Beef/Range Education

North Region Evaluation Results

Educational program focus areas

- Health
- Brush & Weed Control
- Economic Risk Management & Marketing
- Nutrition
- Forage Health
- Management & Reproduction

The Premier Beef/Range educational program was established to:

- ✓ Identify key program areas that address producer needs in Beef/Range
- ✓ Provide teaching objectives within each program area
- ✓ Establish evaluation instruments to determine the Extension educational impact of these programs
- ✓ Provide educational deliveries to impact decisions and economic return of beef production

22 counties providing Beef education

54 meetings

932 producers evaluated

379,317 head

$43.3 million economic return

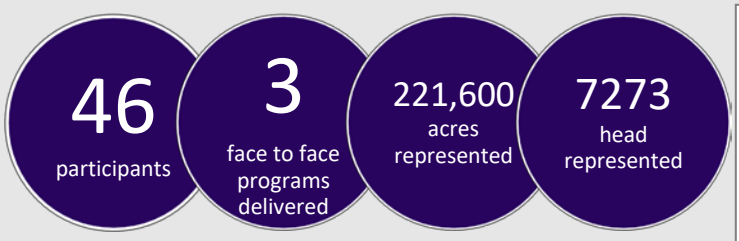
9,488,692 acres

TEXAS A&M AGRILIFE EXTENSION

Premier Beef/Range Education

Health 2014-2018

Beef Health continues to be an important issue to producers on the High Plains of Texas. These Texas A&M AgriLife Extension educational programs focused on the health and profitability of beef cattle.



Producers return on information estimations:
(5-year total)

$690,781

Maintaining healthy productive cattle returns profits to producers and reduces the need for antibiotics. Antibiotic use is a necessary and safe method of controlling illness. Proper use of these products is stressed at educational meetings.

Adoption & Behavior Changes

Eligible producers indicated their intentions to adopt practices or change behavior based on this program

- **100.0%** (13 of 13) indicate they would ***utilize the vaccination programs and other herd health management practices*** Texas A&M AgriLife Extension recommends
- **78.6%** (22 of 28) indicate they would ***adopt external parasite management*** recommendations

TEXAS A&M AGRILIFE EXTENSION

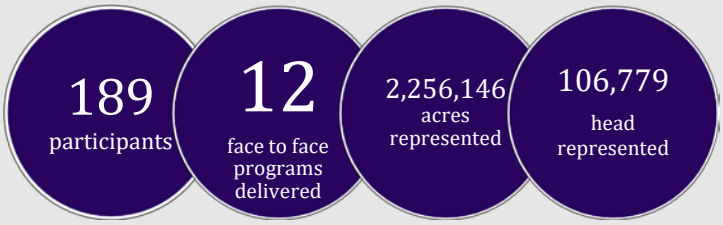
Producers were asked to select their level of understanding **BEFORE** and **AFTER** each program to determine knowledge gained for each topic addressed.

Knowledge Gained	# of Producers	Before	After	% of Change
External parasite management	35	2.24	3.15	30.3%
Use of de-wormers in cattle to improve herd health	12	2.25	3.08	27.7%
Importance of vaccination program in the herd	10	2.70	3.50	26.7%
Determining health requirements of cattle upon arrival	46	2.67	3.56	29.7%

Premier Beef/Range Education

Brush & Weed Control 2014-2018

Controlling Brush and Weeds in rangeland is a priority of Texas A&M AgriLife Extension agents and specialists. The focus is on herbicide recommendations for control of brush and weeds, alternative control options, use and safety of pesticides, improved forages, identification and management.



TEXAS A&M AGRILIFE EXTENSION

Producers return on information estimations: (5-year total)

$1.9 Million

The goal of this program is to improve the quality and quantity of forages available to livestock. Grazing decisions many times reduce or eliminate the need for chemical control in pastures.

Adoption & Behavior Changes

Eligible producers indicated their intentions to adopt practices or change behavior based on this program

- **93.6%** (117 of 125) indicate that they intend to ***use herbicides for weed and brush control***
- **67.0%** (63 of 94) indicate they intend to utilize and compare ***advantages to alternative methods of brush control***
- **76.1%** (48 of 63) indicate that they would adopt recommended ***brush and weed control practices to improve rangeland health***
- **82.2%** (37 of 45) indicate they would adopt ***proper grazing management techniques*** to improve rangeland health

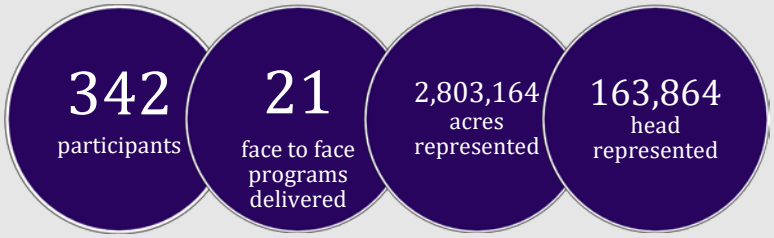
Producers were asked to select their level of understanding **BEFORE** and **AFTER** each program to determine knowledge gained for each topic addressed.

Knowledge Gained	# of Producers	Before	After	% of Change
Brush and weed management practices	158	2.48	3.43	31.6%
Effective timing of herbicide application	189	2.30	3.00	23.3%
Noxious weed control during drought	59	2.28	3.26	32.6%
Alternatives to herbicide control	45	2.17	3.39	40.7%
FSA programs, cost share, and laws and regulations	53	2.00	2.83	27.5%
How brush and weed control affect forage availability	30	2.35	3.41	35.3%
Weed and brush Identification	14	2.14	3.64	50.0%
When and under what conditions to use herbicides	24	2.63	3.29	22.1%

Premier Beef/Range Education

Risk Management & Marketing 2014-2018

Risk Management and Marketing decisions related to beef cattle and ranching are the basis for economic return to producers. Texas A&M AgriLife Extension educational programs focus on pricing, risk assessment and preparation, budgeting and cost of production, laws, relationships, etc.



TEXAS A&M AGRILIFE EXTENSION

Producers return on information estimations: (5-year total)

$14.6 Million

Making sound decisions to improve return and reduce risk is the key to sustainability. Ranchers continue to make decisions for maximum return, protecting their land, and the environment.

Adoption & Behavior Changes

Eligible producers indicated their intentions to adopt practices or change behavior based on this program

- **81.6%** (325 of 398) indicate they would ***adopt recommended marketing strategies*** to enhance profitability 95%
- **66.4%** (103 of 152) indicate they would use some type of ***price protection*** while marketing their cattle
- **84.5%** (11 of 13) indicate they would utilize ***risk management legislative information*** to make decisions about operations
- **75.8%** (25 of 33) indicate they plan to ***develop a succession plan*** for their ranch

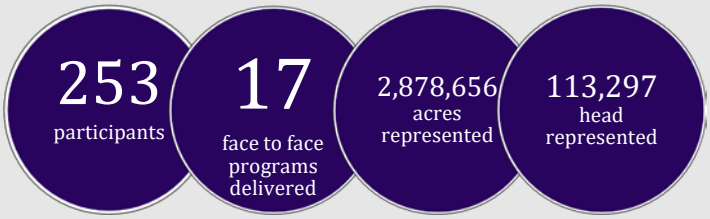
Producers were asked to select their level of understanding **BEFORE** and **AFTER** each program to determine knowledge gained for each topic addressed.

Knowledge Gained	# of Producers	Before	After	% of Change
Importance of price protection and cattle marketing strategies	342	2.42	3.24	27.3%
Understanding available marketing alternatives	203	2.29	3.10	26.9%
Retained ownership advantages and disadvantages	108	2.63	3.33	23.2%
Landowner/Lessee relationship	51	2.11	3.08	32.2%
Recommended marketing strategies for cow/calf	284	2.61	3.43	27.2%
Budgeting and cost of production	241	2.49	3.19	23.2%
Marketing strategies and options for small herds	145	2.46	3.23	25.6%
Developing marketing relationships	100	2.56	3.29	24.1%
Developing a plan for succession of the ranch	42	2.33	2.98	21.7%

Premier Beef/Range Education

Beef Nutrition 2014-2018

Texas A&M AgriLife Extension Beef cattle nutrition educational programs focus on supplementation, Body Condition Scores, nutritional requirements, minerals, alternative sources of feed, decisions aides, forage value, etc.



TEXAS A&M AGRILIFE EXTENSION

Producers return on information estimations: (5-year total)

$9.4 Million

Nutritional health of beef cattle has a direct impact on quality of the product produced. Beef producers are keenly aware of the correlation of nutrition, quality of their product, and increased return.

Adoption & Behavior Changes

Eligible producers indicated their intentions to adopt practices or change behavior based on this program

- **83.1%** (163 of 196) indicate that they intend to use ***supplemental feeding practices to meet nutritional needs*** as recommended by Texas A&M AgriLife Extension
- **80.8%** (97 of 120) indicate they intend to use ***Body Condition Scores in determining nutritional needs*** of beef cattle
- **87.7%** (222 of 253) indicate that they intend to use ***rangeland monitoring techniques*** to determine stocking rates
- **56.5%** (73 of 129) indicate that they intend to use ***forage tests for nutrient quality***
- **66.7%** (10 of 15) indicate that they intend to utilize ***decision aides or computer programs to assist in nutrition decisions***

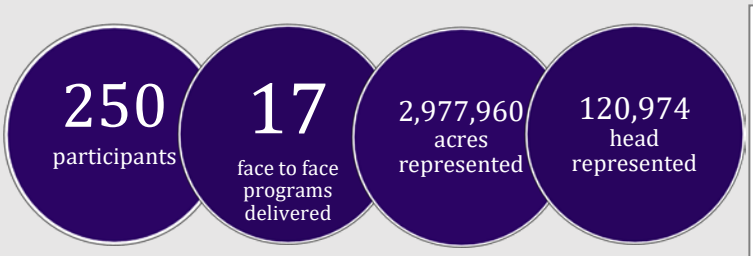
Producers were asked to select their level of understanding **BEFORE** and **AFTER** each program to determine knowledge gained for each topic addressed.

Knowledge Gained	# of Producers	Before	After	% of Change
Importance of supplementation of herds	233	2.60	3.31	23.6%
Nutritional change to forages based on maturity and time of the year	157	2.50	3.40	30.1%
Factors influencing nutritional requirements of cattle	188	2.56	3.43	28.9%
Alternative sources of feedstuffs and associated cost and needs	55	2.11	3.59	49.3%
Utilizing Body Condition Scores to determine nutritional needs	197	2.36	3.30	31.3%
Mineral requirements for cows	50	2.09	3.29	40.1%
Factors affecting nutrient value of forages	52	2.27	3.45	39.3%
Determining nutrient value of available feedstuffs	45	2.37	3.43	35.5%
Relation of nutrition to herd health	113	2.30	3.59	42.9%

Premier Beef/Range Education

Forage Health 2014-2018

Range and Forage Health educational programs focus on monitoring forages, forage availability and quality, rangeland health, determining stocking rates, management, nutrient value of forages, identification, etc.



TEXAS A&M AGRILIFE EXTENSION

Producers return on information estimations: (5-year total)

$5.6 Million

Proper management of grasses and decisions related to stocking rates, increase productivity and enhance economic return. It also benefits wildlife habitat and reduces the use of pesticides. Protecting our environment and natural resources is a priority to ranchers.

Adoption & Behavior Changes

Eligible producers indicated their intentions to adopt practices or change behavior based on this program

- **79.0%** (193 of 244) indicate they intend to ***estimate forage quality and forage inventory***
- **85.7%** (145 of 169) indicate they would ***adopt rangeland monitoring techniques*** for use while determining stocking rates
- **84.3%** (167 of 198) indicate they would rebuild the herd based on ***forage availability and quality***
- **42.8%** (57 of 133) indicate they would adopt ***prescribed burn techniques***
- **83.8%** (52 of 62) indicated they would adopt ***proper management techniques*** to enhance livestock and wildlife

Producers were asked to select their level of understanding **BEFORE** and **AFTER** each program to determine knowledge gained for each topic addressed.

Knowledge Gained	# of Producers	Before	After	% of Change
How to improve rangeland health	156	2.41	3.29	29.4%
Forage quality and livestock inventory	191	2.10	3.34	41.3%
Determine stocking rates based on forage availability and quality	250	2.78	3.42	21.2%
Managing CRP grasses and forages	46	1.96	3.40	48.0%
Management of annual forages	68	1.68	2.74	35.2%
Factors affecting nutrient value of forages	129	2.43	3.44	33.5%
Manipulation of native plant community for quality and quantity	113	2.26	3.05	26.2%

Premier Beef/Range Education

Management & Reproduction 2014-2018

Beef Reproduction and Management continues to be an emphasis for Texas A&M AgriLife Extension educational programming. The focus is on heifer and bull development, management, selection, vaccination programs, condition of livestock, ID issues, etc.

TEXAS A&M AGRILIFE EXTENSION

Producers return on information estimations: (5-year total)

$11.1 Million

Management is sustainability. Good decisions with reduced risk will provide the best economic return for ranchers.

Adoption & Behavior Changes

Eligible producers indicated their intentions to adopt practices or change behavior based on this program

- **69.5%** (151 of 217) indicate they intend adopt ***management practices and ID methods*** to improve reproductive efficiency
- **73.9%** (54 of 73) indicate they would develop a ***systematic approach*** to replacing heifers
- **83.4%** (141 of 169) indicate they would ***utilize recommended vaccination programs***
- **85.1%** (126 of 148) indicate they would ***adopt a drought plan***
- **79.7%** (63 of 79) indicate they would select and ***utilize size, breed, and crossbreeds that adapt to local environmental conditions***

Producers were asked to select their level of understanding **BEFORE** and **AFTER** each program to determine knowledge gained for each topic addressed.

Knowledge Gained	# of Producers	Before	After	% of Change
Advantages of controlled calving	205	2.87	3.49	20.6%
Importance of a vaccination program	252	2.76	3.57	26.8%
Development of a drought plan	162	2.83	3.50	22.3%
Impact of nutrition and health on reproduction	84	2.87	3.54	22.3%
Selection of herd sires	44	2.65	3.51	28.7%
Importance of heifer development	63	2.49	3.29	26.7%
How trichomoniasis negatively impacts beef cattle reproduction and profits	88	2.50	3.36	28.5%
Body conditions effect on production and reproduction	110	3.02	3.45	14.3%