

V(A). Planned Program (Summary)

Program # 1

1. Name of the Planned Program

Global Food Security and Hunger: Beef

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
301	Reproductive Performance of Animals	15%		20%	
302	Nutrient Utilization in Animals	15%		20%	
305	Animal Physiological Processes	10%		15%	
306	Environmental Stress in Animals	10%		15%	
307	Animal Management Systems	30%		15%	
308	Improved Animal Products (Before Harvest)	20%		15%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	3.6	0.0	2.5	0.0
Actual	0.0	0.0	2.7	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
60484	0	117872	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
60484	0	117872	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
300040	0	958370	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Global food security and hunger: Beef team is made up of 18 faculty members contributing a total of 4.8 FTEs to this project. Team members generated \$54,399 in external grant support and made 12,731 direct teaching contacts. Team members produced three peer-reviewed Extension publications and 10 articles in professional and scientific journals. The Team has two major focus areas:

- Beef Production and Management
- Beef Product Integrity (Beef Quality Assurance)

Beef team members conducted 15 beef schools and 24 beef quality assurance workshops. Members conducted 14 tours and field days, published four dozen newsletters and popular press articles, and conducted 12 applied research or demonstration field trials.

2. Brief description of the target audience

Target audiences included beef industry participants (cow-calf producers, stocker operators, feedlot operators, allied industry representatives, veterinarians, students, etc.) youth with beef and livestock projects, Native Americans, and the general public.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	4000	15000	1650	850
Actual	9690	45155	3041	3682

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	2	6	
Actual	3	16	19

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Beef schools.

Year	Target	Actual
2010	15	15

Output #2

Output Measure

- Beef Quality Assurance (BQA) workshops.

Year	Target	Actual
2010	4	24

Output #3

Output Measure

- Field days.

Year	Target	Actual
2010	6	8

Output #4

Output Measure

- Demonstrations/Applied research projects.

Year	Target	Actual
2010	5	12

Output #5

Output Measure

- Tours.

Year	Target	Actual
2010	5	6

Output #6

Output Measure

- Popular press articles.

Year	Target	Actual
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2010	20	24
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Output #7

Output Measure

- Newsletters.

Year	Target	Actual
2010	15	26

Output #8

Output Measure

- Abstracts.

Year	Target	Actual
2010	6	14

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Producers apply new, accepted, or recommended production practices. I: Number of participants indicating adoption of recommended practices.
2	O: Producers acquire knowledge and understanding of new, approved, or recommended beef production practices. I: Number of participants citing change in knowledge on evaluation instruments(pre- post-test results).
3	O: Producers are aware of new, accepted, or recommended practices related to BQA, NAIS, and other new and emerging technologies and issues. I: Number of participants at educational events.
4	O: An increase in the number of trained graduate students prepared to enter the workforce. I: Number of M.S. and Ph.D. candidates relevant to this topic team.
5	O: Producers possess skills and knowledge about BQA I: Number of BQA certificates awarded

Outcome #1

1. Outcome Measures

O: Producers apply new, accepted, or recommended production practices. I: Number of participants indicating adoption of recommended practices.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	75	89

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Adoption of Brucellosis and Trichomoniasis Regulations. Producers, the Shoshone-Bannock Tribes, and the State of Idaho must control these two diseases to maintain the integrity of Idaho beef health. Both diseases cause serious economic losses when discovered in beef herds and wildlife.

What has been done

Education was provided regarding these diseases in two beef schools and two stockmen's meetings. Letters were mailed to producers explaining the issue and why it was critical to practices these animal health practices.

Results

All producers adopted the practices. As a result, all identified cattle herds running on the Fort Hall Reservation are Brucellosis vaccinated. All bulls are tested for Trichomoniasis. This has resulted in no abortions related to these two diseases.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
305	Animal Physiological Processes
306	Environmental Stress in Animals
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)

Outcome #2

1. Outcome Measures

O: Producers acquire knowledge and understanding of new, approved, or recommended beef production practices. I: Number of participants citing change in knowledge on evaluation instruments (pre- post-test results).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	75	86

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Increasing beef safety. Increase wholesomeness and safety of US food supply is important to producers, consumers, and health care professionals.

What has been done

Beef quality assurance certification workshops are held, and include education about raising safe and healthy beef products.

Results

Participants learn new information and skills to protect product quality and safety, as evidenced by participants passing the BQA certification exam.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
305	Animal Physiological Processes
306	Environmental Stress in Animals
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)

Outcome #3

1. Outcome Measures

O: Producers are aware of new, accepted, or recommended practices related to BQA, NAIS, and other new and emerging technologies and issues. I: Number of participants at educational events.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1500	1164

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local beef producers want to acquire knowledge on the latest production practices so they can increase their bottom line.

What has been done

Winter beef schools are conducted across the state to give beef producers an opportunity to gain knowledge that they can take home and apply it on their ranches.

Results

More than 1,100 local beef producers participated in Winter Beef Schools, Beef Quality Assurance workshops, field days, and other learning events.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
305	Animal Physiological Processes
306	Environmental Stress in Animals
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)

Outcome #4

1. Outcome Measures

O: An increase in the number of trained graduate students prepared to enter the workforce. I: Number of M.S. and Ph.D. candidates relevant to this topic team.

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	7	7

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
305	Animal Physiological Processes
306	Environmental Stress in Animals
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)

Outcome #5

1. Outcome Measures

O: Producers possess skills and knowledge about BQA I: Number of BQA certificates awarded

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	25	296

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Consumers expect each food product they buy to be safe, high quality, wholesome, and consistent. To maintain consumer demand for beef and beef products, beef producers must be made aware of the beef quality and consistency shortfalls that result from various management activities and be provided with methods to address and eliminate the shortfalls.

What has been done

Information on a variety of beef quality assurance (BQA) topics was presented at a variety of events (beef schools, etc.) around the state.

Results

At four (4) educational events, participants were allowed to take the Idaho Beef Quality Assurance (BQA) certification exam. Approximately 150 training session participants successfully completed the exam.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
305	Animal Physiological Processes
306	Environmental Stress in Animals
307	Animal Management Systems
308	Improved Animal Products (Before Harvest)

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Appropriations changes
- Competing Programmatic Challenges

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- During (during program)
- Comparison between locales where the program operates and sites without program intervention

Evaluation Results

In the Idaho BQA vaccine handling and management study the results showed the following (each individual received a report on their results):

- 67% of ranch refrigerators failed to maintain animal health products at recommended storage temperature.
 - Many of those refrigerators are simply "out of adjustment."
 - Producers follow BQA chute-side recommendations of keeping vaccines cool, avoiding sunlight, and proper injection-site location.
 - Improvements are needed in syringe cleaning practices and record keeping.
 - Major improvements are needed by surveyed retailers.
 - Retailers are doing a dismal job of storing vaccines at recommended temperatures (only 34% are at proper temperatures).
 - 41% of retailers surveyed do nothing to monitor temperatures.
 - Training for employees in vaccine handling and answering customer questions is lacking in many cases.

Key Items of Evaluation