



# Winter Bull Management

by Heather Smith Thomas

**B**ulls need as much care through winter as your cow herd. Winter management is important to make sure bulls are healthy and in top shape for the next breeding season. They need a chance to regain body condition if they lost weight. Bull management will vary with each operation, partly depending on facilities available for keeping bulls separate from the cows. Yearling bulls may need to regain weight and to catch up if they've worked hard.

## Nutrition

Ram Kasimanickam, DVM, Washington State University department of veterinary clinical sciences, says a body condition score of 5 is adequate for a breeding bull. Yearling bulls need special attention because they are still growing. Feed supplies and sources vary from ranch to ranch, regarding what's economical to feed as forage and/or concentrates or supplements. The main thing is to make sure young bulls have adequate nutrition to keep growing and to stay in adequate body condition. They need additional energy during

winter, however, to keep warm. Weather severity will determine how much extra feed is needed.

Bulls should not be underfed nor overfed; they need optimum body condition before the next breeding season to have enough stamina to cover their cows. If bulls come out of the cow herd a little thin after the current breeding season, some producers tend to overfeed them.

"Fat layers around the scrotum insulate the testes and can interfere with proper thermo-regulation of the testes," Kasimanickam says. "Sperm parameters and sperm production will be adversely affected in overfed bulls. This is why lean-to-moderate body condition is better than over-fat bulls. It's also important for health reasons. Over feeding with grain can lead to acidosis and liver abscesses, or foot problems."

He also says that producers should make sure feeds don't contain endophyte-infected fescues or other plant toxins that act as vaso-constrictors, which interfere with circulation to the extremities. Cattle have been known to lose ears and

tails and to have foot problems during cold weather when eating certain feeds. "This can also have an effect on the testicles and sperm production, affecting thermoregulation," Kasimanickam says.

"Bulls need proper levels of trace minerals and vitamins for good sperm production. Vitamins A and E and selenium, copper, zinc and manganese serve as cell protectors and prevent damage to sperm from stress. Stress-damaged sperm will result in reduced fertility. Even if fertilization occurs, the resultant embryo will fail to develop."

He adds that knowledge of soils and what they lack will give an idea about which minerals need to be supplemented. This supplementation will depend on the region and the ranch. The vitamin-mineral program should be part of the year-round management and not just seasonal. Producers don't need to do anything special for bulls but just to keep them on the same mineral and vitamin supplement program as the cows.

It pays to separate young bulls from the older ones, especially

their first winter, he suggests. The young bulls are still growing and may have lost a little weight during breeding season. They need a higher plane of nutrition. If they are separate from the older bulls, they don't have to fight for feed or fight for their place in the hierarchy. This separation also gives an opportunity to feed them a different ration that the older ones may not need. A mature bull should regain enough body condition on good hay alone.

Sometimes cattlemen leave all their bulls together, but this practice can be hard on the yearlings and even two-year-olds if they are still losing their teeth. Many ranchers never feed their bulls extra, so the older bulls do very well, and the young ones may take a beating. Bulls can be managed like dry cows once they're mature. It's the young bulls that need a little help; they should be fed like young cows.

## Facilities

Joe Van Newkirk, purebred Hereford breeder near Oshkosh, Neb., winters his herd bulls in a quarter section of pasture with trees for windbreaks. They have

room for exercise and have fewer injuries or problems than if they were kept in a corral.

“We put 18 to 20 herd bulls in a pasture together,” Van Newkirk says. “They are fed a mix of ground alfalfa, ground grass hay and a little corn silage and fed in bunks. We spread the bunks out over a large area, so they all have room to eat, without much competition,” he says. Even though the bulls have their social order established, they still have some personal differences; some bulls don’t want to eat at the same bunk with certain individuals.

The bulls have a lot of room, and this is the key to preventing injuries. “They always have room to get away from one another, and the footing in a pasture is much better than in a corral. It’s a lot easier on the corrals, too. The bulls do better out in the pasture, moving around and staying in good athletic condition. They don’t have any feet or leg problems,” says Van Newkirk.

The bull pastures are situated away from other fields or pastures where there are cattle. “It’s important to have them in an area where they are not across the fence from other cattle. We have some farm ground next to them, and two sides are bordered by country roads, so they are a long way from the other cattle,” he says.

There are many kinds of facilities that work for bulls. Some breeders use bull pens that are very stout, while others just use electric fencing and find it very effective for bulls. Once bulls learn about it and respect it, they don’t try to go through or over a fence. Bulls seem to be even more sensitive or aware of a hot wire than cows or calves, according to the people who use electric fencing.

Ken Dunn, an Idaho breeder, winters a large number of bulls, including 175 weaned bull calves. The weaned calves are in 30-40 acre pastures, with about 75 animals in each group, and fed on the ground.

“We have big straw piles in a corner of each pasture for the calves to lie in. We have two other groups of bulls, with four or five in a group. One group is in a 10-acre pen and the others are in a large corral,” he says.

“For the six to eight herd bulls that we’ve invested a lot of money in, we have individual pens about 14 feet wide and 100 feet long or longer. Use of individual pens is mainly so we can keep these bulls away from each other and prevent fighting, so they won’t get injured. We keep them in these pens for winter and turn them out in the

spring on grass as soon as we can,” Dunn says.

For winter feeding, it’s handy to have the herd bulls in one place. “These pens have a 14 foot feed bunk along one end, with a 24-foot cement apron in front of it that we can scrape off and keep clean. The 100-foot long pens are divided with five-strand hot wire. Each pen opens at the back, with a three-strand hot wire so we can come in with a tractor and clean them out. The hot wires keep the bulls apart so they don’t fight,” Dunn says.

A water trough is shared between pens. “We have 14-foot heavy-duty gates by the feed bunks, so we can hold the bulls back away from the feeding area in the 100-foot-long run when we use a tractor to scrape the feeding area, and then let them back in. Most of the manure buildup is where they eat. This enables us to come through the pens quickly and clean this out. We straw the back of the pens for bedding. In the spring we come in and clean the pens completely,” he explains.

#### Weather protection

Cold weather can have adverse effects on the testicles if bulls can’t get out of the wind.

“Scrotal frostbite adhesions will hinder the bull’s ability to raise or lower the testicles for proper thermoregulation, and this can dramatically and adversely affect sperm production and parameters,” Kasimanickam explains.

“If it’s mild frostbite, there’s good chance for recovery, but if it’s severe frostbite the bull may not recover and won’t be fertile — and it must be replaced,” Kasimanickam says. “Prevention is best, so producers should make sure bulls have windbreaks and bedding. Some people pile up old hay and straw for bedding. Any bull that is exposed to severe cold weather may suffer frostbite unless he has protection.”

Dunn says bulls need a place where they can get out of the wind. He has windbreaks in every pen and also creates mounds of piled straw in his bull pens.

“If you keep adding more straw to the pile, the straw mixed with manure ferments and generates heat, Dunn says. “Our bulls always climb up onto those piles to sleep. It is surprisingly warm on top of those piles.”

If bulls lie on frozen ground with no bedding, this negative situation robs body heat and also increases the risk for frostbite. Having mounds to bed on is healthier in wet conditions also; the bulls don’t have to lie in the mud.

Van Newkirk’s bulls have trees for windbreaks. “We get severe

weather here, with wind chills of 30 to 40 below zero. If it’s really bad, we’ll take a big bale or two of straw out there, so they can bed in that instead of on frozen ground or snow,” he says.

#### Health program

“Bulls need a good vaccination program, and control of internal parasites as well as lice and ticks. Most people have a pretty good program for the cow herd but sometimes the bulls are ignored,” says Kasimanickam. Don’t wait until the last minute for vaccinations, since the animals need enough time to build immunity.

Bulls should be on the same health program as the cows. Many producers give bulls their annual booster for IBR-BVD-PI3 at the same time as they give the cow herd pre-calving vaccinations or at the same time they give the

cows their pre-breeding vaccines. It’s important to vaccinate the bulls at least 60 to 90 days before the breeding season. If these vaccinations are given too close to breeding, there may be adverse effects on fertility, since there’s usually a period of fever following vaccination. Producers often vaccinate their cows 30 to 60 days ahead of breeding, but some veterinarians think it’s essential for the bulls to be vaccinated more than 90 days ahead.

Bulls can be dewormed with a purge wormer when they are brought in after breeding season. It pays to wait and do the lice treatment a little closer to the first of the year or at least after the weather has burned cold, and even then there may be a reason to repeat the lice treatment about the first of March. It seems as if the bulls need delouse treatments

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#### Take care of your investment

It’s good business to take care of bulls. It’s like having a maintenance program on vehicles, rancher Larry Melhoff, Sheridan, Mont., describes. They last longer. If a person doesn’t take care of a young bull, it’s like running a vehicle 100,000 miles without an oil change.

On some ranches people assume the bulls will work under any conditions; people don’t intentionally neglect them, but it happens. It’s natural to try harder to take care of the larger group — the cows — especially when producers are really busy and trying to deal with bigger issues. But it pays to pay attention to bulls and their needs.

Some challenges are due to the constraints of each operation. Not everyone has a good place to put bulls or to make divisions so young bulls can be managed separately. The investment in young bulls is usually large,

however, so it pays to try to protect that investment with proper off-season care.

Ranchers are good at making assessments about what they need in a bull to fit their cow herd and environment. They’ve studied expected progeny differences (EPDs) and know how to feed cattle, but even after they’ve done the homework and paid substantial capital for bulls, some producers don’t follow through and take good care of that investment.

More emphasis is placed on proper care of the cow herd since that’s where the bulk of feed resources are going, but the operations that don’t manage bulls properly are usually the ones with more open cows. It always pays to fine-tune bull management as much as possible to give them optimum conditions for health and fertility. **HW**

more often than cows. Producers should monitor them to see if they need another treatment before spring.

Ken Dunn's bulls are on the same vaccination program as his cows. "Everything gets eight-way twice a year and a modified live four-way shot before breeding season. We worm everything in the fall. We treat cows for flukes when we give their Scourgard shot, and treat bulls for flukes in early spring when they get their spring shots. We do a pour-on in the spring, as well, to help control flies," he says.

"We treat for lice and grubs in the fall, using a pour-on, to get internal and external parasites. This usually works for lice through the whole winter, but on occasion we retreat the bulls for lice before spring. We just use the squirt guns and apply a topical product while we're feeding. After we've put the hay out, while the bulls are standing there eating, we walk up behind them and squirt each one of them. That's an easy method, since our bulls are gentle."

### Social order — minimizing risk for injuries

When bulls are gathered out of the cows and put into their fall/winter pastures, producers should make sure the groups can ease back together and get their differences settled and become comfortable with which ones are higher in the pecking order. If they are too confined, there may be more damage to facilities. It's always good for bulls to have a lot of space.

Van Newkirk puts yearling bulls in a pasture by themselves after taking them out of their cow groups. He puts the older herd bulls in a separate pasture. They soon have the pecking order figured out, and there's not much fighting after that.

"They establish this within the first day or two, and we try to throw them all together on the same day, or as quickly as possible," Van Newkirk says. This is easier on them — as they all fight one another — and no one bull gets picked on. If bulls are continually added to a group, the newcomers are outnumbered



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and ganged up on by the ones that are already there, and some of the new ones may be run to exhaustion.

"We don't like to add bulls later, because this upsets the whole social order," Van Newkirk says. "We put 18 to 20 bulls in a pasture together, and have a smaller pasture where we keep the yearlings and new bulls for a while. We put them with the older bulls later. Usually the old bulls tend to leave the young ones alone."

The young ones are also more timid. They see the size of the older bulls and don't challenge them as aggressively as they would their peers. The young bulls are agile and athletic and get out of the way of the older bulls, so they don't get hurt.

Older bulls sometimes become hard to deal with, and if one of them becomes a problem, Van Newkirk gets rid of him. "But we rarely have problems with older bulls that constantly fight," he says. "Even if the older bulls are rivals, in the Hereford breed usually the boss bull is the boss and no one challenges him very much. He won't pick on any of the others but he cuts a wide swath wherever he goes, and they stay out of his way."

Van Newkirk adds, "If two of them can't quite settle it, they eventually get tired of wrestling and tend to go off to their own side of the pasture. This is the advantage of a large pasture. They don't want to fight every day and can go off by themselves. This usually works until you have to move the bulls, and then we bring one of those rivals in at a time, never together. You have to out-think them." The animals' personalities play a role in how to plan a strategy when moving bulls. **HW**

## Importance of exercise

Bulls need exercise to stay fit. "There are many ways to make sure they get enough exercise. Some producers put feed and water at different ends of the pen or pasture, so bulls have to walk. They need to be fit before the next breeding season," says Ram Kasimanickam, DVM, Washington State University department of veterinary clinical sciences. Producers don't want bulls too soft and fat — with no endurance — after their winter "vacation." Exercise and travel create the healthiest situation for feet and legs and for developing athletic fitness. This is one reason it helps to keep bulls in a large area where they have room to move around. **HW**



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