**Water Issues When Ponds Are Low**

Anyone who has spent time working outside in the summer knows the importance of drinking adequate amounts of clean water to keep heat-related illnesses away. Just like people, cattle will increase their water consumption in the summer, and that source needs to be well maintained for optimum health. K-State experts give thoughts on how to adequately provide water to cattle once ponds start to dry up. One source of water that many producers turn to for cattle out on summer pastures is ponds. And like any water source, they must be monitored for quality and quantity as the summer progresses.

As ponds start to get low on water, the cattle are sourcing the water from a smaller access point, so it is important to monitor them. Accessibility to the water can be an issue depending on the shape of the pond. Deep ponds can have steep sides that make it difficult for the cattle to reach and leave the water source. There are also increased health risks when cattle are drinking from depleted water sources. The water quality of the pond should be tested for total dissolved solids (TDS), sodium, sulfates, and nitrates/nitrites. Total dissolved solids (TDS) have a great effect on the palatability of water and therefore water consumption. In general, TDS concentrations should be less than 1,000 ppm (parts per million). High sulfur (S) concentrations reduce feed and water intake in animals resulting in a reduction of growth and performance. It is recommended that water for livestock consumption contains less than 500 ppm sulfate with a maximum safe level of 1,000 ppm. Nitrate/nitrite contamination of water can occur from a variety of sources, but drought conditions can increase water concentrations. Water nitrate concentrations should be less than 400 mg/L and nitrite concentrations should be less than 100 mg/L which should not cause poisoning in livestock.

During periods of hot and dry conditions, the rapid proliferation of blue-green algae (Cyanobacteria) in water is more common. Stagnant water conditions and high levels of nutrients increase the potential for bloom formation. Blue-green algae blooms can reduce water quality and intake and be potentially toxic. Windy conditions can concentrate algae blooms along water edges increasing the risk of ingesting algae. If algae blooms are noticed, testing of water for toxins is recommended as not all algae blooms produce toxins. Cyanobacteria can produce toxins that can affect the liver and nervous system.

Once ponds are no longer viable watering options, it is time to look for other solutions. A temporary solution is to haul water in tanks to the pastures where the cattle are. It is critical that the water tank only be used for storing water and that no amount of rinsing will fully clear the chemicals from a tank that was used for something else prior to hauling water. The plastic polymers in the tank may hold onto the nitrates and you cannot dilute them enough through rinsing to ensure that it won’t kill cattle. If the tank has been used for something besides water, it is no longer a viable option for water. Another solution to a possible pond dry-up is to look at the grazing rotation of the herd. Producers may need to graze a pasture with the pond earlier in the season to use that water source first, and then rotate cattle to other pastures that either have other water sources or are easier to haul water to.
If you have any questions feel free to stop by or contact me in the Concordia office, at 785-243-8185 or khildebrand@ksu.edu.

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