

Livestock Best Management Practices Study



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Purpose of Agricultural Management Measure



Reduce cattle's time in & near stream

Maintain ground cover with proper grazing management



Grazing land Research



- ❧ **5 yr study on:**
 - ❧ Proper grazing management
 - ❧ Alternative water supplies
 - ❧ Alternative shade

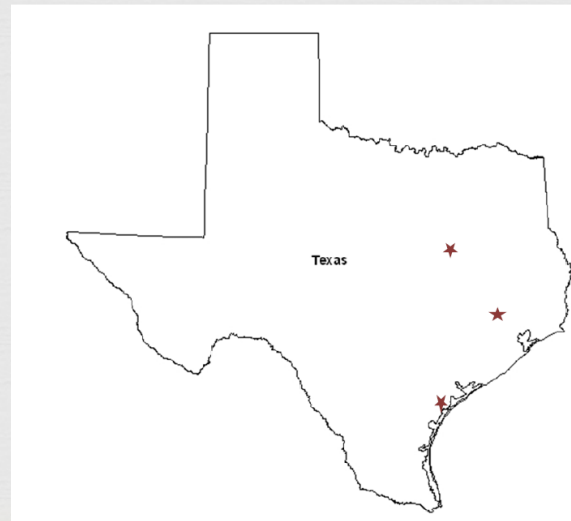
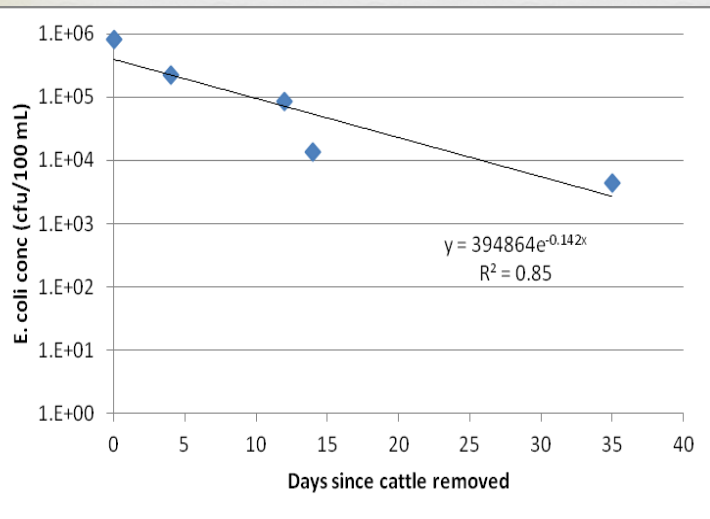
- ❧ **Conducted by:**
 - ❧ Texas AgriLife Extension Service
 - ❧ Texas AgriLife Research
 - ❧ Texas Water Resources Institute
 - ❧ USDA-ARS

- ❧ **Funded by:**
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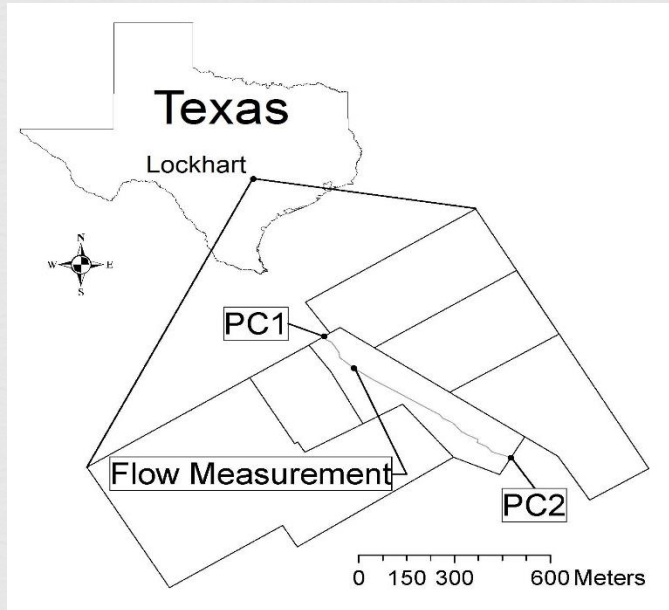
Grazing Management Evaluation

- Seven 1 ha sites assessed across 3 locations
 - 3 – ungrazed
 - 3 – properly stocked
 - 1 – stocked @ 2 X recommended rate
- Grazed sites were rotationally grazed



Alternative Water Evaluation

Bi-monthly water sampling & quarterly GPS tracking



Reduction in Time Spent in Stream	Reference
43%	Wagner et al. 2012
85-94%	Miner et al. 1992 Clawson 1993 Sheffield et al. 1997 Byers et al. 2005

Shade Structure

GPS Collar Evaluation



☞ Shade, coupled with alternative water & salt/mineral locations, encourages cattle to spend less time in riparian areas.

Time Spent w/in 25' of Stream	Reference
27% Reduction	Wagner et al. 2012

Conclusions

- ❧ **Rotate** cattle to upland pastures during wet periods
- ❧ Promote loafing, drinking & grazing away from creeks
 - ❧ Alternative water supplies
 - ❧ Additional shade
 - ❧ Proper grazing management
- ❧ Be aware of impacts of background/wildlife sources



Questions?

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