

V(A). Planned Program (Summary)

Program # 7

1. Name of the Planned Program

Food Safety

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	25%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	75%			
	Total	100%			

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Actual	1.8	0.0	0.0	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
39948	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
64665	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conduct train the trainer workshops
 Conduct workshops
 Facilitate meetings
 Develop local and state partnerships with agencies and businesses
 Workshops aimed at meeting beef quality assurance standards, production and marketing goals

2. Brief description of the target audience

Restaurant and other food service managers/employees
 Volunteers at food service operations
 Adults engaging in home food preservation
 Producers of animals for human consumption

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	{NO DATA}	{NO DATA}	{NO DATA}	{NO DATA}
Actual	2570	8000	2578	4589

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

Patent Applications Submitted

Year: 2010
 Plan:
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	3	0	3

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- **FOOD SAFETY:** Provide 3 train the trainer sessions for County Agents so they can conduct 25 food safety education for audiences such as county sanitarians, school food service personnel, volunteers, food banks and so forth. Provide training and updates to county extension agents so they can implement County based programs.

Year	Target	Actual
2010	{No Data Entered}	670

Output #2

Output Measure

- **FOOD PRESERVATION --** Provide training for County agents so they can conduct workshops for people wanting to preserve their own foods safely. Produce/distribute written materials describing equipment, skills and safe techniques for home canning. Test pressure cooker gauges so home canners can be assured they are canning foods safely.

Year	Target	Actual
2010	{No Data Entered}	500

Output #3

Output Measure

- **BEEF QUALITY ASSURANCE:** Number of people attending beef quality assurance, production and marketing programs. Number of classes, demonstrations and tours provided. Number of people becoming BQA certified. Number of people participating on interactive video program and hits on the web site.

Year	Target	Actual
2010	{No Data Entered}	1400

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	FOOD SAFETY: The participants will learn about or improve safe food handling, specifically facts and skills related to the basics of safe food handling: controlling time and temperature when handling food, ensuring proper personal hygiene, preventing cross-contamination, proper cleaning and sanitizing.
2	FOOD PRESERVATION: Number of people practicing safe food preservation techniques and using appropriate and tested equipment.
3	MONTANA BEEF QUALITY ASSURANCE AND BIOSECURITY EDUCATION

Outcome #1

1. Outcome Measures

FOOD SAFETY: The participants will learn about or improve safe food handling, specifically facts and skills related to the basics of safe food handling: controlling time and temperature when handling food, ensuring proper personal hygiene, preventing cross-contamination, proper cleaning and sanitizing.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	670

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Food borne illnesses impact 1 in 65 Montanans so food safety is of growing concern for the food service industry, public and private agencies. Food safety training ranges from basic safe food handling practices to understanding HACCP. The financial costs of food-borne illnesses are significant covering lost wages, health care and investigation. These losses have widespread implications in health care costs, productivity, and health and economic well-being of children, families and communities.

What has been done

Food safety training for food service employees covered the basics of safe food handling focusing on controlling time and temperature, ensuring personal hygiene, preventing cross-contamination, proper cleaning and sanitizing. Additional training included HACCP and the Serve Safe Food Protection Manager Certification Course designed to provide food-safe knowledge and skills to maintain a food-safe establishment, the impact of safety on the operation and the flow of food through the operation.

Results

Food safety courses (level 1 and 2) were given in 4 counties and 1 reservation. ServSafe classes were presented to 13 women at the Passages program connected with the correctional system; 95% of the participants (13) passed the certification test; 1 of the women has been released and is employed in the food service industry. FCS teachers taking the classes report they have incorporated the information in their curriculums and 3 of the teachers have started the Pro-Start class in their schools to train students in the Food Service Industry. Home Care participants reported they are better able to identify food safety concerns in client's homes and provide accurate information for addressing issues. The Council on Aging reported significant positive

benefits when employees apply a set of consistent standards to address foods safety issues. (controlling time and temperature, ensuring person hygiene, preventing cross-contamination, proper cleaning and sanitizing, etc.)

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #2

1. Outcome Measures

FOOD PRESERVATION: Number of people practicing safe food preservation techniques and using appropriate and tested equipment.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	500

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

A national survey conducted by the National Center for Home Food Processing and Preservation with funding from CSREES-USDA in 2000 revealed a high percentage of home food processors are using practices that put them at risk for foodborne illness and economic losses due to food spoilage. As a result of this initial study and recent updates to it, the need to provide programming for home food preservers is recognized. Additionally, difficult economic times have peaked interest in home food preservation. Montana has an abundance of nutritious seasonal, wild and homegrown foods that can be preserved for use during the up-coming year.

What has been done

Eleven counties and 2 reservations conducted workshops on food preservation. Three counties cooperated with their local libraries, hardware/grocery stores that sell canning supplies, Community Garden and Master Gardener programs to offer food preservation workshops and/or materials. Twenty eight pressure canner gauges were tested for accuracy. Written materials were made available on request.

Results

In county/reservation workshops, participants were asked to rate the programs, the average rating being 9 out of 10. Participants reported that after the workshops, they felt secure in canning foods at home safely. Of the 28 pressure canner gauges that were tested, 2 registered inaccurate and were replaced. The new gauges were tested before they were used for canning.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #3

1. Outcome Measures

MONTANA BEEF QUALITY ASSURANCE AND BIOSECURITY EDUCATION

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	1400

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Food Safety is a recognized part of beef cattle production and is addressed through the Beef Quality Assurance Program. Producers are looking for every opportunity to receive premium returns for their products and realize it is necessary to apply best practices to their operations. Producers on and off the reservations have worked to become BQA Certified as a valued added effort.

What has been done

Anyone working regularly with cattle (on ranch or feedlot) is encouraged to become BQA certified through hands-on, classroom-style and online training. Training at ranches using Twilight Training Seminars has been well received. The sessions emphasize hands-on demonstrations involving: proper handling/ application of pharmaceutical products, judicious treatment/handling of livestock and animal identification of recordkeeping. Group discussions that highlight individual treatment practices/regimes are compared and analyzed. Participants take the BQA exam as a group or individually. These sessions also reflect new information, new technologies and new regulations.

Results

Significant differences were found between BQA certified producers and non-BQA certified producers regarding ranch management. Results of two statewide surveys have shown that: more producers (86.1%) kept track of animal numbers and descriptions, 73.6% kept more cowherd records, 84% maintained more vaccination records, 84% kept records for more than two years, and 91.8% used plastic ear tags for animal identification. It appears BQA certification designation added \$1.56/cwt to steer calf prices and \$1.09/cwt to heifer calf prices. Producers are not only participating for their more profitable operations but for the certified trust it develops with consumers, stated one recent BQA program participant. BQA certification ensures, at least to some degree, that the consumer is receiving quality food products.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

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

1. Evaluation Studies Planned

- After Only (post program)
- Before-After (before and after program)
- During (during program)

Evaluation Results

Key Items of Evaluation