2010 University of Idaho Combined Research and Extension Annual Report of Accomplishments and Results

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I. Report Overview

1. Executive Summary

This combined report of accomplishments for the College of Agricultural and Life Sciences (CALS) represents 93.5 Extension faculty FTEs in outreach education programs and 71.0 research faculty FTEs. The Extension FTEs are contributed by 71 county-based Extension Educators organized into three extension districts and 48 Extension Specialists affiliated with academic departments. Extension programs are conducted by faculty organized into 21 program teams (Topic Teams). Those teams have generated $6,062,844 in external grant support and have recorded 363,377 direct teaching contacts. Extension faculty produced 85 peer-reviewed Extension publications and 85 articles in professional and scientific journals. To summarize research faculty, they contributed to 17 program teams (Topic Teams) and outputs included 171 articles in professional and scientific journals, 18 patents filed or issued (10 plant, 2 provisional and 6 invention disclosures), and $23,289,762 of intramural funding expenditures.

Total Actual Amount of professional FTEs/SYs for this State

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	93.0	0.0	73.0	0.0
Actual	93.5	0.0	71.0	0.0

II. Merit Review Process

1. The Merit Review Process that was Employed for this year

- Internal University Panel
- Combined External and Internal University Panel
- Expert Peer Review
- Other (administrative review)

2. Brief Explanation

Topic Teams consist of faculty who conduct research and extension education programs within an area of related issues. These teams meet annually to review the program plans of colleagues and to provide counsel and feedback on planned methods and programs.

Individual Extension and research faculty submit annual position descriptions to university administrators who review, modify, and approve the slate of programs and activities proposed by faculty members. University administration announces and accepts proposals for four annual mini-grant programs to support competitive applications for programs, including: Topic Teams grant program; Critical Issues grant program; Urban Extension grant program; and Community Development grant program. These proposals are evaluated by a panel of peers against a pre-determined set of criteria. Approximately half of the applications receive funding.

County faculty present their annual work plans to County governments, as part of their annual budget justification process. Commissioners work with faculty to finalize those work plans, and then provide about 20% of UI Extension's total budget, based on the merits of county work plans.

A significant portion of the work performed by UI faculty is supported by competitive grants from outside of the University. In Extension, approximately $3.7 million and in research, approximately $15 million in grants and contracts demonstrates the importance and merit these activities.

All faculty in CALS or other colleges within the UI holding a research appointment in the IAES, are required to have an active, approved research project that reflects their major research emphasis. Hatch projects are expected to address problems relevant to Idaho's agriculture with either a regional or national scope of importance. Project outlines must be reviewed internally by a minimum of two colleagues with expertise in the area of research, the investigator's Department Head and a minimum of two external experts in the area not affiliated with the UI.

Research activities of the IAES that contribute to organized multi-state projects/programs approved by CSREES are designated as Multi-state (Regional) Research Projects. In the Western Region, these multi-state projects must be reviewed by a maximum of four outside peer reviewers in addition to the overall regional multi-function committee (RCIC-see below) appointed by the Western Association of Agricultural Experiment Station Directors (WAAESD). The RCIC reviews the proposal and makes recommendations to the WAAESD and, if approved, transmits the project to CSREES.

III. Stakeholder Input

1. Actions taken to seek stakeholder input that encouraged their participation

- Use of media to announce public meetings and listening sessions
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Targeted invitation to selected individuals from general public
- Survey of traditional stakeholder groups
- Survey of traditional stakeholder individuals
- Survey of the general public

Brief explanation.

Faculty continue to use traditional and novel methods to involve stakeholders as advisers. Several of our counties have complete mailing lists for all households in the county. In some cases, distributing mail surveys to every address in a county has been used during the past several years. To encourage participation in focus groups, few local budgets can support cash incentives, but nearly all such activities provide food and refreshment for participants. To gather stakeholder input from our growing Spanish-speaking population, announcements are printed and broadcast in Spanish through appropriate venues. In some cases (community development, for example) targeted invitations were sent to representatives of pre-determined sectors of the community,

including socio-economic categories of residents less likely to have participated in past sessions. In most cases, people are enticed to provide input as they are taking advantage of opportunities to learn something that meets their personal needs.

During 2010, Extension supplemented our ongoing stakeholder input process by convening a task force of invited individuals to make recommendations to cope with severe budget reductions. We also conducted our ongoing stakeholder input process as described below.

The major stakeholder groups providing input regarding the IAES's spectrum of research activities include:

The Dean's Advisory Board was instituted in 2002. This committee is comprised of a spectrum of stakeholder representatives representing government, industry, and education in Idaho. Academic departments of CALS also have individual advisory boards (see below).

Idaho's 17 agricultural commodity commissions and organizations provide advice specific to commodity based programs and appropriate disciplines and departments within CALS. In addition, IAES researchers provide leadership and most of the content for several major commodity schools that are presented annually in the state. The commodity schools are well attended by stakeholders from Idaho and the region. These "schools", while primarily conducted as major outreach/technology transfer events to provide the latest research results to stakeholders, also serve as major sources of stakeholder input to IAES regarding research priorities and directions. Commodity schools are annually conducted for potato, cereal, and sugarbeet industries. As an example, the UI Potato School is a three-day event that annually attracts approximately 1,400 registrants who come from Idaho, the PNW region, virtually all other states involved in potato production as well as representatives from approximately 25-30 foreign countries.

Beyond the commodity schools mentioned above, IAES faculty organize and participate in "field days" at each of the IAES's six off-campus Research and Extension centers. They also conduct a number of more focused tours or workshops such as: weed identification, ecology, management and technology at several locations, potato storage research open-house, pomology program open-house and field day, and tours of the IAES's crop genetic improvement research programs for beans, potatoes, wheat, and the oilseed crops of rapeseed and mustard. Again, these stakeholder events function as educational/technology transfer events as well as opportunities for stakeholder interaction.

The IAES research project portfolio and an abbreviated version of the POW is annually shared and discussed with representative from the executive branch of state government including the Governor's Office, the Dept. of Agriculture, and to a lesser extent, the Dept. of Environmental Quality, Dept. of Health and Welfare, and the Dept. of Commerce as well as key committees (agriculture and appropriations) and leadership of the Idaho Legislature.

The faculty, staff, and students (both graduate and undergraduate) of CALS have a vested interest in the development of appropriate research programs of high quality that are responsive to needs of the state and region. This university stakeholder group is an important source of valuable input to the IAES and play a major role in IAES program development and delivery. In the course of performing their research, the majority of researchers in the IAES have frequent and substantive contact with stakeholders in their research programs as has been indicated above. An array of inputs regarding program directions and priorities are more informally received in this manner and are subsequently considered and often implemented.

CALS has also mandated the formation of advisory committees for each of the eight academic departments in CALS. As of 2002, all departments of CALS established advisory committees. These committees are comprised of representatives from a broad base of stakeholders sharing interest in the disciplines, programs, and strategic plans of the departments. These committees are now serving as a significant additional source of stakeholder input for the IAES and CALS. In addition, once a year in on-campus meetings the departmental advisory committees meet with the CALS and IAES leadership as well as with the Dean's Advisory Board on program priorities and directions for the college, the experiment station and the departments. One representative from each department's advisory committee serves on the Dean's Advisory Board.

University of Idaho Extension has citizen advisory groups in 42 of Idaho's 44 counties. These committees, which are composed of a very diverse and broad mix of public interests, provide input regarding extension and research program priorities from the county perspective. Extension Specialists have advisory groups as well, many of which are formally associated with producer organizations or commodity interests. A Statewide 4-H advisory Board and a Statewide Extension Advisory Board contribute annual input to guide Extension programs.

2(A). A brief statement of the process that was used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Use Internal Focus Groups
- Use External Focus Groups
- Needs Assessments
- Use Surveys
- Other (Commodity-based research and Extension interactions)

Brief explanation.

During this reporting period, CALS representatives met at least once with each of Idaho's commodity commission groups. In general, these meetings were conducted to determine priorities for research and extension programs relevant to the commissions. CALS administration met two times with the Deans Advisory Board and once with faculty as a group in each of Idaho's three administrative regions. Other important venues for identifying stakeholders state-wide included Extension Annual Conference and annual Ag Summit and legislative strolling dinner in Boise. The Dean or his designee also met with state legislative leaders in Boise regarding agriculture, science and technology, environmental issues, and educational appropriations. These meetings included testimony before several legislative committees as well as informal meetings. CALS research and extension faculty held numerous field days and commodity schools across the state.

Counties follow specific marketing plans that are developed locally, based upon the demographics and characteristics of their communities and populations. Those plans specify efforts needed to ensure parity in program audiences. Depending on faculty areas of expertise and program efforts, stakeholders may be quite easy to identify (for example, potato growers or dairy owners) or may be more difficult to locate (for example, expectant parents or families in financial difficulty).For farmers and ranchers, Extension cooperates with the Idaho State Department of Agriculture or other appropriate agencies to verify contact lists, including lists of those individuals who are licensed to apply pesticides. For low income audiences, Extension works with schools, with the Department of Health and Welfare, and with the local faith community to identify potential clientele. Partnerships with AARP-Idaho and other advocacy organizations have been instrumental in reaching targeted audiences.

County faculty report that requests are made to advisory committees and to local government leaders and private citizens to help identify new stakeholders. Extension Specialists report that they use commodity organizations and other groups in a similar fashion. New faculty are particularly reliant on veteran faculty to help guide them to stakeholders.

2(B). A brief statement of the process that was used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Meeting with the general public (open meeting advertised to all)
- Survey of the general public
- Meeting specifically with non-traditional individuals
- Other (various)

Brief explanation.

To generate public participation in Extension programs, outreach and advertising was designed to effectively reach all residents of the partner communities. For some programs (the Beef Team, for example) stakeholder input was gathered through focus groups made up of Beef Quality Assurance program participants. For other programs (Family Living Education, for example), input was collected by mailing surveys to traditional audiences and known users of those extension programs. Gathering input for several programs involved a major effort to reach underserved audiences 4-H Youth Development and Operation: Military Kids for example) through targeted visits and phone calls to organizations and individuals known to be advocates for some of our underserved groups. Most faculty report using existing program participants to generate recommendations for future programs. Some faculty reported using newsletters to request input from readers, returned via email.

During this reporting period, CALS representatives met at least once with each of Idaho's commodity commission groups. In general, these meetings were conducted to determine priorities for research and extension programs relevant to the commissions. CALS administration met two times with the Deans Advisory Board and once with faculty as a group in each of Idaho's four administrative regions. Other important venues for collecting stakeholder input included Extension Annual Conference and annual Ag Summit and legislative strolling dinner in Boise. The Dean or his designee also met with state legislative leaders in Boise regarding agriculture, science and technology, environmental issues, and educational appropriations. These meetings included testimony before several legislative committees as well as informal meetings. CALS research and extension faculty held numerous field days and commodity schools across the state.

3. A statement of how the input will be considered

- In the Budget Process
- To Identify Emerging Issues
- Redirect Extension Programs
- In the Staff Hiring Process
- In the Action Plans
- To Set Priorities

Brief explanation.

A major result of the Re-designing Extension Task Force was the recommendation to prioritize

our efforts in order to eliminate low-priority programs. This work led to a year-long prioritization process that will be reflected in the 2011-2015 Plan of Work that pares down the number of programs from 21 in 2010 to only 15 in 2011.

Several shifts in emphasis during the past several years have been the direct result of stakeholder input, including a major increase in investments for family financial education and health and fitness. These program expansions have been reported during the past several years and continue in 2010.

Discipline-driven programs generally use input gathered at each event to help guide the content of the next. For example, at the international Idaho Potato Conference, participants are surveyed each year to learn what are their continuing education needs. The results of the survey are used, in part, to direct the agenda for the next conference. We have also identified a growing demand for education about health and fitness. While administrators have not re-tasked positions in Family and Consumer Sciences to respond to our survey results, our faculty have researched and acquired high quality curricula, received training and certification, and delivered health and fitness programs to help meet the need identified by stakeholders.

Information was acquired state-wide from meeting with various stakeholders is discussed at various CALS leadership meetings. These include monthly CALS leadership meetings which are attended by dean and directors as well as leaders from academic departments, research and extension centers and district offices. In addition, priority setting is conducted in an annual dean and directors retreat. Strategic planning and priority setting in these sessions is based largely upon stakeholder input.

Brief Explanation of what you learned from your Stakeholders

A major finding from our task force is that stakeholders would prefer that we deliver fewer programs that are deep and strong, rather than more, shallow or superficial program efforts.

We continue to experience high demand for family finance education, community economic development education, personal fitness/health education, water quality, agricultural technology, and that the agricultural commodities within Idaho are changing in relative importance. A noticeable interest in organic farming (particularly dairy and dairy forages, and table crops) has surfaced in the past several years. Currently we are experiencing increased in interest in local food systems.

IV. Expenditure Summary

1. Total Actual Formula dollars Allocated (prepopulated from C-REEMS)			
Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
2734597	0	2423386	0

2. Totaled Actual dollars from Planned Programs Inputs				
	Extension		Research	
	Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
Actual Formula	2724595	0	2423386	0
Actual Matching	2724595	0	2423386	0
Actual All Other	4838601	0	23289762	0
Total Actual Expended	10287791	0	28136534	0

3. Amount of Above Actual Formula Dollars Expended which comes from Carryover funds from previous				
Carryover	514776	0	1051394	0

V. Planned Program Table of Content

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
Actual	9690	45155	3041	3682

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	3	16	19

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Beef schools.

Year	Actual
2010	15

Output #2

Output Measure

- Beef Quality Assurance (BQA) workshops.

Year	Actual
2010	24

Output #3

Output Measure

- Field days.

Year	Actual
2010	8

Output #4

Output Measure

- Demonstrations/Applied research projects.

Year	Actual
2010	12

Output #5

Output Measure

- Tours.

Year	Actual
2010	6

Output #6

Output Measure

- Popular press articles.

Year	Actual
2010	24

Output #7

Output Measure

- Newsletters.

Year	Actual
2010	26

Output #8

Output Measure

- Abstracts.

Year	Actual
2010	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 aquire 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 aquire 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 healtyful 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)

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

V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Global Food Security and Hunger: Cereals

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	0%		10%	
201	Plant Genome, Genetics, and Genetic Mechanisms	5%		15%	
202	Plant Genetic Resources	20%		20%	
205	Plant Management Systems	40%		5%	
211	Insects, Mites, and Other Arthropods Affecting Plants	15%		10%	
212	Pathogens and Nematodes Affecting Plants	15%		10%	
213	Weeds Affecting Plants	0%		10%	
216	Integrated Pest Management Systems	0%		10%	
502	New and Improved Food Products	5%		10%	
	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	6.3	0.0	7.5	0.0
Actual	3.7	0.0	11.7	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**
176259	0	389171	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
176259	0	389171	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
78979	0	3574111	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Global food security and hunger: Cereals team is made up of 21 faculty members contributing a combined total of 3.7 FTEs to this project. Team members generated $189,823 in external grant support and made 6,511 direct teaching contacts. Team members produced 1 peer-reviewed Extension publication and 1 article in a professional/scientific journal. The Team has three major focus areas

Applying beneficial cultural and fertilization crop management practices
Development and adoption of improved varieties
Integrating cereal production practices into a production cropping system

The Cereals team conducted variety trials across the state, held cereal schools in eight locations, worked with aerial aplicators to calibrate spray equipment, presented information for pesticide applicator certification and recertification purposes, and helped growers identify and treat a variety of cereal pest problems.

2. Brief description of the target audience

The target audiences include grain producers, fieldmen and crop consultants, grain buyers, farm service providers (e.g., applicators) and farm laborers.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	6394	23515	117	23530

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	1	19	20

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Idaho Cereal Schools.

Year	Actual
2010	8

Output #2

Output Measure

- Release and adoption of new cereal varieties.

Year	Actual
2010	0

Output #3

Output Measure

- Peer-reviewed Extension publication (CIS, Bulletins, PNW)
  Not reporting on this Output for this Annual Report

Output #4

Output Measure

- Develop pest control technology - project/experiments.

Year	Actual
2010	1

Output #5

Output Measure

- Research on management systems - projects/experiments.

Year	Actual
2010	20

Output #6

Output Measure

- Refereed publications (Journal & Book Chapters)
  Not reporting on this Output for this Annual Report

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Producers gain knowledge about improved cereals management at cereal schools, field days, seminars, and re-certification events. I: Number of participants attending cereal schools, field days, etc..
2	O: Producers are aware of cereal resource publications.I: Number of cereal extension publications distributed.
3	O: Producers adopt new cereal varieties.I: Increase in number of acres of new varieties (released within 5 years; greater than previously grown).
4	O: Adoption of new crop production methods.I: Number of growers who report adoption through surveys at educational events and meetings.
5	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.

Outcome #1

1. Outcome Measures

O: Producers gain knowledge about improved cereals management at cereal schools, field days, seminars, and re-certification events. I: Number of participants attending cereal schools, field days, etc..

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	550	1223

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Careful irrigation equipment management and water management will allow producers to grow cereal crops of adequate yield and quality with less applied water. This is particularly important in years with short irrigation water supply , but is important every year in that concepts presented will save energy, and therefore reduce production costs.

What has been done
Presentations were given at southern Idaho cereal schools relating to irrigation system and water management of grain.

Results
Producers attending left the meetings with a greater understanding of the need for proper irrigation equipment maintenance, critical crop periods for grain, estimated yield reduction for deficit irrigation in each crop stage, and crop stages when grain could be water stressed and periods where it should not be stressed.

4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
502	New and Improved Food Products

Outcome #2

1. Outcome Measures

O: Producers are aware of cereal resource publications.I: Number of cereal extension publications distributed.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	600	585

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
502	New and Improved Food Products

Outcome #3

1. Outcome Measures

O: Producers adopt new cereal varieties.I: Increase in number of acres of new varieties (released within 5 years; greater than previously grown).

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

O: Adoption of new crop production methods.I: Number of growers who report adoption through surveys at educational events and meetings.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	200	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
New crop production methods can help save grain producers money and time and create a better quality crop. It's important to know if the growers are using the methods introduced at the cereal school.

What has been done
A survey of participants at cereal schools asked whether growers had adopted practices they learned about in previous educational events.

Results
More than half of cereal school attendees indicated that they had adopted practices that they had learned about the previous year.

4. Associated Knowledge Areas

KA Code	Knowledge Area
202	Plant Genetic Resources
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants

Outcome #5

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	2	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
201	Plant Genome, Genetics, and Genetic Mechanisms
202	Plant Genetic Resources
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
502	New and Improved Food Products

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)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Global Food Security and Hunger: Dairy

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	20%		25%	
302	Nutrient Utilization in Animals	20%		25%	
305	Animal Physiological Processes	10%		10%	
307	Animal Management Systems	40%		20%	
308	Improved Animal Products (Before Harvest)	0%		10%	
311	Animal Diseases	10%		10%	
	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	2.4	0.0	2.3	0.0
Actual	3.5	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
99744	0	119977	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
99744	0	119977	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
121333	0	726001	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Global food security and hunger: Dairy team is made up of eight faculty members contributing a combined total of 3.5 FTEs to this project. Team members generated $30,500 in external grant support and made 7,728 direct teaching contacts. Team members produced two peer-reviewed Extension publications. The Team has three major areas of focus:

Spanish language worker training
English language worker training
Dairy management

Dairy team members conducted milker schools for dairy workers and for refugees (who need marketable skills for employment), held schools for artificial insemination and calving, and trained producers on best practices for selecting replacement heifers. Members worked with the national DairyXnet project, held tours and consulted with operators about dairy wast management practices, and wrote and published numerous articles and newsletters.

2. Brief description of the target audience

Target audiences for dairy extension programs included dairy workers, dairy owners/managers, other diry-affiliated professionals, allied dairy industry workers, and a very targeted program directed at refugees.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	10432	59152	496	83

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	5	5

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Winter Dairy Forums.

Year	Actual
2010	2

Output #2

Output Measure

- Milker schools.

Year	Actual
2010	5

Output #3

Output Measure

- Calf Schools.

Year	Actual
2010	1

Output #4

Output Measure

- Artificial Insemination Schools.

Year	Actual
2010	4

Output #5

Output Measure

- Feeder Schools.

Year	Actual
2010	2

Output #6

Output Measure

- Popular Press articles.

Year	Actual
2010	10

Output #7

Output Measure

- Abstracts and Proceedings.

Year	Actual
2010	35

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Dairy Producers and workers will increase knowledge by attending dairy schools and dairy forums.I: Number attending schools and forums.
2	O: Dairy workers will increase knowledge and understanding of dairy management practices. I: Percent knowledge change by attendees (as evaluated with pre/post testing).
3	O: Sound dairy management practices will be adopted by dairy operations as a result of attending the management schools. I: Percent of participants with intent to adopt recommended dairy management practices (as evaluated with pre/post testing).
4	O: Improved calf health on participating farms. I: Percent reduction in calf mortality and scours (farm survey).
5	O: Dairy workers will use proper techniques taught in dairy education programs (e.g., AI techniques, feeding adjustments, milking techniques). I: Percent of participants demonstrating mastery (assessed at dairy education programs).
6	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.

Outcome #1

1. Outcome Measures

O: Dairy Producers and workers will increase knowledge by attending dairy schools and dairy forums.I: Number attending schools and forums.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	200	71

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Refugee center asked to develop a training to teach milking to area refugees. Develop working skills to be inserted in the society are paramount to this clientele.

What has been done
We developed a milker school for refugees in the Magic Valley area. Presentations were translated live to four languages.

Results
Refugees learned skills that enabled them to seek and obtain employment in Southern Idaho's booming dairy industry.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
302	Nutrient Utilization in Animals
307	Animal Management Systems

Outcome #2

1. Outcome Measures

O: Dairy workers will increase knowledge and understanding of dairy management practices. I: Percent knowledge change by attendees (as evaluated with pre/post testing).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	20	17

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Efficient reproduction is key to dairy profitability.

What has been done
AI School participants completed 5 pre-tests and 5 post-tests.

Results
The average score for the pre-tests was 79.1%. The average score for the post-tests was 96.3%. Therefore, there was evidence of a 17.2 percentage point increase in knowledge.

4. Associated Knowledge Areas

KA Code	Knowledge Area
301	Reproductive Performance of Animals
307	Animal Management Systems
311	Animal Diseases

Outcome #3

1. Outcome Measures

O: Sound dairy management practices will be adopted by dairy operations as a result of attending the management schools. I: Percent of participants with intent to adopt recommended dairy management practices (as evaluated with pre/post testing).

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

O: Improved calf health on participating farms. I: Percent reduction in calf mortality and scours (farm survey).

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

O: Dairy workers will use proper techniques taught in dairy education programs (e.g., AI techniques, feeding adjustments, milking techniques). I: Percent of participants demonstrating mastery (assessed at dairy education programs).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	50	11

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
307	Animal Management Systems
311	Animal Diseases

Outcome #6

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	2	5

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
307	Animal Management Systems
311	Animal Diseases

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes

Brief Explanation

loss of personnes and reassignments due to budget reductions caused a reduction of effort in this area.

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

Evaluation Results

results from pre-post tests of AI school participants demonstrated that knowledge about reproduction and skills to perform AI had been increased.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Global Food Security and Hunger: Other Idaho Commercial Crops

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	0%		6%	
111	Conservation and Efficient Use of Water	10%		6%	
204	Plant Product Quality and Utility (Preharvest)	1%		12%	
205	Plant Management Systems	1%		10%	
211	Insects, Mites, and Other Arthropods Affecting Plants	14%		12%	
212	Pathogens and Nematodes Affecting Plants	14%		12%	
213	Weeds Affecting Plants	0%		3%	
214	Vertebrates, Mollusks, and Other Pests Affecting Plants	0%		6%	
215	Biological Control of Pests Affecting Plants	14%		6%	
216	Integrated Pest Management Systems	40%		6%	
403	Waste Disposal, Recycling, and Reuse	1%		0%	
404	Instrumentation and Control Systems	4%		6%	
405	Drainage and Irrigation Systems and Facilities	0%		3%	
511	New and Improved Non-Food Products and Processes	0%		6%	
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	1%		6%	
	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	5.0	0.0	8.0	0.0
Actual	2.2	0.0	6.5	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**
152548	0	262555	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
152548	0	262555	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
25568	0	1948786	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Global Food Security and Hunger: Other Idaho commercial crops team is made up of seven faculty members contributing a total of 2.2 FTEs to this project. Team members generated $155,603 in external grant support and made 1,806 direct teaching contacts. Team members produced two peer-reviewed Extension publications. The Team has three major areas of focus:

Pest management
Production and economics
Education and outreach

Team members are engaged in a variety of integrated projects, many of which focus on integrated pest management for minor corps, including the Idaho OnePlan and the multi-state IR-4 project for minor crop pesticides that is critical for economical and efficient production of many Idaho crops. This program also covers research and extension activities targeting onions, hops, dry beans, pulse crops, alfalfa seed and other seed crops.

2. Brief description of the target audience

Growers of minor crops in Idaho, Oregon, and the Western U.S., EPA, USDA, ISDA and other western departments of agriculture, farm workers, crop advisors, chemical company representatives.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1798	21704	8	0

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

Year: 2010

Actual: 2

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	2	21	23

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Professional invited presentations.

Year	Actual
2010	1

Output #2

Output Measure

- Professional submitted presentations.

Year	Actual
2010	2

Output #3

Output Measure

- Workshops, field tours, demonstration projects and presentations.

Year	Actual
2010	31

Output #4

Output Measure

- Extension peer-reviewed Publications (CIS, Bulletins, PNW).

Year	Actual
2010	2

Output #5

Output Measure

- Other Professional Publications.

Year	Actual
2010	4

Output #6

Output Measure

- Applied and basic laboratory and field research experiments.

Year	Actual
2010	17

Output #7

Output Measure

- Refereed journal articles

Year	Actual
2010	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Producers are aware of issues and knowledgeable of practices that affect the environmental and economic sustainability of minor crop production.I: Percent of knowledge increase demonstrated by participants in programs.
2	O: Growers use best practices in the production of minor crops.I: Percent of Idaho growers indicating adoption of recommended practices (followup survey data).
3	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.

Outcome #1

1. Outcome Measures

O: Producers are aware of issues and knowledgeable of practices that affect the environmental and economic sustainability of minor crop production.I: Percent of knowledge increase demonstrated by participants in programs.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

O: Growers use best practices in the production of minor crops.I: Percent of Idaho growers indicating adoption of recommended practices (followup survey data).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	20	265

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
In order for growers to maintain labels for chemicals, and to minimize the risk of resistance they need to use them properly and judiciously.

What has been done
Information about pest outbreaks and research based control information was disseminated through the PNWPestAlert.net website.

Results
In the 2009 evaluation for the PNWPestAlert.net website, 40% of survey respondents reported that as a result of information received through the website, they increased their field scouting to document pest levels before taking actions to control the pest.

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water

204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
216	Integrated Pest Management Systems
404	Instrumentation and Control Systems

Outcome #3

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	1	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
211	Insects, Mites, and Other Arthropods Affecting Plants
212	Pathogens and Nematodes Affecting Plants
215	Biological Control of Pests Affecting Plants
216	Integrated Pest Management Systems
403	Waste Disposal, Recycling, and Reuse
404	Instrumentation and Control Systems
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from

Agricultural and Other Sources

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Government Regulations

Brief Explanation

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

Evaluation Results

In the 2009 evaluation for the PNWPestAlert.net website, 40% of survey respondents reported that as a result of information received through the website, they increased their field scouting to document pest levels before taking actions to control the pest.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 5

1. Name of the Planned Program

Global Food Security and Hunger: Potatoes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	5%		10%	
202	Plant Genetic Resources	5%		10%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	10%		10%	
204	Plant Product Quality and Utility (Preharvest)	5%		10%	
205	Plant Management Systems	25%		10%	
212	Pathogens and Nematodes Affecting Plants	20%		10%	
216	Integrated Pest Management Systems	15%		10%	
503	Quality Maintenance in Storing and Marketing Food Products	10%		20%	
603	Market Economics	5%		10%	
	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	4.7	0.0	5.0	0.0
Actual	5.0	0.0	11.8	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**
182287	0	175381	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
182287	0	175381	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
114000	0	3627382	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Global food security and hunger: Potatoes team is made up of 14 faculty members contributing a total of 5.0 FTEs to this project. Team members generated $768,761 in external grant support and made 8,813 direct teaching contacts. Team members produced five peer-reviewed Extension publications and 11 articles in professional and scientific journals. The Team has three major areas of focus:

Production and Economics
Food Quality and Safety
Integrated Pest Management

The potato team actively intergrates research and extension functions, conducting laboratory and field experiments to manage pathogens and to improve production systems. The results from research are communicated through scientific publications, through the widely circulated Spudvine newsletter, and at the international Idaho Potato Conference. Faculty presented cutting-edge information to about 250 scientists and producers at the 2010 Idaho Potato Conference, and also presented Spanish-language training for farm workers on using and maintaining specialized farming equipment, potato diseases, and pesticide use and safety.

2. Brief description of the target audience

Idaho and PNW growers, seed potato producers, Potato industry representatives, Idaho Potato Commission Research Committee members, State Department of Agriculture personnel, agriculture and potato-related media, field agronomists, fieldmen, and consultants.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	8569	51890	244	0

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

Patent Applications Submitted

Year: 2010
Actual: 3

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	5	29	34

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Newsletters.

Year	Actual
2010	10

Output #2

Output Measure

- Workshops and Seminars.

Year	Actual
2010	139

Output #3

Output Measure

- Popular Press Articles.

Year	Actual
2010	25

Output #4

Output Measure

- Field Days.

Year	Actual

2010	9

Output #5

Output Measure

- Individual Consultations.

Year	Actual
2010	240

Output #6

Output Measure

- Graduate Students.

Year	Actual
2010	1

Output #7

Output Measure

- Professional Meetings.

Year	Actual
2010	18

Output #8

Output Measure

- Email Information Dissemination.

Year	Actual
2010	311

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Growers apply best potato management practices. I: Number of growers adopting recommended practices
2	O: Growers are aware of pest incidence. I: Number of Subscribers to pest alert website
3	O: Growers are knowledgeable about best potato management practices. I: Number of participants attending educational programs.
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.

Outcome #1

1. Outcome Measures

O: Growers apply best potato management practices. I: Number of growers adopting recommended practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	130	95

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Pink rot, late blight and silver scurf can cause serious economic losses to potatoes in storage. For the last several years substantial research and extension efforts have been on post-harvest product application for disease control.

What has been done
Initial research in the use of phosphorous acid began at the University of Idaho. Numerous presentations, newsletters and trade journal articles have been made. Due to severe disease pressure nationwide, industry use of the product is now widespread. Numerous phone calls and emails were answered this year regarding use, efficacy and application. Presentations and articles were developed highlighting the top 10 things to know about phosphorous acid applications.

Results
Nationwide and statewide use of phosphorous acid was seen this fall especially in areas of substantial risk of disease in storage. This application reduced grower risk of disease development in storage. Knowledge of action was identified by personal correspondence with potato growers and persons in the industry.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
202	Plant Genetic Resources
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
204	Plant Product Quality and Utility (Preharvest)

205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
216	Integrated Pest Management Systems
503	Quality Maintenance in Storing and Marketing Food Products
603	Market Economics

Outcome #2

1. Outcome Measures

O: Growers are aware of pest incidence. I: Number of Subscribers to pest alert website

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	380	326

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
The presence of pests, particularly economically important insects and fungal pathogens can cause both yield and quality problems for potato producers and industry.

What has been done
A pest hotline (with the help of a $4000 grant from Syngenta) was made available to growers and other industry personnel. Pest reports on aphids, as well as early and late blight were recorded on a weekly basis while potatoes were in the fields.

Results
Growers have knowledge of what pests are present and where the outbreak occurred. Management protocols are then implemented or not, based on University recommendations. This information aids growers to make decisions about which products to use and how frequently they need to be applied. These practices often result in lowered pesticide inputs with increased profits for the producers and lowered impacts on the environment.

4. Associated Knowledge Areas

KA Code	Knowledge Area
212	Pathogens and Nematodes Affecting Plants

216 Integrated Pest Management Systems

Outcome #3

1. Outcome Measures

O: Growers are knowledgeable about best potato management practices. I: Number of participants attending educational programs.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	75	371

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
We identified two major insect problems, the Potato Tuber Moth and the Lesser Onion Bulb Fly, which required comprehensive on-farm surveys and control measures.

What has been done
Following several years of educationa programs to teach growers how to manage these pests, Extension conducted a comprehensive survey of potato storage facilities and fields for disease and insect population, migration and control.

Results
For the fifth consecutive year, Lesser Onion Bulb Fly identification, population surveys, and education programs were 98% effective.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
202	Plant Genetic Resources
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
216	Integrated Pest Management Systems

503	Quality Maintenance in Storing and Marketing Food Products
603	Market Economics

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	1	4

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
202	Plant Genetic Resources
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
204	Plant Product Quality and Utility (Preharvest)
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
216	Integrated Pest Management Systems
503	Quality Maintenance in Storing and Marketing Food Products
603	Market Economics

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Competing Programmatic Challenges

Brief Explanation

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

Evaluation Results

Numerous workshop presentations were given at the University of Idaho Potato Conference in 2010 Results from the "Organic Potato Production Workshop" indicated a substantial increase in attendee (n=15) knowledge (scale of 1 to 5 with 1 = no understanding and 5 = complete understanding) from prior to the presentation 1.7 to after the presentations, 3.6, on "performance of different potato varieties in an organic system" and, 2.8, on "organic methods of potato storage and sprout control", respectively.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 6

1. Name of the Planned Program

Global Food Security and Hunger: Small Acreages and Emerging Specialty Crops

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	40%		20%	
202	Plant Genetic Resources	5%		20%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	0%		20%	
205	Plant Management Systems	30%		20%	
212	Pathogens and Nematodes Affecting Plants	5%		20%	
604	Marketing and Distribution Practices	20%		0%	
	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	2.1	0.0	1.0	0.0
Actual	4.1	0.0	1.7	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
84424	0	51698	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
84424	0	51698	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
156568	0	511242	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Global Food Security and Hunger: Small acreages and specialty crops team is made up of 17 faculty members contributing a total of 4.1 FTEs to this project. Team members generated $64,020 in external grant support and made 7,543 direct teaching contacts. Team members produced five peer-reviewed Extension publications and two articles in professional and scientific journals. The Team has two major areas of focus:

Small Farms and Specialty Crop Enterprises
Land Stewardship for Small Acreages

This team was actively engaged in a variety of community-supported agriculture efforts, including development and expansion of farmers' markets, sustainable small acreage farming, backyard poultry, and the "Producer-Chef Connection." Members taught "Living on the Land" classes, collaborated on a multi-state Diversified Agriculture conference, and a Farm-to-Table sustainable food systems conference.

2. Brief description of the target audience

Target audiences are established and prospective small acreage, specialty or organic crop producers, processors and marketers, prospective producers interested in growing for direct markets, producers looking to become more economically or environmentally sustainable and to diversify their existing enterprises and marketing. Audiences include small acreage landowners who want to manage their land in a sustainable manner to protect natural resources, some who are also interested in developing small acreage enterprises; and consumers interested in local food and farms who want more information on where to find local food, learn more about organic production and eco-labeling, and are interested in learning more about rural issues.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	4798	7391	247	100

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

Patent Applications Submitted

Year: 2010
Actual: 4

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	5	6	11

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Small Farms Conference in southern Idaho.

Year	Actual
2010	0

Output #2

Output Measure

- Small Farms Conference in northern Idaho.

Year	Actual
2010	1

Output #3

Output Measure

- Small Acreage Farming Course.

Year	Actual
2010	6

Output #4

Output Measure

- Ag Entrepreneurship Course.

Year	Actual
2010	5

Output #5

Output Measure

- Pasture management shortcourse.

Year	Actual
2010	0

Output #6

Output Measure

- Living on the Land course.

Year	Actual
2010	4

Output #7

Output Measure

- Living on the Land Tour.

Year	Actual
2010	3

Output #8

Output Measure

- LOTL 5 year report.

Year	Actual
2010	1

Output #9

Output Measure

- Vegetable variety trials.

Year	Actual
2010	1

Output #10

Output Measure

- Specialty fruit crop trials.

Year	Actual
2010	1

Output #11

Output Measure

- Field days at demonstration plots.

Year	Actual
2010	2

Output #12

Output Measure

- Small fruit workshops - Huckleberries, etc.

Year	Actual
2010	2

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Growers learn about specialty crops varieties appropriate for their area.I: Number attending field days to observe results of crop variety demonstration trials.
2	O: Producers and landowners gain knowledge about natural resource management, sustainable farm production, marketing and/or business management principles and practices. I: Number of participants completing workshops, farm tours, short courses or in-depth courses such as Living on the Land, Stewardship of Small Acreages, Sustainable Small Acreage Farming or Agricultural Entrepreneurship.
3	O: Producers and landowners adopt recommended land management, production and/or marketing practices due to University of Idaho extension programming. I: Number of producers indicating they did (or intend to) adopt recommended land management, production and/or marketing practices after attending an educational class, workshop, one-on one contact or reading UI information.
4	O: Landowners and farmers achieve success in protecting their natural resources and/or maintaining a successful business.I: Number of past class participants who volunteer to host tours of their farm or speak to new students in classes, workshops or at conferences.
5	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.

Outcome #1

1. Outcome Measures

O: Growers learn about specialty crops varieties appropriate for their area.I: Number attending field days to observe results of crop variety demonstration trials.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

O: Producers and landowners gain knowledge about natural resource management, sustainable farm production, marketing and/or business management principles and practices. I: Number of participants completing workshops, farm tours, short courses or in-depth courses such as Living on the Land, Stewardship of Small Acreages, Sustainable Small Acreage Farming or Agricultural Entrepreneurship.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	50	1345

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Growers and landowners who are trying to be more sustainable by protecting natural resources and operating viable farm businesses need accurate information and guidance on implementing best practices. Partnerships of local food oriented organizations and agencies can help producers and communities by strengthening local food systems through a focused effort of providing resources and information.

What has been done
The Sustainable Small Farming and Ranching class was taught in Genesee, fall of 2009 including 13 three-hour sessions and 3 farm tours. Fall 2010 class has 18 students who have completed 25 hours of instruction thus far. Small Farm Business planning class with 6 three-hour sessions was taught in Moscow, spring of 2010. A Sustainable Food systems conference was planned organized and delivered by a partnership of eight organizations in Moscow, March 2010.

Results

Twelve of the beginning producers who took the Small Farm class indicated they have or will develop whole farm management plans. Seven presented their farm plan to the class. Seventeen students taking the Small Farm Business Planning Class indicated they would develop business plans for their farm business. Eight students gave formal presentations on their plans. All survey respondents (34) who attended the Farmers Market workshop increased their knowledge on direct marketing and business planning. All respondents of an online follow up survey of conference participants indicated they had increased knowledge of concepts and practices of sustainable food systems. Many indicated they had followed through on some aspect learned since the conference.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
202	Plant Genetic Resources
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants

Outcome #3

1. Outcome Measures

O: Producers and landowners adopt recommended land management, production and/or marketing practices due to University of Idaho extension programming. I: Number of producers indicating they did (or intend to) adopt recommended land management, production and/or marketing practices after attending an educational class, workshop, one-on one contact or reading UI information.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	15	163

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Many producers and landowners are seeking methods to help increase productivity and conserve natural resources in a way that might promote sustainability for their land and their livelihoods.

What has been done
A common goal among all our small acreage and specialty crop programming is to promote ecological economic success for growers and landowners. Workshop and class participants are

regularly asked what practices they plan to implement on their farms.

Results
Participants who completed evaluations listed at least one practice they planned to implement. For example, using cover crops more regularly in their crop rotations. Living on the Land class participants who learned about soil management and natural landscaping indicated that they planned to make changes to more closely adopt the practices taught in class.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
202	Plant Genetic Resources
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants

Outcome #4

1. Outcome Measures

O: Landowners and farmers achieve success in protecting their natural resources and/or maintaining a successful business.I: Number of past class participants who volunteer to host tours of their farm or speak to new students in classes, workshops or at conferences.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	3	7

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Classes focus on teaching people to protect their natural resources and run successful small farm businesses. Having students who implement practices they learned from our classes and are able to demonstrate that to subsequent class participants or others is one positive indicator of success.

What has been done
Students in 2008 Small Farming and Ranching Class are selling at the Farmers' Market. 2010 classes toured the farm operations she owned or managed by previous class participants.

Results

Students have adopted practices learned in class and are finding success selling eggs and chickens at our local Farmers' Markets. They shared their experiences with beginning farmers to broaden their understanding of sustainable small farm operations. The beginning farmers learned directly from producers that recently researched and experienced alternative ways to grow and market sustainable, local foods.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
202	Plant Genetic Resources
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants

Outcome #5

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	1	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships

202	Plant Genetic Resources
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

Evaluation Results

During the winter of 2009-2010 I worked with Social Science Research Unit on campus to conduct a survey of all LOTL alumni from 2002-2009. Based on surveys completed by LOTL alumni from 2002-2009 LOTL alumni own or managed over 12,800 acres in eight southwestern Idaho counties, one eastern Oregon county and one eastern Washington county. Fifty-one percent of alumni owned between 1 and 10 acres. Most LOTL alumni are still new to small acreage management with 40% being involved less than five years and 24% from six to ten years. Changes to management practices show that alumni are using the practices and techniques they learned in class. Alumni reported the following changes; 76% changed weed control, 55% changed irrigation practices, 45% changed fertilization practices and 64% changed grazing practices. All of these management changes have positive long-term environmental impacts, including water conservation, improved water quality, improved forage and livestock production and reduced spread of weeds.

Key Items of Evaluation

Changes to management practices show that alumni are using the practices and techniques they learned in class. Alumni reported the following changes; 76% changed weed control, 55% changed irrigation practices, 45% changed fertilization practices and 64% changed grazing practices. All of these management changes have positive long-term environmental impacts, including water conservation, improved water quality, improved forage and livestock production and reduced spread of weeds.

V(A). Planned Program (Summary)

Program # 7

1. Name of the Planned Program

Global Food Security and Hunger: Sugar Beets

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	0%		10%	
111	Conservation and Efficient Use of Water	0%		2%	
205	Plant Management Systems	40%		40%	
212	Pathogens and Nematodes Affecting Plants	30%		26%	
213	Weeds Affecting Plants	20%		5%	
215	Biological Control of Pests Affecting Plants	0%		10%	
216	Integrated Pest Management Systems	10%		5%	
405	Drainage and Irrigation Systems and Facilities	0%		2%	
	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	1.2	0.0	1.0	0.0
Actual	3.7	0.0	5.0	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**
68968	0	41444	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
68968	0	41444	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
182330	0	1140171	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Global food security and hunger: Sugar beets team is made up of 10 faculty members contributing a total of 3.1 FTEs to this project. Team members generated $347,032 in external grant support and made 5,045 direct teaching contacts. Team members produced three peer-reviewed Extension publications and three articles in professional and scientific journals. The team has one integrated area of focus : Crop production.

Significant work was undertaken related to crop pests, including revision of the sugar beet section of the PNW insect management handbook and initiation of a three-year IPM project. Other activities conducted in the field with cooperating growers include weed management trials and demonstrations with various herbicides; seedbed preparation, strip cropping, irrigation practices and other planting practices that impact disease and weed populations.

2. Brief description of the target audience

The Global food security and hunger: Sugar beets team is made up of 10 faculty members contributing a total of 3.1 FTEs to this project. Team members generated $347,032 in external grant support and made 5,045 direct teaching contacts. Team members produced three peer-reviewed Extension publications and three articles in professional and scientific journals. The team has one integrated area of focus : Crop production.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	4798	7341	247	100

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	4	4	8

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Other publications as lead author (non peer-reviewed).

Year	Actual
2010	9

Output #2

Output Measure

- Web publications as lead author.

Year	Actual
2010	1

Output #3

Output Measure

- Presentations.

Year	Actual
2010	32

Output #4

Output Measure

- Newsletters.

Year	Actual
2010	0

Output #5

Output Measure

- Organizing schools or conferences.

Year	Actual
2010	6

Output #6

Output Measure

- Organizing field days.

Year	Actual
2010	4

Output #7

Output Measure

- Field tours.

Year	Actual
2010	9

Output #8

Output Measure

- Web page visits.

Year	Actual
2010	344

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Adoption of best management practices for sugarbeet production will maximize cost-effectiveness while minimizing potential harm to environmental resources, benefiting sustainability of the agro-ecosystem and human health. I: Percentage reduction in input costs (survey).
2	O: Target audiences will gain knowledge and an awareness of sugarbeet publications and other sources of information. I: The number of participants who report increased knowledge measured by: pre- and post-tests or presentation evaluations
3	O: Development of new research information. I: Research publications (peer reviewed).
4	O: Development of new research information.I: Number of research presentations.
5	O: An increase in adoption of IPM practices and BMPs. I: Number of growers adopting one or more IPM practices or BMPs indicated by surveys.

Outcome #1

1. Outcome Measures

O: Adoption of best management practices for sugarbeet production will maximize cost-effectiveness while minimizing potential harm to environmental resources, benefiting sustainability of the agro-ecosystem and human health. I: Percentage reduction in input costs (survey).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Sugar beet production costs continue to increase along with other crop production inputs.

What has been done
Conducted four strip sugar beet weed control studies to better understand how to control weeds in strip tillage.

Results
Growers learned that tank mixtures of soil-active herbicides worked well with glypohsate.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants

Outcome #2

1. Outcome Measures

O: Target audiences will gain knowledge and an awareness of sugarbeet publications and other sources of information. I: The number of participants who report increased knowledge measured by: pre- and post-tests or presentation evaluations

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	7	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Farmers and ag-related workers need easy access to information.

What has been done
We have updated our growers list, placed growers by crops and have kept them updated on current events and technology advances via email or mail. The demand for easy access to information has prompted us to enhance and keep updating the information that we provide on our website. The staff are keeping new research findings on file.

Results
Our website averages 25 downloads per month of the sugar beet publications available. We have been able to send out flyers and updates to growers via email and mail due to maintaining an accurate growers list.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants

Outcome #3

1. Outcome Measures

O: Development of new research information. I: Research publications (peer reviewed).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	3

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants

Outcome #4

1. Outcome Measures

O: Development of new research information.I: Number of research presentations.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2	8

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Information needed to understand how best to use glyphosate for weed control in sugar beets.

What has been done
Co-authored and presented three poster presentations at two different professional meetings.

Results
Audience learned about tank mix compatibility of glyphosate with other pesticides including herbicides, fungicides and insecticides.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants

Outcome #5

1. Outcome Measures

O: An increase in adoption of IPM practices and BMPs. I: Number of growers adopting one or more IPM practices or BMPs indicated by surveys.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	10	6

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems
212	Pathogens and Nematodes Affecting Plants
213	Weeds Affecting Plants

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Other ()

Brief Explanation

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

Evaluation Results

No evaluations conducted during 2010. Funding received in Aug 2010 will afford us an opportunity to follow-through with a statistically valid survey after nearly two decade of extension IPM programming in sugarbeets.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 8

1. Name of the Planned Program

Civil Society

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
805	Community Institutions, Health, and Social Services	100%		0%	
	Total	100%		0%	

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	0.7	0.0	0.0	0.0
Actual	0.7	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
5701	0	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
5701	0	0	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
53604	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Civil Society team is made up of 9 faculty members contributing a combined total of 0.75 FTEs. Team members made 1,095 direct teaching contacts. Team members produced one articles in a professional /scientific journal. The Team has three major focus areas

Diversity workshops

Idaho's journey for diversity and human rights
Manners mishaps

The work of the team focuses on civility, particularly with youth audiences, and with diversity issues for both youth and adult audiences.

2. Brief description of the target audience

Our target audiences include partner organizations, extension professionals and volunteers, business people, social service providers, state and local agencies, and FCS professionals. Youth audiences include 9th-12th graders, , and some Jr. High students.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	421	1305	674	528

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	1	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Idaho's Journey for Diversity and Human Rights.

Year	Actual
2010	0

Output #2

Output Measure

- Manners Mishaps.

Year	Actual
2010	2

Output #3

Output Measure

- Diversity workshops.

Year	Actual
2010	1

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: People are aware that knowledge will help address diversity/inclusiveness issuesI: Number of Civil Society program participants
2	O: Participants change in knowledge, attitude and behavior related to diversity/inclusivenessI: Surveys developed for each program

Outcome #1

1. Outcome Measures

O: People are aware that knowledge will help address diversity/inclusiveness issuesI: Number of Civil Society program participants

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

O: Participants change in knowledge, attitude and behavior related to diversity/inclusivenessI: Surveys developed for each program

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	40	41

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
HS Students needing to know how to apply and interview for a job has increased, yet the skill is not there & HS students need to improve manners during meals for image.

What has been done
Students were taught how to apply and interview for jobs, and learned do's and don'ts pertaining to these topics. Students were taught correct manners to use during important events including scholarship meals, dates, family settings.

Results
A majority of participants indicated that their knowledge had increased, and that they plan to use new knowledge in the future.

4. Associated Knowledge Areas

KA Code	Knowledge Area
805	Community Institutions, Health, and Social Services

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)

Evaluation Results

Since their Idaho's Journey experience, many participants reported taking follow-up actions, attending events relevant to human rights and diversity (61%), reconnecting with the sites or people from the journey (58%), speaking up or taking action on human rights and diversity (58%), reading further information on human rights (54%), and joining or continuing memberships in human rights organizations (19%). Some took on new leadership roles in human rights and diversity since their Journey (19%), while others continued previous leadership positions (11%).

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 9

1. Name of the Planned Program

Commercial and Consumer Horticulture

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	20%		0%	
111	Conservation and Efficient Use of Water	0%		25%	
202	Plant Genetic Resources	0%		25%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	15%		0%	
204	Plant Product Quality and Utility (Preharvest)	15%		25%	
205	Plant Management Systems	20%		25%	
216	Integrated Pest Management Systems	20%		0%	
805	Community Institutions, Health, and Social Services	10%		0%	
	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	10.1	0.0	1.0	0.0
Actual	10.6	0.0	1.5	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**
332911	0	52153	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
332911	0	52153	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
428810	0	445634	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Commercial and consumer horticulture team is made up of 31 faculty members contributing a combined total of 10.6 FTEs to this project. Team members generated $124,127 in external grant support and made 32,135 direct teaching contacts. Team members produced 13 peer-reviewed Extension publications and six articles in professional and scientific journals. The Team has three major areas of focus

Master Gardener
Consumer Horticulture
Green Industry and Commercial Horticulture Education

The team organized and delivered Beginning Master Gardener courses in 18 locations across the state, including multi county venues and multi-state collaborations with Washington, Oregon, and Utah. Members delivered dozens of classes for Advanced Master Gardeners, nearly 300 horticulture workshops, demonstrations, and seminars for consumers, and 43 educational events for green industry audiences.

2. Brief description of the target audience

The target audience for the Master Gardener program includes members of the public with a high level of interest in horticulture and time and interest in educating othersin topics related to landscaping and gardening, such as soils, plant development, fertility, irrigation, plant diagnosis, pest control, etc. The target audience for consumer horticulture is very large, consisting of virtually all Idaho citizens with yards, gardens, or landscapes. The green industry audience consists of owners, managers, and employees of nurseries, Christmas tree growers and other green industry companies.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	28840	161544	3295	9746

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

Patent Applications Submitted

Year: 2010

Actual: 1

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	13	9	22

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Advanced Master Gardener Training Workshop/Tours.

Year	Actual
2010	118

Output #2

Output Measure

- Beginning Master Gardener Courses.

Year	Actual
2010	18

Output #3

Output Measure

- Consumer Horticulture Education Media Publications/Programs.

Year	Actual
2010	247

Output #4

Output Measure

- Consumer Horticulture Education Personal Contacts/Visits.

Year	Actual
2010	24516

Output #5

Output Measure

- Consumer Horticulture Web Site.

Year	Actual
2010	10

Output #6

Output Measure

- Consumer Horticulture Workshops/Seminars/Demonstrations.

Year	Actual
2010	299

Output #7

Output Measure

- Green Industy Education Workshops/Seminars/Clinics.

Year	Actual
2010	43

Output #8

Output Measure

- Master Gardener Volunteer Activities (in Hours).

Year	Actual
2010	23230

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Beginning Master Gardeners will obtain adequate knowledge of horticultural principles to help or instruct other people.I: Marked increase in knowledge as measured by percentage increase in before and after test assessments.
2	O: Consumers have access to appropriate information about horticulture when they need it.I: Number of web site hits.
3	O: Adoption of effective and sustainable gardening practices by trained Master Gardeners.I: Survey-derived self-ranking of the extent of adoption of appropriate principles and practices; self-ranking is on 1-9 scale where 9=fully adopted.
4	O: Improved green-industry access to pest control and product information. I: Number of hits on technical resource center web site.

Outcome #1

1. Outcome Measures

O: Beginning Master Gardeners will obtain adequate knowledge of horticultural principles to help or instruct other people.I: Marked increase in knowledge as measured by percentage increase in before and after test assessments.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	30	52

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Residents demand horticultural information on gardening and landscaping and request help in identifying pests and plant problems. With the large population that Boise and the surrounding county houses, these requests for assistance are in the form of thousands of phone calls and specimens brought into the Extension office.

What has been done
Each year the Master Gardener Program is offered to develop volunteers to assist in answering horticultural questions from city and county residents.

Results
Master Gardeners completing the training program showed an increase in knowledge of 52% (from pre and post exams).

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #2

1. Outcome Measures

O: Consumers have access to appropriate information about horticulture when they need it.I: Number of web site hits.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	75000	95080

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Web site visits document both availability and value of horticultural information offered on the web site. It is important to both educators and the public.

What has been done
Web site visits (not just hits, but documented use of information) were accumulated using an auto-count feature in the web site.

Results
The most important impact of this effort is the widespread distribution of educational materials that will influence and educate Idaho's public with regard to proper and sustainable practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #3

1. Outcome Measures

O: Adoption of effective and sustainable gardening practices by trained Master Gardeners.I: Survey-derived self-ranking of the extent of adoption of appropriate principles and practices; self-ranking is on 1-9 scale where 9=fully adopted.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	7	9

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
One of the goals of the Idaho Master Gardener Program is to develop skilled amateur horticulturists empowered to teach and assist the general public. By integrating and adopting sustainable gardening and landscaping practices into their own yards and gardens, Master Gardener Volunteers are better able firsthand to recommend and demonstrate environmentally sound practices to others.

What has been done
We specifically teach a number of recommended sustainable principles and practices in our beginning and advanced courses, focusing on composting, soil health, water use, pest management and overall safety in every aspect of home horticulture. We survey graduating Master Gardeners on their rate of adoption.

Results
100% of Master Gardeners surveyed reported full adoption of the sustainable principles learned through the program. These volunteers then served over 500 individuals in our community over the year, encouraging wider adoption of sustainable practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
205	Plant Management Systems

Outcome #4

1. Outcome Measures

O: Improved green-industry access to pest control and product information. I: Number of hits on technical resource center web site.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1700	14012

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Many people who work for green industry companies lack a formal education in pest control and production information on landscape plants and greenhouse crops. These green industry employees rely on the internet to supply information for production problems or plant concerns. The companies these people work for need unbiased information that will help the employees and their company to produce plants in an environmentally responsible manner.

What has been done
A web site, the Nursery Technical Resource Center, was maintained and periodically updated during the past year.

Results
The nursery web site had over 14,000 visits this past year. Most of the visits were from North America, but several visits are from overseas each month. Visitors downloaded a number of technical articles available. The articles downloaded most often were ones that described pest problems (diseases and insects), unique production practices (gravel bed growing), or potting mix characteristics. The technical information on the web site has been used all over the country and Canada, based on requests for additional information from web site articles downloaded this past year.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
205	Plant Management Systems

216 Integrated Pest Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

Evaluation Results

Evaluation results are in the form of pre and post exams in the Master Gardener Program. For other classes offered in horticulture, class or course evaluations are collected at the end to determine a participant's increased knowledge, desire to adopt or change a behavior addressed in the class or course, which topics were most useful and why, and future educational needs.

Students are evaluated as to knowledge and skills gained by exams as well as hands-on projects they must complete such as drawing a landscape plan, rooting cuttings and growing seeds. Impact is further accessed of practices that students changed or adopted in their home gardens and landscapes through tours to selected individual residences to observe these adopted practices. Key practices adopted in home gardens and landscapes would be water usage and conservation, mulching, correct plant choices for the site, pest and disease control choices, soil preparation, fertilizer usage, quantity and quality of produce, successful design principles used in landscaping, etc.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 10

1. Name of the Planned Program

Community Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
111	Conservation and Efficient Use of Water	1%		10%	
131	Alternative Uses of Land	0%		10%	
601	Economics of Agricultural Production and Farm Management	1%		10%	
608	Community Resource Planning and Development	28%		20%	
609	Economic Theory and Methods	0%		10%	
610	Domestic Policy Analysis	0%		10%	
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	10%		10%	
805	Community Institutions, Health, and Social Services	30%		10%	
903	Communication, Education, and Information Delivery	30%		10%	
	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	5.6	0.0	2.0	0.0
Actual	7.8	0.0	1.5	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**
104117	0	148546	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
104117	0	148546	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
422213	0	464711	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Community Development team is made up of 26 faculty members contributing a combined total of 7.8 FTEs to this program. Team members generated $268,532 in external grant support and made 8,890 direct teaching contacts. Team members produced four peer-reviewed Extension publications and seven articles in professional and scientific journals. The Team has four major areas of focus:

Business and Economic Development
Data Tools for Understanding Communities - County Level Data
Leadership Development & Civic Engagement
Wildland/Urban Interface

Significant faculty resources were expended to coach and assist community leaders and aspiring leaders in participating Horizon's communities. Faculty worked on individual community boards and commities to help find funding and support for new community centers and similar infrastructure, to support business expansion and retention activities, and to help community organizations, boards and committees become more successful.

2. Brief description of the target audience

Target audiences include:
Small business owners in Idaho, government organizations/agencies in Idaho, community non-profit organizations, entrepreneurs - current and future, elected officials & decision makers (state & local), state & local employees, and new leaders and individuals currently serving in leadership roles

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	5135	2621	1755	4935

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	4	16	20

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Steering Committees/Teams formed.

Year	Actual
2010	14

Output #2

Output Measure

- Materials/Curriculum developed.

Year	Actual
2010	2

Output #3

Output Measure

- Presentations/Workshops.

Year	Actual
2010	66

Output #4

Output Measure

- Trainings- Series/Short Courses.

Year	Actual

2010	31

Output #5

Output Measure

- Conferences organized or implemented.

Year	Actual
2010	4

Output #6

Output Measure

- Ind/Boards/Com- Mentored/Coached.

Year	Actual
2010	60

Output #7

Output Measure

- Communities served.

Year	Actual
2010	71

Output #8

Output Measure

- Counties served.

Year	Actual
2010	44

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Elected officials, decision makers, government agencies, and civic organizations will become knowledgeable about data relevant to their communities. I: Number of participants who increase knowledge about local data and how to find it. (Retrospective Post)
2	O: Entrepreneurs: Current & future Idaho Entrepreneurs learn business practices and develop skills needed for starting a business I: Number of participants learning skills
3	O: Entrepreneurs establish or expand their business I: number of business owners establishing or expanding their business. (Annual survey/3 yrs.)
4	O: Customer: Small business owners & government organizations in Idaho learn customer relation practices. I: Number of participants achieved a threshold level of knowledge. (Pre/post test)
5	O: Customer: Small business owners and government organizations adopt customer oriented operating practices I: Percentage of participants indicated adoption of practices. (customer service follow-up checklist)
6	O: Leadership: Incumbent and emerging leaders learn skills for leadership positions. I: Number of participants with increased skills (pre-post test)
7	O: Leadership: New leaders will assume leadership roles I: Number of new leaders serving in communities. (1 yr. follow up checklist/count)
8	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.

Outcome #1

1. Outcome Measures

O: Elected officials, decision makers, government agencies, and civic organizations will become knowledgeable about data relevant to their communities. I: Number of participants who increase knowledge about local data and how to find it. (Retrospective Post)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	40	99

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
County Commissioners and City Council members are only hearing limited discussion from a limited amount of community members attending meetings.

What has been done
Commissioners and Councilmen attended both vision rallies and were visited by the Horizons steering committee who presented the vision statement to the group of leaders as a whole.

Results
Commissioners hung a copy of the Vision Statement in their office and the City Council incorporated the Vision Statement into the updating of the City's Comprehensive Plan.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
805	Community Institutions, Health, and Social Services
903	Communication, Education, and Information Delivery

Outcome #2

1. Outcome Measures

O: Entrepreneurs: Current & future Idaho Entrepreneurs learn business practices and develop skills needed for starting a business I: Number of participants learning skills

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	40	163

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Small business owners struggle to keep up with technology and the diverse knowledge that is required to operate a small business.

What has been done
Excel Basics for Businesses is a 12 hour long course The learning system is listen, observe, practice and review. A workbook was developed to allow the participants to follow every example and contains practice activities to ensure greater retention. The format is very interactive allowing questions and discussion, which promotes taking notes and encourages class participation.

Results
An evaluation of the training showed the following:
?100% rated the quality of the Excel training as either very good or excellent.
?Participants reported, on average, a 33% increase in knowledge of the Excel program.
?91% planned to use Excel in business activities
?71% planned to use Excel for personal or household activities.
?100% said they would recommend the Excel training to a friend or co-worker.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
903	Communication, Education, and Information Delivery

Outcome #3

1. Outcome Measures

O: Entrepreneurs establish or expand their business I: number of business owners establishing or expanding their business. (Annual survey/3 yrs.)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	3	7

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
It is hard to make a living on small farms.

What has been done
Extension provided multiple educational opportunities, technical and economic tools for aspiring small farmers and for small farmers who wanted to expand.

Results
One small farm business expanded to include sheep cheese as a value-added product along with the grass-fed lamb meat they were already producing.

A Native American woman was able to obtain a loan and purchase her own cattle after consulting with Extension about a business plan. She is now experiencing success as a female Native American Rancher.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
805	Community Institutions, Health, and Social Services
903	Communication, Education, and Information Delivery

Outcome #4

1. Outcome Measures

O: Customer: Small business owners & government organizations in Idaho learn customer relation practices. I: Number of participants achieved a threshold level of knowledge. (Pre/post test)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	80	64

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Businesses are feeling the impact of customers' response to the recession by shopping at stores that offer the lowest price. This cuts into local businesses who cannot buy in block.

What has been done
Customer Relations class was taught for businesses concerned about losing loyal customers, those people who a year ago would not shop anywhere else.

Results
One visible impact came after a presentation of Customer Relations at Horizon Credit Union. Within a week, they had pens in cups instead of pens on chains. They learned that chaining down a pen implies that you do not value your customer, in reality all banks would want customers to have (and lose) pens that have the banks' name and identification and hope the customer takes them.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
805	Community Institutions, Health, and Social Services
903	Communication, Education, and Information Delivery

Outcome #5

1. Outcome Measures

O: Customer: Small business owners and government organizations adopt customer oriented operating practices I: Percentage of participants indicated adoption of practices. (customer service follow-up checklist)

Not Reporting on this Outcome Measure

Outcome #6

1. Outcome Measures

O: Leadership: Incumbent and emerging leaders learn skills for leadership positions. I: Number of participants with increased skills (pre-post test)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	80	576

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Many experienced and emerging leaders in Horizons Communities lack training and skills to hold effective meetings, build and agenda or work through conflict. As a result groups and meetings are less effective.

What has been done
Leadership Plenty was held 3 days a week for 9 weeks to reach a wide variety of participants. Participants worked in groups through each of the nine lessons practicing leadership skills.

Results
In one county, evaluation following the program found that 97.1% of participants increased their knowledge of leadership skills. 17.6% of participants gained 76%-100% of their leadership knowledge from the Leadership Plenty course while 47% gained up to 50% of their knowledge from the course.

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
805	Community Institutions, Health, and Social Services
903	Communication, Education, and Information Delivery

Outcome #7

1. Outcome Measures

O: Leadership: New leaders will assume leadership roles I: Number of new leaders serving in communities. (1 yr. follow up checklist/count)

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	15	4

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Small populations of rural communities tends to restrict the number of citizens willing to step into leadership positions, and causes leadership burn-out of those few who take on most of the responsibility. More members of small rural communities need to be involved in local leadership.

What has been done
Leadership Plenty is taught as part of the Horizons program.

Results
This year four Leadership Plenty graduates were newly elected to their respective city councils,

4. Associated Knowledge Areas

KA Code	Knowledge Area
608	Community Resource Planning and Development
803	Sociological and Technological Change Affecting Individuals, Families, and Communities

805	Community Institutions, Health, and Social Services
903	Communication, Education, and Information Delivery

Outcome #8

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	{No Data Entered}	8

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
805	Community Institutions, Health, and Social Services
903	Communication, Education, and Information Delivery

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

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

Evaluation Results

In one region in Southeastern Idaho, 167 small business owners and managers completed QuickBooks® training in 2008, 2009, and 2010. Participants surveys revealed the following:

- 42% increase in knowledge of QuickBooks®.
- 27% increase in knowledge of financial record keeping.
- 98% plan to use QuickBooks® for business record keeping.
- 60% plan to use QuickBooks® for household record keeping.
- 85% rate the quality of the training as either very good or excellent.
- 100% would recommend the training to a friend or coworker

In the same region, 44 people completing Excel training demonstrated the following:

- 100% rated the quality of the Excel training as either very good or excellent.
- Participants reported, on average, a 33% increase in knowledge of the Excel program.
- 91% planned to use Excel in business activities
- 71% planned to use Excel for personal or household activities.
- 100% said they would recommend the Excel training to a friend or co-worker.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 11

1. Name of the Planned Program

Family Economics

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	100%		0%	
	Total	100%		0%	

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	5.0	0.0	0.0	0.0
Actual	4.4	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
49104	0	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
49104	0	0	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
308859	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Family Economics team is made up of 16 faculty members contributing a combined total of 4.4 FTEs to this project. Team members generated $13,500 in external grant support and $13,600 in in-kind donations, and made 9,744 direct teaching contacts. Team members produced two peer-reviewed Extension publications. The Team has three major areas of focus:

Financial Basics

Financial Security in Later Life
Youth Financial Literacy

For youth audiences, team members deliver educational programs including: Kids Kredit Card, Fun with Money,Welcome to the Real World, Give me Credit, Money on the Bookshelf, NEFE High School Financial Planning Program Teacher Training.

For disadvantaged audiences, team members teach programs including: Dollar Decision$, Credit Basics, and Financial 'Fun'damentals.

For seniors and those interested in retirement and inheritance, members teach: Who Gets Grandmas Yellow Pie Plate, Retirement Ready, Organizing Financial Records.

Classes including Guard Against Identity Theft, Couples and Money are delivered to more general audiences.

2. Brief description of the target audience

Basic Financial Management: Young adults and those who are new to financial management (widows, divorcees, immigrants, etc.) and individuals who need to improve their financial management practices will use family economics publications, web sites and participate in classes/workshops. Professionals who work with low-income audiences and those with financial challenges will be trained and/or provided with family economics publications and curriculum.

Financial Security in Later Life: Adults will utilize publications, web sites, and educational programs covering retirement planning, investing, government programs benefitting senior citizens, long term care and legal education. Mid-life and older adults who are caretakers of elderly relatives and friends will use publications, the website and/or attend classes. Profesionals who serve elderly clients will use publications, curriculum materials, website and/or training provided by extension.

Youth Financial Literacy: Teachers, youth group leaders, parents and youth will utilize web sites, publications and educational programs. Teachers and youth group leaders will purchase extension curriculum for youth.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	4958	216097	4786	4370

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	1	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Newsletters published; print or electronic.

Year	Actual
2010	33

Output #2

Output Measure

- Popular Press articles.

Year	Actual
2010	25

Output #3

Output Measure

- Professional or paraprofessional trainings.

Year	Actual
2010	19

Output #4

Output Measure

- Classes, seminars, and workshops.

Year	Actual
2010	328

Output #5

Output Measure

- Websites developed or updated.

Year	Actual
2010	4

Output #6

Output Measure

- Lesson/curriculums developed and published.

Year	Actual
2010	3

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Participants increase awareness of effective financial management practices.I: Number of participants reporting awareness on end-of-class evaluations.
2	O: Participants gain new personal finance knowledge.I: Knowledge gain reported on end-of-program evaluations.
3	O: Participants adopt recommended financial practices.I: Participant responses on end-of-program and follow-up evaluations.
4	O: Extension Family economics information is accessible to new audiences through an Urban Extension website.I: Number of sessions and pages visited.

Outcome #1

1. Outcome Measures

O: Participants increase awareness of effective financial management practices.I: Number of participants reporting awareness on end-of-class evaluations.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	800	2082

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Awareness is the first step to changing a destructive spending behavior. Without the knowledge and the tools to correct this behavior, stakeholders continue to make the same decisions over and over.

What has been done
Extension faculty conducted classes, workshops, and simulations to share the resources available through Extension and to increase financial awareness.

Results
From surveys, discussions, and comments received after the events, nearly all participants increase awareness of the topics presented. In Credit Sense, 81% of participants surveyed said that they planned to order a copy of their credit report now that they knew they were free and available. Before these workshops, only 25% knew that they could order their reports or had ordered them before they took the class.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #2

1. Outcome Measures

O: Participants gain new personal finance knowledge.I: Knowledge gain reported on end-of-program evaluations.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	500	2070

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Many sectors in the community are are concerned about youth's ability to manage money.

What has been done
Extension and Extension-trained school teachers introduce young people to financial management concepts through "Welcome to the Real World".

Results
44% of participating young people learned how to open savings and checking accounts. 50% learned how to use and balance a check book register. 69% learned there are budget percentages for different expense categories. 43% learned there is a relationship between education and potential earnings. 46% learned the "Time Value" of saving money.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #3

1. Outcome Measures

O: Participants adopt recommended financial practices.I: Participant responses on end-of-program and follow-up evaluations.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	300	861

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Low-income families have little money to spend on food. If they learn to plan meals they can eat at home and save money and have enough food for the entire month. If they compare prices at the grocery store they can save additional money. If they use a grocery list they are less apt to purchase impulse items.

What has been done
More than 500 adults enrolled in the EFNEP; 369 completed the program. All graduates completed a Food survey at entry and before exiting the program.

Results
The EFNEP Reporting System reported that 97% of the graduates (358 of 369 participants) showed improvement in one or more food resource management practices.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

Outcome #4

1. Outcome Measures

O: Extension Family economics information is accessible to new audiences through an Urban Extension website.I: Number of sessions and pages visited.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	3000	16200

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Web sites are a way of educating audiences who might not attend Extension face-to-face programs. Education is available 24/7.

What has been done
The ID Personal Finance website provides educational information in 5 program areas: Basic Financial education (website section Money 101); Credit and Debt (same title on web site); Identity Theft (same title on web site); Managing Money in Tough Times (website Spend Less, Live Well section); and Financial Security. Eight Topic Team members wrote website content.

Results
Website visits exceeded expectations- more than 16,000 unique page visits. Most visited sections were Money 101 and Spend Less, Live Well. Web site visitors came from 5 continents.

4. Associated Knowledge Areas

KA Code	Knowledge Area
801	Individual and Family Resource Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

Evaluation Results

Financial Security in Later Life: Area residents have need for unbiased, low-cost education on the important legal issues associated with later life/ estate planning. Basic Financial: Idaho residents from all demographic groups lack financial management knowledge and skills to make educated financial decisions and implement sound financial practices. More Idahoans are struggling to make ends meet in these challenging economic times.

Fifteen Legally Secure Your Financial Future: Organize, Communicate, Prepare (LSYFF) seminars were offered in Boise, Nampa and Caldwell from 2004 to 2010. Managing Money in Tough Times, a four part series (budgeting, credit, debt and identity theft) was offered twice in Boise and once in Caldwell during 2009-2010.

FSLL: Before attending & 6-mo after completion of legal tools: 30%/87% completed living wills; 34%/91% inventoried important papers; 32%/ 81% completed health care durable power of attorneys; 40%/88% organized family records; 47%/ 87% developed household recordkeeping systems; 44%/ 81% written wills; 62%/93% after organized property records; 64%/92% after organized financial records. BFM actions listed: start using a budget, set financial goals/put in writing, start an emergency fund, save money, build a positive credit history, order a copy of my free credit report, pay bills on time, use PowerPay or a worksheet to create a plan for debt repayment, request my photo placed on credit cards, stop carrying my Social Security card and extra credit cards in my wallet, and be cautious of giving out my personal information to prevent identity theft.

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 12

1. Name of the Planned Program

Family Life Education

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
802	Human Development and Family Well-Being	100%		0%	
	Total	100%		0%	

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	1.7	0.0	0.0	0.0
Actual	1.5	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
7446	0	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
7446	0	0	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
103399	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Family life education team is made up of five faculty members contributing a combined total of 1.5 FTEs to this project. Team members generated $32,978 in external grant support and made 884 direct teaching contacts. Team members produced one peer-reviewed Extension publication and three articles in professional and scientific journals. The Team has three major areas of focus:

Aging life/grandparenting issues
Couples relationships
Parenting

2. Brief description of the target audience

Family adults, parents, and grandparents, members of couple relationships.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	867	1099	17	100

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	1	3	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Offer Married and Loving It series.

Year	Actual
2010	1

Output #2

Output Measure

- Offer workshops on aging life issues.

Year	Actual
2010	2

Output #3

Output Measure

- Web-based educational materials.

Year	Actual
2010	5

Output #4

Output Measure

- Newsletter articles.

Year	Actual
2010	16

Output #5

Output Measure

- Conference posters/presentations.

Year	Actual
2010	3

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: People apply recommended practices to deal with issues and situations important for families. I: Number of participants in Family Life Education program (MALI, Aging, Etc.) reporting adoption of recommended practices.
2	O: People are knowledgeable about issues and practices important for families.I: Number of participants in Family Life Education programs (MALI, Aging, etc.) demonstrating changes in knowledge.
3	O: Users of web-based family life materials find useful information that addresses their needs.I: Number of participants accessing the materials who rate the information as useful.

Outcome #1

1. Outcome Measures

O: People apply recommended practices to deal with issues and situations important for families. I: Number of participants in Family Life Education program (MALI, Aging, Etc.) reporting 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	120	236

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Individuals seeking assistance to leave poverty are given treatment plans from educational and social agencies without input from them on what they would like to the future to look like for their families.

What has been done
Extension co-facilitated Getting Ahead in a Just-Gettin'-By World, targeting individuals who are ready to move out of poverty go through a step-by-step process to create their own plan for economic stability for themselves and their families.

Results
Despite the economic downturn, 40 Getting Ahead graduates made significant positive changes: 43% reported getting a better paying job 67% paid off a credit card or pay day loan 60% opened or added money to a bank account 80% donated food or clothing to a charity.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #2

1. Outcome Measures

O: People are knowledgeable about issues and practices important for families.I: Number of participants in Family Life Education programs (MALI, Aging, etc.) demonstrating changes in knowledge.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	120	149

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Families in Cottonwood, Idaho and surrounding rural communities do not like their elderly family members leaving the area for assisted or specialized health care as they age. The Prairies Horizons leadership team requested education on the continuum of care and the feasibility of an assisted living center on the prairie.

What has been done
Extension delivered a Planning for Independence and Long-Term Care Seminar with a legal aid lawyer and ombudsman for the elderly as speakers. A student team from the UI's College of Business gave a report on the business plan they had developed for an assisted living facility in Cottonwood, Idaho. Their plan won second place in a UI competition.

Results
Survey evaluations from 29 participants show that after the seminar: 93% agree they had a better understanding of long term care issues 80% agree the information will help them and their families develop a long-term care plan 76% agree they learned some ways to pay for long-term care.

4. Associated Knowledge Areas

KA Code	Knowledge Area
802	Human Development and Family Well-Being

Outcome #3

1. **Outcome Measures**

   O: Users of web-based family life materials find useful information that addresses their needs.I: Number of participants accessing the materials who rate the information as useful.

   Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Public Policy changes
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 13

1. Name of the Planned Program

Farm and Ranch Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
111	Conservation and Efficient Use of Water	0%		5%	
132	Weather and Climate	0%		5%	
212	Pathogens and Nematodes Affecting Plants	0%		5%	
601	Economics of Agricultural Production and Farm Management	60%		10%	
602	Business Management, Finance, and Taxation	10%		10%	
603	Market Economics	10%		10%	
605	Natural Resource and Environmental Economics	10%		10%	
606	International Trade and Development	10%		10%	
609	Economic Theory and Methods	0%		20%	
610	Domestic Policy Analysis	0%		10%	
722	Zoonotic Diseases and Parasites Affecting Humans	0%		5%	
	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	3.0	0.0	3.0	0.0
Actual	3.7	0.0	1.7	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**
118155	0	143691	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
118155	0	143691	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
207581	0	427663	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Farm and ranch management team is made up of 12 faculty members contributing a total of 3.7 FTEs to this project. Team members generated $78,973 in external grant support and made 3,178 direct teaching contacts. Team members produced four peer-reviewed Extension publications and five articles in professional and scientific journals. The Team has four major areas of focus:

Farm Management Program
Farm and Ranch Production Management Economics Program
Financial Condition of Idaho Agriculture Program
Sustainability through AgrAbility Program

Farm management classes were taught across the state and focused on topics including strategic planning, Quickbooks, Recordkeeping, Marketing, Business Planning, and Estate Planning. Delivery of farm management education is often integrated into programs designed for specific producer audiences, such as potato and cereal schools and at forage and pasture schools,

2. Brief description of the target audience

The target audience is comprised of farmers, ranchers and agribusiness managers in Idaho who are interested in improving their business management skills. This would include farmers and ranchers who are struggling financially and need to evaluate alternatives and may need help with basic financial management concepts, as well as highly successful farmers and ranchers who want to stay at the cutting-edge, improve their efficiency and/or evaluate alternative crops/cropping systems or alternative livestock/livestock production systems.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	3063	7333	115	175

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	4	10	14

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Farm Management Classes.

Year	Actual
2010	15

Output #2

Output Measure

- Crop & Livestock Costs and Returns Estimates Published.

Year	Actual
2010	80

Output #3

Output Measure

- Number of ID Agriculture's Economic Situation tri-fold distributed

Year	Actual
2010	1000

Output #4

Output Measure

- Media Contacts.

Year	Actual
2010	61

Output #5

Output Measure

- Workshops/presentations at Commodity Schools.

Year	Actual
2010	24

Output #6

Output Measure

- Office/one-on-one consultations

Year	Actual
2010	822

Output #7

Output Measure

- AERS web site visits related to farm management

Year	Actual
2010	3034

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Educational material is widely distributed to clientele. I: Number of publications and other resources distributed
2	O: Clientele motivated to obtain knowledge and/or learn new management skills.I: Number of clientele attending educational programs.
3	O: Clients learn about new issues, management practices or marketing tools.I: Number of clientele attending educational programs that indicate a change in knowledge.
4	O: Clientele apply new knowledge about issues, management practices or marketing/risk management tools. I: Number of clientele attending educational programs that indicate an intention to change a practice or that have changed a practice.

Outcome #1

1. Outcome Measures

O: Educational material is widely distributed to clientele. I: Number of publications and other resources distributed

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	200	513

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Farmers and ranchers with proper farm management information and tools will make better and hopefully more profitable decisions.

What has been done
Resource material was distributed to clientele upon request.

Results
Clientele who are motivated enough to seek out information on good management practices and to obtain management decision aids are likely to make better and more profitable decisions.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
602	Business Management, Finance, and Taxation
603	Market Economics

Outcome #2

1. Outcome Measures

O: Clientele motivated to obtain knowledge and/or learn new management skills.I: Number of clientele attending educational programs.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1000	789

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
602	Business Management, Finance, and Taxation
603	Market Economics
605	Natural Resource and Environmental Economics
606	International Trade and Development

Outcome #3

1. Outcome Measures

O: Clients learn about new issues, management practices or marketing tools.I: Number of clientele attending educational programs that indicate a change in knowledge.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	250	105

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
602	Business Management, Finance, and Taxation
603	Market Economics
605	Natural Resource and Environmental Economics
606	International Trade and Development

Outcome #4

1. Outcome Measures

O: Clientele apply new knowledge about issues, management practices or marketing/risk management tools. I: Number of clientele attending educational programs that indicate an intention to change a practice or that have changed a practice.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	106

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Sustainable farm businesses depend on leasing crop lands. Economic viability depends on the development of crop leases that are equitable to both parties.

What has been done
A orkshop was held to demonstrate a decision-aid tool that allows the user to calculate the cost contribution of the landlord and tenant, which is the basis of any equitable crop lease agreement.

Results
In this oone workshop, 2/3 of the workshop participants (19 out of 30) indicated that they would use the information or the decision-aid program to help them analyze current or future crop lease agreements.

4. Associated Knowledge Areas

KA Code	Knowledge Area
601	Economics of Agricultural Production and Farm Management
602	Business Management, Finance, and Taxation

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Public Policy changes
- Competing Programmatic Challenges

Brief Explanation

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

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 14

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
201	Plant Genome, Genetics, and Genetic Mechanisms	0%		10%	
308	Improved Animal Products (Before Harvest)	0%		10%	
311	Animal Diseases	0%		10%	
315	Animal Welfare/Well-Being and Protection	0%		10%	
501	New and Improved Food Processing Technologies	0%		10%	
503	Quality Maintenance in Storing and Marketing Food Products	0%		10%	
504	Home and Commercial Food Service	60%		10%	
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	40%		10%	
722	Zoonotic Diseases and Parasites Affecting Humans	0%		10%	
723	Hazards to Human Health and Safety	0%		10%	
	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	3.0	0.0
Actual	5.2	0.0	3.8	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**
96049	0	87562	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
96049	0	87562	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
301696	0	1253359	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Food safety team is made up of 21 Extension faculty members contributing a total of 5.2 FTEs to this project. Team members generated $151,231 in external grant support and made 8,960 direct teaching contacts. Team members produced four peer-reviewed Extension publications and six articles in professional/scientific journals. The Team has five major areas of focus:

Just in Time Food Safety/Consumer Food Safety Programs
Food Safety Advisor/Master Food Preserver/Preserve@Home
Food Service Food Safety Training
Hand Hygiene Education
ENP/EFNEP Food Safety

The Extension team works through trained Master Food Preservers and Food Safety Advisors, and teaches residents through a variety of classes, demonstrations, and one-on-one consultations.

2. Brief description of the target audience

Just in Time Food Safety Information is directed toward:

- Consumers who need specific information to keep food safe or to avoid risky foods (for example, consumers who call extension offices with questions about food preservation, food storage, etc).
- Specific groups of consumers who benefit from targetted food safety information (for eample, seniors, parents of young children, volunteers who cook for groups who call extension offices with specific quesitons) .

Consumer Food Safety Programs target

- Consumers who need general and specific information to keep food safe or to avoid risky foods (Programs can cover a variety of topics, requested, for example, using slow cooker safely, preserving foods safely, storing food safely, using labels to avoid allergic reaction, etc).
- Specific groups of consumers who benefit from a targeted food safety program: for example, senior centers, parents of young children, caregivers of children, volunteers who cook for groups.

Food Industry Assistance is intended for

- Idaho citizens interested in developing and marketing a food product.
- Food companies needing assistance with implementation of food safety systems, such as HACCP.

Food Safety Advisor / Master Food Preserver / Preserve-at-Home train those consumers with

particular interest in home food preparation and food safety topics (particularly food preservation and food storage) and in sharing the knowledge with others.

Food Service Food Safety Training is delivered for
- High school students in foods classes
- Adult food service workers

Hand Hygiene Education primarily targets
- Elementary age children.
- Families and children at County Fairs.
- Adults at health fair settings.

ENP-EFNEP Food Safety
- Limited income families receiving food stamps or eligible to receive food stamps (27 counties), and
- Limited income families with children (4 counties)

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	6323	26297	2637	6940

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	4	8	12

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of food safety calls answered.

Year	Actual
2010	5140

Output #2

Output Measure

- Consumer food safety classes taught.

Year	Actual
2010	106

Output #3

Output Measure

- Food industry consults.
  Not reporting on this Output for this Annual Report

Output #4

Output Measure

- Number of new certified Food Safety Advisors (MFPs).

Year	Actual
2010	3

Output #5

Output Measure

- Number of re-certified Food Safety Advisors (& MFP).

Year	Actual
2010	45

Output #6

Output Measure

- Number of volunteer hours logged by FSA/MFPs.

Year	Actual
2010	1104

Output #7

Output Measure

- Students receiving a RSFS certificate.

Year	Actual
2010	128

Output #8

Output Measure

- Participants in hand hygiene education programs.

Year	Actual
2010	5052

Output #9

Output Measure

- Number participants who completed ENP/EFNEP series of classes.

Year	Actual
2010	517

Output #10

Output Measure

- Number of participants in ENP/EFNEP one-time classes.

Year	Actual
2010	825

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: People use Just in Time Food Safety Information to help them make decisions about food preparation, storage, etc.I: Number of people who describe that they will use requested advice.
2	O: Food Industry Assistance-Companies have appropriate knowledge to operate food safe businesses.I: Number of companies that achieve licensing.
3	O: Food Safety Advisor/Master Food Preserver-Knowledgeable citizens volunteer to help others learn and adopt safe food practices.I: Number of certified Food Safety Advisors and Master Food Preservers.
4	O: Food Service Food Safety Training-High school students are prepared to work in food service jobs.I: Number of students passing the RSFS exam and becoming certified.
5	O: Hand Hygiene Education-People will practice improved hand hygiene for reduction of colds, flu and foodborne illness.I: Hand Hygiene Education-Program participants indicate their intention to adopt recommended health practices.
6	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.
7	O: Other scientists are aware of our research findings. I: Number of refereed scientific journal articles.
8	O: ENP-EFNEP Food Safety-Low income family members will practice safe food behaviors.I: Number of EFNEP graduates reporting intent to adopt practices.
9	O: Interested consumers will learn skills through Preserve@Home I: number of people completing program

Outcome #1

1. Outcome Measures

O: People use Just in Time Food Safety Information to help them make decisions about food preparation, storage, etc.I: Number of people who describe that they will use requested advice.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2850	2883

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Consumers are in need of additional education on the importance of proper food handling, preparation, and storage to reduce the spread of foodborne illnesses.

Most often, consumers call Extension offices while they are in the middle of food preparation and must receive correct information at the time they call or may risk a variety of food-related illnesses.

What has been done
Faculty and volunteers answered phone calls, researched questions and provided correct information, and checked to ensure that the information given was adequately understood.

Results
Nearly 2,900 phone calls were answered, many by volunteers as part of more than 1,000 hours of community service donated. Of all callers, the vast majority indicated that they were 100% sure that they would use the advice they had received.

4. Associated Knowledge Areas

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

Outcome #2

1. Outcome Measures

O: Food Industry Assistance-Companies have appropriate knowledge to operate food safe businesses.I: Number of companies that achieve licensing.

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

O: Food Safety Advisor/Master Food Preserver-Knowledgeable citizens volunteer to help others learn and adopt safe food practices.I: Number of certified Food Safety Advisors and Master Food Preservers.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	20	45

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Consumer food preservation and storage questions are common at UI Extension Offices statewide because extension is recognized as a source of reliable and current home food preservation information. Idaho has a large number of families who participate in home canning and food storage practices; recent declines in the economy and increases in food prices have resulted in even more consumers preserving food at home.

What has been done
As a result The food safety advisor/master food preserver program was developed to train citizens to help meet the demand for local expertise. With these volunteers, extension offices are able to extend their reach to consumer needing vital safety information. Volunteers give back 30 hours of time each year. Extension offices give updates each year to the volunteers to make sure they have all the current information needed to do their work.

Results
Forty food safety volunteers responded to hundreds of consumer questions during 2010. Results from a poll of callers indicates that 98% of callers are using the information they are given.

4. Associated Knowledge Areas

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

Outcome #4

1. Outcome Measures

O: Food Service Food Safety Training-High school students are prepared to work in food service jobs.I: Number of students passing the RSFS exam and becoming certified.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	250	128

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Many adolescents get their first job working in a food service establishment. Teens make up a significant portion of the workforce in the food service industry. In addition, many high schools and teen organizations prepare food for fundraising. Unfortunately, adolescents may not have been previously taught correct ways to safely handle food or be required to receive such training if they are hired to work in a food service establishment.

What has been done
Ready, Set, Food Safe Curriculum, second edition, was taught to high school students in Idaho. The curriculum was based on the Idaho Food Code and is a state-approved curriculum. It was developed specifically for high school students, and includes Microsoft PowerPoint slides to teach the nine lessons, student fill-in notes, and activities.

Results
One hundred twenty-eight high school students have been taught the Ready, Set, Food Safe Curriculum. Seventy-nine (64%) of those who took the test passed with an 80% or higher and received an Idaho food safety and sanitation certificate.

4. Associated Knowledge Areas

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

Outcome #5

1. Outcome Measures

O: Hand Hygiene Education-People will practice improved hand hygiene for reduction of colds, flu and foodborne illness.I: Hand Hygiene Education-Program participants indicate their intention to adopt recommended health practices.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2850	403

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Many children do not wash hand properly, often enough, or at appropriate times

What has been done
Germ City displays are set up at county fairs, school health fairs, and other places where children can learn about hand washing.

Results
Children demonstrated how to properly wash hands and could identify when to wash. Each child chose one key hand washing time to focus on.

4. Associated Knowledge Areas

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

Outcome #6

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	2	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
201	Plant Genome, Genetics, and Genetic Mechanisms
308	Improved Animal Products (Before Harvest)
311	Animal Diseases
504	Home and Commercial Food Service
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #7

1. Outcome Measures

O: Other scientists are aware of our research findings. I: Number of refereed scientific journal articles.

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
{No Data Entered}

What has been done
{No Data Entered}

Results
{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
201	Plant Genome, Genetics, and Genetic Mechanisms
308	Improved Animal Products (Before Harvest)
311	Animal Diseases
504	Home and Commercial Food Service
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins

Outcome #8

1. Outcome Measures

O: ENP-EFNEP Food Safety-Low income family members will practice safe food behaviors.I: Number of EFNEP graduates reporting intent to adopt practices.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	385	1760

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
EFNEP families can't afford to be sick; when their children miss school they get behind in their school work and the parents are not able to work. Not only do EFNEP families not have extra money for doctor visits but they also lack the funds for medications. Few low-income workers are employed where sick leave is provided. Keeping families healthy is a low cost strategy to help them not get further behind...at work or at school.

What has been done
EFNEP adult clients (369) graduated the course in Southwest Idaho learned a variety of methods to keep their food safe as well as their family healthy using low tech, lost cost methods. Likewise, EFNEP youth (1246) enrolled in EFNEP 4-H. learned the importance of hand washing.

Results
Of the 369 EFNEP graduates 76% (281 of 369) showed improvement in one or more of the food safety practices (i.e. thawing and storing foods properly). Also, 17% (64 of 369) of participants showed improvement in both of the food safety practices (i.e. thawing and storing foods properly). One hundred percent of enrolled EFNEP youth (1246) in 10 groups improved their practices in food safety (hand washing).

4. Associated Knowledge Areas

KA Code	Knowledge Area
504	Home and Commercial Food Service
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
723	Hazards to Human Health and Safety

Outcome #9

1. Outcome Measures

O: Interested consumers will learn skills through Preserve@Home I: number of people completing program

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	5	93

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Consumer food preservation and storage questions are common at UI Extension Offices statewide because extension is recognized as a source of reliable and current home food preservation information. Idaho has a large number of families who participate in home canning and food storage practices; recent declines in the economy and increases in food prices have resulted in even more consumers preserving food at home.

What has been done
Courses such as preserve @ home were developed to help consumers learn the skills necessary to preserve foods at home safely. Preserve @ home was developed to address the need for food preservation knowledge with a shrinking pool of faculty who are knowledgeable of food preservation methods. The use of technology makes it easier for participants to gain the knowledge they need at a time that is convenient for them.

Results
Partnerships with Extension Educators from Idaho, Oregon and Colorado for the third year to continue to expand the reach of P @ H. Students received a certificate of completion but are not certified. As educated consumers they have the knowledge and tools to produce high quality preserved foods and the science behind food preservation and food safety.

In our on-site courses, 83% of participants significantly increased their knowledge of foodborne illness, 92% significantly increased their knowledge of acid canning and 100% significantly increased their knowledge of low acid canning. 100% of participants said they were very likely to try boiling water canning after the class and 83% said they were very likely to try pressure canning.

4. Associated Knowledge Areas

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

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

Evaluation Results

Food Safety Behavior
Before class
DID
REGULARLY
After class
WILL DO
REGULARLY
Used up-to-date tested, research-based recipes and recommendations when canning foods
28%
98%
Adjusted processing time for altitude when processing foods in a boiling water canner
42%
98%
Processed all foods including jams, jellies, high acid, pickles and relishes in a boiling water canner according to research-based recommendations
22%
97%
Processed all low acid foods such as green beans, meats, fish and combination foods in a pressure canner
18%
46%
When making home canned salsa, followed a tested research-based recipe and processed according to recommendations
11%
83%
When canning tomatoes and tomato products, added acid according to recommendations
24%
85%
Adjusted for altitude when pressure canning by increasing the pressure as recommended

for your elevation
21%
67%

Key Items of Evaluation

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
Actual	5499	6153	225	283

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	5	1	6

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Demonstrations.

Year	Actual
2010	5

Output #2

Output Measure

- Extension educators trained.

Year	Actual
2010	34

Output #3

Output Measure

- Grants.

Year	Actual
2010	8

Output #4

Output Measure

- Media Interview Articles.

Year	Actual
2010	11

Output #5

Output Measure

- Operator Posters.

Year	Actual

2010	1

Output #6

Output Measure

- Operator Presentations.

Year	Actual
2010	1

Output #7

Output Measure

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

Output #8

Output Measure

- Popular Press articles.

Year	Actual
2010	13

Output #9

Output Measure

- Poster Papers.

Year	Actual
2010	6

Output #10

Output Measure

- Presentations.

Year	Actual
2010	63

Output #11

Output Measure

- Professional Education Opportunity.

Year	Actual
2010	3

Output #12

Output Measure

- Research Papers.

Year	Actual
2010	1

Output #13

Output Measure

- School (group of related presentations).

Year	Actual
2010	9

Output #14

Output Measure

- Tour (Guided tour of producers practices).

Year	Actual
2010	2

Output #15

Output Measure

- Workshops (Multi-day educational activity).

Year	Actual
2010	9

Output #16

Output Measure

- Proceeding Papers and Reports

Year	Actual
2010	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 head about "intensive" grazing and the economic and environmental benefits. If they are committed to attend the workshop, the usually are interested in learning how conventional practice compares to recommend practice in pasture management.

What has been done
Two four day hands on workshops were provides, 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 witnter 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)

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

V(A). Planned Program (Summary)

Program # 16

1. Name of the Planned Program

Climate Change: Forest Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources	90%		40%	
213	Weeds Affecting Plants	5%		20%	
215	Biological Control of Pests Affecting Plants	0%		20%	
216	Integrated Pest Management Systems	5%		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	3.6	0.0	1.0	0.0
Actual	2.9	0.0	1.7	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
156044	0	90445	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
156044	0	90445	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
36406	0	456117	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Climate change: Forest management team is made up of five faculty members contributing a total of 2.9 FTEs to this project. Team members generated $114,148 in external grant support and made 5,636 direct teaching contacts. Team members produced five peer-reviewed Extension publications and one article in a professional/scientific journal. The Team has four major areas of focus:

Improving Family Forest Management
Sustainable Timber Harvesting
Natural Resource Education for Professionals
Youth and Educators

Workshops and field days for family forest owners, forestry and natural resource professionals, and for loggers continue to dominate the agenda for this Team. These efforts are generally presented in series to increase the knowledge and understanding of the target audience about a suite of topics eadh year. Team members continued to produce educational articles for various trade publications and for our own newsletter targeting forestry professionals.

A new grant supported a multistate effort to evaluate the educational status and needs of forest owners related to climate change, in partnership with Oregon State University.

2. Brief description of the target audience

Family Forest Owners, Loggers, Natural Resource Professionals

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	4406	1220250	1230	18450

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	5	4	9

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of workshops, field days, etc.

Year	Actual
2010	54

Output #2

Output Measure

- Number of participants in workshops, field days, etc.

Year	Actual
2010	4038

Output #3

Output Measure

- Number of articles in popular and trade press.

Year	Actual
2010	26

Output #4

Output Measure

- Number of web site "hits".

Year	Actual
2010	4200

Output #5

Output Measure

- Continuing Education hours for foresters, loggers, & other natural resource Professionals.

Year	Actual
2010	4808

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Family forest owners manage resources to achieve healthy, sustainable forests.I: Numbers of family forest owners indicating they will adopt recommended practices (e.g., monitor for insect, disease, or animal damage; thin forest trees; complete a forest management plan; etc.).
2	O: Family forest owners' understand issues and practices related to forest ecology, silviculture, and forest management.I: Number of family forest owners participating in educational programs who report an increase in awareness and knowledge of specific forest ecology, silviculture, and forest management issues.
3	O: Loggers operate using recommended forest management practices (e.g., monitor for insect, disease, or animal damage).I: Numbers of LEAP Update participants indicating they will adopt specific improved forest management practices.
4	O: Loggers possess credentials required by forest industry to conduct business.I: Number of loggers who complete continuing education requirements.
5	O: Natural resource professionals have knowledge consistent with current scientific understanding and emerging technologies.I: Number of natural resource professionals demonstrating increase in knowledge related to specific forest science and technology topics.
6	O: Other scientists are aware of our research findings. I: Number of refereed scientific journal articles.
7	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.

Outcome #1

1. Outcome Measures

O: Family forest owners manage resources to achieve healthy, sustainable forests.I: Numbers of family forest owners indicating they will adopt recommended practices (e.g., monitor for insect, disease, or animal damage; thin forest trees; complete a forest management plan; etc.).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	300	881

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Roughly 44% of the forests in the Idaho Panhandle (Boundary, Bonner, Kootenai and Benewah counties) are held and managed by 46,993 family forest owners (23,663 owning 5 acres or more). Family forests are critical to timber supply, water, wildlife, and many other shared values. For example family forests tend to be more concentrated near key locations for ecosystem functions (e.g., along lakes, streams, and in increasingly rare low elevation wildlife habitats)

What has been done
As part of the Idaho Forest Stewardship program, a cooperative effort with the Idaho Dept. of Lands and many other partners, UI Extension provides an annual series of workshops, field days and other educational activities titled Strengthening Forest Stewardship Skills. The activities are designed to strengthen forest owners' ability to implement practices that improve forest health and growth, and are offered in a variety of locations and times.

Results
In FY 09-10, 672 owners of nearly 90,000 family forest acres attended UI Extension workshops and other educational activities in the Idaho panhandle. On average, less than a third of participants indicated previous involvement in various forestry education or assistance programs. Participants indicated knowledge increases ranging from 40% to 158%, with an un-weighted average of 84%. Based on evaluation results: 215 panhandle family forest owners will attend additional forestry education programs; 140 will contact a forester for additional assistance; 108 will monitor for insect, disease, or animal damage; 89 will thin forest trees; 81 will manage to favor larch and pines; 61 will complete a forest management plan; 52 will reduce noxious weeds or other non-native invasive species; 48 will reduce fuels in the home ignition zone; 43 will make their house easier for firefighters to identify and access; 39 will prune forest trees; 31 will reduce unwanted vegetation.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
216	Integrated Pest Management Systems

Outcome #2

1. Outcome Measures

O: Family forest owners' understand issues and practices related to forest ecology, silviculture, and forest management.I: Number of family forest owners participating in educational programs who report an increase in awareness and knowledge of specific forest ecology, silviculture, and forest management issues.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	300	672

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Roughly 44% of the forests in the Idaho Panhandle (Boundary, Bonner, Kootenai and Benewah counties) are held and managed by 46,993 family forest owners (23,663 owning 5 acres or more). Family forests are critical to timber supply, water, wildlife, and many other shared values. For example family forests tend to be more concentrated near key locations for ecosystem functions (e.g., along lakes, streams, and in increasingly rare low elevation wildlife habitats)

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average of 84%.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
216	Integrated Pest Management Systems

Outcome #3

1. Outcome Measures

O: Loggers operate using recommended forest management practices (e.g., monitor for insect, disease, or animal damage).I: Numbers of LEAP Update participants indicating they will adopt specific improved forest management practices.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	230	142

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Loggers are a critical link in forest management. Unfortunately, if communication between landowners, loggers, or foresters is inadequate, the resulting timber or biomass harvests may not meet expectations. To the extent forest certification programs require trained loggers, UI Extension logger training efforts are vital to helping Idaho forest product companies maintain or increase Idaho's share of global markets for certified wood products.

What has been done
Logger Education to Advance Professionalism ("LEAP") features over 20 hours of training designed to increase loggers' understanding and skills related to forest ecology, silviculture, and water quality. Based on logger recommendations, we developed LEAP Update, an annual 2-day program where loggers can get updated on current forestry issues. UI Extension has integrated logger education needs into other education programs as well.

Results
Eight hundred and ninety-two loggers have attended the 38 LEAP sessions offered annually in the Idaho Panhandle since 1994. As a result of 158 loggers participation in the three LEAP Update sessions held in the Idaho Panhandle in 2010: 142 loggers will be able to identify

Douglas-fir tussock moth problems; 138 will select better leave trees; 138 will be able to better evaluate forest stand density; 129 will manage slash more effectively; and 101 will make better decisions on biomass harvesting.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
216	Integrated Pest Management Systems

Outcome #4

1. Outcome Measures

O: Loggers possess credentials required by forest industry to conduct business.I: Number of loggers who complete continuing education requirements.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	250	683

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Partially stimulated by SFI, the Idaho logger education committee developed the "Idaho Pro-Logger" program, administered through the Associated Logging Contractors of Idaho (ALC). The Idaho Pro-Logger credential requires LEAP and 16 credits of continuing education annually. With growing enrollment in the Idaho Pro-Logger program, more loggers are looking for ways to meet credit requirements.

What has been done
Based on logger recommendations, we developed LEAP Update, an annual 2-day program where loggers can get updated on current forestry issues.

Results
Six hundred eighty-three loggers have maintained enrollment in the Idaho Pro-logger program.

4. Associated Knowledge Areas

KA Code	Knowledge Area

123	Management and Sustainability of Forest Resources
216	Integrated Pest Management Systems

Outcome #5

1. Outcome Measures

O: Natural resource professionals have knowledge consistent with current scientific understanding and emerging technologies.I: Number of natural resource professionals demonstrating increase in knowledge related to specific forest science and technology topics.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	150	314

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Forests are vital to the economy and quality of life in the Inland Northwest. Foresters and other natural resource professionals must continually sharpen their skills and stay current with emerging scientific and technological developments to sustainably produce more wood and forest biomass and simultaneously improve forest biodiversity and health. K-12 teachers must also stay updated and are continually looking for local opportunities to hone their skills.

What has been done
UI Extension and WSU Extension cooperate to hold an annual forum for consulting foresters, state-employed service foresters, and other natural resource professionals working with family forest owners, titled The Family Foresters Workshop, updates participants on emerging technology and knowledge applicable to family-owned forests. Other efforts involve adjusting programs developed for forest owners or other groups to simultaneously meet foresters' or teachers' needs as well.

Results
Over 267 foresters attended UI Extension forestry programs in the Idaho Panhandle in 2009-2010, for 1,074 contact hours. Participants in the 2010 Family Forester's Workshop, indicated percentage knowledge increases ranging from 13-68% on: cap and trade, wetland/riparian habitat improvement, LIDAR, managing forests for aquifers, and family forest economics/policy. Three panhandle teachers took the Forestry Shortcourse for credit in 2009-2010. Some teachers have used the shortcourse to develop innovative high school forestry classes. Future UI Extension programming in this area will evolve to reflect emerging technologies and professional education needs in the Idaho Panhandle related to forestry.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
216	Integrated Pest Management Systems

Outcome #6

1. Outcome Measures

O: Other scientists are aware of our research findings. I: Number of refereed scientific journal articles.

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
{No Data Entered}

What has been done
{No Data Entered}

Results
{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
216	Integrated Pest Management Systems

Outcome #7

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	2	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
{No Data Entered}

What has been done
{No Data Entered}

Results
{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
216	Integrated Pest Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Public Policy changes
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

Evaluation Results

Evaluation results are described in the outcomes portion of this program

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 17

1. Name of the Planned Program

Global Food Security and Hunger: Health and Human Nutrition

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
206	Basic Plant Biology	5%		5%	
301	Reproductive Performance of Animals	10%		5%	
311	Animal Diseases	10%		15%	
313	Internal Parasites in Animals	0%		5%	
701	Nutrient Composition of Food	10%		5%	
703	Nutrition Education and Behavior	35%		15%	
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	0%		10%	
722	Zoonotic Diseases and Parasites Affecting Humans	10%		10%	
723	Hazards to Human Health and Safety	10%		15%	
724	Healthy Lifestyle	10%		10%	
903	Communication, Education, and Information Delivery	0%		5%	
	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	6.6	0.0	10.0	0.0
Actual	7.8	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**
95316	0	205057	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
95316	0	205057	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
479852	0	4418247	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Food Security and Hunger: Health and human nutrition team is made up of 18 faculty members contributing a total of 7.8 FTEs to this project. Team members generated $2,206,854 in external grant support and made 92,404 direct teaching contacts. Team members produced five peer-reviewed Extension publications and nine articles in professional and scientific journals. The Team has three major areas of focus:

Food Security and Hunger
Healthy Lifestyles - childhood obesity
Nutrition and Chronic Diseases

Team members delivered hundreds of lessons about healthy lifestyles, nutrition and disease management. Food security issues are addressed through individual counseling and through classes about community food resources, stretching the food budget, and best consumer practices for shopping and meal preparation.

2. Brief description of the target audience

Limited income adults are targeted by the EFNEP program in two urban clusters in the State, and by the ENP (Snap-ed) program in other counties. Other audiences include adults responsible for planning and preparing the family's food, households with young children, 4-H children, individuals and families with an interest in or need for health, nutrition and physical activity information, homebound seniors, employees and families of Early Head Start and Head Start, the uninsured, and people with diabetes.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	23959	100509	52404	4021

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

Patent Applications Submitted

Year: 2010

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	5	24	29

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Conduct classes on nutrition and health and physical activity.

Year	Actual
2010	9106

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Improved physical condition of individuals enrolled in a physical activity program. I: Number of individuals who felt physically stronger from the Strong Women classes or improved their Get Up and Go scores from the Fit and Fall Proof classes.
2	O: Adult ENP participants will plan to change a dietary or activity behavior after completing a nutrition or physical activity class.I: Number of adult ENP participants who indicate their intention to improve their diet or physical activity.
3	O: Adult EFNEP participants will improve their diets after completing 6 core lessons.I: Number of adults that improve their diets by at least one food group (determined through pre/post 24 hour recalls).
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.

Outcome #1

1. Outcome Measures

O: Improved physical condition of individuals enrolled in a physical activity program. I: Number of individuals who felt physically stronger from the Strong Women classes or improved their Get Up and Go scores from the Fit and Fall Proof classes.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	459

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Staying physically active and being properly nourished is one of the most important things we can do to stay healthy for life. Essential to staying strong and vital during older adulthood is participation in regular strengthening exercises, which help to prevent osteoporosis and frailty by stimulating the growth of muscle and bone. Feeling physically strong also promotes mental and emotional health.

What has been done
Extension taught 14 series of classes of 12 classes each of Strong Women Stay Youn and six series of Fit and Fall Proof.

Results
Over 465 StrongWomen classes have been taught in Ada and Owyhee counties from 2006-2010. Participating in strength training exercises can help women maintain or improve their current bone density. All participants showed an increase in strength, making daily activities easier and adding to the independence level of many. Participants reported improved energy levels and muscle tone, and an increase in flexibility and balance, which has been shown to help women to avoid falls and fractures. Similar studies have shown a 40% reduction in falls due to strength and balance exercises.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
703	Nutrition Education and Behavior

724 Healthy Lifestyle

Outcome #2

1. Outcome Measures

O: Adult ENP participants will plan to change a dietary or activity behavior after completing a nutrition or physical activity class.I: Number of adult ENP participants who indicate their intention to improve their diet or physical activity.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	3500	6003

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Individuals who eat a healthy diet and are physically activity are less likely to be overweight/obese and less likely to develop certain chronic diseases, such as diabetes, heart disease, stroke.

What has been done
Adult participants attended dietary quality classes that covered MyPyramid, the various food groups, label reading, reducing fat, sodium, and sugar content, and meal planning.

Results
During FFY2010, ENP taught 1631 adult dietary quality classes and (1) 91% reported they learned something new, (2) 43% planned on eating more fruits and vegetables, (3) 23% planned on eating more whole grains, (4)17% planned on eating more low-fat dairy, and (5) 68% planned on being more physically active.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #3

1. Outcome Measures

O: Adult EFNEP participants will improve their diets after completing 6 core lessons.I: Number of adults that improve their diets by at least one food group (determined through pre/post 24 hour recalls).

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	330	517

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Obesity, poor health, and limited physical activity are major health concerns. Past years of data show that the EFNEP improves the health and well-being of its limited resource families. Research shows that better health is associated with reduced health care costs, less absenteeism from work, and less dependence on emergency food assistance, thus leading to public savings.

What has been done
In FY2010 501 low-income adults enrolled in the Southern District EFNEP; 369 graduated the program. The graduates learned how to: improve their diets, improve their nutrition practices and stretch their food dollars farther, and increase their physical activity rates.

Results
In Nutrition Practices 96% (356 0f 369) of the participants showed improvement in one or more nutrition practices (i.e. plans meals, makes healthy food choices, prepares foods with adding salt, reads nutrition labels or has children eat breakfast). Also, at exit 64.5% had a positive change in physical activity. At exit 68%.6 reported exercising 30 to 60 minutes per day, whereas only 29% did so at entry.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
703	Nutrition Education and Behavior
724	Healthy Lifestyle

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	5	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
{No Data Entered}

What has been done
{No Data Entered}

Results
{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
206	Basic Plant Biology
301	Reproductive Performance of Animals
311	Animal Diseases
701	Nutrient Composition of Food
703	Nutrition Education and Behavior
722	Zoonotic Diseases and Parasites Affecting Humans
723	Hazards to Human Health and Safety
724	Healthy Lifestyle

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

Evaluation Results

Seafood at its Best curriculum was taught and evaluated after each lesson using the curriculum evaluation of knowledge gained. A follow up 6 months later gained information from participants about confidence in selection, buying and preparing seafood.

Knowledge gained from lesson one was 103.3%, lesson two was 54.5%, lesson three 40.3%, lesson four 56%.

The survey response rate was about 39%, which is considered quite good. Although seafood consumption did increase among the participants, it was not a significant increase. However, 88% and 71% of respondents respectively, indicated they were more confident and informed shoppers and their seafood cooking skills improved as a result of the class. A total of 81% would recommend this class to others.

Key Items of Evaluation

Participants reported after six months they had greater confidence in selection, buying and preparing seafood.

V(A). Planned Program (Summary)

Program # 18

1. Name of the Planned Program

Sustainable Energy: Nutrient and Waste Management

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	10%		20%	
102	Soil, Plant, Water, Nutrient Relationships	10%		20%	
133	Pollution Prevention and Mitigation	10%		20%	
205	Plant Management Systems	10%		5%	
403	Waste Disposal, Recycling, and Reuse	50%		30%	
601	Economics of Agricultural Production and Farm Management	10%		5%	
	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	2.2	0.0	1.0	0.0
Actual	3.3	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	1890 Extension	Hatch	Evans-Allen
125990	0	88267	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
125990	0	88267	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
74035	0	609567	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Sustainable energy: Nutrient and waste management team is made up of nine faculty members contributing a total of 3.3 FTEs to this project. Team members generated $139,190 in external grant support and made 4,576 direct teaching contacts. Team members produced three peer-reviewed Extension publications and two articles in professional and scientific journals. The Team has three major areas of focus:

Crops and Fertility
Integrated Systems
Animals and Facilities

Work in sustainable energy includes demonstration and education efforts to reduce the need for inorganic fertilizers and conservation of energy required for its production; and various demonstrations and educational programs targeting and energy capture from manure generated from our large dairy industry.

Nutrient Waste Management Faculty designed, developed, and delivered the Idaho Master Composter and Recycler Program, conducted trials to determine application characteristics of manures, revised numerous fertilizer guides, and collaborated with producers installing, testing, and documenting technologies including bio-digesters on dairies.

2. Brief description of the target audience

Target audiences include dairy producers, crop producers, dairy allied industry, small farm owners, lawmakers, home owners, small livestock producers crop consultants, and regulatory agencies

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	4123	59879	453	400

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	3	3	6

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Bi-annual NWM Conference; number of participants

Year	Actual
2010	72

Output #2

Output Measure

- Educational Field Days and Tours; number of participants.

Year	Actual
2010	699

Output #3

Output Measure

- CCA Credits awarded through Online Testing.

Year	Actual
2010	121

Output #4

Output Measure

- Number of nutrient and waste management presentations at producer and fieldman meetings.

Year	Actual
2010	26

Output #5

Output Measure

- Nutrient Management applied research projects and demonstrations, number of projects

Year	Actual
2010	18

Output #6

Output Measure

- Nutrient Management articles prepared for newsletters and trade publications

Year	Actual
2010	15

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Improve application of NMP principles on farms; I: Number of participants indicating their intention to adopt recommended practices
2	O: Producers and consultants learn new skills and methods through research-based education. I: Number of participants indicating an increase in knowledge about NWM.
3	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.

Outcome #1

1. Outcome Measures

O: Improve application of NMP principles on farms; I: Number of participants indicating their intention to adopt recommended practices

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	10	56

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Nutrient management practices need to be improved to improve Idaho's water, soil, and air quality while maintaining and improving crop performance.

What has been done
Presentations were given at the Idaho Nutrient Management Conference that offered useful and current information on practices that improve nutrient and waste management in Idaho.

Results
Of the 70 attendees at the Idaho Nutrient Management Conference, 10 reported that they would change practices and 8 reported that they may change practices, based on the information that they learned at the conference.

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
102	Soil, Plant, Water, Nutrient Relationships
133	Pollution Prevention and Mitigation
403	Waste Disposal, Recycling, and Reuse
601	Economics of Agricultural Production and Farm Management

Outcome #2

1. Outcome Measures

O: Producers and consultants learn new skills and methods through research-based education. I: Number of participants indicating an increase in knowledge about NWM.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	118

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Concentrations of phosphorous in the soil have increased; continuing to increase jeopardizes soil and water quality and soil productivity.

What has been done
Compost use by producers can export nutrients farther away from dairies and provide needed fertility for crop production. Field trial results using compost were presented.

Results
Professional and producer knowledge of compost use for crop production increased.

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
102	Soil, Plant, Water, Nutrient Relationships
133	Pollution Prevention and Mitigation
205	Plant Management Systems
403	Waste Disposal, Recycling, and Reuse
601	Economics of Agricultural Production and Farm Management

Outcome #3

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	{No Data Entered}	6

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
101	Appraisal of Soil Resources
102	Soil, Plant, Water, Nutrient Relationships
133	Pollution Prevention and Mitigation
205	Plant Management Systems
403	Waste Disposal, Recycling, and Reuse
601	Economics of Agricultural Production and Farm Management

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Public Policy changes
- Government Regulations

Brief Explanation

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

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 19

1. Name of the Planned Program

Range Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
121	Management of Range Resources	50%		0%	
133	Pollution Prevention and Mitigation	0%		30%	
213	Weeds Affecting Plants	30%		10%	
216	Integrated Pest Management Systems	0%		30%	
307	Animal Management Systems	20%		0%	
605	Natural Resource and Environmental Economics	0%		10%	
901	Program and Project Design, and Statistics	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	2.8	0.0	1.0	0.0
Actual	4.0	0.0	1.6	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
199005	0	88973	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
199005	0	88973	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
69977	0	422545	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Range management team is made up of 13 faculty members contributing a total of 4.0 FTEs to this project. Team members generated $243,398 in external grant support and made 8,099 direct teaching contacts. Team members produced 10 peer-reviewed Extension publications and four articles in professional and scientific journals. The Team has five major areas of focus:

The Ecology, Assessment and Monitoring of Idaho Rangelands
Sustainable Livestock Grazing Strategies for Idaho Rangelands
Rangeland Restoration and Management of Invasive Species
Youth and Adult Educational Outreach on the Ecology, Uses, and Management of Rangelands
Rangeland Enterprises, Social Networks and Public Policy

The Range Team conducted 15 grazing and range health workshops, nine biological weed control workshops, and 21 events to educate land owners and managemrs about invasive weed species, including field days, tours, and presentations at producer meetings.

2. Brief description of the target audience

Traditional audiences for range management programs included ranchers, landowners, federal/state agency professionals and conservation-minded individuals. In 2010 we targeted several non-traditional audiences including high school educators, public policy makers, youth (11-17 yrs), "environmentalists", elected officials, University administrators and a "new" population of ranchers who had not previously been engaged with Extension programming.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	7524	6097	575	394

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	10	5	15

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Range and weed tours.

Year	Actual
2010	14

Output #2

Output Measure

- Range monitoring and grazing workshops.

Year	Actual
2010	15

Output #3

Output Measure

- Weed workshops and presentations.

Year	Actual
2010	21

Output #4

Output Measure

- range science at school.

Year	Actual
2010	4

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Awareness of new, accepted or recommended grazing and weed management practices.I: Number attending educational events.
2	O: Youth learning about rangeland ecology and management.I: Number of youth participating in school programs on range.
3	Increase in the number of graduate students entering the workforce.

Outcome #1

1. Outcome Measures

O: Awareness of new, accepted or recommended grazing and weed management practices.I: Number attending educational events.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	2022

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Weeds in rangelands continue to cost at least 300 million dollars in losses and control each year. In specific systems like CRP, requirements for control of species like African wiregrass have led to intense interest in control strategies and the problem is mirrored in pasture and hay production. In large landscapes, weed management is a complicated process because of extensive acreage and multiple species. In addition, it is difficult to evaluate progress in management.

What has been done
We have determined strategies for management of African wiregrass that are effective and we have communicated those efforts through workshops and individual contacts with landowners and NRCS personnel who make individual contacts.

Results
We now can control African wiregrass which allows people to participate in CRP. We also have discovered strategies that reduce the species impact in hay which opens foreign markets to sale of Idaho and Washington hay. In pasture we have returned unusable pasture to good condition.

4. Associated Knowledge Areas

KA Code	Knowledge Area
121	Management of Range Resources
213	Weeds Affecting Plants
307	Animal Management Systems

Outcome #2

1. Outcome Measures

O: Youth learning about rangeland ecology and management.I: Number of youth participating in school programs on range.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	100	408

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Much of the conflict and associated inefficiencies in managing federally owned rangelands results from a lack of understanding, insight and consideration of the compatibility of multiple uses for these resources. We targeted young learners because there are the policy makers, voters and citizen activists of the future. If we can develop an appreciation and understanding of sustainable range management in our youth, the perennial conflicts associated with "competing" users may be mitigated.

What has been done
We developed and implemented 3 Rangeland Career Development Events for high school students in Idaho, Utah, and Nevada. I am also an Instructor at the Natural Resources Camp.

Results
Over 300 youth from Idaho and adjacent states were engaged in experiential learning activities focused on rangeland management and assessment. These programs also focused on career and educational opportunities in range management. Our efforts resulted in a Western National champion team from Idaho, and in several confirmed students enrolled in the range program at UI or other institutions.

4. Associated Knowledge Areas

KA Code	Knowledge Area
121	Management of Range Resources
213	Weeds Affecting Plants
307	Animal Management Systems

Outcome #3

1. Outcome Measures

Increase in the number of graduate students entering the workforce.

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	3	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
{No Data Entered}

What has been done
{No Data Entered}

Results
{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
121	Management of Range Resources
213	Weeds Affecting Plants
307	Animal Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes

Brief Explanation

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

Evaluation Results

Key Items of Evaluation

V(A). Planned Program (Summary)

Program # 20

1. Name of the Planned Program

Water and Environmental Quality

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	0%		10%	
104	Protect Soil from Harmful Effects of Natural Elements	0%		10%	
111	Conservation and Efficient Use of Water	30%		10%	
112	Watershed Protection and Management	30%		10%	
132	Weather and Climate	0%		10%	
133	Pollution Prevention and Mitigation	30%		10%	
215	Biological Control of Pests Affecting Plants	0%		10%	
315	Animal Welfare/Well-Being and Protection	0%		10%	
723	Hazards to Human Health and Safety	10%		10%	
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	0%		10%	
	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	1.2	0.0	6.8	0.0
Actual	2.0	0.0	7.1	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**
154184	0	326970	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
154184	0	326970	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
1922	0	2114533	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Water Resources team is made up of 10 faculty members contributing a total of 2.0 FTEs to this project. Team members generated $301,114 in external grant support and made 2,965 direct teaching contacts. Team members produced two articles in professional and scientific journals. The Team has three major areas of focus:

Agricultural water conservation and management
Watershed education/management
Pollution prevention

Activities of the Team included development and circulation of a newsletter 24 times during the reporting year; a water resources - IPM symposium held in Boise, Idaho; the 5th biennial regional water conference titled "Water and Land Use in the Pacific Northwest: Integrating Communities and Watersheds" held on November 4-6, 2009 at the Skamania Lodge in Stevenson, Washington; completion of a survey on watershed groups in the Pacific Northwest; collaboration on a number of irrigation district task forces; presentations for pesticide recertification to educate about water issues; and a variety of publications for distribution and dissemination through various media including the regional water quality website.

2. Brief description of the target audience

target audiences include farmers, irrigation industry personnel, and local, state and federal agency personnel working in irrigation-related areas, water management professionals and stakeholders, elected decision makers, school teachers, and various general audiences.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	1076	19000	0	350

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

Patent Applications Submitted

Year: 2010
Actual: 2

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	10	10

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- WQ Updates

Year	Actual
2010	27

Output #2

Output Measure

- Number of Popular press articles published

Year	Actual
2010	9

Output #3

Output Measure

- Number of water quality workshops and seminars

Year	Actual
2010	19

Output #4

Output Measure

- Number of professional meetings attended

Year	Actual

2010 8

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Improved protection of Ground Water Resource.I: Number of participants who are land owners and managers that adopt BMPs that protect groundwater.
2	O: Improved protection of surface water resource.I: Number adopting BMPs to reduce runoff of sediment and nutrients.
3	O: An increase in the number of trained graduate students prepared to enter the workforce. I: Number of M.S. and Ph.D. candidates in water and environmental quality graduate training programs.
4	O: Improve protection of water resources. I: Number of pest management and nutrient management plans written with producers.

Outcome #1

1. Outcome Measures

O: Improved protection of Ground Water Resource.I: Number of participants who are land owners and managers that adopt BMPs that protect groundwater.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	25	115

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Leaching of Nitrogen fertilizer adversely impacts the quality of groundwater in Idaho.

What has been done
Extension-led programs have promoted better timing of application and better placement of nitrogen of nitrogen fertilizers in soils. The combination of reduced nitrogen fertilizer use and improved efficiency of the fertilizer that is applied has reduced the introduction of nitrogen into both surface and groundwater in many parts of the Pacific Northwest.

Results
Nitrogen use efficiency in crop production has increased by 6% in the last 10 years. This results in less aquifer contamination.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
723	Hazards to Human Health and Safety

Outcome #2

1. Outcome Measures

O: Improved protection of surface water resource.I: Number adopting BMPs to reduce runoff of sediment and nutrients.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	50	300

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Nutrient runoff contributes to surface water eutrophication

What has been done
Even though P fertilizer application rates in the region have remained stable over the last 10 years, because of improved fertilizer placement technologies, additions of P to surface waters via runoff from croplands have actually declined by more than 10 percent.

Results
Additions of P to surface waters via runoff from croplands have actually declined by more than 10 percent.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
104	Protect Soil from Harmful Effects of Natural Elements
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
215	Biological Control of Pests Affecting Plants

Outcome #3

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 in water and environmental quality graduate training programs.

2. Associated Institution Types

- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	2	2

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
104	Protect Soil from Harmful Effects of Natural Elements
111	Conservation and Efficient Use of Water
112	Watershed Protection and Management
132	Weather and Climate
133	Pollution Prevention and Mitigation
215	Biological Control of Pests Affecting Plants
315	Animal Welfare/Well-Being and Protection
723	Hazards to Human Health and Safety
803	Sociological and Technological Change Affecting Individuals, Families, and Communities

Outcome #4

1. Outcome Measures

O: Improve protection of water resources. I: Number of pest management and nutrient management plans written with producers.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	150	55

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
NRCS can provide cost-share money to producers for writing pest management plans

What has been done
Extension participates on the NRCS State Technical Committee in order to get pest management planning entered into the Conservation Planning process. NRCS field staff can then enroll producers in IPM planning. All pesticides selected are evaluated using Win-PST.

Results
Growers continue to scout fields and plant green manure crops as two major pest management practices. Also, growers are encouraged to select pesticides that are less risky to the water resources.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
112	Watershed Protection and Management
133	Pollution Prevention and Mitigation
215	Biological Control of Pests Affecting Plants

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Appropriations changes
- Government Regulations

Brief Explanation

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

Evaluation Results

Extension conducted a survey to assess the status of watershed groups in the PNW. In addition to defining Pacific Northwest watershed group structure and function, the survey was designed to measure PNW watershed group needs. Group needs were defined in two ways within the survey: 1) by watershed group's access to and use of technical watershed information, and 2) through an open-ended question, specifically asking survey respondents to list group needs.

Key Items of Evaluation

Conclusions based on the watershed group survey include the following:

1. The majority of PNW watershed groups had access to adequate amounts of technical watershed information and they willingly utilized this information in watershed planning and to accomplish watershed group missions and goals.
2. Watershed groups rely on agency personnel to provide necessary technical information and prefer to receive information in this manner.
3. The major, unmet needs of PNW watershed groups are sustainable, base funding, increased and varied participation, and specific baseline data for watersheds in which they work.

V(A). Planned Program (Summary)

Program # 21

1. Name of the Planned Program

Childhood Obesity: 4-H Youth Development

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
724	Healthy Lifestyle	40%		0%	
803	Sociological and Technological Change Affecting Individuals, Families, and Communities	20%		0%	
806	Youth Development	40%		0%	
	Total	100%		0%	

V(C). Planned Program (Inputs)

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	18.5	0.0	0.0	0.0
Actual	19.0	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
343063	0	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
343063	0	0	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
1208863	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

The Childhood obesity and 4-H Youth Development team is made up of 55 faculty members

contributing a total of 19.0 FTEs to this project. Team members generated $750,879 in external grant support and made 128,910 direct teaching contacts. Team members produced six peer-reviewed Extension publications and eight articles in professional and scientific journals. The Team has five major focus areas:

Expanding Science, Engineering and Technology Programs
Healthy Living Programs-Childhood obesity
Youth and Adult Leadership/Volunteer Development Programs (more than 3,400 volunteers attended training)
Reaching Underserved Audiences Programs
Youth-Adult Partnership Programs

Childhood Obesity-relevant activities of the 4-H Youth Development Team are found in the Healthy lifestyles project area, and include health and nutrition training for volunteer leaders and resulting projects for youth such as cooking projects, eating right projects, and physical activity projects. These educational programs are delivered through the regular 4-H club program, afterschool and classroom enhancement programs, and through an array of camps and special events.

Efforts in Science, Engineering and Technology include participation in a variety of robotics projects, participation in the National Science Experiment, Junior Master Gardeners, and hundreds of clubs working on animal husbandry and plant science projects.

All project areas generate trained volunteers and many contribute toward our goals of building youth-adult partnerships.

2. Brief description of the target audience

Target audiences vary by county and by project area, but include traditional rural youth as well as urban and suburban youth for the traditional club programs. Many of the afterschool programs are conducted in schools with large numbers of children from disadvantaged families, including specific outreach for Hispanic children and their families.

Volunteers are also recruited to lead the wide array of youth programs delivered by Idaho 4-H, and are targeted to reflect the communities from which youth emerge,

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	49152	44630	79758	62641

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

Patent Applications Submitted

Year: 2010
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	6	8	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of youth in educational classes and workshops.

Year	Actual
2010	31888

Output #2

Output Measure

- Number of volunteers in educational classes and workshops.

Year	Actual
2010	3462

Output #3

Output Measure

- Number of opportunities to promote 4-H Youth Development (publications, newsletters, columns, radio PSA's, radio/TV appearances)

Year	Actual
2010	494

Output #4

Output Measure

- Number of educational classes, workshops, trainings, seminars taught (teaching contacts)

Year	Actual
2010	1047

Output #5

Output Measure

- Number of 4-H clubs or groups.

Year	Actual
2010	1402

Output #6

Output Measure

- Number of youth attending statewide 4-H events.

Year	Actual
2010	704

Output #7

Output Measure

- Number of volunteers attending county, multi-county, district, state, regional, and national events

Year	Actual
2010	1639

Output #8

Output Measure

- Number of hits on the web site each year.

Year	Actual
2010	124273

Output #9

Output Measure

- number of youth participating in robotics tournaments

Year	Actual
2010	1114

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	O: Youth will expand science, engineering, and technology skills through participation in 4-H Youth Development Programs. I: Number of youth participating in 4-H Youth Development programs designed to expand science and technology skills.
2	O: Youth participating in 4-H Youth Development programs will increase their knowledge of healthy lifestyle behaviors.I: Number of youth who increase their knowledge of healthy behaviors.
3	O: More youth and adult volunteers will be available to lead 4-H Youth Development programs.I: Total number of volunteers receiving training.
4	O: More youth and adult volunteers will be available to lead 4-H Youth Development programs.I: Number of new volunteers certified.
5	O: Underserved youth will learn life skills through 4-H Youth Development.I: Number of underserved youth participating in 4-H Youth Development.
6	O: Underserved youth will learn life skills through 4-H Youth Development.I: Number of programs designed and marketed specifically for underserved youth.
7	O: A greater number of organizations will benefit from effective youth-adult partnerships.I: Number of committees, councils and boards with youth and adults serving together.
8	O: Youth will learn life skills through participation in 4-H Youth Development programs. I: Number of youth indicating life skill development

Outcome #1

1. Outcome Measures

O: Youth will expand science, engineering, and technology skills through participation in 4-H Youth Development Programs. I: Number of youth participating in 4-H Youth Development programs designed to expand science and technology skills.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	8100	15228

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
A critical need in the U.S. today is providing opportunities for youth in authentic science, engineering, and technology fields.

What has been done
Two of our two primary programs for engaging youth in SET programs are the geospatial program and the robotics program for youth 6-18.

Results
Youth in these programs report through their leaders/parents that they have improved in their ability to conduct science inquiries, engineering tasks, and use technology.

4. Associated Knowledge Areas

KA Code	Knowledge Area
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #2

1. Outcome Measures

O: Youth participating in 4-H Youth Development programs will increase their knowledge of healthy lifestyle behaviors.I: Number of youth who increase their knowledge of healthy behaviors.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	8400	8844

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Youth are inactive and overweight causing chronic health problems. Over weight youth have a reduced quality of life, social stigmatization, and discrimination. There is an increased risk of coronary heart disease, hypertension, stroke, diabetes, and cancer. All leading to higher medical costs.

What has been done
Five classes were taught to Native American youth regarding the new USDA food guide pyramid and how to choose the right types of foods to eat. Youth were also taught what serving sizes were and how to stay active and healthy.

In another county, Youth were taught basic food preparation skills, to improve their knowledge base and skills that can be used for food preparation for the rest of their life.

Results
Youth were verbally surveyed to determine actual impacts of these programs. An estimated 65% adopted improved eating habits and tried to incorporate more exercise in their daily lives.

Youth were successful in preparation of whole grain muffins. Day camp youth learned to work together as a team to prepare a meal.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
806	Youth Development

Outcome #3

1. Outcome Measures

O: More youth and adult volunteers will be available to lead 4-H Youth Development programs.I: Total number of volunteers receiving training.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	1425	1238

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Volunteers need to diversify and add to their skills and abilities to teach and work with 4-H youth and families. Training programs help spark new areas of interest and keep volunteers energized in their role.

What has been done
Trainings were offered during each 4-H Leaders Council meeting and as needed to satisfy volunteer needs. Volunteers were encouraged to attend the annual State 4-H Leaders Forum and Western Regional Leaders Forum.

Results
In most several counties, the number of volunteers attending 4-H Leader Council meetings increased slightly, resulting in more informed leaders. Many volunteers attended either the State 4-H Leaders Forum or the Western Regional Leaders Forum and will be able to share what they learned with their clubs and peers.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #4

1. Outcome Measures

O: More youth and adult volunteers will be available to lead 4-H Youth Development programs.I: Number of new volunteers certified.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	500	667

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Youth need adult volunteers to lead clubs Stakeholders such as commissioners, parents and teachers want to provide youth education opportunities to help the youth become productive in the community.

What has been done
Training opportunities were held. Newspaper articles were written. Adults were recruited to teach an expertise through day camp projects.

Results
Adults volunteered to lead clubs and teach projects. Enrollment numbers increased.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #5

1. Outcome Measures

O: Underserved youth will learn life skills through 4-H Youth Development.I: Number of underserved youth participating in 4-H Youth Development.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	200	6403

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
At the 5-County Correctional Facility in St. Anthony, there are youth who are either Federal, State, or county detainees. These youth are frequently from limited resource families, but even those from non-limited families are underserved by Extension and by the government because of their status.

What has been done
On four separate days, classes were taught to incarcerated students on the topics of anthropology, horticulture, prison horticulture therapy, forest management, fish and game management, and other topics.

Results
Students learned basic gardening skills, grew their own container gardens, learned about animals and the natural world, and also about anthropological exhibits at the Museum of Idaho.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #6

1. Outcome Measures

O: Underserved youth will learn life skills through 4-H Youth Development.I: Number of programs designed and marketed specifically for underserved youth.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	32	160

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Idaho is experiencing rapid changes that dramatically affect our youth and adults who work with them. While 10% of the total population is Hispanic, 25% of the 4-H age youth are Hispanic. Hispanic and Native American youth are a significant population base in Idaho and are currently underserved by 4-H Youth development programs. Just under 17% of Idaho's youth live in poverty and many of these youth are also underserved.

What has been done
Through a grant with National 4-H called Children, Youth and Families At Risk Sustainable Communities an afterschool program in Cassia County was formed. This program offers 30 youth in Cassia County a safe and educational environment afterschool four days per week.

Results
As a result of this program the participants had a 67.9% increase in communication life skills, 46.4% increase in healthy lifestyle choices life skills, 53.6% had an increase in critical thinking life skills and 39.3% had an increase in positive identity life skills.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #7

1. Outcome Measures

O: A greater number of organizations will benefit from effective youth-adult partnerships.I: Number of committees, councils and boards with youth and adults serving together.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	90	78

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
The Bear Lake "Made it Happen" Club is not a project focus group but a service group were the youth and adults work together.

What has been done
Once a month they meet to socialize, plan and organize. Youth planned service projects such as visiting elderly, cleaning up ball fields after tournaments, cleaning up buildings or wherever they see a need. Members participated in fund raisers for the Bear Lake County 4-H program. They also plan recreation activities to reward their hard work. Each year the club is slowly building and the members are becoming more responsible and more aware of the community.

Results
Bear Lake County "Make It Happen" Club completed five activities with 80 members participating. Two Service Projects were accomplished with 27 members participating. Three Fund Raisers which served different activities in the community were fulfilled with 49 members helping. The "Make It Happen" Club has been instrumental in serving the community when there is a need and building the 4-H program to help make things possible. The youth involved have been able to increase their leadership skill.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
803	Sociological and Technological Change Affecting Individuals, Families, and Communities
806	Youth Development

Outcome #8

1. Outcome Measures

O: Youth will learn life skills through participation in 4-H Youth Development programs. I: Number of youth indicating life skill development

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	300	9268

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
All 4-H programs are designed to provide youth with opportunities to improve life skills. In 2006, UI 4-H Youth Development sought out an evaluation tool to measure the extent to which youth are learning those skills. Consistent administration of the tool will help justify the impact of our programming efforts.

What has been done
We used the Life Skills Evaluation Tool to measure life skill development in 200 teens at Idaho 4-H Teen Conference. The evaluation uses a retrospective pre-post test design that asks participants to measure their knowledge of a particular life skill indicator both before and after an activity.

Results
Teen Conference Evaluation results showed that 52% reported gains in the "wise use of resources" life skill; 48% showed gains in "positive identity;" and 58% of the respondents reported gains in the "accepting differences" life skill. These results remain consistent from last year's results, and show that the measured gains in life skills are consistent from year to year. While only half of the youth are reporting gains in each life skill, it is probable that the number of youth reporting gains in at least one life skill is much higher. Further, the population that attends Teen Conference is self-selected, and rated themselves above-average on all three life skills before the program.

4. Associated Knowledge Areas

KA Code	Knowledge Area
724	Healthy Lifestyle
803	Sociological and Technological Change Affecting Individuals, Families, and

	Communities
806	Youth Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

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

Evaluation Results

Participants were given a pre- and post-tests at the Beef Quality Education Program. The scores increased from 42.5% on the pre-test to 90.7% on the post-test. This was a 113.2% improvement in knowledge. The participants were also given an evaluation after the program. On a scale of 1-5 (1 outstanding and 5 unacceptable) the scores received for the overall experience of the program and the educational materials provided was 1.4. All attendees of the Beef Quality Education Program also indicated that they learned something new regarding the relationship of livestock management and beef quality.

Key Items of Evaluation