



Statewide Directors

203 Culbertson Hall
MSU • Bozeman
P.O. Box 172230
Bozeman, MT 59717-2230

Telephone (406) 994-1750
Fax (406) 994-1756

Extension

*Need
7/19/99*

DATE: 7/15/99

TO: John Michael, Program Leader
ECS, CREES, USDA

FROM: Rick Williams *Rick Williams*
Special Projects Coordinator
MSU Extension Service

RE:

Dear John:

Greetings from Montana. As per my email yesterday, here is the corrected copy of our Plan of Work.

I wanted to send this as the master for any copies you may need to make.

Thank you again for your continued help and support through this process.

Rick

Michael John ECS

From: Williams, Rick [rickw@montana.edu]
Sent: Wednesday, July 14, 1999 7:44 PM
To: 'JMICHAEL@intranet.reeusda.gov'
Subject: RE:MONTANA'S PLAN OF WORK

Dear John:

Greetings from Montana.

This evening at 4:54 MST a copy of our Plan of Work was put in the FED EX post box. We are in hopes it is overnight and in your hands tomorrow.

Due to the time crunch of getting it all completed there was not time to correct the spacing etc. in the plan. We will be forwarding you a clean copy tomorrow.

I wanted you to have this less than perfect copy so you can get an idea of what were are reporting, the format used and some back ground information about how we arrived at our plan.

I will also be calling tomorrow after 9:30 MST just to touch base.

All the other Extension Admin. has been out for the week and will not be back until Friday. So I have had to fly this solo, first trip out trying to compile all this information once it was submitted from the program leaders. Great learning experience.

Hoping this document meets expectations.

I really appreciated you help on the items for the Resource Allocations. I think we kept in really bare bones. The director and other admin. might want to enhance it. That is for a later time.

Thanks again for you help.

Rick Williams

Montana State University Extension Service PLAN OF WORK

October 1, 1999 - September 30, 2004

certification
p. 59

**Federal Fiscal Years
2000 to 2004**

Introduction: **STATE OF MONTANA**

Montana's 1990 population, at 799,065, was up 1.6 percent from 1980. Population density, measured in people per square mile, was 5.5 in 1990-third lowest in the United States. Montana's 59.6 million acres of land in farms and ranches ranks second in the nation behind Texas. The rural farm population is 45,718 (63.0% of the population) with 1.9 persons per square mile. All land in farms and ranches is 58,607,778 acres.

The total land in Montana is, 145,388 square miles, or a total of 93.0 mil acres. Ref. *Montana Agricultural Facts May, 1999, Montana Agricultural Service, 301 S. Park Helena, Montana 59262*

Montana is experiencing profound change, perhaps as much in the last two decades as in the preceding half century. The structure of the economy has shifted. In less than a generation, sources of income, the nature of work, and the quality of earnings have altered. In large measure, these changes echo the varying rhythms of the national economy. Other changes, such as new patterns of migration, the evolving relationship of people to the land, and their emerging impact on the landscape are more distinctly Western in character. All resonate somewhat differently in Montana, shaped and colored by the contrasting geography and culture of the Great Plains and the Rocky Mountains, and by the state's small population and relative isolation.

Two decades of personal income growth slower than that of the nation overall has intensified debate among Montanans while sheltering the state's traditional cultural values and preserving its majestic landscape. The enduring values embedded in Montana's landscape-its expanse, diversity, and scenic beauty-its forests, watersheds, wildlife, fertile soils, productive grazing land, mineral and energy deposits-have immense cultural and economic worth. They are also intimately linked one to the other. Decisions about how these values should best be utilized to ensure the well-being of present day Montanans and, at the same time, protect the inheritance of future Montanans will be difficult. Ref: *Montana People and the Economy, January 1999, Liz Claiborne and Art Ortenberg Foundation, 5893 Lindbergh Lank Road, Seeley Lake, Montana 59868*

Table of Contents

Resource Allocation:	4
Montana State University Extension Service Strategic Plan Preliminary Program Priorities and Potential Goals	5
Goal 1	9
Goal 2	15
Goal 3	22
Goal 4	26
Goal 5	30
Stakeholder Input into the Strategic Planning Process	51
Merit and Peer Review	52
Multi-institutional, Multi-disciplinary, Multi-state, and Integrated Activities	53
Appendices:	60

Resource Allocation: Sources of Funding for Montana State University Extension Service

Federal: The Federal Year 1999 allocation of Smith-Lever 3 (b), 3 (c), and 3 (d) funds was \$2,754,024.

State: The amount provided by the State of Montana for Federal Year 1999 was \$3,944,383.

County: The amount of county contributions for Federal Year 1999 was \$3,595,270

Anticipated changes in resource levels

By all information that we have received regarding the Federal Year 2000 budget, the amount of federal funding is expected to remain level with the amount provided for Federal Year 1999.

The State of Montana Legislature meets once every two years for a ninety day session. During this process the 1999 Legislature used our actual year expenditures from the first year of the last biennium to establish the amount of our present law funding. From that level, the state of Montana used inflation factors to make adjustments to our budget. In Montana, the Legislature appropriates both our state general fund and regular Federal Smith-Lever funds. During the session the Extension Service provided estimates of our expected level of federal funding to the Legislative Fiscal Division and the Governor's Budget Analyst. Even given all this information, our approved budget is entirely dependent on political decisions.

We do not anticipate any major decreases or increases at the state level t this time.

Each year the counties prepare a County Budget Agreement form that is approved by the Commissioners. This agreement establishes the agreed level of county contribution that will be provided for personal services, operations and capital for the operations of their individual offices. The annual contribution that counties make to their agents' salaries is based on sixty five percent of the Clerk & Recorder's salary.

Anticipated changes in resource types.

We do not anticipate any changes in resource types at this time with the exception that some counties are now requiring that an annual vote is taken to determine whether citizens will support continued funding of Extension and other county agencies.

Anticipated changes in resource policy, budgeting strategy:

Looking into the future, there may need to be discussions on foundation fund raising, county budget funding formulas, public/private partnerships, networking opportunities in and out of state, and more collaboration within the total University systems in the state of Montana.

Resource Management (External demands being place on MSU Extension may require new or different strategies and resources).

The 1999 Legislature approved a 1.0 FTE position from the Vision 2005 emphasis for FY2000 and FY 2001; in the amount of \$90,000 per year; \$60,000 for salary and benefits and \$30,000 for operations. We are hopeful that by FY 2002, that the position will be supported by funding from producer and commodity groups in the state.

Additional demands are forthcoming to meet the educational requirements of the citizens of the state through the use of existing and expanded distance educational technologies. This will require a considerable investment in resources for FTE and equipment.

In order to meet the programming needs of the citizens of the state, the potential of establishing learning centers across the state needs to be considered as Extension attempts to meet its mission.

Introduction: (Defining our strategic planning process and major issues)

Montana State University Extension Service Strategic Plan Preliminary Program Priorities and Potential Goals

The Montana State University Extension Service Strategic Planning Committee has identified the following preliminary program priorities for the next three to five years.

Five sources provided information leading to the selection: (1) a statewide survey of Montana residents asking what they felt were the key concerns for the next three to five years facing the state, communities, and families; (2) a survey of Extension Service faculty and staff asking the same questions; (3) input on key issues from the Montana Extension Advisory Council; (4) a national satellite broadcast on the future of agriculture; and (5) briefings by external experts on key issues facing Montana's economy, environment, health care and youth over the next three to five years.

The program priorities were selected from a list of potential concerns and issues by applying the criteria:

1. Was this identified as a state concern in the surveys?
2. Was this identified as a community concern in the surveys?
3. Was this identified as a family concern in the surveys?
4. Does this fit with MSU Extension's mission?
5. Is this a priority on which Extension can have an impact?

Based on these criteria, the Strategic Planning Committee identified six key issues for increased Extension attention over the next three to five years:

1. Better Paying Jobs

"Good paying jobs" was the only issue listed as a top concern by all respondent groups at the state, community, and family levels. Since 1948 Montana's per capita income has dropped from 10th in the nation to 46th. Indeed, average wage levels are last, while the number of people working more than one job is first in the country. The concern was expressed as both lack of "liveable wage jobs" and "lack of jobs to keep young people in Montana." Since half of Montana farm family income comes from "off-farm" sources, the availability of good paying jobs is essential to keep our families on the farm. Extension can work in partnership with other agencies to help with job skill training. In addition, there is a direct relationship between better paying jobs and value-added opportunities, community growth, economic and community development, home-based businesses, and sources of ranch income such as ranch recreation.

Goals

The primary goal of Extension's Better Paying Jobs effort is to help Montana communities, businesses, individuals and families learn how to obtain better paying jobs and appreciate the ramifications of obtaining better paying jobs.

2. Population Growth and Decline

"Growth and population change" was identified as a top concern for both communities and the state. In the 1990s, Montana's population has grown by ten percent. But the distribution of population change across the state is quite uneven. "High amenity" areas like the Gallatin Valley have grown by 20 percent, raising concerns regarding loss of agricultural lands, open space, and the "Montana way of life," plus the costs of providing community infrastructure and services. In other areas, loss of population endangers local businesses, schools, and health care. Evidence of the concern for growth is also indicated by several growth-related bills planned for introduction in the 1999 State Legislative Session.

Goals

The goal of Extension's Community Growth and Decline program is to help Montana communities achieve their desired futures in the face of in-migration and out-migration.

3. Agricultural Sustainability and Profitability

The long-term well-being of farm and ranch families in Montana is dependent on their ability to cope with fluctuating agricultural prices, increased competition, variable production costs, increasing governmental regulation, complex generational transitions, and new technological requirements. In order to address agricultural sustainability and profitability, Extension provides integrated programs in crops, soils, animal science, weeds, marketing, range science, water quality, and natural resources. Included in this effort are Extension programs that address forest stewardship and Montana's forest industry needs. Much of the potential for future economic growth and community development in Montana is closely related to agricultural and forest industry health and prosperity.

Goals

Be known and utilized as the source of unbiased, research-based information for economically viable and environmentally sound agricultural operations.

4. Family Issues

A survey of Montana citizens identified family issues as a top concern. Respondents' concerns included family finances; stress related to the economy; holding multiple jobs; balancing work and family; quality and affordable housing; health care and wellness; and domestic violence. In their responses to other state issues such as the agricultural economy, community growth and quality jobs, respondents also viewed dealing with family issues as the foundation to creating and sustaining strong and healthy communities. Family issues are of critical importance to agricultural sustainability and profitability. Presently the Extension Service Family and Consumer Sciences Program has the capacity to address many of these family issues in four program areas: Food and Nutrition, Family Economics, Housing and Environmental Quality, and Family and Human Development.

FCS Program Goals

To empower individuals, families and communities to apply unbiased, research-based information to make informed decisions to establish and maintain strong and healthy families.

5. Natural Resource and Environmental Issues

Montana is known to many as "the last best place." A statewide survey revealed that the public is concerned with environmental issues at many levels. There is a concern for air and water quality, soils, rangelands, forests, wildlife and multiple use of public lands. Prominent among the issues raised were concerns about coping with environmental regulations. Because of an underlying desire to care for Montana's natural resources, the Extension Service is challenged to provide families at home and on farms and ranches and small businesses with information and programs that help them care for the land, water and air while utilizing the resources that are essential for Montana's economic future and that allow traditional lifestyles to continue.

Goals

Landowners, environmentalists and businesses will recognize Montana Extension as the best source of unbiased

information on management of our natural resources in relation to the environment and sustainable use.

6. Youth

Issues about Montana youth were identified as major concerns by respondents at the state, community, and family levels. Their concerns ranged from meaningful work for youth and workforce preparation to countering youth crime. Life skill education surfaced as a need to prepare youth to be contributing citizens in the future. In addition, efforts to enhance protective factors and eliminate the risk factors for youth were recognized as the best long-term approach for youth education and youth development. While the 4-H program is recognized for providing life skill education and working in the area of prevention, more youth would benefit from involvement. Currently, nearly 11,000 youth are in the club program and 20,000 youth participate in non-club educational activities, but more youth could be reached through after-school programs and other delivery methods.

Goal

4-H will increase the number of youth reached with life skill education by using a variety of delivery methods.

Goal

4-H will assist in creating healthy environments in which youth have meaningful roles.

Goal

Youth will make appropriate choices for attaining and maintaining a healthy lifestyle.

Goal

Youth will have the necessary skills to be successful in the workforce and be contributing citizens.

State Contacts: Rick Williams, Special Project Coordinator

MSU Extension Service
PO Box 172230
Bozeman, MT 59717-2230
Phone: (406) 994-7311
E-mail: acxrw@montana.edu

James P. Johannes, Director of Programming
MSU Extension Service
PO Box 172230
Bozeman, MT 59717-2230
Phone: (406) 994-1750
E-mail: acxjj@montana.edu

Jim Knight, Program Leader - Ag and Natural Resources
MSU Extension Service
PO Box 172820
Bozeman, MT 59717-2820
Phone: (406) 994-5579
E-mail: jknight@montana.edu

David Sharpe, Program Leader - Community Development
MSU Extension Service
PO Box 173580
Bozeman, MT 59717-3580
Phone: (406)94-2962
E-mail: acxds@montana.edu

Michael Vogel, Program Leader - Family and Consumer Science
MSU Extension Service
PO Box 173580
Bozeman, MT 59717-3580
Phone: (406)994-3451
E-mail: acxmv@montana.edu

Elizabeth McCoy, Program Leader - 4-H and Youth Development
MSU Extension Service
PO Box 173580
Bozeman, MT 59717-3580
Phone: (406)994-3501
E-mail: acxem@montana.edu

Planned Programs:

Function	Goal 1	Goal 2	Goal 3	Goal 4	Goal 5
	5	2	1	2	14

Montana State University Extension Service PLAN OF WORK

October 1, 1999 - September 30, 2004

Goal 1

An agricultural system that is highly competitive in the global economy.

- **Fine tune Farmers/Rancher's Skills in Production, Finance and Marketing**
- **Reproductive Rates of Young Female Ruminants**
- **Swine Production**
- **Neonatal Loss in Lambs**
- **Wheat Stem Sawfly**

Program 1: An agricultural system that is highly competitive in the global economy.

Topic: Fine Tune Farmer's/Ranchers's Skills in Production, Finance and Marketing

Statement of Issue(s):

The beef industry in Montana is primarily a range cow-calf production system. Reproductive rates of young females are 20-30% lower than that of mature females. Increasing their reproductive rates would increase our ranchers' competitive edge by increasing supply and reducing costs.

Performance Goal(s):

Increase reproductive rates of young female ruminants.

Outcome Indicators: A tabulation, calculation or recording of activity of effort expressed in quantitative or qualitative manner which measures the products or services produced by the planned program. (For each goal)

Annually conduct 10 educational programs related to reproduction.

Key Program Component(s):

Work with research counterparts to determine level of trace minerals needed to meet metabolic requirements of beef cattle. Nutrition educational efforts with clientele to help them better understand how to meet nutrition requirements of young females and enhance their fertility levels.

Internal and External Linkages:

Collaborators will include departmental researchers and USDA research scientists to provide the basic data needed for the educational program. Programming is conducted in collaboration with county agents and the Montana Stockgrowers Association.

Target Audiences:

Livestock producers, feed dealers and consulting nutritionists.

Program Duration: (Program planning cycle is for 5 years, with opportunity for annual modifications).
5 years

Evaluation Framework: How will this program be evaluated for level of accomplishment.
Survey of producers and agents.

Allocated Resources: (in dollar amount supporting salary, benefits, operations)

Current (1999)	FFY 2000	FFY 2001	FFY 2002	FFY 2003	FFY 2004
\$23,000	\$23,982	\$24,663	\$24,663	\$24,663	\$24,663

Program 1: An agricultural system that is highly competitive in the global economy.

Topic: Swine Production

Statement of Issue(s):

The swine industry is currently undergoing dramatic changes in production technologies, business structures, product quality, and marketing strategies. Montana has a significant number of favorable resources for swine production including abundant grain supply, low disease incidence, favorable climate, extensive land base, and progressive producer attitudes. There is potential for major expansion in Montana for swine production and, in particular, producer alliances, innovative business relationships, and niche marketing can allow swine production to provide supplemental income for Montana farms and ranches. However, there are limitations or needs, including individual producer financial resources, health and supply infrastructure, and public acceptance of larger operations that producers require assistance in addressing.

Performance Goal(s):

To evaluate potential swine producer alliances and innovative relationships that could expand swine production in Montana.

Outcome Indicators: A tabulation, calculation or recording of activity of effort expressed in quantitative or qualitative manner which measures the products or services produced by the planned program. (For each goal)

Annually two print and electronic media/educational workshops, 10 one-on-one consultations, 5 industry task force and 3 committee activities.

Key Program Component(s):

Develop an educational program with producers that identifies key performance areas and business practices that allow for a successful producer alliance. Provide training that helps the interested producers conduct their own feasibility and the process for organizing.

Internal and External Linkages:

Collaborative programming and other assistance occurs between the Extension swine specialist, MSU Department of Animal and Range Sciences, county Extension agents, the Montana Department of Agriculture, the Montana Pork Producers Council, and the National Pork Producers Council. This collaboration includes information exchange, joint programming, and financial assistance.

Target Audiences:

The target audience is primarily current and potential Montana pork producers. Secondary audiences include the general public and potential providers of financial or other resource investments to support swine production in Montana.

Program Duration: (Program planning cycle is for 5 years, with opportunity for annual modifications).
5 years

Evaluation Framework: How will this program be evaluated for level of accomplishment.
Survey of producers and agents.

Allocated Resources: (in dollar amount supporting salary, benefits, operations)

Current (1999)	FFY 2000	FFY 2001	FFY 2002	FFY 2003	FFY 2004
\$51,062	\$54,765	\$59,333	\$59,333	\$59,333	\$59,333

Program 1: An agricultural system that is highly competitive in the global economy.

Topic: Neonatal Loss in Lambs

Statement of Issue(s):

Neonatal loss in lambs is the biggest production factor reducing profitability in U.S. sheep operations. Research published in 1997 states that 20 percent pre-weaning losses are common. The results from these studies suggest that little improvement has been made in prevention of early lamb mortality in the last 30 years. To reduce the number of non-predator neonatal death losses, a better understanding of the immune system is needed. In addition, methods of evaluating management and nutritional inputs and their effect on neonatal losses are necessary.

Performance Goal(s):

Reduce non-predator neonatal death loss of lambs.

Outcome Indicators: A tabulation, calculation or recording of activity of effort expressed in quantitative or qualitative manner which measures the products or services produced by the planned program. (For each goal)

Annually 3 producer meetings.

Key Program Component(s):

Sheep and lamb educational efforts with producers will continue to identify impacts of emerging research that suggests a positive change. This will be a collaborative effort between producers, Extension and research.

Internal and External Linkages:

Producers and immunologists in Veterinary-Molecular Biology at MSU.

Target Audiences:

Sheep producers and sheep industry in Montana.

Program Duration: (Program planning cycle is for 5 years, with opportunity for annual modifications).
5 years

Evaluation Framework: How will this program be evaluated for level of accomplishment.
Survey of producers and agents.

Allocated Resources: (in dollar amount supporting salary, benefits, operations)

Current (1999)	FFY 2000	FFY 2001	FFY 2002	FFY 2003	FFY 2004
\$33,491	\$34,292	\$35,263	\$35,263	\$35,263	\$35,263

Program 1: An agricultural system that is highly competitive in the global economy.

Topic: Wheat Stem Sawfly

Statement of Issue(s):

Wheat stem sawfly (WSS) is a serious economic pest to wheat producers in Montana. It has been estimated to result in 25-30 million dollars in direct losses to growers. Wheat curl mite (WCM), vector of wheat streak mosaic, is a sporadic but economically damaging pest to Montana producers. During the last outbreak of this disease in 1993, it was estimated to cause \$12.7 million in losses to Montana.

Performance Goal(s):

Developing economic and environmentally sound pest management practices.

Outcome Indicators: A tabulation, calculation or recording of activity of effort expressed in quantitative or qualitative manner which measures the products or services produced by the planned program. (For each goal)

Annually conduct 2 workshops and 2 field demonstrations.

Key Program Component(s):

Insecticides to control WSS and WCM are erratic and ineffective in performance. Cultural controls and host plant resistance factors are being examined to determine efficacy for management of WSS and WCM. Blends of compatible resistant and susceptible varieties are being examined to evaluate impact on WSS infestation and wheat yield and quality.

The impact of crop rotation is being examined on population dynamics of wheat curl mite. Volunteer wheat is an important reservoir for wheat curl mite and wheat streak mosaic virus in the dryland cropping system. We are examining plant-plant and plant-insect interactions of volunteer wheat-alternate crop and volunteer wheat-wheat curl mite.

Internal and External Linkages:

Research collaborations include faculty in Department of Plant, Soil and Environmental Sciences, Montana Agricultural Experiment Station, and county Extension faculty. Entomology and Plant Pathology faculty at University of Nebraska have been collaborators in this research project.

Target Audiences:

Montana producers, agricultural consultants and MSU-ES county Extension faculty.

Program Duration: (Program planning cycle is for 5 years, with opportunity for annual modifications).
5 years

Evaluation Framework: How will this program be evaluated for level of accomplishment.
Surveys of producers and agents.

Allocated Resources: (in dollar amount supporting salary, benefits, operations)

Current (1999)	FFY 2000	FFY 2001	FFY 2002	FFY 2003	FFY 2004
\$34,237	\$35,312	\$36,317	\$36,317	\$36,317	\$36,317

Program 1: An agricultural system that is highly competitive in the global economy.

Topic: Reproductive Rates of Young Female Ruminants

Statement of Issue(s):

The beef industry in Montana is primarily a range cow-calf production system. Reproductive rates of young females are 20-30% lower than that of mature females. Increasing their reproductive rates would increase our ranchers' competitive edge by increasing supply and reducing costs.

Performance Goal(s):

Increase reproductive rates of young female ruminants.

Outcome Indicators: A tabulation, calculation or recording of activity of effort expressed in quantitative or qualitative manner which measures the products or services produced by the planned program. (For each goal)

Annually conduct 10 educational programs related to reproduction.

Key Program Component(s):

Work with research counterparts to determine level of trace minerals needed to meet metabolic requirements of beef cattle. Nutrition educational efforts with clientele to help them better understand how to meet nutrition requirements of young females and enhance their fertility levels.

Internal and External Linkages:

Collaborators will include departmental researchers and USDA research scientists to provide the basic data needed for the educational program. Programming is conducted in collaboration with county agents and the Montana Stockgrowers Association.

Target Audiences:

Livestock producers, feed dealers and consulting nutritionists.

Program Duration: (Program planning cycle is for 5 years, with opportunity for annual modifications).
5 years

Evaluation Framework: How will this program be evaluated for level of accomplishment.
Survey of producers and agents.

Allocated Resources: (in dollar amount supporting salary, benefits, operations)

Current (1999)	FFY 2000	FFY 2001	FFY 2002	FFY 2003	FFY 2004
\$55,800	\$57,400	\$58,978	\$58,978	\$58,978	\$58,978

Montana State University Extension Service PLAN OF WORK

October 1, 1999 - September 30, 2004

Goal 2

A safe and secure food and fiber system.

- **Food Safety and Security Education**
- **Pesticide Use**

Program 2: A safe and secure food and fiber system.

Topic: Food Safety and Security Education

Statement of Issue(s): Most Montana consumers recognize the need for safe food. Some consumers also understand the need for increased food security in this state. However, in both food safety and food security issues, Montanans experience a gap in their knowledge of research to address the problems. In addition, people of Montana need practical and understandable recommendations based on the research.

Providing a safe and secure food system is a serious concern in Montana. Specifically, food safety is major health concern for the public as issues such as E. Coli, biotechnology, and pesticides in our food supply arise. According to national statistics, about one in every 65 Montanans will be sickened by food-borne illnesses each year. While most will be healthy again after enduring a day or two of nausea, some will wind up with costly and extensive hospital stays. The financial costs of food-borne illness are also tremendous, as scarce public tax money covers lost wages, health care, and investigative costs. Sadly, most cases of food-borne sickness could be stopped long before they strike.

Foodborne illness is a major cause of death, especially among vulnerable groups - the elderly, young children, pregnant women, the chronically ill, and people with impaired immune function. Foodborne illness also robs many otherwise healthy people of productive roles in the workplace. Programs designed to improve food handling and preparation in food service establishments and in the home would decrease Montanans' losses from foodborne illness.

A goal of MSU Extension is to reduce the number of annual food-related illness. A major focus is food safety courses for food service workers. Research results have shown food service workers' improper hand-washing accounts for approximately 25% of food-borne illnesses. Proper hand-washing is just one of many topics covered in Extension-supported food safety courses. State and County Extension Faculty have joined forces with state and local Sanitarians to provide food safety to educate food service workers whose meals may reach thousands of people each day.

MSU Extension works cooperatively with the Montana State Department of Health and the food industry to offer the nationally-recognized "SERVSAFE" program. Over 40 county Extension Educators and county and state Sanitarians received the SERVSAFE train-the-trainer program and have consequently are offering training in their counties.

Food safety education for the consumer including children is also an important component of Extension programming.

In addition to food safety concerns, hunger and lack of access to food and nutrition services exists in Montana and is caused by poverty and related problems that affect families and communities. The relationships among issues that endanger food security and create hunger in a community are often not understood. Hunger and food security issues must be resolved and public issue education and community action can help bring about the awareness and action necessary to improve food security status.

Food security in Montana is a problem for 7.9% of children under 12 who are hungry. Those children live in the 15.3% of Montanans' homes who are below the poverty line. Adults and children need knowledge and skills which help them improve their food choices, safely prepare and store food, and better manage food budgets and related resources.

Current priority issues focus on national and state welfare reform, specifically as it will influence food security. National and state welfare reform efforts have heightened awareness and increased concern in addressing the issue of food security in Montana. We define food security as the access by all citizens at all times to enough food for a healthy life. At a minimum, food security includes ready availability of nutritionally adequate and safe foods and an assured ability to acquire acceptable foods in socially acceptable ways. Montana is creating several strategies/programs to help limited resource audiences meet their food and nutrition needs.

Improving access to an affordable food supply is becoming increasingly important and difficult to achieve. Montanans' experience poverty and many lack food in sufficient quantity and quality for adequate nutrition. Understanding food access requires a broad-base knowledge of the community's resources to

access food as well as the barriers to affordable and healthy food supply. Once the community knowledgeable about their resources and alleviating the barriers. In addition, a community group can establish community food and nutrition policies that will support the continued development of food and nutrition programs in their community that address the identified needs.

A representative of Montana State Extension Service is also a member of the 11 member Montana State Advisory Council on Food and Nutrition, whose mission is to provide information and education to policy-makers and the public on the state access to food and nutrition in Montana.

Performance Goals:

1. Limited resource Montanans, most likely to be food insecure, will develop new skills and learn behaviors leading to improved nutritional well-being and economic independence.
2. Montanans will improve their knowledge and practice of safe food handling.
3. Montana's commercial and public food industry will improve their knowledge and practice of safe food production and handling.

Outcome Indicators: A tabulation, calculation or recording of activity of effort expressed in quantitative or qualitative manner which measures the products or services produced by the planned program. (For each goal)

1. Annually, data on number of programs for limited resource Montanans, number and demographic profile of participants, and behaviors changed will be collected for targeted programs
2. Annually, each county agent and state specialist will report the number of consumer food safety programs delivered, the number of participants who attended, and document program success stories.
3. Annually, each county agent and state specialist will report the number of safe food production and handling programs for the commercial and public food industry.

Key Program Component(s):

Food Safety

Inherent in all the key components for this goal is the realization that all Extension staff working in food and nutrition have many facets to their roles. The facets could be grouped into Education, Facilitation, Leadership, Collaboration and Management.

Strategies:

- MSU Extension Project Director will work closely with two existing food safety task forces to continue the implementation of the ServSafe, Level II-HACCP, statewide train-the-trainer session for MSU Extension faculty, Sanitarians, and other interested professionals.
- Project Director will work closely with Tribal Community Colleges, MSU Extension Faculty and State and local Sanitarians to promote the utilizing of the ServSafe program.
- MSU Extension Project Director will work closely with DPHHS Food and Consumer Safety Director, members of both task forces, and industry to develop an initial strategic planning session for a community-based food safety plan to develop and implement training and education for food safety in their community utilizing a food and nutrition systems approach, "farm to fork." This will include, when appropriate, processors, producers, retail, and consumers. Director will take the lead in planning and organizing this strategic planning session and action plan.
- MSU Extension Project Director will work closely with marketing professionals, DPHHS Food and Consumer Safety division, members of both task forces, industry and health agencies to develop and implement a statewide food safety campaign to encourage safe food handling practices to be utilized in the community-based food safety plans as well as other activities.
- MSU Extension Project Director will work closely with DPHHS Food and Consumer Safety Director, members of both task forces, and industry to develop a state and local response to

- critical and temporary food safety problems requiring a rapid response.
- MSU Extension Project Director will work with others to promote the utilization of the SAFEAID program by presenting programs at national, state, and local meetings, and promoting the program via various national, state, and local professional networks.

Innovations:

- Development of a seamless food safety education program that incorporates volunteer food certification program for food service workers.
- "Four-Star SAFE" achievement award program to provide to food service establishments that show excellence in implementing food safety principles into a food business as a regular business practice.
- A consumer campaign to encourage safe food handling practices. Materials for this seamless food safety education program includes the ServSafe program, and will require the development of a state-wide achievement award program for food service establishments, and a Montana-based consumer education campaign utilizing national food safety campaign materials.

Food Security for Limited Resource Audiences. Inherent in all the key components for this goal is the realization that all Extension staff working in food and nutrition have many facets to their roles. The facets could be grouped into Education, Facilitation, Leadership, Collaboration and Management.

Strategies:

- A partnership with the Montana Department of Public Health and Human Services and Montana State University has provided federal Food Stamp Program funding for the Montana Food Stamp Nutrition Education Program (FSNEP). Paraprofessionals hired and trained will teach food stamp and food stamp-eligible recipients to better manage their food resources each month. Small group sessions will be formed with the assistance of community agencies involved in the program. Building community partnerships will be vital in this educational effort.
- Montana EFNEP is operating in four counties inclusive of three reservations. The professionals and paraprofessionals on staff not only serve EFNEP families with children and youth in traditional EFNEP lessons, but also reach out to meet the changing needs of families and children. The professionals also serve to develop or help develop other programming efforts for nutrition education for limited resource audiences. In the past, nutrition education programming (EFNEP "clone") was developed with funds from the commodity foods program to teach persons on the seven Montana Indian reservations. EFNEP experience was the basis for FSNEP in Montana, and has contributed to EDUFAIM. EFNEP staff work closely in counties with the Offices of Public Assistance to collaborate on efforts to help welfare recipients move to self-sufficiency in Montana's FAIM (Families Achieving Independence in Montana).
- The State Strengthening Project funded by CYFAR, called Montana EDUFAIM, is designed to provide limited resource families with knowledge, attitudes and skills needed for self-sufficient living. One of the programming areas that might be chosen by families is the area of food and nutrition. Two project sites are operating in Montana with the lessons to families taught by paraprofessionals and professionals hired for this program.

Innovations:

With FSNEP, community needs will be recognized. County proposals developed by Extension field staff with many other community agencies and organizations are the basis of the effort. Collaboration with Montana's welfare reform program (FAIM: Families Achieving Independence in Montana) is a critical part of the plan.

Materials:

With FSNEP lessons already developed will be used as the program begins. Additional materials will be developed specific to the goal of aiding families and individuals in making their food

resources last through each month.

For FAIM and EDUFAIM, EFNEP materials are utilized as the basis for the food and nutrition lessons for the participants.

Internal and External Linkages:

Food Safety

- In cooperation with both task forces, continues strategic planning for the train-the-trainer program utilizing the HACCP training program-ServSafe for Extension, Sanitarians, and other professionals.
- Contact MSU Extension Educators working with Native Americans, Tribal Community Colleges professionals and students, Native American health professionals, and health professionals serving Native Americans to invite their participation in both task forces.
- Work with task forces, industry, Montana Restaurant Association, and others to discuss promotional award program, state and local rapid response action plan.
- State-wide utilization of SAFEAID program with increase in knowledge and safe food handling skills by food bank workers.

Food Security

Internal:

- FSNEP: Extension staff at every level will play a role in creating an effective effort. County faculty, state specialists, administrators, and support staff will be important.
- FSNEP: The University staff in the grants office, personnel, communication services, and instructional technology will be involved, as well as department, college, and university administrators.

Agencies:

- Funding from the Food Stamp Program will be made available to Montana's Department of Public Health and Human Services, (DPHHS), and will then be contracted to Montana State University to develop, implement and evaluate the programming effort. State and county directors and staff of DPHHS will collaborate.
- Other agencies and organizations in the counties have offered support in the form of matching funds and matching effort. County commissioners have supported every count proposal.

Target Audiences:

Food Safety

- Professionals targeted to take the ServSafe program includes MSU Extension Educators, state and county Sanitarians, and other interested professionals.
- The target audience for the ServSafe-HACCP training all managers of food service establishments.
- Target audience includes potential and current professionals involved in food safety within the Tribal community colleges and within the state's Indian reservations.
- Food service establishments interested in completing the ServSafe program and have the criteria necessary to qualify for the Montana Excellence "Four-Star SAFE" achievement award.
- Consumers and professionals responsible for making decisions about food safety will be targeted for receiving information necessary to make informed decisions on a pressing food safety problem.
- Volunteers and paid staff involved with food banks programs.
- Individuals and families

Food Security

- For the Montana FSNEP, primary audience is food stamp recipients and those eligible for food stamps. In this audience, special sessions will be developed for families with children, elderly, disabled, and individuals receiving assistance in FAIM. The primary delivery method is small group sessions facilitated by Paraprofessionals. Some individual sessions will be arranged; and some professionals will be implementing programs. Outreach for initial participation will be strengthened by the partnership of many community agency staff supporting the program. Especially the collaboration between the Public Assistance County Director and Extension staff will be important.
- For FAIM and EDUFAIM, the primary audience is the welfare recipients in counties. Extension efforts for this goal are evident for the two sites which have EDUFAIM, as well as all other counties in Montana where the Extension staff are working with welfare recipients in the food security aspect of their lives. Again, the collaboration with FAIM (Families Achieving Independence in Montana) is critical to recruiting and teaching the target audience.

Program Duration: Programs will be planned for this goal in all five years of the planning cycle.

Evaluation Framework: How will this program be evaluated for level of accomplishment. Did we achieve our goals?

1. Modifications of EFNEP's ERS and Behavior Checklist will be utilized for programs for Limited Resource Montanans.
2. The evaluation framework for the Food Safety and Quality Initiative will serve as the evaluation framework for consumer food safety programs.
3. The evaluation framework for the Food Safety and Quality Initiative will serve as the evaluation framework for safe food production and handling programs for Montana's commercial and public food industry.

Allocated Resources: (in dollar amount supporting salary, benefits, operations)

Current	FFY 2000	FFY 2001	FFY 2002	FFY 2003	FFY 2004
145,000	150,000	155,000	160,000	165,000	170,000

Program 2: A safe and secure food and fiber system.

Topic: Pesticide Use

Statement of Issue(s):

A safe and secure food system relies upon reducing environmental and human health risks associated with pesticide use. The MSU-ES Integrated Pest Management (IPM) program seeks to optimize grower profitability through appropriate use of pest management techniques, resulting in a safe and secure food supply. The Montana IPM program educates clientele about accurate identification of potential pests, monitoring pest populations, and making sound pest management decisions.

Performance Goal(s):

Reduce pesticide use and provide greater economic incentives by only using pesticides when they are needed to prevent additional economic damage.

Outcome Indicators: A tabulation, calculation or recording of activity of effort expressed in quantitative

or qualitative manner which measures the products or services produced by the planned program. (For each goal)

Annually conduct 3 workshops. Develop guidelines. Four on-farm trials and demonstrations.

Key Program Component(s):

Provide educational information about pest identification, how to and when to monitor, and how to use economic thresholds in pest management decision-making. Economic thresholds and decision-making guidelines will be examined to guide responsible use of pesticides through on-farm field trials and demonstrations.

Internal and External Linkages:

USDA, APHIS, PPQ – Conducting cooperative biological control programs.

Montana Department of Agriculture – Monitoring spread of new and emerging pest species and cooperative delivery of pesticide safety programs.

USDA, ARS – Delivery of research results by ARS researchers.

Montana Agricultural Statistics Service (MASS) – Program evaluation through unbiased producer surveys.

Faculty in Departments of Agricultural Economics and Economics, Plant, Soil, and Environmental Science, Plant Pathology, Montana Agricultural Experiment Station faculty, county Extension faculty.

Target Audiences:

Montana producers, agricultural consultants and MSU-ES county Extension faculty. As research results are summarized and analyzed, information is made available to county Extension faculty, agricultural consultants, and producers in Montana through MSU-ES IPM-sponsored Crop Pest Management School, Montana Crop Health Report, MSU-IPM Web site, pest identification through IPM-sponsored Insect and Disease Diagnostic Labs, and a variety of on-farm and producer meetings.

Program Duration: (Program planning cycle is for 5 years, with opportunity for annual modifications).
5 years

Evaluation Framework: How will this program be evaluated for level of accomplishment.
Surveys of producers and county agents.

Allocated Resources: (in dollar amount supporting salary, benefits, operations)

Current (1999)	FFY 2000	FFY 2001	FFY 2002	FFY 2003	FFY 2004
\$15,892	\$16,330	\$16,805	\$16,805	\$16,805	\$16,805

Montana State University Extension Service

PLAN OF WORK

October 1, 1999 - September 30, 2004

Goal 3

A healthy, well-nourished population.

- **Health-promoting Lifestyles in the Prevention of Disease**

