# **Limited Access Ramps for Pond Watering of Cattle**

#### Overview

Ponds are common sources of livestock water in Kansas. However, allowing unlimited cattle access to ponds can cause severe bank erosion and poor water quality.

Cattle prefer clean water and avoid steep, muddy approaches to water sources whenever possible. Developing limited cattle access ramps with a hardened surface and fencing can greatly improve cattle access to water.

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## **Advantages**

- Simple and inexpensive
- Improves livestock safety and health, (foot rot and leg injuries)
- Reduces bank erosion
- Less sediment and fewer nutrients entering ponds
- Extends pond life and improved water quality
- Applies to new or existing ponds
- Works with "Pit ponds" and exclusion fences

#### Limitations

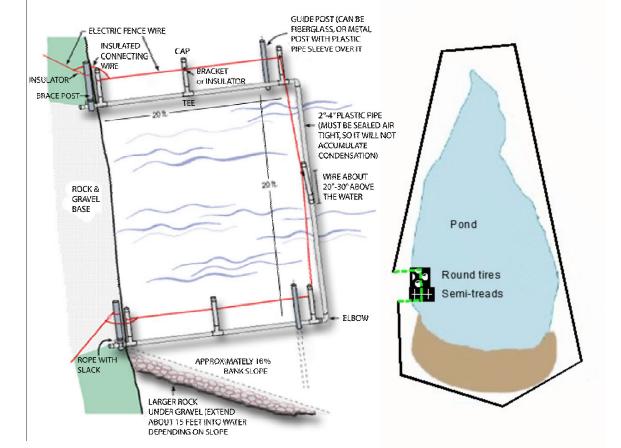
- Fence maintenance required
- Options for location of watering access ramp may be limited
- Few Examples in Kansas













### **Design Considerations**

To encourage animal use, a limited access ramp should have a maximum slope of 6:1 (run to rise) slope. Ramps as steep as 4:1 have been used, however, a flatter slope (8:1 to 12:1) is generally better, especially when conditions are wet or icy. The ramp surface should be able to withstand heavy traffic to prevent erosion from hoof traffic. A ramp construction method using used tires (called an open bowl tire ramp) is available from authors at end of page.

Width may vary (recommendations range from 4 to 80 feet) but a minimum recommended guideline is 10 feet plus one foot for each 10 head of cattle – for example, 15 feet for 50 head. Fencing is required to exclude livestock from other parts of the pond and discourage congregating and loafing near the pond.

An electrified floating fence made of PVC pipe and electric fence wire can be used to restrict cattle movement to the watering access ramp.

Extracted from "Water and Water System Handbook", http://www.ksre.ksu.edu/library/lvstk2/s147.pdf

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