

Keeping cattle hydrated and healthy during a drought

Drought conditions can create two deadly dangers for a herd: water deprivation and water (salt) intoxication. Poor water quality will worsen these conditions.

WATER DEPRIVATION

High temperatures combined with a lack of fresh water or green forage can lead to dehydration and death. During a drought, a poorly managed herd may lack access to enough fresh water to stay adequately hydrated.

To remain healthy in hot weather, a 1000-pound heifer may need to drink about 20 gallons daily. The lack of rain may also lead to far less forage growth. In normal years, green forage may provide some of the daily water requirements for a grazing cow. In drought years, forage becomes much drier and the amount of water available from forage will lessen.

To avoid water deprivation, ensure water is readily available to your cattle daily. Check the pumps that draw water from wells. Make certain troughs and tanks contain water. Ensure nipple waterers in barns are working properly.

Avoid holding cattle for long periods in pens that lack water sources and do not work cattle in the heat of the day.

Ensure cattle know where to find water. Cattle are creatures of habit. If their preferred tank or trough dries up, animals may ignore other, distant watering points in their pasture.

When introducing cattle to new pastures, drive the animals to the troughs or tanks. Make sure weaned calves know where to find water. Watch cattle to ensure they are drinking adequately.

WATER (SALT) INTOXICATION

When cattle become excessively dehydrated, sodium levels increase in all tissues, including the brain. If dehydrated cattle find water and drink too much too quickly, the liquid will rush to their brains. As pressure builds in the brains, cattle may develop instability or seizures, or may die. This is known as water (salt) intoxication.

Salt intoxication does not mean the animal is getting an excessive load of salt, but rather the sodium concentration is increasing in the body because the animal is deprived of adequate water.

If cattle become dehydrated, they need to drink water immediately – but only in small amounts. If the trough is empty, put a few inches of water in the bottom.

Let all cattle drink at once to create competition for the water. Then repeat several times with 30 minutes between each watering until their thirst is satisfied. Monitor water intake. Keep it gradual.

POOR WATER QUALITY

Hot summer days take their toll on ponds and tanks. As water sources dwindle during a drought, water may become concentrated with salt and other inorganic materials.

Unpalatable water may cause cattle to avoid troughs or tanks, leading to deprivation and dehydration.

Test water for high concentrations of sodium, calcium, nitrates, magnesium salts, and sulfates. If concentrations are high, new sources of fresh water must be provided.

Warm, stagnant water may also encourage the growth of blue-green algae, some of which are toxic. The algae often concentrate on the downwind side of a pond.

Dead rodents, birds or fish along the downwind side of a pond may indicate the presence of blue-green algae that could harm cattle. However, the first indication of blue-green algae could be one or more dead cattle.

Even during a drought, toxic weeds may thrive along the edges of a water source. Look along the shorelines of tanks and ponds for toxic weeds, like small headed sneezeweed or knotweed and control grazing to avoid toxic weeds.

Have questions about toxic threats that may exist around your farm or ranch?

Contact TVMDL's Analytical Chemistry Section at 888.646.5623.