

Water Issues Arise During Drought

Many producers suffering from drought are working hard to manage forage shortage; however, livestock producers should also pay close attention to the water requirements of their herd. In 90 degree weather, a mature beef cow will consume approximately 18 gallons of water daily. Without rain, pond volume will diminish from consumption and evaporation. When ponds begin to get low, water quality diminishes as well. Large volume ponds and refilling from rain generally keep the water fresh. However, ponds with low volumes and ponds where cattle traffic stirs up sediments will experience poor water quality conditions. These conditions can result in the accumulation of contaminants such as nitrates and salts to levels that can lead to health and performance problems. The safe upper limit for nitrates in water for livestock is 100 ppm nitrate-nitrogen, and waters with total soluble salt contents greater than 5,000 ppm can become detrimental to cattle health. Cattle during late-gestation, or early-lactation and stressed cattle are most susceptible. Poor water quality can result in reduced water consumption leading to reduced feed intake and performance. If water quality is a concern, cattle producers can send in a water sample for analysis and should begin to identify additional water resources for their cattle.

In 2005, some producers faced with water quantity issues plumbed into rural water systems or began watering from wells. Producers considering supplying water through a tank system should ensure that the volume and flow rate are capable of meeting the demands of the cattle. A helpful conversion for tank capacity is 1 cubic foot of volume is equal to approximately 7.5 gallons. Extension engineers can help determine the necessary volume and flow rate required.

Others in 2005 attempted to haul water to their herds. Hauling water is no easy task. A 30-cow herd will require in excess of 600 gallons daily, not considering the additional water required for their calves. Producers attempting to haul water should implement safety precautions by making sure their equipment (gross vehicle weight ratings) are capable of handling the weight of water they will be transporting and their trailer braking systems are in good working condition. Keep in mind that 1 gallon of water weighs 8.34 pounds, so 240 gallons of water weighs 1 ton, or 2,000 pounds.

Drought provides an opportunity to clean out sediment that has accumulated over time and reduced pond capacity. Many producers took advantage of the situation last year. When cleaning out sediment, caution needs to be taken to avoid digging into porous material that might not seal, resulting in water loss due to leakage.

For more information on water quality analysis for livestock or information on watering systems for cattle, visit your local county Extension office.