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How Far Should Cattle Walk to Water?

The topic of watering livestock is one that we most often think about in the hot summer months, but in reality, access to a good water source is important year-round. The winter months can pose an issue in water availability, as water sources freeze up and/or livestock don't want to leave areas of protection. Additionally, this year a person can drive about anywhere in Kansas now and see farm ponds that are dry or very low. While that is discouraging on one hand, it provides opportunity on the other. So, let's take a look at livestock watering in pasture settings.

Behaviorally, cattle tend to water as a group, this is a pattern that is much more pronounced when the distance to water is greater than 1/4-mile away. Range and livestock professionals recommend that animals not be forced to travel more than 1/2 to 3/4 of a mile to water in rough terrain and no more than 1 to 1 1/2 miles on level terrain. This is obviously more of a problem in larger pastures, but water location is a critical link to a total management system in any pasture. Ideally, animals should not have to travel more than 800-900 feet to water.

The significance of the whole herd watering at the same time is that tanks need a lot of capacity to facilitate that behavior. In addition, the water device needs sufficient perimeter to handle at least 10% of the group watering at once. For example, if we have 100 cows in our group, the water tank needs a minimum of 20 ft. of water access, or a 6-ft. diameter tank. This is a conservative measure, as the group size at watering is typically a much higher percentage.

The tank also should hold a minimum of 25% of the herd's daily water intake or 500 gals (100 cows X 20 g/h/d), which would require a 10-ft.-diameter tank that is 2.5 ft. deep. Remember tank sizes can be adjusted, just keep in mind volume and gallons. If cattle have to travel less than 900 ft. to water, they tend to water individually or in small groups of 2-5 head. This reduces the cost for the water system in terms of tank capacity and water delivery rate. The size of this pasture would be roughly 9 acres if water is located in a corner. If water is located at the mid-point along a fence line, then the pasture could be up to 13 acres in size and still keep the four corners within 900 ft. of water.

The point about location is a very valid one to consider. Oftentimes in pastures the water, mineral/salt, fly-control, and possibly creep feeder among other things, are located in a corner of the pasture. Many times, this is at a point of easy access to the cattle manager, close to an entry gate for the pasture. One of my former college professors referred to this as the "Aggieville" of a pasture. Having "Aggieville" in the corner is counterproductive to grazing distribution. Through the use of some planning and plumbing, this point can be divided into separate areas with a more central location for watering systems, which helps better utilize pasture resources.

Keep in mind that how far cattle walk to water is highly dependent on the levels of performance a producer wants to achieve. The less effort cattle exert in traveling back and forth to water, the better they will perform. Producers must evaluate if the cost of providing close-by water can be paid for with increased production. If you want more from your pastures and grazing herd, adding or changing water sources can be a good investment.

Ideally, water systems should provide animals the ability to drink from a tank or fountain and not allow them to enter the water source; if a pond, stream or spring is utilized. This is one benefit of dry weather and low ponds, this gives opportunity to clean out silted in ponds, fence out the renovated pond and incorporate watering systems that move water out of the pond, into tanks. Not only is there a benefit to animals who don't have to physical travel greater distances, but improved water quality from these developments is notable too! If you'd like to learn more, the publication "[Watering Systems for Serious Graziers](#)" is a great reference,