

Feeding Cattle Extra Reduces Hay Stocks

Producers may need to stretch hay supplies with grain or grain byproducts.

This winter's prolonged bitter cold and significant snowfall may have resulted in cattle producers using considerably more feed than they planned.

"For some, what looked like an adequate supply of hay for the winter is becoming questionable," says John Dhuyvetter, North Dakota State University Extension's livestock systems specialist at the North Central Research Extension Center near Minot.

In harsh conditions, producers protect their livestock from the wind and provide greater amounts of feed to allow cattle to meet their increased energy needs under subzero conditions. The cold increases animals' appetites, rate of feed passage and voluntary intake of feed. A rumen that's kept full during cold weather produces heat by fermentation, and with additional digested energy, cattle can survive weather extremes and remain healthy and in good condition.

"Cows can endure a two- or three-day winter storm or extreme cold period when a reprieve of nicer weather occurs," says Karl Hoppe, NDSU Extension livestock systems specialist at the Carrington Research Extension Center. "However with this year, several weeks of extreme cold without relief have impacted cow feed requirements. Daily cow feed intakes can increase from a normal 3 to 4 percent of body weight to 4 to 6 percent of body weight.

"If the weather is extreme enough, a higher feed intake won't meet the cow's energy needs and body fat will be mobilized for energy," he adds.

He notes that this need for additional feed follows two years of drought that led to a shortage of hay.

Dhuyvetter suggests that if finding the extra feed needed during the past several months has drawn down stored forage supplies, producers should try to make adjustments so the feed lasts until spring turnout to pasture.

"It is likely difficult to purchase additional hay at this point, so consider stretching available forage with grain or grain byproducts," he advises.

If the forages have adequate protein, the lowest-cost option may be to feed 3 to 5 pounds of corn or other available grain daily to substitute for 6 to 8 pounds of hay, the specialists says. However, if forages are low in quality and protein, producers should provide supplemental feed with additional protein to ensure good rumen function and fiber digestion.

Grain-processing byproducts such as distiller grains, wheat midds, canola meal and corn gluten are higher in protein and low in starch, and could be used in combination with corn or by themselves. Grain can be added easily to mixes of hay, silage and crop residues.

If feeding processed or set-out hay bales, grain delivery may require the use of a hopper that's attached to a hay processor, mounted on a pickup or pulled by a utility vehicle. When feeding small amounts of grain to groups of cattle, the grain must be spread over a great enough distance to give all animals an opportunity to get their share.

"Feeding grain is best done in bunks to minimize feeding losses; however, the practicality of this is not always an option," Dhuyvetter notes. "Placing grain over the top of windrowed hay, on scraped compacted snow or as

Images



Winter weather has forced some cattle producers to use more feed than they planned. (NDSU photo)

small piles verses a continuous small line will help minimize losses.”

High-starch grains, while good sources of digestible energy, can result in some competition in the rumen between starch and fiber digestion. To minimize these effects and digestive upsets, cattle should be introduced to grain slowly by feeding limited amounts consistently and daily.

Coarsely cracking or rolling grains is preferable for greater digestibility, but the fines that cracking or rolling can create likely will increase feeding losses, Dhuyvetter says. Therefore, cracking or rolling likely isn't warranted for corn or oats.

Along with providing cattle a balanced ration fed at levels to provide required protein and energy, producers should consider giving their livestock vitamin and mineral supplementation.

“While hay, and particularly legume hay, is a good source of calcium, ration adjustments using more grain, grain byproducts or silage likely will result in rations becoming short in total calcium or the ratio of calcium to phosphorus if an appropriate mineral with the appropriate calcium level is not provided,” Dhuyvetter says. “Additionally, animal feed efficiency, fetal development and immune function are dependent on receiving appropriate vitamin and trace mineral supplementation.”

When a supplement can be fed with some precision daily, including an ionophore such as rumensin has been shown to increase the digestion of forages. In addition, rumensin in the ration can help prevent coccidiosis, a scouring disease that develops when cattle are stressed.

If an adequate feed supply isn't available, producers should consider selling some stock, the specialists say.

“This can be a difficult position, but most producers can find older, less productive cows or bulls in the herd to market,” Dhuyvetter says. “While marketing plans may have sought to hold over additional heifers for replacement or feeders for grazing or spring markets, flexibility may be required to match feed availability to anticipated needs.”

The specialists recommend that producers who are challenged with feeding issues, evaluating rations or cow condition contact their local NDSU Extension agent for assistance and further information.

NDSU Agriculture Communication - March 4, 2019

Source: John Dhuyvetter, 701-857-7682, john.dhuyvetter@ndsu.edu

Source: Karl Hoppe, 701-652-2951, karl.hoppe@ndsu.edu

Editor: Ellen Crawford, 701-231-5391, ellen.crawford@ndsu.edu