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# COW SENSE CHRONICLE

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### WINTERTIME HERD BULL BLUES

Happy New Year! As I write, we are finally experiencing some above-zero temperatures here in Montana for the year, which are very welcome. During my travels to Extension programs this month (fondly referred to as Asphalt Cowgirl January), I've seen a lot of herd bulls out to winter pasture, and I'll be very honest with you - I have concerns about the future fertility of many of the bulls I've driven past.

Protection from inclement weather is a critical factor in winter herd bull management because of the very real concern of frostbite of the scrotum. While mild frostbite generally has a good recovery rate, severe frostbite can leave a bull infertile. Scarring from frostbite can hinder a bull's ability to raise and lower the testicles for proper temperature regulation. This regulation depends on coordination of three structures: the tunica dartos muscle in the walls of the scrotum, which relaxes when hot and contracts when cold; the external cremaster muscle within the spermatic cord, which lengthens or shortens to lower or raise the testicles depending on temperature; and the pampiniform plexus, which is a coil of veins that provide an effective countercurrent temperature exchange by cooling arterial blood entering the testicle and transferring its heat to the venous blood leaving the testicle. Normal sperm formation only occurs at 4-5 degrees below body temperature, so any damage to any of these three structures could result in infertility.

Pull up that National Weather Service windchill chart and take a look at some of the effective temperatures we've experienced already this winter. The frostbite warning zones aren't going to be much different for that vital part of bull anatomy than they are for human skin. You've invested in those herd bulls for the future of your cow herd and sustainability of your ranch. Shouldn't you put a little insurance policy on that investment? Ensure that bulls have the ability to get out the wind and are not lying on unbedded, frozen ground. Putting testicles on ice is not conducive to fertility.

You can read more about herd bull management in the February 2014 and November 2014 issues of Cow Sense Chronicle. This article begins year 5 of Cow Sense Chronicle. Thank you for reading!

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