

## Can Cows Eat Snow To Meet Water Requirements?

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When winter hits and temperatures drop below freezing, it becomes harder to keep a fresh water supply for cattle grazing on range. It can be difficult to access areas to cut ice and open reservoirs or to haul tanks of water.

Many wonder if cows can eat snow in the winter to supply all their water needs. The answer is yes. There are many situations where cattle can survive on snow without having any other water supply. Many ranches throughout the West and Midwest with cattle on large pastures and few or no water resources depend entirely on snow for winter grazing.

Just turning cattle loose on the snow sounds like a very simple management technique, but it requires that ranchers pay very close attention to the animal's body condition and general health.

Several studies have shown there is no reason to expect cattle performance to deteriorate when animals use snow for water. Researchers found cows using snow for water did not differ in live weight amount of body fat compared to cows receiving water.

Another study evaluated the effects of snow as a water source on milk yield and calf growth. A group of pregnant beef cows were provided only snow as a water source. A similar group of cattle were given access to heated water. Cows eating snow consumed between 30 and 40 pounds of snow per day to meet their water needs. Cows with access to water drank 2 to 3 gallons, but also ate 7 to 25 pounds of snow. In the end, there was no difference in average milk yield or body weight between the two groups of cattle or the calves they produced.

Research in Montana showed when cattle have access to water and snow, 2% of cows never drank any water, and only 65% drank water every day. The other 33% drank every second or third day while eating snow the rest of the time. There was no visible difference in the appearance of any of the animals.

When using snow as the only water source, several points should be considered:

- Thin cattle (Body Condition Score of 3 or less) should not be forced to depend only on snow. Cattle should have at least a BCS of 4 and should be in good health.
- An alternate water source must be available in case conditions change and there is not enough snow to meet the herd's water needs.
- Snow must be clean and accessible. Ice crusted, wind-blown or trampled snow is not adequate. It takes approximately 4 inches of snow to get a half-inch of water.
- Make certain feed intake does not decline. A mature cow will eat 2.5 percent of her body weight on each day. Reduction in feed intake may mean insufficient water intake.
- Eating snow is a learned behavior. It can take some cows 4 or 5 days to learn the technique. It's always best to put inexperienced cows with herd mates that have experience using snow as a water source.

Cows can survive and do very well using snow as their only source for water. Ranchers can use pastures without water, increase the length of the grazing season, and save money by not having to provide water during times of snowfall. It is imperative, however, to continually monitor the feed intake and the body condition score of the cows.