V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Food Safety

☑ Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
501	New and Improved Food Processing Technologies	12%			
502	New and Improved Food Products	11%			
701	Nutrient Composition of Food	12%			
703	Nutrition Education and Behavior	8%			
711	Ensure Food Products Free of Harmful Chemicals, Including Residues from Agricultural and Other Sources	12%			
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins	11%			
722	Zoonotic Diseases and Parasites Affecting Humans	8%			
723	Hazards to Human Health and Safety	8%			
901	Program and Project Design, and Statistics	6%			
902	Administration of Projects and Programs	6%			
903	Communication, Education, and Information Delivery	6%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	6.2	0.0	0.0	0.0
Actual Paid Professional	5.8	0.0	0.0	0.0
Actual Volunteer	499.0	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**
218287	0	0	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
218287	0	0	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
21983	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Developing and applying new technology of food processing systems
- Developing products, curriculum, resources
- Developing services
- Presenting seminars and professional talks
- Conducting workshops and training sessions
- Publishing scientific findings
- Partnering
- Providing community education classes
- Maintaining a statewide food safety hotline
- Working with and supervising volunteers to deliver high quality information and programming about food safety topics

2. Brief description of the target audience

There are diverse audiences for information this program generates. They can be classified into five general groups: (1) the general public and food consumers; (2) state and federal food regulatory agencies; (3) the research community including scientists working in government, industry, and academic sectors; (4) the commercial food processing industry and commodity groups; and (5) professional food handlers in organizations such as schools and other institutions, as well as restaurants.

3. How was eXtension used?

In 2012, Oregon's use of Ask an Expert continued to grow across the 36 counties, with 3111 questions answered in the system. Oregon ranks third in the nation for Ask an Expert activity, only a horse's nose behind 2nd busiest Colorado. Question response time remains less than 40 hours, well below the 48 hour target suggested nationally.

Over130 Extension faculty and staff and some thirty Master Gardener volunteers are actively answering questions from both Oregon and beyond.

Ask an Expert Question of the Week--developed at OSU-- featured 49 questions in 2012, with 5,476

unique visitors, spending on average over 2 minutes of reading. These featured questions have provided yet another access point for Oregonians to locate science-based answers to issues that matter to them.

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	47058	12276	1730	3990

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

Patent Applications Submitted

Year: 2012

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2012	Extension	Research	Total
Actual	6	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational classes

Year	Actual
2012	76

Output #2

Output Measure

- Number of workshops

Year	Actual
2012	18

Output #3

Output Measure

- Number of demonstrations

Year	Actual
2012	45

Output #4

Output Measure

- Number of recurring newsletter published

Year	Actual
2012	5

Output #5

Output Measure

- Number of web sites maintained

Year	Actual
2012	2

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of specialty food and mainstream food processors accessing and applying science based information to produce and distribute safe, nutritious, high-quality foods.
2	Number of individuals improving their practices of safe food handling, food preparation, and food preservation.

Outcome #1

1. Outcome Measures

Number of specialty food and mainstream food processors accessing and applying science based information to produce and distribute safe, nutritious, high-quality foods.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	367

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Oregon residents are able to launch new food businesses through a program called Recipe to Market, which helps local entrepreneurs become marketable to well-established companies like Tillamook Cheese. The program is part of the Oregon Open Campus initiative, which aims to meet the educational and economic needs of communities by tapping university resources.

What has been done
Throughout the four-month Recipe to Market program, each participant builds a business plan, helps design a marketing campaign, and works one-on-one with local coaches to turn their dream into a profitable local business. The course takes place in three day-long sessions, including one full day at OSU's Food Innovation Center in Portland, where the educational emphasis is producing a safe and wholesome consumer food.

Results
In one rural, isolated coastal community, seven participants completed the first offereing of Recipe to Market and three new businesses have been launched as a result. These three businesses now generate about $1.2 million in combined annual gross income and employ up to 12 people.

4. Associated Knowledge Areas

KA Code	Knowledge Area
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
723	Hazards to Human Health and Safety
901	Program and Project Design, and Statistics

902	Administration of Projects and Programs
903	Communication, Education, and Information Delivery

Outcome #2

1. Outcome Measures

Number of individuals improving their practices of safe food handling, food preparation, and food preservation.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	233

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Oregon residents exhibit a high degree of interest in local foods, gardening and food preservation, but our experience through our community classes and the calls received through our Food Safety Hotline suggest that the practices employed are often out-dated and put users at risk of food-borne illness.

What has been done
While the Master Food Preserver training series would prepare individuals to can, pickle, dehydrate and use other preservation methods safely and effectively, not everyone can commit to the extensive volunteer requirements associated with that series. A 24- hour Food Preservation Certificate Class was developed. It covered key topics including science of food preservation, jams and jellies, drying and freezing, water bath canning, pickling, and tomato and salsa canning. The Cerificate Class was offered as a cost-recovery program with participants paying $240.

Results
A retrospective pre/post test was conducted to determine participants' levels of knowledge and skills before and after the class. Participants indicated they had increased their knowledge across all 10 categories (safety, water bath canning, pressure canning, recipes, freezing, canning fruit, perserving tomatoes and salsa, drying, jams & jellies, low acid foods). They expressed similar levels of increase in skill within these topic areas, based on their opportunities to experience them in a hands-on fashion during the series. In many cases, the numerical ratings of knowledge or skill doubled. Ratings for knowledge and skill in preserving low acid foods (which are particularly prone to food-borne illness if preserved improperly) increased by a factor of 5 or more. Participants indicated that, as a result of the class, they had increased their food preservation

activities, been more effective at canning, utilized low sugar recipes to address diabetic issues, utilized new canning techniques, and made use of OSU's recommended recipes.

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins
722	Zoonotic Diseases and Parasites Affecting Humans
723	Hazards to Human Health and Safety
901	Program and Project Design, and Statistics
902	Administration of Projects and Programs
903	Communication, Education, and Information Delivery

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Government Regulations
- Competing Programmatic Challenges

Brief Explanation

The 2012 illness and death of OSU Extension's food safety specialist had an impact on the overall program; however, many stepped forward to fill the leadership gap and the program maintained momentum, focusing on disseminating knowledge of food product development and increasing understanding about transfer, fate and effects of environmental contaminants.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Most evaluation was retrospective or post- then pre-test. Efforts were evaluated based on the stated objectives. Performance monitoring data was collected through an annual report submitted by county faculty. The statewide program evaluation utilized end-of-event assessments, follow-up assessments (12-18 months) and case study methodologies.

Key Items of Evaluation

A retrospective pre/post test was conducted to determine participants' levels of knowledge and skills before and after the Food Preservation Certificate Class. Participants indicated they had increased their knowledge across all 10 categories (safety, water bath canning, pressure canning, recipes, freezing, canning fruit, preserving tomatoes and salsa, drying, jams & jellies, low acid foods). They expressed similar levels of increase in skill within these topic areas, based on their opportunities to experience them in a hands-on

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