

Ag Sustainability and Profitability

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V(A). Planned Program (Summary)

1. Name of the Planned Program

Ag Sustainability and Profitability

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
112	Watershed Protection and Management	20%			
205	Plant Management Systems	20%			
213	Weeds Affecting Plants	20%			
216	Integrated Pest Management Systems	20%			
301	Reproductive Performance of Animals	20%			
Total		100%			

V(C). Planned Program (Inputs)

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

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	9.0	0.0	0.0	0.0
Actual	8.3	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 279489	1890 Extension	Hatch	Evans-Allen
	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
30338	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The issues under this program area are related to agricultural production, rangeland management, farm/ranch management, small acreages and horticulture. All of these areas are subject to such concerns as drought, fuel prices, disease, noxious weeds and marketing. Ultimately, those engaged in agriculture as a main source of income are most worried about profitability and making appropriate decisions for their respective enterprises. Over the past several years, land owners, in some parts of the state, have dealt with the impact of natural disasters, specifically wildfire.

2. Brief description of the target audience

The audiences that are targeted by programs under this planned program area are largely agricultural producers, small land owners and people interested in raising produce. This includes ranchers who make their living from beef cattle and sheep production and farmers who rely on small grains and other crops for their income. All of these people are concerned about profitability from their operations as well as weed and pest control. Small land owners are engaged in raising animals or crops, but generally have another source of income. Montana has a large number of people living on small acreages who have animals they use for recreational purposes and do not realize any income from them. Those who raise gardens may be selling produce or raising it for their own consumption while others interested in horticultural issues may be mostly concerned about their ornamental gardens and trees.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	12120	43240	930	2100
2007	9347	32000	810	1700

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

Patent Applications Submitted

Year Target

Plan: 0

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Montana Beef Network

- Number of people attending beef quality assurance, production and marketing programs. Number of classes provided.
- Number of people participating in the interactive-video conference programs.
- Number of producers becoming BQA certified.
- Participation in interactive television short courses (4).
- Number of hits on the web site
- Number of people participating in demonstration/tour opportunities.

Year	Target	Actual
2007	3500	2838

Output #2

Output Measure

Montana Sheep Institute

- Number of people attending workshops teaching innovative ways of using sheep.
- Number of projects being conducted with sheep grazing invasive plants.
- Number of sheep producers involved with sheep grazing projects
- Number of landowners involved in sheep grazing projects
- Number of acres where weeds were controlled and documentation of vegetative composition trends.
- Number of wool growers involved in developing larger, more marketable clips.

Year	Target	Actual
2007	6000	1140

Output #3

Output Measure

Weed Control

- Number of producers participating in workshops on weed control.
- Number of producers and landowners attending tours
- Number of people attending meetings on pesticide control and applicator training.

Year	Target	Actual
2007	1535	0

Output #4

Output Measure

Crops

- Number of producers attending cropping systems workshops.

Year	Target	Actual
2007	2050	2435

Output #5

Output Measure

Master Gardener

- Number of people who become certified Master Gardeners

Year	Target	Actual
2007	100	216

Output #6

Output Measure

Profitability

- Number of producers attending farm management workshops.

Year	Target	Actual
2007	155	132

Output #7

Output Measure

PASTURE/FORAGE PRODUCTION: Number of producers attending workshops related to alternative crops/forage.

Year	Target	Actual
2007	{No Data Entered}	1648

V(G). State Defined Outcomes

O No.	Outcome Name
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1	<p>SHORT TERM Montana Beef Network</p> <ul style="list-style-type: none"> • Number of people using and understanding Beef Quality Assurance protocols for raising beef. • Number of people learning about new practices in livestock production. Montana Sheep Institute • Number of people who learned about using sheep to control invasive plants • Increase in the number of Wool Pool consolidation. Weeds • People learn about noxious weed identification and weed management. • People learn how to map their property with a GIS device. • Landowners will be able to recognize weed problems, determine control techniques, and improve their weed control skills. Master Gardener: <ul style="list-style-type: none"> • Participants learn about plants and how to grow them successfully. Crops: <ul style="list-style-type: none"> • Producers will improve their understanding of nutrient cycling, weed control, variety selection and alternative crop possibilities. Profitability: <ul style="list-style-type: none"> • Ag producers will gain knowledge associated with development of standard financial statements, and track machinery costs as well as fixed and variable costs associated with crop enterprises. MEDUIM TERM Montana Beef Network <ul style="list-style-type: none"> • The percent of increase in the value of calves sold at weaning. • Number of people who made changes in the way records are kept on ranches. • Percent of breeding programs that are meeting the needs of the consumer in terms of quality and yield grade of calves. Montana Sheep Institute <ul style="list-style-type: none"> • Increased number of grazing management programs initiated and monitoring programs developed. • Increase in the number of Wool Pools organized and wool delivery and marketing of consolidated pools implemented. <ul style="list-style-type: none"> • Number of producers who developed plans to implement technology in their own production unit. (Ribeye program) Weeds <ul style="list-style-type: none"> • An increase in the number of acres mapped for purposed of weed identification and location. • An increase in the number of weed infested acres being controlled by accepted practices. • Producers will implement weed management plans/areas on their land. • Integrated Pest management techniques will be put into practice. Master Gardener: <ul style="list-style-type: none"> • Participants' volunteer hours of service to their communities in answering questions about horticultural issues. Crops: <ul style="list-style-type: none"> • Producers will plant short water varieties when moisture conditions are low, plant sawfly resistant varieties to minimize losses, and forage varieties that will improve production. • Pounds of fertilizer used in faming systems will be reduced. • Producers will adopt weed, crop and forage management strategies that sustain agricultural crop production and lessen environmental damage. Profitability: <ul style="list-style-type: none"> • Producers will adopt financial management programs that will provide financial statements for business analysis and bank lending requirements. • Producers will analyze enterprise cost of production that will aid in cropping decisions, marketing, leasing, machinery and land purchases. LONG TERM Montana Beef Network <ul style="list-style-type: none"> • Add value to weaned calves. Montana Sheep Institute • Acres of infested landscape controlled by small ruminant grazing. • Wool from smaller growers prepared and marketed on the international market. • Producers improving production efficiency of their sheep enterprise. Weeds • Agricultural and public lands will be conserved for future production and use. • The spread of noxious weeds will be reduced Crops: <ul style="list-style-type: none"> • Farm operators who implement best practices will increase their profitability and enhance long-term sustainability. Profitability <ul style="list-style-type: none"> • Successful farm and ranch businesses provide stability and continuity for local communities, businesses and schools.
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2	MONTANA BEEF NETWORK: Number of people using and understanding Beef Quality Assurance protocols for raising beef; number of people learning about new practices in livestock production; percent of increase in value of calves sold at weaning; number of people making changes in records keeping; percent of breeding programs meeting the needs of the consumer in terms of quality and yield grade of calves; added value to weaned calves.
3	MONTANA SHEEP INSTITUTE: Number of people who learned about using sheep to control invasive plants; increase in the number of wool pool consolidations; increased number of grazing management programs initiated and monitoring programs developed; increase in the number of wool pools organized and wool delivery/marketing of consolidated pools implemented; number of producers who develop plans to implement technology in their production units; acres of weed infested land controlled by small ruminant grazing; wool from smaller growers prepared and marketed on the international market; producers improving production efficiency of their sheep enterprise.
4	WEED CONTROL: Number of people who can identify noxious weeds; number of people who can map their property with a GIS device; number of landowners who can recognize weed problems, determine control techniques and improved their weed control skills; number of acres mapped for weed identification and location; increase in the number of acres being controlled by accepted practices; producers implementing weed management plans/areas on their land; number of integrated pest management techniques put into practice; spread of noxious weeds will be reduced.
5	CROPS: Producers will understand nutrient cycling, weed control, variety selection and alternative crop possibilities; producers will plant short water varieties when moisture conditions are low, plant sawfly resistant varieties to minimize losses and forage varieties that will improve production; pounds of fertilizer used in farming systems will be reduced; producers will adopt weed, crop and forage management strategies that sustain agricultural crop production and lessen environmental damage.
6	MASTER GARDENER: Participants learned about plants and how to grow them successfully; number of volunteer hours of service to their communities in answering questions about horticultural issues.
7	PROFITABILITY: Producers will learn about standard financial statements and be able to track machinery costs and fixed/variable costs; number of producers who adopt financial management programs that will provide financial statements for business analysis and bank lending requirements; number of producers who analyze enterprise cost of production to aid in cropping decisions, marketing, leasing, machinery and land purchases.
8	PASTURE/FORAGE PRODUCTION: Number of producers planting cereal forages as a source for winter feed; number of people certified to use the Nitrate Quik Test Program; number of samples tested and estimated economic impact for producers.

Outcome #1

1. Outcome Measures

Not reporting on this Outcome for this Annual Report

2. Associated Institution Types

3a. Outcome Type:

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Populations changes (immigration, new cultural groupings, etc.)
- Other (High cost of fuel, fertilizer etc)

Brief Explanation

Since 1998, one of the largest concerns for agricultural producers has been the drought. Many problems seem to magnify under these conditions; pests seem to thrive, weeds seem to grow better, grasses are stressed, crops yields are down. Agricultural producers, to some extent, are at the mercy of the weather – a factor over which they have no control. In stress times, farm/ranch families rely more heavily on government subsidies than when prices are good. This makes the "new" farm bill of great importance. While prices seem to be good now, farmers/ranchers know that will not be the case long term. The fluctuation in markets, like the weather, are facts of life for people who make their living from the land.

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Time series (multiple points before and after program)

Evaluation Results

Key Items of Evaluation