Reducing Cost of Efficient Beef Production (ends 2013)

2013-2017

Alleviating Rate Limiting Factors that Compromise Beef Production Efficiency
NEXT 5 YEARS

1. Mechanisms by which level of harvested feed affect longevity.
2. Pasture based heifer development systems.
3. Identify factors affecting fertility (bulls and females).
4. Impact of genetic by environmental interactions on production efficiency (poor and favorable environment).
1. Mechanisms by which level of harvested feed affect sustainability
Level of harvested feed input and production

COW

Adequate

Marginal

Daughter

Control

Restricted

Control

Restricted

Uterine Programming
Preliminary results on longevity

![Graph showing retention percentages over cow age]

Retention

Cow Age

IGF-1

R  MargDam
R  AdeqDam
C  MargDam
C  AdeqDam

226/500
2. Pasture based heifer development systems (evaluate strategies to extend forage utilization).

Influences on range
Pasture based heifer development systems

COW

Adequate

Marginal

Daughter

Drylot

Pasture 1

Pasture 2

↓ dependence on harvested feed/

↑ Range utilization
NEXT 5 YEARS

1. Mechanisms by which level of harvested feed affect sustainability.
2. Pasture based heifer development systems.
3. Identify factors affecting fertility (bulls and females).
4. Impact of genetic by environmental interactions on production efficiency (poor and favorable environment, range effects).