

# REDUCING BACTERIA WITH BEST MANAGEMENT PRACTICES FOR LIVESTOCK: FEED, SALT, AND/OR MINERAL LOCATIONS

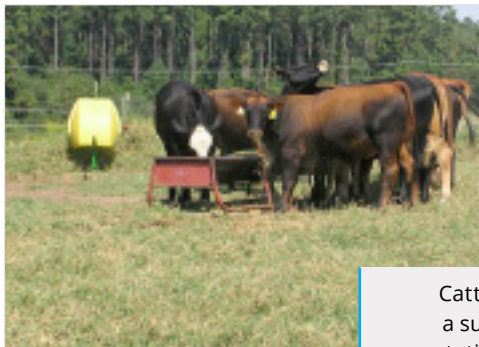
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## Description

The placement of feed, salt, and/or mineral locations off-stream as an attempt to improve grazing distribution and encourage livestock to move away from sensitive riparian areas.

## Benefits to Producer

- ▶ Reduces herd health risks associated with livestock standing in muddy areas, such as foot disease and injuries due to unstable footing.
- ▶ Decreases herd injuries associated with cattle climbing steep and unstable stream banks.
- ▶ Improves water quality by reducing sediment, nutrient, bacterial, organic, and inorganic loading to the stream.
- ▶ Reduces stream bank destabilization and associated erosion due to trampling and overgrazing of banks.
- ▶ Increases grazing distribution.
- ▶ Increases overall herd gain.



Cattle gather around a supplemental feed station. These can be used to draw cattle away from unprotected riparian areas. *Photo courtesy of Dr. Monte Roquette.*

## Bacterial Removal Efficiency

- ▶ Supplemental feed/salt locations can be used in conjunction with other conservation practices including Fencing (NRCS Code 382) and Watering Facilities (NRCS Code 614). These practices have been shown to reduce concentrations of bacteria. Any practice that reduces the amount of time cattle spend in a stream will thus reduce the manure loading and decrease the potential for adverse effects of water pollution from grazing livestock.

## Other Benefits

- ▶ Increased gain in beef cattle of 0.2 to 0.4 lb/day.
- ▶ Increased annual net returns to ranch between \$4,500 and \$11,000 depending on cattle prices and precipitation levels with use of off-stream water.
- ▶ Increased cattle distribution and consumption of upland forage.
- ▶ Reduced development of uncovered and unstable streambanks by 9% over two grazing seasons as compared to pastures not offering supplemental feed/salt.
- ▶ Reduced time cattle spent near stream by 50% to 100%.



Salt blocks can be used to draw cattle away from unprotected riparian areas. *Photo courtesy of Robin Piggott.*

## For Technical or Possible Financial Assistance

- ▶ Contact your local County Extension Agent, Soil and Water Conservation District (<https://www.tsswcb.texas.gov/swcds>) or the Natural Resources Conservation Service (<https://www.nrcs.usda.gov/>).

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