

WINTER LIVESTOCK MANAGEMENT

Fortunately in winter, most of us can stay inside where it's warm and not worry about having food and water. Livestock don't have it as easy when the temperatures drop.

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Winter can be tough in Montana. Freezing rain is one of the harshest types of weather for any kind of livestock. Snow is less of a problem, especially if it's relatively dry, and, in general, cold weather can be tolerated if the sun is shining. Wind, however, can be a major detriment to livestock.

Animals that have no shelter from wind or wet conditions require up to 30% more feed per day than animals that have access to shelter from the wind. Beef cattle have a heavy winter coat that provides protection against temperatures as low as 18°F. However, when temperatures dip below 18°F, animals become stressed and require additional energy from feed to maintain body temperature. Exposure to winter winds increases the need for additional feed even more.

An important consideration for livestock owners is that livestock need water or they won't eat. Maintaining proper water intake is extremely important, even in cold weather. Extremely low water temperatures may limit water intake by

cattle, so breaking ice on a pond or creek once or twice a day may not be enough. If possible, supply water that has been warmed to at least 37°F to ensure adequate intake.

When using tank heaters to keep water thawed, use high-quality equipment and ensure the connection is good to avoid potential problems such as stray voltage in a tank. Nebraska research indicates that electrical AC currents above three to four volts in a water source will decrease water intake by cattle. Water is critically important for livestock production, but is additionally important during harsh weather.

Another important consideration, after providing water, is that livestock require more energy during the winter months to maintain an appropriate body temperature and for additional functions. More energy can be provided with feeds by adding high-quality forages and grains to their diets. These feeds provide energy which helps meet maintenance energy requirements.



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An animal's nutrient requirements also go up as the temperature drops, especially in wet conditions followed by extreme cold. Plan to have an additional supply of feed available to get livestock through treacherous times when the roads may be closed due to hazardous driving conditions.

The morphology of an animal's digestive system affects its efficiency in digesting feeds. A horse has only one stomach, while cattle have a four-part rumen to digest feed. Because of this, horses must eat small amounts of high-quality feed often to satisfy their nutrient requirements. Additionally, because they only have one stomach, horses get the most out of their feed when they chew it into fine pieces before swallowing, which increases the amount of time it takes to consume adequate rations. Lastly, horses are much less efficient at digesting low-quality feeds than ruminants (i.e., animals that have a rumen for digestion, such as cattle), and should be given only good quality feeds, especially in harsh winter weather.

Another important aspect of winter livestock management is knowing the body condition of animals. Body condition refers to the relative fatness of an animal. It will be much harder for horses in less than moderate condition to stay warm in low temperatures because they have less insulation than a horse in high body condition. Because of this, their energy requirements will be higher. Livestock owners should start trying to increase the body condition of all livestock in the fall before severe winter weather hits. Body condition scores can change livestock feed requirements dramatically.

It is also important to manage internal parasites in livestock going into winter to reduce another potential cause of stress. In some instances, low body condition scores can be linked to internal parasites.

When caring for animals in times of weather stress, remember that animals have a relatively high tolerance for temperature fluctuations. For example, the comfort range for cattle is between 40 and 70°F. Horses have a wider range, from about 10 to 80°F, and hogs housed in confinement usually are fine unless there is a power outage and the heat source is compromised.

If the temperature outside is around 20°F and the wind is calm, most animals, excluding hogs, will be better off outside where ventilation is better and there are less chances for contact with parasites and diseases that may exist inside a humid barn.

With proper management, livestock owners should sail through the winter months with relatively few problems. Prevention and attentiveness to each situation and species are key elements to a successful winter for livestock. ■

Maintaining ample water intake is the most critical part of ensuring the health of horses during cold weather.

Horses prefer water at temperatures between 45 and 65°F. A normal, healthy horse will consume between 5 and 15 gallons of water daily depending on environmental conditions and level of activity. Ideally, water should be kept between 45 and 65°F to maintain consumption because as water temperature decreases, the horse will consume less water.

Low water intake is directly related to the increased incidence of impaction colic (i.e., when feed material builds up in a part of the digestive system, often the colon). Water intake can be encouraged by increasing the amount of forage being fed prior to a temperature drop and maintaining appropriate water temperatures for horses.

