REDUCING BACTERIA WITH LIVESTOCK BEST MANAGEMENT PRACTICES

LIVESTOCK SHADE STRUCTURE
NRCS CODE 717

Description:
A permanent or portable framed structure to provide shade for livestock away from the riparian area and to improve grazing distribution.

Benefits to Producer:
- Improves animal health and well-being.
- Reduces time cattle spend in or near waterway thereby reducing stream bank erosion and protecting riparian area.
- Improves water quality by reducing sediment, nutrient, bacterial, organic, and inorganic loading to the stream.

Bacterial Removal Efficiency:
- Shade structures resulted in the following bacterial reductions:
  - E. coli: 85% when combined with an off-stream water source.
- Shade structures can be used in conjunction with other practices such as alternate watering facilities. This practice has been shown to reduce concentrations of bacteria.

Other Benefits:
- Increased weight of 1.25 lbs/day for cows, 0.41 lbs/day for calves, and 0.89 lbs/day for steers when provided shade in the spring and summer.
- Reduced deep body temperatures of cattle by 0.5 - 1.4 F.
- Increased summer gain of yearling Hereford steers by 19 lbs/head in a 4-year study.
- Reduction in cow’s radiant heat load by 30%.
- Reduction in total suspended solids and total phosphorus with availability of non-riparian shade.
- Improved grazing distribution.

Estimated Installation Costs:
- $6.50/square foot.
- Cost information obtained from the South Carolina NRCS Electronic Field Office Technical Guide.

Practice Life Span:
- 15 years

Available Cost-Share Programs:
- Cost-share is not currently available for this practice in Texas.

For More Information:
- Contact your local County Extension Agent, Soil and Water Conservation District (http://www.tswcb.state.tx.us/swcds) or the Natural Resources Conservation Service (http://www.usda.nrcs).