

## **Cattle Drinking Preference - Pond vs. Trough**

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Allowing cattle to drink water directly from ponds and streams is historically the common livestock watering method in Eastern Kansas. Water quality is significantly degraded when cattle are allowed to wade into a pond. Fecal bacteria and suspended sediment levels are particularly increased and may actually reduce the palatability of the water.

Recent research and increased awareness of the importance of water quality has resulted in new emphasis in looking at ways to provide cattle with cleaner drinking water. Research by Montana State University indicates 75% of cows and calves prefer to drink from a watering tank rather than a pond (Gordon 2000). Research in Alberta Canada show that weight gains are improved by cattle drinking from troughs compared to drinking from ponds. (PAMI, 1999).

In 2005, a research trial on the Bressner pasture was designed to evaluate whether cattle would prefer to drink, when offered the same water, from a tank (with a well graveled approach), over drinking from the pond.

Cattle behavior would be observed to determine if this might subsequently reduce the time cattle stand loafing in the pond.

Two 72 acre native bluestem pastures were early intensively grazed with 40 head of 580 lb. steers. Cattle were allowed access to a common pond and stock tank. A 3-gpm submersible pump was used to pump water to a 600 gallon concrete tank located 50 feet up-slope from the approximately 3/4 acre pond. Two 53 watt solar panels were used to power the pump. A water meter was installed inline so volume of water consumed by the cattle could be measured. Cattle were observed at least once daily.

### **Results:**

With frequent rainfall received from May 1-July 4 the sloughs, ditches, and depressions etc. had water in them most of the time. These competing watering opportunities undoubtedly influences our results. Some days no water was consumed from the tank. During the driest time July 7-12, water consumption from the tank averaged 2.35 gal/hd/day. The greatest daily consumption was July 11-12 at 3.5 gal/hd/day.

The south pasture had abundant water available in the slough, but the small surface water supplies in the north pasture had dried up by the conclusion of the trial. One or two individual animals in each pasture were often found standing in the pond. Large numbers of cattle were never observed in the pond.