spermatogenesis takes approximately 60 days, so damage occurring at this time from frostbite or other injuries still may be evident in early May.

“Producers should ensure that breeding soundness exams allow adequate time for bulls to recover from winter injuries but also give themselves time to source new bulls if necessary,” she says.

An examination normally includes a physical evaluation of the entire reproductive tract, including the testicles and epididymis, as well as a microscopic semen evaluation.

Check out the NDSU Extension publication “Winter Management of the Beef Cow Herd” (<https://tinyurl.com/WinterHerdManagement>) for information on winter management of cattle.

Images



The future reproductive success of the cattle herd will suffer if herd bulls are not prepared for or protected from winter weather.
 (NDSU photo)

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