



**K-STATE**  
Research and Extension

## 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.

### Advantages

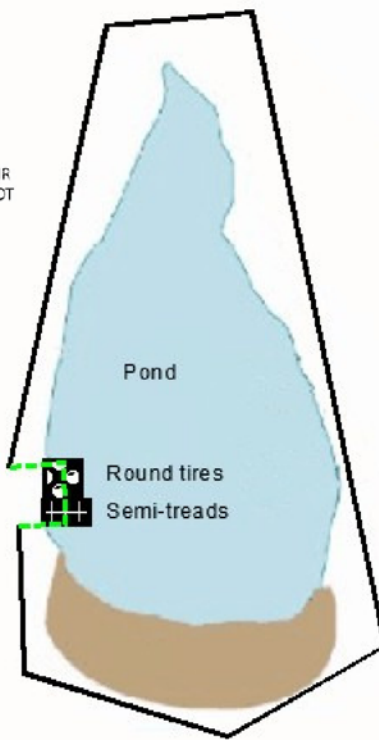
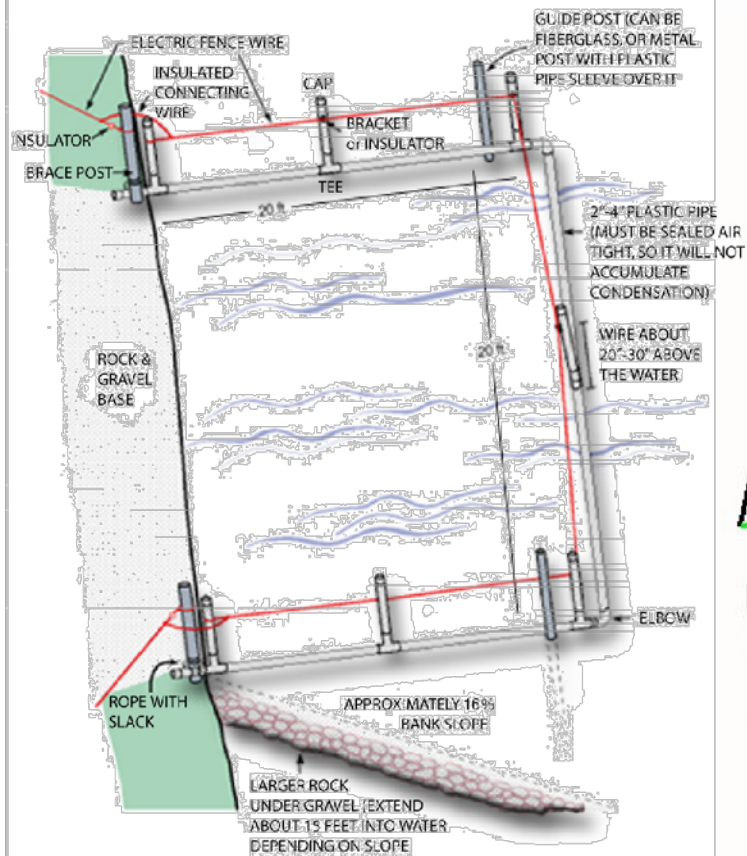
- Simple and inexpensive
- Improves livestock safety and health, (foot rot and leg injuries)
- Reduces bank erosion
- Less sediment and fewer nutrients entering ponds
- Extends pond life and improved water quality
- Applies to new or existing ponds
- Works with “Pit ponds” and exclusion fences

### Limitations

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







## Design Considerations

Slope of the access ramp is important. 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.

The width of the access ramp at the shore line should be wide enough to accommodate at least 10% of the herd at one time. The rule of thumb minimum width is 10 feet, plus 1 additional foot for every 10 head of cattle: thus a total width of 20 feet for 100 head of cattle. For cow/calf pairs consider a width of 10 foot, plus 1.5 or even 2 additional feet per 10 pair, making the total width from 25 to 30 feet for 100 pair. 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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