

V(A). Planned Program (Summary)

Program # 15

1. Name of the Planned Program

Sustainable Energy: Forages

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	0%		25%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	15%		30%	
204	Plant Product Quality and Utility (Preharvest)	15%		0%	
205	Plant Management Systems	40%		25%	
215	Biological Control of Pests Affecting Plants	30%		0%	
405	Drainage and Irrigation Systems and Facilities	0%		20%	
	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	3.3	0.0	0.3	0.0
Actual	4.0	0.0	0.7	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
112796	0	33624	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
112796	0	33624	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
162566	0	191323	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Sustainable energy: Forages team is made up of 18 faculty members contributing a total of 4.0 FTEs to this project. Team members generated \$27,728 in external grant support, \$9,000 in in-kind contributions, and made 5,724 direct teaching contacts. Team members produced nine peer-reviewed Extension publications and one article in a professional/scientific journal. The Team has four major areas of focus:

- Alfalfa
- Biofuels (new, no activity reported for 2010)
- Irrigated Pasture Management
- Annual Forage Cropping Systems

The Sustainable Energy: Forages Team collaborated to create and publish the Northwest Pasture & Grazing Management Guide, a multistate effort involving authors from neighboring states. Team members also participated in the multistate project WERA 1014; Intensive Management of Irrigated Pastures.

The team has been conducting research and sharing information about carbon sequestration potential in pastures with scientists, growers and consultants as a component of climate change education.

The team conducted schools for clientele to learn about intensive grazing management and forage production. They conducted forage variety trials and held field days for stakeholders.

2. Brief description of the target audience

The target audience for this program includes livestock and forage producers, landowners with pasture and alfalfa for hayuing and grazing, small acreage land owners interested in recreational livestock production and in sustainable use of their lands, and members of forage-related industries.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	1000	1115	95	40
Actual	5499	6153	225	283

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	4	1	
Actual	5	1	6

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Demonstrations.

Year	Target	Actual
2010	3	5

Output #2

Output Measure

- Extension educators trained.

Year	Target	Actual
2010	10	34

Output #3

Output Measure

- Grants.

Year	Target	Actual
2010	0	8

Output #4

Output Measure

- Media Interview Articles.

Year	Target	Actual
2010	7	11

Output #5

Output Measure

- Operator Posters.

Year	Target	Actual
2010	1	1

Output #6

Output Measure

- Operator Presentations.

Year	Target	Actual
2010	1	1

Output #7

Output Measure

- Papers.
Not reporting on this Output for this Annual Report

Output #8

Output Measure

- Popular Press articles.

Year	Target	Actual
2010	12	13

Output #9

Output Measure

- Poster Papers.

Year	Target	Actual
2010	3	6

Output #10

Output Measure

- Presentations.

Year	Target	Actual
2010	21	63

Output #11

Output Measure

- Professional Education Opportunity.

Year	Target	Actual
2010	2	3

Output #12

Output Measure

- Research Papers.

Year	Target	Actual
2010	1	1

Output #13

Output Measure

- School (group of related presentations).

Year	Target	Actual
2010	8	9

Output #14

Output Measure

- Tour (Guided tour of producers practices).

Year	Target	Actual
2010	9	2

Output #15

Output Measure

- Workshops (Multi-day educational activity).

Year	Target	Actual
2010	12	9

Output #16

Output Measure

- Proceeding Papers and Reports

Year	Target	Actual
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2010

2

3

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Clients will become aware of new or preferred production practices. I: Number of clients attending schools.
2	O: Clients will adopt new or preferred production practices. I: Percentage of clients indicating in post- surveys that they intend to implement recommended practices.
3	O: Clients gain improved understanding of production and harvesting principles and practices. I: Percent of clients who demonstrate improved knowledge in pre- and post- testing
4	O: Clients will become aware of new or preferred production practices I: Number of popular press articles and interview articles published

Outcome #1

1. Outcome Measures

O: Clients will become aware of new or preferred production practices. I: Number of clients attending schools.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	332	659

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Operators, agency personal and ranch employees who attend the Lost River Grazing Academy have often heard about "intensive" grazing and the economic and environmental benefits. If they are committed to attend the workshop, they usually are interested in learning how conventional practice compares to recommended practice in pasture management.

What has been done

Two four day hands on workshops were provided, where participants studied grazing, livestock and environmental principles and applied them in real grazing situations during the workshop. We also presented a 1 day workshop on alfalfa and pasture management in the Lost River Valley.

Results

38 operators, agency personal and ranch employees attended two Grazing Academy workshops in 2010. They all reported learning about new (or new to them) practices. 25 producers attended the Lost River Forage Workshop.

4. Associated Knowledge Areas

KA Code	Knowledge Area
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
215	Biological Control of Pests Affecting Plants

Outcome #2

1. Outcome Measures

O: Clients will adopt new or preferred production practices. I: Percentage of clients indicating in post- surveys that they intend to implement recommended practices.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	22	64

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Winter feeding costs jeopardize cattle producing operations, often eliminating profit from what might otherwise be a sustainable enterprise.sustainability

What has been done

Unconventional forages have been evaluated for several areas around the State to discover ways to reduce winter feeding by extending the grazing season.

Results

In one county, three local producers have implemented strategies to extend the grazing season with unconventional forages.

4. Associated Knowledge Areas

KA Code	Knowledge Area
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
215	Biological Control of Pests Affecting Plants

Outcome #3

1. Outcome Measures

O: Clients gain improved understanding of production and harvesting principles and practices. I: Percent of clients who demonstrate improved knowledge in pre- and post- testing

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	46	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Pastures often provide less than 50% of the forage that could be produced due to poor grazing and management practices. In addition, poorly managed pastures have a great potential for environmental contamination. Operators need to improve productivity and profitability and society wants clean air, water and save drinking water.

What has been done

Two 4-day hands on workshop on MiG were conducted in central Idaho. At each workshop, the participants were given pre and post quizzes on principles covered during the workshop.

Results

50% of the participants scored higher after that workshop.

4. Associated Knowledge Areas

KA Code	Knowledge Area
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
215	Biological Control of Pests Affecting Plants

Outcome #4

1. Outcome Measures

O: Clients will become aware of new or preferred production practices I: Number of popular press articles and interview articles published

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	12	29

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Getting the word out about currently recommended production practices is getting harder. Social media and blogs are becoming increasingly important pathways for distributing information.

What has been done

A Central Idaho Extension blog was started and article posted to the blog from other sources as well as original pieces.

Results

1461 hits were made on the blog in the last year. There were 126 posts.

4. Associated Knowledge Areas

KA Code	Knowledge Area
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
215	Biological Control of Pests Affecting Plants

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- 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)
- Case Study

Evaluation Results

A summary of evaluations for 16 presentations and facilities rated from 1 (poor) to 5 (excellent) by 36 participants is summarized below for the 1.5-day conference on 16-17 February 2010 at the Burley Inn and Convention Center. The improvement in knowledge was calculated as the difference between the respondent's numerical rating of "your understanding of this subject before and after the workshop." Respondents were anonymous unless they chose to identify themselves. The 36 respondents were about 72% of forms handed out to sample the audience of about 100 producers/crop advisors, 45 vendors, and 15 speakers and extension people.

The average gain in knowledge was 1.2 points on a scale from 1 to 5. The largest gains in knowledge were obtained by the topics "A hay bale core test can indicate nutrient deficiency," "The reduced lignin trait may allow growers to produce high quality hay, increase yield and reduce harvests in a growing season;" and "Silostop system reduces losses compared to using 8 mil white polyethylene." In my opinion, even the lowest gains in knowledge were significant and show the general appreciation of the topics, speakers, and conference in whole.

Key Items of Evaluation