

**Penn State Cooperative Extension  
ANNUAL REPORT OF  
ACCOMPLISHMENTS  
AND RESULTS  
FY2001**

Submitted to  
Cooperative States Research, Extension, and Education System  
United States Department of Agriculture  
(CSREES-USDA)

in fulfillment of requirements of the  
Agricultural Research, Education, and Extension Reform Act (AREERA)

March 1, 2002

---

Theodore R. Alter, Associate Vice President for Outreach  
Director, Penn State Cooperative Extension  
Associate Dean, College of Agricultural Sciences  
[talter@psu.edu](mailto:talter@psu.edu)

---

Mary Jo Depp-Nestlerode  
Interim Associate Director, Penn State Cooperative Extension  
[mjdepp@psu.edu](mailto:mjdepp@psu.edu)

College of Agricultural Sciences  
The Pennsylvania State University  
217 Agricultural Administration Building  
University Park, PA 16802  
Phone: 814-863-3438  
Fax: 814-863-7905



## Table of Contents

<b>GOAL 1</b>	
<b>Overview</b>	1
<b>Planned Program</b> – Operating Agri-Food Systems for Profitability and Sustainability	3
<b>Key Theme</b> – Business Skills	3
<b>Key Theme</b> – Other Business Skills	6
<b>Key Theme</b> – Improving the Ability of Pennsylvania Producers to Understand and Use Marketing Systems	8
<b>Key Theme</b> – Strategies to Enhance Agribusiness Competitiveness	9
<b>Planned Program</b> – Agricultural Productivity and Efficiency	10
<b>Key Theme</b> – Food Quality and Protection Act	10
<b>Key Theme</b> – Improving Animal Production	11
<b>Key Theme</b> – Improving Agronomic Production	12
<b>Key Theme</b> – Improving Horticulture & Green Industry Production Systems	13
<b>Key Theme</b> – Improving Process and Product Quality	14
<b>Key Theme</b> – Other	14
<b>Planned Program</b> – Animal Waste and Nutrient Management	17
<b>Key Theme</b> – Public Policy and Impact of Animal Agriculture	17
<b>Key Theme</b> – Nutrient Management	18
<b>Key Theme</b> – Manure & Dietary Management Strategies to Reduce Nutrient Excretions	19
<b>GOAL 2</b>	
<b>Overview</b>	20
<b>Planned Program</b> – A Systems Approach to Food Safety	22
<b>Key Theme</b> – Food Service Certification Program	22
<b>Key Theme</b> – Food Producers and Processors Training	23
<b>Key Theme</b> – Beef & Pork Quality Assurance	24
<b>Key Theme</b> – Other	25
<b>GOAL 3</b>	
<b>Overview</b>	27
<b>Planned Program</b> – Diet, Nutrition, and Health	29
<b>Key Theme</b> – Wellness and Food Choices	29
<b>Key Theme</b> – Food and Nutrition Life Skills Across the Life Cycle	32
<b>Key Theme</b> – Combating Misinformation That Influences Food and Health Decision Making	34

<b>GOAL 4</b>	
<b>Overview</b>	35
<b>Planned Program</b> – Watershed Management and Water Quality	37
<b>Key Theme</b> – Private Water System Management	37
<b>Key Theme</b> – Watershed Stewardship: Management Tools for Enhancing Water Quality	39
<b>Planned Program</b> – Sustaining Pennsylvania Forests	41
<b>Key Theme</b> – Management on Private Forest Lands	41
<b>Key Theme</b> – 4-H/Youth and Sustainable Forests	42
<b>Key Theme</b> – Sustainable Forestry for Resource Professionals	44
<b>GOAL 5</b>	
<b>Overview</b>	46
<b>Planned Program</b> – Strengthen and Support Family Well-Being	48
<b>Key Theme</b> – Child Care	48
<b>Key Theme</b> – Parenting Education, Aging Issues, Family Structures, Family/Youth Resiliency	51
<b>Key Theme</b> – Other	55
<b>Planned Program</b> – Community Capacity Building and Decision Making	57
<b>Key Theme</b> – Community Collaborations, Communications, Understanding Community Change, Public Policy	57
<b>Planned Program</b> – Youth Development and 4-H	61
<b>Key Theme</b> – Youth Development	61
<b>Planned Program</b> – Develop Leadership Capacity in Adults and Youth	63
<b>Key Theme</b> – Building Leadership Capacity	63
<b>Key Theme</b> – Volunteer Management and Development of Volunteer Skills	64
<b>Planned Program</b> – Understanding Public Policy Issues	65
<b>Key Theme</b> – Public Policy and Citizenship	65
<b>Stakeholder Input Process</b>	68
<b>Program Review Process</b>	68
<b>Evaluation of the Success of Multi and Joint Activities</b>	69
<b>Multistate Extension Activities</b>	71
<b>Integrated Research and Extension Activities</b>	82



## GOAL 1

**Through research and education, empower the agricultural system with knowledge that will improve competitiveness in domestic production, processing, and marketing.**

### Overview

Penn State Cooperative Extension accomplishments in Goal 1 for the second year of the five-year plan of work were highly satisfactory. Penn State is dedicated to the integration of research and extension, and faculty and county-based educators collaborate to develop and successfully implement the objectives of the five-year plan of work, seeking continuous input from citizens, local advisory groups and boards, the Pennsylvania Council of Cooperative Extension Associations, and the Penn State Agricultural Advisory Council. As outlined in the plan of work, Cooperative Extension emphasizes three overarching goals: (1) improving the profitability and sustainability of agri-food system enterprises; (2) improving agricultural productivity and efficiency; and (3) increasing knowledge and skills to manage animal waste and nutrients. Within each of these areas, sub-goals and objectives guide Cooperative Extension faculty and field-based educators in solving the issues critical to a diverse clientele, particularly to underserved groups such as Anabaptists (Amish and Mennonites), and in regions of the state where the population is geographically dispersed.

In order to remain competitive in a rapidly changing business environment, agri-food system managers must possess adequate business skills to acquire necessary information, make rational economic decisions, and chart strategy for their businesses. Producers need to increase their understanding of price risk management and marketing systems and develop strategies that enhance their ability to compete successfully in a global marketplace. Penn State Cooperative Extension made significant progress in the area of improving profitability and sustainability of agri-food system enterprises, nearly doubling the number of participants in these programs this year. Extension field-based educators and faculty report that 60,929 people engaged in programs related to profitability and sustainability of agri-food system enterprises; 23,874 increased their knowledge, skills, and abilities related to profitably and sustainably operating their agri-food businesses.

The success of Pennsylvania's largest industry, the food system, is dependent upon the continued efficient and cost-effective production of animal and plant products by agricultural producers. In the past, the only demand on producers was to efficiently produce a low-cost and high-quality food supply. The Food Quality Protection Act (FQPA) substantially changes the way food safety is determined and pesticides are regulated such as through powerful incentives for IPM research, extension, and adoption. Growers need to be aware of the changes in pesticide law and usage, and Cooperative Extension is active in providing the necessary information and training producers need to improve productivity and maintain certification for pesticide use.

Sustainable agricultural production practices and technology must be profitable, environmentally sound, and consistent with society's interests. Product quality needs to be maintained or improved by production practices such as systematic approaches to analyzing performance and management skills that ensure safe supplies and improve efficiency. High-quality green-industry and ornamental products are in increasing demand along with the services associated with their care. Programs such as high-tunnel technology provide opportunities for small family farmers to increase profitability, decrease dependence on off-farm jobs, and produce high quality, added-value horticultural crops.

Cooperative Extension staff and faculty report significant accomplishments in the area of agricultural productivity and efficiency. A total of 39,605 people participated in programs related to production management strategies to enhance agricultural productivity or efficiency, and 19,849 increased their knowledge and skills to improve their agricultural productivity and efficiency. The number of participants in programs related to the FQPA was 6,836. Of those participants, 3,333 increased their knowledge and/or skills to incorporate FQPA principles and practices into their management practices or educational programming.

Within animal agriculture, public policy, nutrient management, and waste management are important issues. Cooperative Extension staff collaborate with a variety of agencies in efforts related to preserving farmland. Staff conduct programs related to inappropriate handling of manure from livestock enterprises that can lead to contamination of ground or surface water. In addition, training introduces livestock producers to best management practices regarding nutrient management and manure and dietary management strategies to reduce nutrient excretions. Cooperative Extension faculty and county-based educators continue to inform and educate the public and agricultural audiences regarding these issues. A total of 3,457 persons attended programs related to animal waste and nutrient management, with 2,091 demonstrating increased knowledge and skills to manage animal waste and nutrients.

Additionally, there have been a number of urgent issues that have arisen during the past several years. Penn State Cooperative Extension has taken a major role in responding to these issues which include: (1) plum pox virus, (2) West Nile virus, (3) animal infectious disease, and (4) agricultural biosecurity.

Highlights of successful Penn State Cooperative Extension activities and documentation of their benefits are noted in the following section. A complete listing of programs is available at <<http://pow.cas.psu.edu>>.

	<b>FY2001</b>
Human Resources (FTEs)	121
Fiscal Resources (Smith-Lever)	\$3,346,112
Fiscal Resources (match)	\$3,346,112





## GOAL 1

**Through research and education, empower the agricultural system with knowledge that will improve competitiveness in domestic production, processing, and marketing.**

### **Planned Program – *Operating Agri-Food Systems for Profitability and Sustainability***

#### **KEY THEME – Business Skills**

Managers in the agri-food system face an increasingly complex array of managerial tasks and decisions. Globalization of the economy and the reduced role of government in the agricultural sector have led to increases in the price risk faced by agri-food system businesses. In order to remain competitive in a rapidly changing business environment, agri-food system managers must possess adequate business skills to acquire necessary information, make rational economic decisions, and chart strategy for their businesses.

#### **Farm Service Agency Financial Training**

##### *a. Brief description of activity:*

Cooperative Extension provides financial and production training workshops for farm borrowers to meet requirements for continuing to receive loan services from the USDA Farm Service Agency (FSA). Participants learn to prepare balance sheets, income statements, and cash flow budgets. They use this information to diagnose financial problems and analyze profitability and net worth. More than 200 participants in over 20 counties received training at these workshops.

##### *b. Impact/Accomplishment:*

Lebanon County (with participants from three surrounding counties)

- one six-session class offered to FSA borrowers in the region
- 14 farm families prepared financial record forms after receiving training

Crawford County (with participants from surrounding counties)

- 42 participants attended training
- participants diagnosed financial problems in their own farming operations to better manage their business

Cambria County (with participants from three other counties)

- 26 participants received training
- pre- and post-tests to determine knowledge gained indicated an average increase of 35% in test scores
- the average score on the post-test was 8.5 out of 10

Somerset County (with participants from three adjoining counties)

- 34 participants received basic financial management training

- 24 of the FSA attendees satisfactorily completed the course requirements
- FSA loan officer indicated that over half of the 24 participants can now complete their own balance sheet and cash flow statements

Bradford County (with participants from three other counties)

- 21 people (representing 16 farms) participated in a 5-day training program
- 16 participants developed a farm business plan and estimated saving of at least \$9,600 by developing their own business plan

Centre County

- 14 participating operators completed the training requirements
- 71% successfully completed the four key financial statements from their farm records

Lancaster County

- 58 farmers and spouses (80% of whom were Amish) completed the 5-day financial training program
- 100% of the participants completed balance sheet, income statement, and cash flow budget for their farms
- 90% acquired basic skills in maintaining farm financial records
- 100% used course training to make all loan payments due to FSA by year-end

a. *Brief description of activity:*

A field-based educator from Bradford County edited and rewrote the FSA Borrower Training Manual. These materials, developed for the FSA Financial Training, are now used by faculty to train FSA loan officers nationwide. From these materials, Penn State faculty developed two new regional and national training programs for FSA lenders. The New England Production Training for FSA Lenders is an innovative, personalized training approach designed specifically to increase the confidence levels of FSA loan officers with little farm production experience by focusing on production technology and equipment use in agriculture. Approximately 80 lenders have been trained nationally.

b. *Impact/Accomplishment:*

New England Production Training for FSA Lenders

- 14 lenders from Maine, New Hampshire, Vermont, and New York completed a 5-day training on farm production methods
- lenders visited three farms, an equipment dealer, and viewed 15 farm video interviews from the Northeast
- lenders rated the workshop as outstanding, with a value of 4.6 on a 5.0 approval scale

National Credit Financial Analysis Training for new FSA Lenders

- 60 new FSA loan officer candidates received training conducted in Kansas City
- weeklong course focused on basic finance concepts and statements to help participants better assist farm borrowers
- lenders from more than 40 states attended
- knowledge levels of the balance sheet increased 1.39 on a 4.0 scale

- knowledge levels of the income statement increased 2.04 on a 4.0 scale
- knowledge levels of the cash flow budget increased 1.32 on a 4.0 scale
- knowledge levels of financial ratio analysis increased 2.21 on a 4.0 scale
- knowledge levels of fixing financial problems increased 1.86 on a 4.0 scale

## **Financial Resource Management**

### *a. Brief description of activity:*

Financial management training that includes computer analysis programs such as FINPACK<sup>®</sup> and QuickBooks<sup>®</sup> is provided to farmers across the Commonwealth. Educators familiarize participants with the capabilities of FINPACK<sup>®</sup> to prepare a farm business analysis, cash flow, income statements, and balance sheets, and they introduce participants to basic financial ratios and their role in business management. Educators also offer programs on QuickBooks<sup>®</sup> for farm business financial record keeping and assist participants in applying these programs to their businesses. A few highlights of this training follow.

### *b. Impact/Accomplishment:*

Bradford County (with participants from Sullivan and Tioga Counties)

- FINPACK<sup>®</sup> programs were used to analyze 45 Northern Tier farm businesses
- 39 farmers were introduced to the FINPACK<sup>®</sup> series
- 39 developed a business plan for their own operation
- 39 developed a computer-generated farm business plan. Developing their own business plan and farm business analysis saved this group of farmers an estimated \$39,000.
- 39 used the FINPACK<sup>®</sup> program to develop a sensitivity analysis for their business

Westmoreland County (with participants from Indiana and Armstrong Counties)

- 19 farmers successfully completed a 30-hour farm financial management course
- all participants successfully completed a long-range plan
- daily test scores indicated an understanding of the topics presented
- two dairies refined production goals for the next 5 years

Bradford County (with participants from Sullivan and Tioga Counties)

- 22 attended QuickBooks<sup>®</sup> workshops
- participants developed a computerized chart of accounts for use in their farm business
- 22 farms developed computerized record keeping systems equal in quality and utility to commercially available systems that would cost \$575 per farm. This resulted in a savings of at least \$12,650 to this group of farmers.

## **Labor Management**

### *a. Brief description of activity:*

Cooperative Extension educational programming focuses on managing the resource of labor effectively by providing participants with skills that enhance labor management practices and strategies for hiring, training, and retaining quality employees. Other training sessions focus on improving protocols and procedures, developing standard operating procedures (SOP), and improving employer/employee relationships. As dairy

farms become larger in size and the need for hired labor increases, dairy producers are encountering a new challenge in managing employees. Labor is one of the highest costs on a dairy farm, and the challenge for farmers is to find and keep a good labor force. For example, complete training in SOP writing, implementation, and management can help farmers move from marginal profitability to exceptional profitability. In Clarion County, dairy advisory teams provide information to producers. As a result of training sessions to improve milking protocols and procedures, consistent routines among employees have improved milking times.

b. *Impact/Accomplishment:*

Cooperative Extension educators and faculty members were involved in the design and development of two Managing Hispanic Workforce Conferences held in Pennsylvania and New York, that addressed workforce issues related to Hispanic agricultural laborers.

- overall rating for both conferences was 4.38 on a 5-point scale

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific, Multistate Extension (ME, NH, VT, NY; one program involved participants from 40 states), and Integrated Research and Extension.*

## **KEY THEME – Other Business Skills**

### **Computer Training**

a. *Brief description of activity:*

Keeping proper records is essential to maintaining a competitive edge in agriculture and central to effective business decision making. New technologies in information management offer increased opportunities for farmers to generate critical data to manage their farms. Cooperative Extension educators across the Commonwealth offer a variety of hands-on computer training, from basic computer skills and Internet use to more advanced data analysis skills. For example, *Computer Technology for Agricultural Producers (CTAP)*, a regionally planned program to help farmers learn the importance of using new computer technology to manage their farms, provided an array of workshops to teach computer skills on a variety of farm management issues. Seventy farmers from western Pennsylvania took advantage of this opportunity.

b. *Impact/Accomplishment:*

Twelve farm families from Jefferson, Clearfield, McKean, and Potter Counties attended farm computer training at the North Central Regional computer lab.

- 100% stated they were better able to utilize a computer

- 83% indicated it would help improve profitability

a. *Brief description of activity:*

Producers need efficient ways to summarize vast amounts of data and information in order to make more effective management decisions. Cooperative Extension educators in Lancaster County offer computer workshops and individual assistance to help producers evaluate new technologies that can be applied to their businesses.

b. *Impact/Accomplishment:*

- A total of 70 farmers and agricultural industry personnel who sought individual assistance in solving various dairy herd health and production problems learned how to use Dairy Herd Improvement Association (DHIA) records as an effective tool for monitoring herd performance and troubleshooting herd problems.

**Estate and Financial Planning**

As family businesses and family farms are being lost in Pennsylvania, producers need to use sound financial planning to ensure that transitions within their business (retirements, sales, transfers, etc.) will be beneficial to the business. Farmers need to understand the legal and financial options involved in transferring or dispersing farm real estate.

a. *Brief description of activity:*

Cooperative Extension programs focused on these issues include estate and financial planning to assist participants in understanding issues such as new laws and the impact of these changes on their business plans and estates. Local attorneys and trusts officers were included in the instruction team in Bradford County and provided basic knowledge about wills, intestacies, trusts (testamentary and living), federal estate and gift tax, Pennsylvania inheritance tax, and various types of property titles and forms of real property ownership.

b. *Impact/Accomplishment:*

Potter County (with participants from two surrounding counties)

- 32 participants attended a seminar offered in cooperation with Pennsylvania Farm Link and the Potter County Conservation District
- 31% percent indicated that the workshop saved them money

Bradford County (with participants from two surrounding counties)

- 47 farm families attended estate planning sessions
- The group of farm families could save at least \$3,525 in estate planning legal fees by thinking in advance about the kinds of questions and issues they need to raise when meeting with their estate planners.

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

## **KEY THEME – Improving the Ability of Pennsylvania Producers to Understand and Use Marketing Systems**

### **Dairy Options Pilot Program**

#### *a. Brief description of activity:*

Dairy farmers in Pennsylvania need to learn to protect their milk price from volatility and increase their understanding of milk price risk management. The Dairy Options Pilot Program (DOPP), instituted by the USDA Risk Management Agency, assists farmers in learning about and using options on futures. A faculty member in the department of Agricultural Economics and Rural Sociology organized the delivery of the Pennsylvania Dairy Options Pilot Program. An in-service program was held with the dairy agents, and this federal program was delivered in 25 counties.

#### *b. Impact/Accomplishment:*

- 167 option contracts were purchased by Pennsylvania dairy farmers statewide

#### Mercer, Erie, and Crawford Counties

- Mercer County dairy producers participating in the third round of DOPP training were ranked number one in the state for total amount of put options purchased.
- 21 signed up with a broker
- producers signed 30 options contracts before the end of the program
- three producers adopted SOPs as management tools
- two producers improved milk quality by adjusting unit detacher setting

#### Bradford, Tioga, and Susquehanna Counties

- These three county areas received \$16,912 in USDA options purchases cost share monies and \$660 in broker fees paid by USDA.
- 55 dairy farmers in three counties completed the DOPP training
- The financial impact for dairy farmers in these counties who purchased options following the DOPP training could reach in excess of \$40,000 in direct payments as a result of options purchases.

### **Feeder Cattle**

#### *a. Brief description of activity:*

Beef producers need to produce a value-added feeder calf and attract buyers who perceive a value in preconditioned calves. Producers need to increase their marketing power by cooperating and selling calves in larger, more uniform lots, rather than individual or small lots. Cooperative Extension educators worked with area producers in Westmoreland, Armstrong, and Indiana Counties to identify ways to increase the value of their feeder cattle.

#### *b. Impact/Accomplishment:*

#### Westmoreland County

- 24 producers participated in graded feeder sales through the Pennsylvania Feeder Calf Roundup

- Pennsylvania Feeder Calf participants marketed 250 calves for an average value of \$.15 per pound above market value. This resulted in an approximate increase in producer revenue of \$16,875 for a total increase income of approximately \$3,500.

#### Washington County

- 7 beef producers marketed 93 steer calves and 47 heifer calves through the Pennsylvania Feeder Calf Roundup
- producers received, on average, approximately \$5.00 per hundred weight premium over traditional marketing strategies

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

### **KEY THEME – Strategies to Enhance Agribusiness Competitiveness**

#### **Dairy Accounting and Benchmark Standardization Program**

a. *Brief description of activity:*

Professionals serving the dairy industry want benchmarks to help their clients evaluate the dairy businesses. However, little standardization exists across the industry due to the diverse methods used to collect, process, and report data. The Dairy Accounting and Benchmark Standardization Program (DABS) was developed to provide guidelines for data collection, processing, and reporting to dairy producers and the professionals who serve them.

A series of meetings was held around the state to solicit input from the dairy advisors in the development of these guidelines. Input was gathered from nearly 50 professionals. As a result of these meetings, a standardized chart of accounts was developed for collecting dairy accounting data which is posted on the Dairy Alliance Web site. The guidelines for data entry and processing were distributed to the 50 professionals who participated in the meetings and presented at meetings held by local extension staff across the state. In addition to the DABS program, an electronic posting of pertinent benchmarks (E-Benchmark) provides producers and industry professionals with information on the use of benchmarks in interpreting farm business performance. The posting reaches approximately 500 professionals and producers.

b. *Impact/Accomplishment:*

Nearly 25 percent of the state's 9,600 dairy producers and their advisors are able to generate more standardized benchmarks as a result of this program. They are better equipped to use these benchmarks in evaluating the performance of their business.

#### **Strategic Planning**

a. *Brief description of activity:*

Strategic planning and long range projections can help producers make informed business decisions, as well as providing them with goals to achieve their plans. Cooperative Extension educators provide educational programs that help producers

operate and manage their businesses in a more profitable and efficient manner. For example, in Lancaster County, strategic plans were developed and discussed with 19 dairy farm families to help them evaluate the economics of about \$11 million worth of investments (expansions, renovations, alternative enterprises, getting started in dairying, purchasing farms, etc.).

b. *Impact/Accomplishment:*

- two participants increased the price they received for milk by adopting technologies to improve milk component levels
- five increased income and saved building costs by boarding heifers off-farm so they could add and manage more cows
- three improved cattle housing facilities to enhance cow health, productivity, and profits
- two decided to purchase farms

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

## **Planned Program – *Agricultural Productivity and Efficiency***

### **KEY THEME – Food Quality and Protection Act**

#### **Food Quality Protection Act**

The Food Quality Protection Act (FQPA) substantially changes the way food safety is determined and pesticides are regulated, and growers need to be aware of the changes in pesticide law and usage. The Pesticide Education Program staff present programs statewide to a wide diversity of grower groups, including golf course professionals, Christmas tree growers, greenhouse operators, vegetable growers, field crop applicators, and turf grass professionals. The Publications Distribution Center distributed over 800 copies of the Pesticide Education Program's *The Food Quality Protection Act* fact sheet. In the fall of 2001, the Pesticide Education Program provided agents with several presentations for use at meetings about label changes that have resulted from FQPA decision making. Three presentation topics, which included turf, greenhouse/ornamental, and agronomic crops, were developed tailored to a specific segment of the agricultural industry and were made available to extension educators.

a. *Brief description of activity:*

Cooperative Extension educators provide valuable information to agriculture producers, pesticide license holders, home gardeners, Master Gardeners, and the public on how to control pests, how to replace pesticide products being dropped from the marketplace, and how to use new IPM methodologies that provide current approaches to pest control. Applicator training on the proper use and handling of pesticides is an ongoing effort of extension educators. Annual updates keep applicators abreast of changes occurring in the



field, and educational programs provide applicators opportunities to receive required pesticide license certification credits. The Pennsylvania Office of Rural Health and Penn State Cooperative Extension received a 2001 Program of Excellence Award from the U.S. Department of Agriculture's Cooperative State Research, Education and Extension Service for their Swimming Pool Pesticide Applicators Training Program.

b. *Impact/Accomplishment:*

Carbon County

- 411 people received credits toward their pesticide license recertification
- A survey of those attending the Northeast Regional Christmas Tree Growers meeting indicate that 95 percent will scout their trees for pests regularly; 95 percent can better identify tree diseases; and 85 percent will attempt to control pests through cultural practices before turning to pesticides.

Schuylkill County

- 311 growers from fruit, small fruit, vegetable, and Christmas tree production attended meetings
- 276 (89%) received update pesticide credits

Lycoming County

- extension educators conducted a number of programs in a five-county area, emphasizing the use of newer IPM methods
- 15 growers reported decreased number of sprays and money saved using newer methods
- one grower eliminated eight sprays, saving an estimated \$1,500, which would also result in positive environmental impact
  
- over 900 people participated in educational meetings in the region on safe pesticide use and applicator awareness
- 80% indicated they would make one or more changes dealing with pesticide safety
- 30% received credits for recertification

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

**KEY THEME – Improving Animal Production**

**Benchmarks for Analyzing Herd Performance**

a. *Brief description of activity:*

The DHIA Information Analysis Training (DIAT) program is a series of workshops that train dairy professionals in a systematic approach to herd performance analysis using paper DHIA records and the dairy information programs PCDART and DairyComp 305. Each workshop is a combination of lecture, hands-on computer training, and a case study that will improve the participants' knowledge of key benchmarks for analyzing herd performance, their skills in herd performance analysis,

and their ability to get this information from the on-farm information systems employed by their customers. Faculty and staff have participated in this Dairy Alliance program.

*b. Impact/Accomplishment:*

Fifty-eight professionals from eight different companies, who serve approximately 25 percent of the dairies in Pennsylvania, participated in the four sessions of the pilot DIAT program. Ninety-five percent of participants indicated that the training improved their skills in herd performance analysis. Ninety-five percent indicated they would use these skills to help the customers improve profitability.

*c. Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

*d. Scope of Impact—State specific.*

**KEY THEME – Improving Agronomic Production**

**Crop Management**

*a. Brief description of activity:*

Agronomic production is a major component of local agricultural economies, and Cooperative Extension plays a key role in providing the technical expertise necessary for the enhancement of this sector and the maximization of yield. Extension educators conducted research on cooperating farms, held educational programs at Crops Days, demonstration plots, through farm visits, and disseminated information through newsletters and other media.

*b. Impact/Accomplishment:*

Lycoming County

- local agriculture business provided \$3,000 in direct or in-kind services donations
- 85 people from six counties attended Crops Day
- 75% of attendees planned to adopt one or more new practices

Franklin County

- 63 attended a Corn Clinic
- 95% increased knowledge of soil fertility
- 90% increased knowledge of corn diseases
- 68% increased knowledge of weed control
- 75% indicated they would increase profitability from what they learned

Cumberland County

- 80% of survey respondents indicated increased ability to make better corn hybrid decisions

Lancaster County

- over 800 farmers attended meetings about growing tobacco low in nicotine and reduced carcinogens
- almost 600 farmers grew the new variety

- gross income of the 600 farmers will be approximately \$12 million

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

### **KEY THEME – Improving Horticulture & Green Industry Production Systems**

a. *Brief description of activity:*

The use of "high tunnel" technology can offer small/family farmers the opportunity to keep the family farm, increase cash flow and profitability, decrease dependence on off-farm jobs, and produce high quality, added-value horticultural crops. A High Tunnel Research and Education Facility was the cornerstone of this program which included winter meetings, twilight meetings, in-service training for extension educators, personal and group tours of the facility, newsletter, Web site development and maintenance, extension publications, and interaction with state and local governments <<http://plasticulture.cas.psu.edu/>>. An experimental tunnel was completed in the fall of 2001 at the Southeast Research and Extension Center in Lancaster County.

b. *Impact/Accomplishment:*

- increased agricultural income estimated at \$1 million
- increased availability of locally grown fresh fruits and vegetables in the Northeast

a. *Brief description of activity:*

Pennsylvania's vegetable producers grow 5,500 acres of tomatoes and 14,000 acres of potatoes annually. The most important diseases affecting these crops are early blight and late blight. Cost of a regular preventive fungicide program to control blights for one season is high, averaging about \$112 per acre for tomatoes and \$55 per acre for potatoes. Disease forecasters (FAST and TOMCAST for early blight; BLITECAST for late blight) were modified, validated, and implemented within Pennsylvania. Rapid-dissemination technologies (1-800 phone messages, fax, Internet) were used to get information to growers promptly enough to affect day-to-day decisions about blight control.

b. *Impact/Accomplishment:*

- 41% reduction in fungicide use for early blight
- 29% reduction in fungicide use for late blight
- improved timing of fungicide application
- 80,000 pound reduction in fungicide use for tomatoes and potatoes

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific and Integrated Research and Extension.*

## **KEY THEME – Improving Process and Product Quality**

### *a. Brief description of activity:*

Consumers and food processors demand safe, high-quality milk. Producers need an organized approach to assuring product and process quality. Penn State, in cooperation with the Pennsylvania Department of Agriculture and agricultural industries in Pennsylvania, developed the PDQA (Pennsylvania Dairy Quality Assurance) Program.

### *b. Impact/Accomplishment:*

- approximately 100 agricultural professionals were trained to implement or validate PDQA programs
- of 32 demonstration farms established, 19 indicated changes in milking or management procedures to increase milk quality

### *c. Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

### *d. Scope of Impact—State specific and Integrated Research and Extension.*

## **KEY THEME – Other**

### **Plum Pox Virus (PPV)**

#### *a. Brief description of activity:*

In 1999, the plum pox virus, also known as sharka, was discovered for the first time in North America in Adams County, the top fruit-producing county in Pennsylvania. The disease does not kill trees and is harmless to humans, but it makes fruit unmarketable and drastically reduces yields. Left unchecked, it could devastate Pennsylvania's \$25-million-a-year stone fruit industry. During 2001, Penn State Cooperative Extension continued its leadership role in collaborating with state and federal agencies, growers, and local public officials to eradicate PPV from Pennsylvania. This Cooperative Extension program has been recognized with Awards of Excellence from both the Northeast Extension Directors and the Northeast Experiment Station Directors. Extension disseminated educational materials to researchers, growers, government, and industry personnel from 18 states and Canada and created a Sharka Web site <<http://sharka.cas.psu.edu>>. Additionally, 350 copies of a 45-minute documentary about PPV in Adams County were distributed to all 38 peach growing states, state extension offices, land-grant universities, growers, and laboratories.

#### *b. Impact/Accomplishment:*

- \$2 million was secured to assist fruit growers with the financial consequences that affected their livelihood as a result of the plum pox virus
- over 850 acres of infected peaches, plums, and nectarines have been eradicated
- an effective indemnification program has been put in place
- recommendations from extension have helped state and federal Department of Agriculture personnel to make many decisions on how to handle the disease
- rapid mobilization and response of extension and research faculty and staff to a critical industry need

## **Reproductive Health and Biosecurity**

### *a. Brief description of activity:*

Reproductive losses as a result of nutritional and infectious disease continue to be a major economic burden to all aspects of animal agriculture. As part of the Dairy Production Medicine (DPM) Certificate Program, a module emphasizing reproductive health evaluation for veterinarians, was developed. Selected components of this program were presented at annual conferences for the Pennsylvania Veterinary Medical Association. A case-based workshop addressing reproductive health was presented at a regional conference for nutrition consultants and extension personnel.

### *b. Impact/Accomplishment:*

- 22 veterinarians participated in the DPM module
- 82% of participating veterinarians stated the information was very useful
- 86% stated they planned to apply the information with their clients
- A follow-up evaluation confirmed that 19 veterinarians applied what they learned

## **Foot and Mouth Disease**

### *a. Brief description of activity:*

The Foot and Mouth Disease (FMD) outbreak in England heightened the awareness of the vulnerability of our agricultural system. Penn State Cooperative Extension's response has been to participate in special meetings focused primarily on foreign animal disease. Dissemination of information to the public included a television interview and three other television sessions responding to reporters' questions, which were aired on local news broadcasts, as well as several short radio spots. Materials were designed relating to foreign animal diseases, food safety concerns, effective biosecurity, and a preventative approach to infectious diseases. Materials included PowerPoint presentations, Web site development <<http://fmd.cas.psu.edu/>>, and a number of printed documents.

The veterinary extension group has developed the concept of risk assessment, a system producers can understand and implement: i.e., high, moderate, or low risk (correlated with red, yellow, and green). By promoting the biosecurity concepts with the low-mod-high format, it is easier for producers to identify high risk animals and activities. It is hoped that this three-tiered approach will help producers concentrate on the high risk areas first. Better biosecurity will improve on-farm food safety, increase product quality, and enhance consumer confidence.

### *b. Impact/Accomplishment:*

- 600 people attended statewide meetings on foreign animal disease
- Improved communication between Cooperative Extension and the Pennsylvania Department of Agriculture (PDA)
- Eight extension regional directors have established connections with their regional PDA veterinarians
- Farm Bureau regional directors can promote the importance of biosecurity issues with their members using risk assessment concept

## **West Nile Virus**

### *a. Description of activity:*

The West Nile virus (WNV) was first detected in the United States in 1999. That year the Centers for Disease Control and Prevention confirmed 62 human cases of encephalitis, including seven deaths. Infected mosquitoes transmit the West Nile virus and infect wild birds, but can also infect horses and other mammals. In October 2000, the first cases of West Nile virus were confirmed from birds, mosquitoes, and a horse in Pennsylvania, and by 2001, detections were made in 361 birds, 43 mosquito pools, and 6 horses. In addition, Pennsylvania confirmed its first three human cases of West Nile virus infection.

The Pesticide Education Program staff worked with members of the West Nile Virus Coordinating Committee to revise and update several of the 2000 publications, including the *West Nile Virus* brochure, *West Nile Encephalitis and Horses*, and *West Nile Virus: What You Need to Know*. A new fact sheet, *Using Insect and Tick Repellents Safely*, was developed in Spring 2001. The poster *Mosquito Pest Management* and a West Nile encephalitis Web site also were developed <<http://www.pested.psu.edu/spwestnile.html>>. Exhibits used at both small and very large public events have been created, which include maps showing the distribution of WNV in humans, birds, horses, mosquitoes, and other mammals; facts sheets; and information about insect repellants.

A program to inform Cooperative Extension staff throughout the state about the current West Nile virus situation was broadcast via satellite technology. The program featured a five-member panel including three members from Penn State, an epidemiologist from the Pennsylvania Department of Health (DoH), and a contact from the Pennsylvania Department of Environmental Protection (DEP). The West Nile virus outreach educational program received Honorable Mention in the Northeast Extension Directors' 2001 Award of Excellence Program.

### *b. Impact/Accomplishment:*

A West Nile virus call-in program was produced in cooperation with WPSX-TV, a PBS station serving 500,000 households in central Pennsylvania. The panel, including a Penn State faculty member, and one member each from the Pennsylvania Department of Agriculture, Department of Environmental Protection, and Department of Health, answered questions from viewers. Two 15-minute programs addressing WNV issues were also produced. Since August 2000, the Penn State Publications Distribution Center distributed 97,100 fact sheets, 125,200 color brochures, and 1,510 color posters.

Certification training sessions for DEP and DoH staff and municipal workers were offered cooperatively by Penn State faculty and staff and the Pennsylvania Department of Agriculture staff. Approximately 300 people attended.

County extension educators are involved in the West Nile virus program—surveillance, control, and education—and serve as coordinators with the Pennsylvania DEP and local

groups. Several counties have received grants to support activities: e.g., \$112,000 secured in Carbon County.

#### Somerset County

- 125 participants at senior centers (at-risk audiences); 70 attended community groups/agencies educational programs
- 85% confident in taking steps to protect themselves from WNV

#### McKean County

- 11,369 adult and larva mosquitoes collected and submitted to DEP
- 61% of attendees could reduce mosquito breeding sites, as a result program

#### Clearfield County

- 360 samples containing 10,901 mosquitoes collected and submitted to DEP
- data became integral part of decision by DEP to recommend proactive control measures

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific, Multistate Integrated Research and Extension (Listing of states involved in PPV activities included in the Penn State Research Annual Report of Accomplishments and Results for FY2001), and Integrated Research and Extension.*

### **Planned Program – *Animal Waste and Nutrient Management***

#### **KEY THEME – Public Policy and Impact of Animal Agriculture**

Key issues in this area include rural zoning, right-to-farm laws, and "smart growth" regulations. For example, Berks County has developed several programs to preserve a future for its agriculture industry.

##### a. *Description of activity:*

Initially, Berks County citizens needed to recognize agriculture as a vital county industry. They then had to understand what critical elements were necessary to maintain a viable agricultural industry. One method to maintain farmland for agricultural use is effective agriculture preservation zoning. This approach is encouraged through the Pennsylvania Municipality Planning Code. Penn State Cooperative Extension has collaborated with the Berks County Planning Commission on these issues.

##### b. *Impact/Accomplishment:*

- four townships preserved over 24,000 acres in 2000
- one township preserved 10,000 acres in 2001
- since 1997, nine townships have developed this land use technique
- 58,000 acres have been designated for agriculture production and other farm-related businesses since 1997

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

### **KEY THEME – Nutrient Management**

a. *Description of activity:*

An environmental literacy course was offered at about 20 locations throughout the state. The course included four modules: Manure management, environmental awareness, odors and gaseous emissions, and environmental regulations. To successfully complete the course, participants were required to score a minimum of 80 percent on a follow-up exam.

b. *Impact/Accomplishment:*

- 571 individuals participated in the course
- 553 individuals successfully completed the course

a. *Description of activity:*

A certification course for commercial manure haulers was developed to improve environmental practices among these individuals. The course consisted of a classroom session and a field demonstration day. During the classroom session, the following subjects were taught: Pennsylvania's nutrient management laws, nitrogen management, phosphorus management, conservation practices, manure spreader calibration, and odor control. The field demonstrations included hands-on exercises to teach manure calibration, utilization of GPS technology on manure application equipment, soil health and conservation concepts, compaction, and manure sampling. To complete the certification process, participants were required to score an average of 80 percent on the six exams administered at the classroom session, and attend the accompanying field day.

b. *Impact/Accomplishment:*

One classroom session and one field day were held during the reporting year. Thirty-four individuals attended the classroom session, and 46 people attended the field day. Of these, 22 people completed the certification requirements. Most of the remaining individuals attended the field day and were planning to attend a classroom session in the next fiscal year. During the field days, 28 professional nutrient management plan writers received continuing education credits.

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*



## **KEY THEME – Manure & Dietary Management Strategies to Reduce Nutrient Excretions**

Farmers and those advising and regulating farmers need up-to-date information on dairy manure handling systems that are environmentally friendly, cost-effective, and safe for workers and animals. A national conference and workshop series, sponsored by Natural Resources, Agriculture and Engineering Service (NRAES), a cooperative program of the Northeast Extension Directors, was developed, and the main event was the Dairy Manure Systems: Equipment and Technology Conference. Twenty-one Pennsylvania farmers, advisors, and government personnel attended the conference (total attendance was 237).

### *a. Description of activity:*

Livestock producers are faced with reducing nutrient losses on the farm or reducing nutrient excretion levels, and they need to be aware of strategies to reduce nutrient losses on the farm. The high animal density and the importation of phosphorus (P) via purchased feeds and fertilizers increases soil phosphorus loads, which could result in elevated levels of phosphorus in our water supplies. In Lancaster County, a program was designed to alert producers to the impending P-based nutrient management regulations and inform agricultural service personnel and producers of new P feeding guidelines for cows. Additionally, a dairy newsletter about the new guidelines and reducing P levels in rations reached 2,800 dairy producers and industry personnel.

### *b. Impact/Accomplishment:*

#### Sullivan County

- ten producers developed a nutrient management strategy to reduce nutrient losses
- five producers began work with their feed supplier to develop rations that would reduce nutrient losses through the manure and improve livestock production

### *a. Description of activity:*

During the previous fiscal year, presentations were made at two national meetings held in the region (one in Maryland, one in Pennsylvania) to outline strategies for minimizing nutrient excretion. Several popular press articles were published in weekly farm publications and newsletters. In addition, extension programs have focused on the dangers of adding high levels of copper, particularly in swine finishing diets.

### *b. Impact/accomplishment:*

At least two major swine producing companies now include phytase in their diets to minimize phosphorus excretion, and nearly all companies include one or more synthetic amino acids which reduce the excretion of nitrogen. The swine industry has now all but eliminated the use of high levels of copper in swine finishing diets, and has curtailed its use even in nursery diets.

### *c. Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

### *d. Scope of Impact—State specific, Multistate Extension (Northeast states), and Integrated Research and Extension.*



## GOAL 2

**To ensure an adequate food and fiber supply and food safety through improved science-based detection, surveillance, prevention, and education.**

### Overview

Penn State Cooperative Extension accomplishments in Goal 2 for the second year of the five-year plan of work were highly satisfactory. Penn State is dedicated to the integration of research and extension, and faculty and county-based educators collaborate to develop and successfully implement the objectives of the five-year plan of work, seeking continuous input from citizens, local advisory groups and boards, the Pennsylvania Council of Cooperative Extension Associations, and the Penn State Agricultural Advisory Council. As outlined in the plan of work, Cooperative Extension emphasizes the overarching goal of developing a systems approach to food safety. Within this area, sub-goals and objectives guide Cooperative Extension faculty and field-based educators in solving the issues critical to a diverse clientele.

Food safety is an issue that needs the attention of everyone involved in the food system, and food safety education should be a high priority for producers, processors, government regulators, food handlers, food retailers, and consumers. Government, agriculture, industry, academia, and consumers must work together on the issue of food safety. Penn State Cooperative Extension forms a variety of partnerships focused on educational activities that help constituents gain knowledge about practices to ensure the safety and integrity of the food system.

Many Cooperative Extension programs related to food safety center on the issue of foodborne illness. The CDC (Centers for Disease Control and Prevention) estimates "that foodborne diseases cause approximately 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year"

<http://www.cdc.gov/ncidod/EID/vol5no5/mead.htm>. The economic impact of foodborne illness, in terms of medical care, lost wages, and associated costs, is clearly in the billions of dollars per year. To address this important issue, Cooperative Extension educators continue their training efforts to help clients in food establishments meet the requirements of the Pennsylvania Food Service Employee Certification Act. The results of this training are outstanding, and a significant increase in the number of participants certified has been reported. This year 3,342 participants completed ServSafe<sup>®</sup>, the state-approved curricula, and passed certification/recertification requirements. Excellent progress on reaching underserved audiences with food safety programming has been made this year, particularly in accommodating non-English speaking audiences.

By keeping a broad, farm-to-table focus when applying solutions to our food safety problems and taking careful, multiple steps, we can ensure that real progress will occur. Extension educators are actively involved in providing training for food producers and processors related to food safety and sanitation practices. They also offer programs for

other types of food certification, such as Beef and Pork Quality Assurance. In all 758, participants were reported to have received these types of certification.

In addition to the activities noted above, county-based educators offer an array of food safety programs for non-profit organizations that serve and distribute food. They also reach very diverse audiences, from kindergarten and elementary students to senior citizens, providing relevant knowledge and hands-on experiences related to food safety. This fiscal year, a total of 16,824 people participated in programs related to food safety (an increase of more than 50 percent), and 10,213 participants demonstrated increased knowledge and understanding of practices to ensure safety of the food system.

Highlights of successful Penn State Cooperative Extension activities and documentation of their benefits are noted in the following section. A complete listing of programs is available at <http://pow.cas.psu.edu>.

	<b>FY2001</b>
Human Resources (FTEs)	15.73
Fiscal Resources (Smith-Lever)	\$399,056
Fiscal Resources (match)	\$399,056

## GOAL 2

**To ensure an adequate food and fiber supply and food safety through improved science-based detection, surveillance, prevention, and education.**

### **Planned Program – *A Systems Approach to Food Safety***

#### **KEY THEME – Food Service Certification Program**

a. *Brief description of activity:*

As mandated by the Pennsylvania Department of Agriculture, one person from each Pennsylvania food establishment shall complete certification for the Pennsylvania Food Service Employee Certification Act by July 1, 2003. ServSafe®—a nationally recognized food safety training program developed by the National Restaurant Association—is a 16-hour food sanitation course designed for food service managers, chefs, caterers, cooks, health officials, and inspectors. Topics include contamination and foodborne illness; storage, preparation, and serving food safely; and food safety regulations and standards. The class is concluded with an 80-question exam. Participants need a score of 70 percent or higher to gain their certification in Pennsylvania. Cooperative Extension educators in many counties are trained and certified to teach the course, and results of the training in terms of the number of participants certified are outstanding.

In several counties, the ServSafe® program is offered collaboratively with Penn State Continuing Education and Penn State campuses and/or with local organizations. In Bradford County, for example, extension educators collaborated with Guthrie Healthcare System personnel to team teach one of the courses. In addition, efforts continue in serving non-English speaking audiences. Materials and tests are provided in Spanish and Chinese. An excellent example is represented by efforts in three counties in the Capital Region where courses were offered to more than 100 participants using a Chinese-speaking instructor. Hands-on activities were provided in a Chinese restaurant. Extension educators are also involved in pre- and post-testing and follow-up surveys to determine the effectiveness of the training. Significant results are reported in increased knowledge and change in practices.

b. *Impact/Accomplishment:*

Statewide

- 107 food safety certification classes offered in 47 counties
- 2,356 participated in food safety certification classes

Capital Region (includes seven counties)

- 26 ServSafe® food safety certifications classes offered for 614 food service workers
- 98% of participants qualified for certification

### Columbia County

- three classes with 59 participants were held in Columbia and Union Counties
- 34 respondents to a phone survey noted significant changes in food safety practices
  - Class 1 - 22% knowledge increase over 2 weeks based on the pre- and post-tests
  - Class 2 - 35% knowledge increase over 4 weeks based on the pre- and post-tests

Class 3 - 37% know

### Mercer County

- 73 participants certified in Mercer and Lawrence Counties
- 97% of survey respondents made at least one specific behavior change in food handling

### Beaver County

- 33 food service managers and employees completed training
- 33 passed exam with an average score of 93%
- based on the number of people served by these establishments, 2,140 patrons each day may be positively affected by the improvement of food handling practices

### Clearfield County (with participants from 7 surrounding counties)

- 181 participants enrolled in classes offered throughout the North Central Region
- 180 (99.4%) of the participants passed the exam with a score greater than 70%
- overall average passing grade percentage was 91.5%

### Bucks County

- 108 students in nine classes
- 94% passed the exam with an average score of 90 (of 100)
- 10% of class participants were provided with materials (books, exams) in languages other than English

### Lackawanna County (with participants from four surrounding counties)

- 157 foodservice managers attended
- average knowledge gain for participants ranged from 11% to 15%
- 129 intend to make some positive behavior changes within 3 months of the program
- 98% of 154 participants who took the exam received a grade of 75% or higher

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific and Integrated Research and Extension.*

## **KEY THEME – Food Producers and Processors Training**

### *a. Brief description of activity:*

Faced with a barrage of government and buyer requirements, food-processing companies are increasingly in need of accurate information related to food safety and sanitation practices in their operations. Producers and processors seeking to provide value-added food products in the marketplace also face challenges in producing market-worthy products. Faculty and extension educators provide educational opportunity for

these audiences. For example, the Penn State Sanitation Short Course—Prerequisites for Food Safety—provides affordable training to food processors in food safety, sanitation practices, and related technologies annually. This year, the Food Processors Training Seminar in Franklin County brought together food processors, regulatory personnel from the Pennsylvania Department of Agriculture (PDA), Penn State water and sewerage experts, and quality control experts for a full-day conference. Additionally, fruit growers who sell cider must comply with FDA regulations regarding pasteurization and all growers who sell fruit that may be processed should have a Hazard Analysis and Critical Control Point (HACCP) plan.

*b. Impact/Accomplishment:*

Luzerne County

- food processor required basic food safety training in both English and Spanish languages to increase profitability
- 162 employees of a food processing plant completed "Basic Food Safety for Food Processors" training program
- average of 90% rated 3 or higher (on a scale of 1 to 5) indicating much new knowledge was gained
- series of classes presented for non-English speaking employees with the assistance of an interpreter

Schuylkill County

- educator assisted three commercial cider press operators develop HACCP program
- 100% of the cider press operations in the county were inspected by the PDA and found in compliance to press and sell cider

*c. Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

*d. Scope of Impact—State specific.*

**KEY THEME – Beef & Pork Quality Assurance**

*a. Brief description of activity:*

Beef and pork producers need to develop production management skills that ensure a safe beef supply, and they must attend training to be certified in Pennsylvania's quality assurance programs. Producers first attend classroom presentations to learn management practices. The second phase of on-site training includes demonstrating their ability to properly administer animal health products. Both adults and youth are involved in these training sessions. Extension educators offer many programs to assist producers in this training.

*b. Impact/Accomplishment:*

- 14 counties reported offering quality assurance training
- 260 beef and pork producers received certification/recertification

Mercer County

- 170 producers attended classroom training
- 130 attended two chute-side training sessions
- 59 producers received Beef Quality Assurance certification

#### Columbia County

- pre- and post-tests at the first beef quality assurance session showed a 21% improvement in knowledge

#### Chester County

- 60 producers demonstrated they could correctly administer vaccines
- follow-up survey indicated that 95% changed their practices (storing, handling, and administering vaccines)

#### Lancaster County

- 43 adult and 16 youth pork producers received Pork Quality Assurance (PQA) Level III certification
- 99 producers recertified in the program, using a PQA third-party audit tool developed by the educator and Penn State Cooperative Extension specialists
- PQA Level III Certification conducted for the Lancaster County 4-H Swine Club
- 70 of the 86 club members (81%) successfully completed training

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific and Integrated Research and Extension.*

### **KEY THEME – Other**

#### **Food Safety for Non-profit Organizations and the General Public**

##### *a. Brief description of activity:*

Many counties offer food safety training to members of non-profit organizations. Occasional Quantity Cooks workshops are offered across the Commonwealth to community, civic, and religious groups, as well as others who serve and distribute food. A wide variety of food safety programs are offered to both young children in day care, kindergartens, and elementary schools, as well as to senior citizens groups. Cooperative Extension educators are actively involved in educating the public through newspaper articles, newsletters, and responding to individual calls from clients.

##### *b. Impact/Accomplishment:*

#### Blair County

- workshop offered on basics of food safety for the volunteer food server
- follow-up survey mailed to at least one member of each organization, with 42% return rate (36), 94% indicated at least one change was made in food safety practices in the organization

#### York County



- 10 cooks from 4 Head Start Programs attended class on serving safe food for children
- after training, 3 facilities had hot water installed for hand washing for the children
- as a result of the training, lunchtime milk was delivered at lunch time, rather than at 8:30 A.M. (sitting at room temperature until noon)

#### Susquehanna County

- puppet show about the importance of properly washing hands presented to children of migrant workers attending a weeklong outdoor camp
- camp staff reported children were very aware and diligent about proper hand washing throughout the entire week of camp after attending the program

- program presented about food safety guidelines to six senior centers
- 60,000 meals served to the elderly at the senior centers and home delivered meals with no reported incidence of foodborne illness
- pretest score average 84%, post-test score average 97%

#### Beaver County

- three workshops conducted in each of seven fourth grade classes
- pre- and post-tests indicated that all of the 133 students improved their scores

#### *a. Brief description of activity:*

The Penn State Department of Food Science recently created the Penn State Food Safety Web Site <<http://foodsafety.cas.psu.edu/>>. The Web site offers links to online information on food safety and preservation, food safety news and upcoming events, and summaries of food safety related outreach, research, and teaching activities at Penn State. Unique to the Web site are two databases containing over 1,300 links to online food safety information resources. Since the Web site was introduced to extension educators at an in-service in March 2001, the site has been visited over 19,000 times. The food preservation and food safety databases have been visited over 7,500 and 5,000 times respectively. As a reflection of the value of this site, over 50 other Web sites have been identified as having linked to the Food Safety Web Site, including government, university, county extension, and commercial sites.

#### *b. Impact/Accomplishment:*

Based on an impact survey sent to 72 Cooperative Extension educators (58 percent response rate), nearly one-half use the site at least once per week with 16 percent using it multiple times per week. Eighty-five percent indicated they used the site either somewhat or a great deal to prepare for a meeting, lecture, or workshop, or to respond to a call from a client. Eighty-six percent indicated that the site had increased their knowledge of food safety issues and activities within the Department of Food Science either somewhat or a great deal.

#### *c. Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

#### *d. Scope of Impact—State specific and Integrated Research and Extension.*

## GOAL 3

**Through research and education on nutrition and development of more nutritious foods, enable people to make health-promoting choices.**

### Overview

Penn State Cooperative Extension accomplishments in Goal 3 for the second year of the five-year plan of work were highly satisfactory. Penn State is dedicated to the integration of research and extension, and faculty and county-based educators collaborate to develop and successfully implement the objectives of the five-year plan of work, seeking continuous input from citizens, local advisory groups and boards, the Pennsylvania Council of Cooperative Extension Associations, and the Penn State Agricultural Advisory Council. As outlined in the plan of work, Cooperative Extension emphasizes the overarching goal of increasing healthy food choices among Pennsylvania adults and youths. Within this area, sub-goals and objectives guide Cooperative Extension faculty and field-based educators in solving the issues critical to a diverse clientele.

Pennsylvania has the largest rural population and the second-largest senior population (16 percent) in the U.S. The population is largely White (88 percent) with increasing numbers of African Americans and Hispanics. Diseases that have lifestyle antecedents—heart disease, cancer, cerebrovascular disease, and diabetes—are among the six leading causes of death in Pennsylvania. According to the BHRFS of 1996, a significant portion of residents are physically inactive, overweight, not eating fruits and vegetables five or more times a day, and have elevated blood cholesterol, all predisposing risk factors for chronic diseases. Many Pennsylvanians are not following the principles embedded in the USDA Food Guide Pyramid and balancing caloric intake with regular physical activity. Cooperative Extension faculty and field-based educators create and offer a variety of programs that help people adopt lifestyle practices that promote health and wellness.

Over half of Americans eat meals and snacks away from home on any given day, choosing foods that are higher in fat and saturated fat and have less calcium, iron, and fiber than foods prepared in the home. The huge variety of convenience foods and meal choices available has increased the number of consumers at all economic levels and stages of the life cycle who do not have basic food shopping, food preparation, and food preservation skills. Many of those practicing home food preservation are not aware of safer, more up-to-date practices. Constituents in many counties of Pennsylvania preserve food at home. For example, a survey of newsletter recipients in Lancaster County in 1999 indicated that nearly 500 of the readers preserve food. Extension educators present many different educational programs addressing these issues.

The ability to understand and use the information on a food label is increasingly important, and Cooperative Extension educators are developing and offering educational programs that emphasize how to make food choices both in the supermarket and for away-from-home meals, as well as teaching basic food preparation skills. These programs target diverse audiences across the life span, especially those with fewer

economic and social resources, and those at vulnerable life cycle stages: children, pregnant women, families with young children, the elderly, and caregivers.

With an increasingly complex food supply, the opportunity increases for purveyors of misinformation to attract buyers. Consumers are increasingly interested in herbal remedies, fad diets, dietary supplements, and foods with associated health benefits. Americans are expected to spend \$30 billion on such items by the year 2010. However, many of these items are not well regulated and some cause serious side effects or even death. Cooperative Extension offers programs and sources of reliable information that assist consumers to evaluate claims associated with any herb, food, supplement, or diet plan.

Cooperative Extension has made significant progress in providing educational programming opportunities that increase healthy food choices among Pennsylvania adults and youths. During this fiscal year, 23,067 people participated in programs on nutrition across the life cycle, a nearly 40 percent increase. Of those participants, 14,843 demonstrated the use of the food guide pyramid and/or the nutrition facts panel to make healthy food choices.

Highlights of successful Penn State Cooperative Extension activities and documentation of their benefits are noted in the following section. A complete listing of programs is available at <http://pow.cas.psu.edu>.

	<b>FY2001</b>
Human Resources (FTEs)	17.53
Fiscal Resources (Smith-Lever)	\$420,666
Fiscal Resources (match)	\$420,666

## GOAL 3

**Through research and education on nutrition and development of more nutritious foods, enable people to make health-promoting choices.**

### **Planned Program – *Diet, Nutrition, and Health***

#### **KEY THEME – Wellness and Food Choices**

a. *Brief description of activity:*

Cooperative Extension field-based educators provide a variety of programming and collaborate with many local groups and agencies in response to the needs of their communities. These programs include topics such as weight loss, choosing healthy foods, understanding the Food Guide Pyramid and dietary guidelines, reading food labels, healthy hearts and bones, and nutrition for diabetics. Programs are developed by faculty members and educators, and can be adapted to meet the needs of varied audiences. Programs such as My New Weigh of Life, which emphasizes slow, steady weight loss through sound nutrition principles, and Wellness Road Map, are offered in many locations across the Commonwealth. The Wellness Road Map includes lessons on understanding your family health history, evaluating your own risk of diabetes, finding your target heart rate for exercise, planning more physical activity in your daily routine, and using food labels to make healthful food choices.

An array of programs reach children, families, community members, and senior citizens. Programs may involve small groups in rural areas, and many efforts target underserved groups, at-risk populations. For example, Franklin County has 1,964 families living below poverty level (1997 census). The Super Cupboard nutrition education program provides education through a series of lessons in a group setting. The classes are targeted to low-income audiences, families with young children, pregnant teens, and low-income senior citizens. An \$8,000 grant was obtained from Summit Health to execute this yearlong program. Collaboration with House of Grace, Financial Counseling, and other community groups helped ensure the success of the program. Seven sessions were held with 53 of the 63 initial participants completing the class series, an excellent completion rate for this clientele.

In addition to these types of programming activities, extension educators disseminate information through newsletters and interactive exhibits displayed at various venues—schools, health fairs, senior centers, malls, and the workplace. Over 600 residents in five counties received the *To Your Health Newsletter* from Snyder County. In a survey sent to 400 people, with a 30 percent return rate (120), 98 percent listed three or more ways they have used the newsletter to improve their diet or health.

b. *Impact/Accomplishment:*

Berks County

- 36 people completed three My New Weigh of Life (MNWL) programs

- 97% of the participants lost an average of 8 to 10 pounds during the 12-week session
- 86% of the participants increased their physical activity
- 99% indicated they learned the skills needed to reduce weight and maintain their weight loss

#### Butler County

- 11 participants in the MNWL program lost a total of 126 pounds in 13 weeks
- all participants reported eating a more balanced diet with portion control and adopting an exercise routine

#### Luzerne County

- 25 women and three men participated in MNWL
- 79% completed the ten-week program and filled out the evaluation survey:
  - 73% eating lower fat foods
  - 55% reading food labels
  - 45% exercising 3 to 5 times per week

#### Erie County

- Cardiovascular Risk Reduction Program, a program to raise public awareness, change attitudes, and change food purchasing and consumption habits regarding total dietary fats and saturated fats among county residents, was conducted in collaboration with the Erie Center on Health and Aging and other community partners.
- during first component of the program, 3,092 Erie County residents pledged to switch to 1% or nonfat milk
- milk sales figures showed a decrease in the amount of whole and 2% milk sold and an increase in the amount of 1% and nonfat milk sold

#### Mercer County

- over 75 participants successfully completed Wellness Road Map series
- 115 participated in this program as an independent "Learn at Home" series
- educator provided "train the trainer" sessions for four area residents to lead this program for their respective community groups

#### Allegheny County

- 36 participants completed Wellness Road Map sessions
- clients lost an average of 5 pounds during the 12-week session
- 55% reported changing the type and amount of fat they consumed

#### Sullivan County

- 48 at-risk youth (16–23 years of age) completed six nutrition lessons including hands-on food preparation
- demonstrated knowledge and attitude changes on food safety and basic nutrition
- all were able to read and interpret a nutrition label
- evidence of increases in food preparation ability

- 275 people participated in Sullivan County Health Fair
- all received reduced-price health tests, nutrition information, and viewed exhibits
- organization handling government food and food bank (TREHAB) requested assistance from extension to develop low literacy-level nutrition information
- handouts were developed by educator to be included in food baskets distributed by agency; 150 families received information on nutrition
- chart was developed that provided a guide to the amount of food to be distributed according to family size; resulted in larger families receiving enough food for their families, and the food bank reducing surplus food supplies

#### Beaver County

- over 500 people attended Herbs: The Good, the Bad, and the Ugly conducted at five senior centers and for other community groups
- 90% identified at least one interaction that an herb can have with prescription medication

#### Bucks County (with participants from Chester and Montgomery Counties)

- 226 attended programs on a variety of nutrition topics, e.g.,
- 9 pregnant and parenting teens learned basic nutrition and preparing simple foods
- 40 attended Latino Leadership Alliance Summer Camp: topics include the food guide pyramid and making snacks
- 86 students in five classes (grades 6–12) learned about healthy eating and snacking
- 10 school district nurses received eating disorder training
- 40 members of Chester County 4-H Day Camp learned about iron rich eating
- 34 attended Park Springs 4-H Summer Special nutrition program (75–80% of the group was an underrepresented ethnic group)

#### Berks County

- 50 to 60 campers (some handicapped) from five counties attended Regional Adult Camp with focus on foods and nutrition and leadership development
- as a result of the leadership development focus, Berks County women have assumed many camp leadership roles
- two attendees have become members of Family Living Advisory Committee, expanding membership of underrepresented groups on the committee
- two attendees started small craft businesses as a result of the skills they learned at camp

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific and Integrated Research and Extension.*

## **KEY THEME – Food and Nutrition Life Skills Across the Life Cycle**

### *a. Brief description of activity:*

A variety of programming topics are offered by Cooperative Extension educators related to food and nutrition life skills. Cooperative Extension program offerings include basic information on planning, shopping, and cooking; healthy eating; cooking for one or two, targeted to senior citizens; cooking for men; and healthy meals on the run. These programs reach audiences across the life span from childcare providers and youths to home care providers and the elderly. Many of the program offerings target underserved populations, and extension educators engage in collaborative efforts with local groups and agencies to enhance the reach and effectiveness of these programs. In addition, constituents in many counties preserve food at home and canning classes remain popular. The need for updated information on safe food preservation is important, since individuals may use outdated methods—handed down from older generations—which are potentially dangerous.

### *b. Impact/Accomplishment:*

#### Somerset County

- 33 participants in three counties attended presentation on safe canning techniques
- 89% of those who canned before planned to make changes in canning methods
- follow-up indicated that respondents shared information with 108 other people
- respondents canned 1,130 quarts of food using new procedures

#### Cambria County

- annual canning clinic offered; tested dial-gauge pressure canners
- over 25 dial-gauge pressure canners were tested for accuracy
- 95% needing repair; repairs were completed

#### Snyder County

- a total of 20 women and 4-H leaders participated in Food Preservation Update
- 15 participants completed evaluations
- 87% named a safe food preservation practice they will use

#### Centre County

- workshops on food selection and preparation that included food demonstrations and tasting presented to community groups
- 90% of the 72 participants tried at least one new food
- 90% indicated willingness to adapt the new food in their dietary plans, potentially leading to an increase of vegetable servings
- children's nutrition program reached 23 providers at Cen-Clear Child Care Services
- 96% of the respondents would recommend this training to others

#### Montgomery County

- 580 low-income youths (51% minority) reached through Summer Nutrition Program at summer day camps; 20 workshops offered at nine different locations

- \$5,400 received from county organization to hire intern to present the workshops

#### Wyoming County

- 76 participants attended the session on healthy behaviors targeted to the community
- 39 of 70 respondents planned to make a behavior change based on the program

#### Chester County

- Community Bridges, a workforce development/readiness program, developed using \$1 million dollar grant from the Mellon Corporation
- program focuses on life skills training (which includes nutrition and food resource management), job training skills, etc.
- 90% of participants agreed the class enabled them to feel more confident in preparing meals that were quick, less expensive, and healthful
  
- nutrition and food resource management (part of the life skills training) lessons adapted for use in training for agencies
- 16 participants completed training at "La Comunidad Hispania"
- participants received the curriculum in Spanish or English

#### Monroe County

- summer nutrition education program offered to limited resource families
- networked with community agencies to plan and coordinate resources, identify locations; 43 classes held at nine sites
- 571 children (6–12 years of age) participated in the project
- 12% scored 70% or above on the pretest; 32% scored above 70 on the post-test at the end of the 5-day classes
- new community partnerships for NEP programming were made with the Salvation Army, Bridge Street Housing, and Pocono Mountain Intermediate and Summer School

#### Clearfield County

- Alliance for a Healthier Community, a multi-county agency task force, determined through a survey that the community wanted more nutrition education for youths
- 600 students (grades 3–6) attended the 2-day Nutrition and Healthier Eating Fair held at an elementary school
- 574 students returned surveys after the event, rating their current eating habits
- surveys distributed to 600 students 3 weeks after the event; 534 surveys were returned
- results indicated the following change by all participants:
  - increased or added more servings of milk each day
  - increased or added more servings of fruits and vegetables each day
  - decreased the number of cans of soda consumed each day
  - 55% increase in the number of participants eating breakfast more than three times a week

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*



## **KEY THEME – Combating Misinformation That Influences Food and Health Decision Making**

### *a. Brief description of activity:*

A faculty member in the Food Science Department developed a Nutrition Information Resource Center (NIRC) <<http://nirc.cas.psu.edu/index.cfm>>. The site offers information about food science and nutrition with links to many other nutrition Web sites. Online fact sheets and other publications are available. The NIRC has a library of food and nutrition materials, and provides direct lending services to teachers, dietitians, family and consumer scientists, as well as other food, nutrition, and health professionals. Consumers are increasingly interested in herbal remedies, fad diets, dietary supplements, alternative medicine, and foods with associated health benefits. Nutrition programming offered to the community often sparks questions regarding recent press releases that involve nutrition, and extension educators need to respond with current information and offer sources of reliable information.

### *b. Impact/Accomplishment:*

#### Delaware County

- Herbs: Growing, Cooking and Medicating was updated and offered for the third year
- team-taught with urban gardening coordinator and local health foods store owner
- of 50 evaluations, all increased confidence in choosing herbs to plant or cook
- all participants listed two new facts they had learned about herbs

#### Mercer County

- need for program determined by Advisory Committee due to conflicting information on herbs in the media
- 285 attended program, Herbs: To Your Health
- 105 participants increased knowledge about what to look for on a label when purchasing herbs
- 52 participants correctly identified two potential interactions between herbal supplements, medications, and/or nutritional supplements
- 52 participants correctly answered question regarding appropriate Food and Drug Administration labeling claims for herbs
  
- 80 attended workshop, Thyme for Herbs
- 63 evaluations received indicated that within the next 3 months:
  - 40 plan to plant their own herb garden
  - 53 plan to try a new recipe using herbs
  - 43 plan to make their own herb-flavored vinegars, butters, or honeys
  - 36 plan to study more about herbs

### *c. Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

### *d. Scope of Impact—State specific.*

## GOAL 4

**Enhance the quality of the environment through better understanding of and building on agriculture's and forestry's complex links with soil, water, air, and biotic resources.**

### Overview

Penn State Cooperative Extension accomplishments in Goal 4 for the second year of the five-year plan of work were very satisfactory. Penn State is dedicated to the integration of research and extension, and faculty and county-based educators collaborate to develop and successfully implement the objectives of the five-year plan of work, seeking continuous input from citizens, local advisory groups and boards, the Pennsylvania Council of Cooperative Extension Associations, and the Penn State Agricultural Advisory Council. As outlined in the plan of work, Cooperative Extension emphasizes two overarching goals: (1) improving watershed management to enhance water quality; and (2) improving sustainability of Pennsylvania forests. Within each of these areas, sub-goals and objectives guide Cooperative Extension faculty and field-based educators in solving the issues critical to a diverse clientele.

Pennsylvania has long been known for its abundant water resources, with six major watersheds in the state. One of these, the Susquehanna, provides more than 50 percent of the fresh water entering the Chesapeake Bay. Pennsylvania also has the largest rural population in the U.S. (over 3 million people). Most of that population gets its drinking water from private wells and springs (900,000 individual wells), and monitoring water quality is the responsibility of individual residents. Residents need to be informed about the types of contamination possible in their systems and how to address those problems. In addition, heavily agricultural regions of Pennsylvania have surface and groundwater pollution problems associated with nutrient applications to farmland and disposal of animal and food processing wastes.

Cooperative Extension faculty and field-based educators are fully engaged in providing educational programs to homeowners, landowners, and the public regarding issues of water quality and watershed stewardship. During the fiscal year, 9,655 people participated in educational programming related to watershed management and water quality; 1,859 of those participants took action to protect or enhance water quality.

The environmental benefits of forested acreage, such as high-quality water resources, diverse animal and plant life, and influences on climate and air quality are an invaluable consideration for the entire populace. Pennsylvania's 17 million forested acres support a \$4.5 billion per year forest products industry that employs 90,000 people. Recreation and tourism generate additional revenue and employment. Nearly three-quarters of Pennsylvania's forest land is owned by more than 500,000 private owners who generally are unaware of their management opportunities. Fewer than 25 percent of Pennsylvania's private forest landowners know where to get professional resource management assistance or are aware of the management options that can improve their returns from

and enjoyment of their land. To provide landowners and forestry professionals up-to-date and timely information about forest taxes, faculty in the Department of Forest Resources offered forest taxation workshops in more than 10 counties in Pennsylvania, Maryland, and West Virginia. Three hundred landowners attended these workshops, which included information on the importance of taxes and record keeping for management planning, understanding Federal income taxes, estate planning, and Pennsylvania's Clean and Green preferential property tax program.

Through on-site visits and educational programming for both adults and youths, Cooperative Extension field-based educators address critical forestry issues and assist landowners and the general public in gaining the necessary knowledge to increase the sustainability of Pennsylvania forests. 3,578 adults and 2,028 youths participated in programs related to private forest land management during the second year of the plan of work. Additionally, 2,560 participants demonstrated increased knowledge and skills needed to increase the sustainability of private forest lands, and 670 youths, participating in structured events, demonstrated knowledge of basic forestry skills.

Highlights of successful Penn State Cooperative Extension activities and documentation of their benefits are noted in the following section. A complete listing of programs is available at <<http://pow.cas.psu.edu>>.

	<b>FY2001</b>
Human Resources (FTEs)	16.32
Fiscal Resources (Smith-Lever)	\$436,992
Fiscal Resources (match)	\$436,992

## GOAL 4

**Enhance the quality of the environment through better understanding of and building on agriculture's and forestry's complex links with soil, water, air, and biotic resources.**

### **Planned Program – *Watershed Management and Water Quality***

#### **KEY THEME – Private Water System Management**

a. *Brief description of activity:*

Much of Pennsylvania's population gets its drinking water from private wells and springs (900,000 individual wells). These private wells and springs are not subject to regulation, beyond general zoning regulations. Monitoring is the responsibility of individual residents, and many residents need to be informed about the types of contamination possible in their systems and how to address those problems. In many counties, problems are common due to a large low-income rural population and a lack of operating sewage systems at many residences. Accurate interpretation of water quality analyses is a critical need.

Extension educators provide information that assists clientele in understanding water quality problems, encourages testing, and aids in interpreting test results. Topics include maintaining a private drinking water system, including water testing and wellhead protection, watershed issues, siting and maintenance of septic systems, and protection of ground water. Extension educators collaborate with a variety of local organizations and agencies to help citizens maintain and protect safe drinking water, and many counties conduct safe drinking water clinics and workshops to provide information to clients and assist in water testing. For example, in Fulton County, over 150 water sample bottles were distributed to citizens in response to water pollution problems throughout the county. Different types of contamination were identified, and many systems were treated to ensure water quality.

b. *Impact/Accomplishment:*

Franklin County

- sponsored the 13th annual water testing program in spring 2001
  - 98 people participated in sampling and testing their own private water supply
  - 13 year program results indicate:
    - over 1,415 people have participated in the last 13 years
    - about 25% (N=353) of attendees demonstrated increased knowledge
    - about 10% (N=141) of participants changed practices
    - on average, about 1/3 of the samples exceeded MCL\* for coliform
    - about 15% of the samples exceeded MCL for nitrate
    - about 10% of the samples exceeded MCL for lead
- \* MCL (maximum contaminant level)

- One homeowner tested his water and found high iron level in his water supply. After attending water quality educational meeting, he installed an oxidation-filtration system and believes his action adds value to the property in addition to making the water safer.

#### Greene County

- 7 county families took active steps to improve the quality of their water after receiving test results
- livestock producers improved the quality of water available to their herds through spring development, which requires significant planning and investment resources

#### Westmoreland County

- In conjunction with an intern from Penn State's Schreyer Honors College, a survey was conducted to determine the health concerns of residents who depend on private water supplies for drinking.
- of the 1,369 surveys sent, 369 were returned; 44% (162 surveys) use private water supplies
- a message board for asking questions was created for the water quality section of the Web site
- 107 people participated in five Safe Drinking Water Clinics to learn the importance of testing their drinking water to ensure safety
- as a result of the clinics, participants can identify common water pollutants
- increased knowledge reported about managing water supplies and septic systems to avoid contamination

#### Monroe County

- water tests were conducted before Safe Drinking Water Clinic with results provided at the meeting
- 100% (N=10) of the individuals who did not have their water tested before the program planned to do so
- evaluation indicated increased knowledge (on a scale of 1–7):
  - Water supply testing fundamentals—before = 2.72, after = 5.89
  - Test result interpretations—before = 2.56, after = 5.69
  - Water treatment options—before = 2.23, after = 5.35

#### Susquehanna County

- 99 water test kits were distributed to various grocery outlets, in collaboration with the League of Women Voters:
  - 5 test results showed the presence of coliform in the drinking water supply
  - residents disinfected their supplies and retested; all but one eliminated the problem
  - one resident purchased equipment to eliminate the problem

#### Wayne County (and two surrounding counties)

- 50 participants attended On-lot Septic System Seminar
- demonstrated increase in knowledge gained:
  - septic system management—95% increase

- fixing septic system problems—155% increase
- actions planned by participants as a result of the seminar:
  - 85% planned to clean septic tank regularly
  - 68% planned to perform routine maintenance
- 85% of participants in Safe Drinking Water Clinic understand contamination can cause health problems
- 80% know they are responsible for water quality
- 79% know that looks, smells, and tastes do not indicate quality

#### Sullivan County

- 90% of the 28 attendees at the Safe Water Symposia had their water tested for bacteria
- 13 of the 46 people contacted who had potentially health-threatening bacteria safely treated their water supply
- One investigation uncovered a contaminated well that was causing production problems for a veal producer. Producer drilled a new well at a different location.

#### Mifflin County

- 22 clients completed water quality analysis on their home water source
- 18 clients applied proper techniques of disinfecting home water systems

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

### **KEY THEME – Watershed Stewardship: Management Tools for Enhancing Water Quality**

a. *Brief description of activity:*

Cooperative Extension educators are involved in an array of educational programs related to watershed stewardship: i.e., watershed management, pond and lake management, habitat management, soil run-off, and various water quality issues. Educating the public about watersheds and the role individuals play within their own watersheds is the focus of many activities. In Westmoreland County, 25 people attended the watershed workshop, entitled Your Community, Your Watershed. The workshop was designed to inform members of watershed groups, teachers, and concerned citizens about watershed organizations, abandoned mine drainage, household water quality issues, backyard conservation, erosion and sediment control, as well as storm water management. In addition, because of continuing efforts of Cooperative Extension educators, local public officials increasingly recognize the credibility of their work in the area of septic system management to protect watersheds.

### **Watershed Management**

b. *Impact/Accomplishment:*

#### Franklin County

- 48 participants attended training session on watershed conservation practices

- 81% of the survey respondents indicated increased knowledge of watershed conservation practices
- community watershed educational project developed
- over 500 residents received educational brochure about the watershed during site visit
- extension educator enhanced collaborative efforts with the Pennsylvania Association of Sewage Enforcement Officers and with supervisors in 21 townships
  
- 171 eighth grade students participated in field day
- 95% identified three or more practices they could do to protect water quality
  
- 4 watershed education workshops conducted for youths as part of an environmental science camp at Wilson College
- 100% of the youths constructed a watershed model and identified four methods individuals can use to protect groundwater
  
- educator participated with regional Resource Conservation and Development Council to develop Pennsylvania Department of Environmental Protection grant application
- approximately \$493,000 awarded to provide technical assistance to local watersheds
- 4 watershed groups in Capital Region have received technical assistance

#### McKean County

- members of a high school student organization, "Port Pride," attended a McKean County Commissioners meeting to describe illegal dumping problem in the county and request help
- extension educator organized a meeting of concerned citizens which resulted in the formation of the first Pennsylvania CleanWays McKean County Chapter
- educator submitted a Growing Greener grant in the amount of \$33,884 which was funded to support a County Illegal Dump Survey and clean up for four illegal dumps
- 58.43 tons of trash and 745 abandoned tires removed from illegal dumps
- 87 volunteers donated 640 volunteer hours

#### Westmoreland County

- extension educator collaborated with the Conservation District to provide water quality baseline data for Whitethorn Creek, a stream affected by agriculture
- used bio-sampling and other techniques to determine the quality of the stream
- quarterly water samples gathered to record changes in quality over time and help determine the benefits of implementing agricultural Best Management Practices
  
- watersheds and sustainable communities curriculum presented to 16 county teachers
- encouraged teachers to bring students to the new Center for Conservation Education

### **Pond and Lake Management**

#### *b. Impact/Accomplishment:*

#### Sullivan County

- 25 people have undertaken some type of habitat improvement

- Pond Weed Control meeting hosted in cooperation with the Conservation District and Cgnet Inc. to assist pond owners in employing IPM methodology to control aquatic weeds
- 28 of the 33 individuals attending the meeting significantly improved knowledge of pond weed management

Wayne County

- 140 participants attended management workshops on lake ecology and management, aquatic plants, aquatic plant and algae management and control, and pond construction
- knowledge gain on topic of lake ecology and management—90%
- knowledge gain on topic of herbicide permits—177%

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

## **Planned Program – Sustaining Pennsylvania Forests**

### **KEY THEME – Management on Private Forest Lands**

a. *Brief description of activity:*

In Pennsylvania, 12.5 million acres of forest land are privately owned, and these owners need to understand approaches to effective management/stewardship of their land that will ensure future sustainability. Cooperative Extension provides educational programs covering topics on forest management, the economic and sociological impact of forest land, forest income and taxes, wildlife management, and protecting forests from insects and disease. Cooperative Extension works in partnership with state and federal agencies, organizations, industry, and landowners. These partnerships help facilitate programming and educational outreach.

Volunteers are a significant resource supporting educational programs in Pennsylvania. For example, volunteers played important roles in planning, facilitating, and moderating seven regional landowner conferences, hosting nearly 1,500 participants. Woodland owners, students, and professionals attended the sessions and learned how to apply techniques in managing for biodiversity, how to establish objectives, and how to consider their impacts on neighboring properties. Participants developed an understandings of how cutting changes forest conditions, and they gained knowledge about the importance of using resource professionals to mark and manage their forests.

b. *Impact/Accomplishment:*

Franklin County

- 36 participants attended wildlife habitat enhancement workshops
- 80% of the participants indicated they would implement two or more of the techniques presented to enhance wildlife habitat in their woodlot



- extension educator participated in a planning meeting with Bureau of Forestry staff, Pennsylvania CleanWays staff, and community planners on a project to clean up illegal dumping in public forest areas
- 16 woodland owners attended extension presentation on preventing illegal dumping
- 94% of participants indicated they would implement two or more of the techniques presented to reduce illegal dumping

McKean County (with participants from two surrounding counties)

- 55 private forest landowners participated in surveying workshops sponsored with the North Central Forest Landowners Association
- participants indicated they learned how to read their deeds and maintain their boundary lines

Snyder County (and surrounding region)

- 8 woodland owners developed a forest management plan and implemented forest practices, as a result of on-site inspections and recommended practices

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

**KEY THEME – 4-H/Youths and Sustainable Forests**

a. *Brief description of activity:*

Forestry education for 4-H members and youths is an important approach to reaching families and the next generation of decision makers about the critical issues related to forest stewardship and forest sustainability. Through 4-H projects, participation in Field Days, day camps, and other forestry events, members can learn basic forestry skills. Programs designed to enhance youth development through school enrichment programs related to natural resources are expanding to serve a more diverse audience of youths. These hands-on programs also provide opportunities for teacher training and community involvement. One hundred public school teachers from across the Commonwealth attended a one-day program on forest resources and sustainable forestry. They learned to use a packet of lesson plans on sustainable forestry, and visited a forest management demonstration area. Additionally, ten public schools cooperated in the development of school stewardship forests on their property. Numerous field days and outdoor sessions staged in association with these involved an estimated 2,000 youths.

b. *Impact/Accomplishment:*

Statewide

- 185 high school youths participated in weeklong natural resources learning experiences at three summer residential programs
- participant knowledge levels increased 20%.
- 60 public school teachers enrolled in a Forest Resources Institute for Teachers (FRIT)
- pre- and post-tests indicated a 25% gain in knowledge about forest, wildlife and water

### Crawford County

- 4-H Dairy Day for 7-, 9- and 12-year-olds to familiarize them with maps and orienteering compasses
- field tour to a nearby riparian zone, where they referred to the map and oriented the map to landscape and by compass
- all youths demonstrated proper use of the compass in describing the bearing of an object
- all participants understood the description of three zones of riparian protection

### Bradford County

- 4-H Forestry Skills program provided hands-on experience in tree identification and orienteering
- members could identify at least 10 Pennsylvania trees using a key
  
- Pennsylvania 4-H Forestry Field Day
- members from throughout Pennsylvania learned and demonstrated forestry skills
- The four highest scoring 4-H members were chosen to represent Pennsylvania at the National 4-H Forestry Invitational. They placed 9th out of 19 states participating.
  
- Forests for All Ages: program focused on the importance of forests to the economy of Pennsylvania and forest management
- 100 people (youths and families) participated
- attendees successfully identified trees and demonstrated tree measurement skills

### Indiana County

- 67 youths participated in three 4-H Day Camps with the theme of forestry and wood products
- \$2,500 Pennsylvania Department of Agriculture (PDA) grant was received to help sponsor the camps and enable enhanced programming
- campers gained knowledge (16-point pre- and post-test): test scores increased by 6.85, 7.08, and 6.05 points respectively at the three camps
  
- 35 campers attended Camp Sunrise; programming provided for the camp for mentally handicapped children

### Clearfield County

- \$2,500 grant received from PDA to develop a Nature Education Trail, enabling enhanced programming
- trail built by junior high school students enrolled in 4-H project: Trees + Me = Forestry
- students demonstrated leadership skills hosting tours of the trail for elementary students and the public
- trail is maintained by students and their teachers, demonstrating student responsibility
- 97 students were rewarded for their work, receiving blue ribbons on the 4-H project books they completed

### Mercer County

- 4-H clubs, school enrichment programs, and teacher workshops offered
- through FRIT, teachers learned about the importance of the forest resources industry to the Pennsylvania economy
- 23 area teachers acquired accurate information and tools to teach curricula
- teachers developed four detailed lesson plans based on information/training provided at FRIT; about 45% of the teachers reported reaching more than 370 students

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

### **KEY THEME – Sustainable Forestry for Resource Professionals**

Pennsylvania has more private forest landowners than any other state. These owners have, on average, a very short tenure: i.e., less than 13 years. Timber harvesting rates are increasing rapidly, and high grading (cutting the best and leaving the rest) is pervasive. A 1995 study indicated that most timber harvests result in unsustainable outcomes.

Therefore, communicating the need for forest stewardship to ensure long-term forest health is paramount. The Commonwealth of Pennsylvania employs 42 Cooperative Forest Management (CFM) Service Foresters to cover all 67 counties. These foresters have traditionally focused on technical service, are well respected for their efforts, and are frequent collaborators with extension faculty and field-based educators.

Unfortunately, they service fewer than 3,000 forest landowners annually, using technical assistance.

a. *Brief description of activity:*

Penn State Cooperative Extension faculty, in collaboration with CFM foresters and a subcommittee appointed by the State Forester, are crafting a new approach for building agency partnerships and for delivering educational programs. The dialogue about approaches to reaching a larger cross section of the private forest landowners, educational materials, and program delivery is increasing. Discussions regarding peer education through VIP-Coverts volunteers continue to be positive. VIP-Coverts volunteers in each of Cooperative Extension's eight extension regions share outreach ideas and strengthen working relationships among extension personnel and local Bureau of Forestry service foresters to increase the effectiveness of local/regional natural resource educational outreach efforts.

Cooperative Extension educators provide classroom, hands-on, and field presentations to loggers, resource professionals, forest industry personnel, and landowners on the critical issues related to sustainable forestry.

b. *Impact/Accomplishment:*

Statewide VIP-Coverts Volunteer Training

- 20 new volunteers completed 40 hours of training in forestry and wildlife management
- statewide 250 volunteers serve in various roles supporting forest landowner educational programming
- a survey, with 150 respondents, found that they volunteered more than 12,000 hours
- volunteers support extension outreach education by assisting to plan, host, and facilitate county and regional meetings, hosting tours of their properties
- volunteers helped establish 18 county and multi-county forest landowner associations, which further extend extension programming

Bradford County (with participants from three surrounding counties)

- 60 loggers collected and analyzed data from a potential timber harvest area thus demonstrating their ability to determine the impact the harvest operation may have on nongame wildlife species
- skill enabled them to modify operations to meet landowner goals

McKean County (with participants from across the Commonwealth)

- Sustainable Forestry II Course provided participants with tools to evaluate timber harvests sustainability (Timber Harvest Assessment Tool)
  - 50 loggers and natural resource professionals participated in a "train the trainer" course
  - most indicated they will use the information to determine sustainability of future timber harvests
- 
- 288 participants attended "Meeting the Challenges of Sustainable Forestry in Pennsylvania," a conference designed to foster dialogue among private forest landowners, natural resource professionals, and forest industry personnel, and to enhance future interactions and actions of forestry practice

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

## GOAL 5

**Empower people and communities, through research-based information and education, to address the economic and social challenges facing our youths, families, and communities.**

### Overview

Penn State Cooperative Extension accomplishments in Goal 5 for the second year of the five-year plan of work were highly satisfactory. Penn State is dedicated to the integration of research and extension, and faculty and county-based educators collaborate to develop and successfully implement the objectives of the five-year plan of work, seeking continuous input from citizens, local advisory groups and boards, the Pennsylvania Council of Cooperative Extension Associations, and the Penn State Agricultural Advisory Council. As outlined in the plan of work, Cooperative Extension emphasizes five overarching goals: (1) increasing the quality of child care, (2) strengthening the capacity of families and communities; (3) increasing youths life skills; (4) developing leadership capacity in adults and youth; and (5) increasing the understanding of public policy issues. Within each of these areas, sub-goals and objectives guide Cooperative Extension faculty and field-based educators in solving the issues critical to a diverse clientele.

Child care needs have increased tremendously over the past decade. Child care concerns can cause work-related issues such as absenteeism, distraction on the job, and decreased job satisfaction. Research suggests that access to affordable, high-quality child care is critical to success on the job. According to research by a Penn State faculty member, in Pennsylvania the overall quality of infant care is dropping, and the ratings of child care for infants and toddlers are lower than desirable. The training of child care providers continues to be an area of high priority for Penn State Cooperative Extension. This year participation in this area has nearly doubled. Extension field-based educators and faculty report that 18,965 child care providers engaged in professional development activities during the year; 16,994 of these participants increased their knowledge, skills, and abilities regarding appropriate child care practices.

Cooperative Extension educators provide valuable programming that supports parents, strengthens families and youths, and addresses issues of an aging population. Also, new research-based educational programs on the prevention of alcohol, tobacco, and other drug use are reaching out to middle-school youths. Community capacity building is another theme important to Cooperative Extension, and faculty and educators collaborate with a variety of community groups and agencies to help solve issues related to the development of caring, safe, and productive communities. Significant accomplishments are reported in the area of strengthening the capacity of families and communities. A total of 1,706 interagency collaborations—a 50 percent increase—were reported this year, and 21,836 youths and/or parents improved social and communication skills.

Cooperative Extension in Pennsylvania has a proven record of programs to help youths become productive, contributing members of society and leaders of tomorrow. Youth development programs focus on educational programming in areas such as life sciences, citizenship, leadership, and personal development. While extension reaches youths through traditional 4-H programs, expanded after-school programs and programs targeted to more diverse, underserved clientele are increasingly evident. A total of 158,282 youths participated in 4-H and youth development programs with 114,980 of these youths demonstrating life skills such as decision making, record keeping, communication, and problem solving.

Leadership education is a major focus for Cooperative Extension and significant success is reported this year in the preparation of both youths and adults to meet the demands of the 21st century. A wide variety of extension education programs and resources are available to assist individuals in learning to take action, to make changes in their lives, and to assume leadership roles in a global society. A key ingredient of the Cooperative Extension system is the high degree of involvement of citizens in the planning and delivery of educational programs at the local level. To develop and support this system of volunteer staff requires a considerable time commitment to recruit, train, and update skills so that volunteers can effectively support extension programs. Cooperative Extension staff and faculty report that 13,003 persons participated in formal leadership and volunteer development educational programs, and 15,531 participated in ongoing volunteer and leadership activities (e.g., extension boards, committees, 4-H and youth volunteers, Master Gardeners, etc.). The total number of persons who increased knowledge and/or demonstrated leadership skills in this area reached 22,516.

Cooperative Extension assists in the development of skills needed to understand current and emerging public policy issues. Working with local officials, community organizations, and individuals, Cooperative Extension plays an important role in providing relevant educational programming and services, most recently in agriculture and land-use issues. A total of 17,258 people participated in programs related to public policy issues, and 7,461 indicated increased knowledge and understanding of public policy issues such as local taxation, land use, environment and natural resources, and economic development.

Highlights of successful Penn State Cooperative Extension activities and documentation of their benefits are noted in the following section. A complete listing of programs is available at <http://pow.cas.psu.edu>.

	<b>FY2001</b>
Human Resources (FTEs)	196.95
Fiscal Resources (Smith-Lever)	\$4,811,281
Fiscal Resources (match)	\$4,811,281

## GOAL 5

**Empower people and communities, through research-based information and education, to address the economic and social challenges facing our youths, families, and communities.**

### **Planned Program – *Strengthen and Support Family Well-Being***

#### **KEY THEME – Child Care**

Child care needs have increased tremendously over the past decade, as the number of single-parent families and families with two wage-earners increases. In 2000, 65.3 percent of mothers with children under 6 were in the labor force (U.S. Department of Labor, Bureau of Labor Statistics). It is well documented that increased education of child care providers significantly improves the care provided to children in their care. Training child care providers continues to be a priority for Penn State Cooperative Extension. To meet this educational need, county-based educators provide an array of programs across the Commonwealth designed specifically to address child care concerns in their regions.

#### **Better Kid Care (BKC)**

##### *a. Brief description of the activity:*

Penn State Cooperative Extension's Better Kid Care Program provides educational materials and resources, satellite broadcasts, Internet-based workshops, telephone help lines, videos, and educational activities for child care providers, parents, and employers. The Pennsylvania Department of Public Welfare (DPW) requires child care providers to have 6 hours of training annually. Cooperative Extension meets this need by offering unique training opportunities conducted through satellite and on-site training sessions. The Cooperative Extension educators who offer BKC programs strive to provide an appropriate balance between direct training and satellite downlinks, which are cost-effective.

The Better Kid Care satellite training workshops originate from Penn State and are uplinked and broadcast nationwide on KU band and C band channels. Eight satellite workshops are produced and up-linked each year along with accompanying marketing and printed materials. The broadcasts are down-linked in county and state Cooperative Extension offices, resource and referral agencies, community colleges, school districts, libraries, public television stations, and a variety of other agencies throughout the United States. The satellite broadcasts are streamed live on the satellite, thus making the broadcasts accessible to early childhood educators around the world. The satellite workshops are also archived on the Better Kid Care Web site—making them available to virtually anyone at any time. Training credits are awarded to all participants who fulfill the necessary requirements.

Penn State's Learn-At-Home Video Training Modules are also available to child care providers, offering additional hours of training credit for participants. Many nonlicensed home-based clients also requested and received Better Kid Care kits and reference manuals, which contain useful information on child-care issues and parenting. These are available at no charge for anyone responsible for the care and supervision of a child. County-based educators visit unregistered providers, distribute educational literature, and several counties have established newsletters to continue communications with established clientele. Additionally, 35 counties offer Better Kid Care outreach to child care providers who are relatives/neighbors.

In addition to the programs and resources noted above, several counties reported receiving grant funds. These funds allow staff to hire BKC coordinators and to support child care training activities. BKC programs across the Commonwealth serve a variety of audiences, particularly children, youths, and families at risk and underserved audiences.

*b. Impact/Accomplishment:*

Nearly 19,000 child care providers in 66 counties received over 47,000 hours of training across the Commonwealth via satellite and direct training through BKC programs. Over 100,000 providers in 46 states participated in each satellite training workshop. Over 5,000 providers enrolled and completed distance education training units and engaged in over 10,000 hours of Learn-At-Home video training. Almost \$1 million in grant funds to support BKC training have been awarded Penn State Cooperative Extension during the fiscal year. Additional benefits of the BKC program have been reported by extension educators. For example, three child care centers started 4-H clubs for summer youths, and graduates of BKC workshops became volunteers in other Cooperative Extension programs.

### **Additional Educational Programming**

Child care providers need training in many aspects of their work. In addition to providing quality child care, providers need assistance in administering programs effectively, annual training to meet state compliance standards, guidance in managing staff, and day care record keeping. Educators in many counties offer a variety of unique programs.

*a. Brief description of the activity:*

Survival Skills for Child Care Directors

This 6-hour conference in Montgomery County—offered to 90 child care directors serving children, youths, and families at risk—was planned by child care directors who also served as panelists.

*Impact/Accomplishment:*

The overall quality of training was ranked 4.5, based on a scale of 1 to 5 (5=highest).

Meeting Training Requirements

The DPW requires child care providers to acquire 6 hours of training each year. Delaware County's Child Care Advisory Board, the planning and working committee



for two large direct-training programs, organized a full day workshop, "Come Together, Fall 2000." A spring program was planned to provide 3 hours in an evening format.

*Impact/Accomplishment:*

A total of 131 people attended the fall 2000 program. Evaluations indicated that 97 percent (of 110 evaluations) rated the workshop as very useful with many positive comments about the speakers, format, location, and what they would take home to use in their child care settings. Twenty-nine providers from family home, group home, centers, school age, and others attended the spring 2001 program. Sixty-one percent were African American women and 29 percent were White women. All providers would recommend the programs to others.

Update for Child Care Professionals

Lackawanna County educators offered two 2-hour training sessions to 15 unregistered child care providers to acquaint them with extension resources, update them on subject matter, and inform them about Pennsylvania Department of Public Welfare (DPW) regulations.

*Impact/Accomplishment:*

Nine out of the 10 who attended the first program registered for other child care workshops and used the child care resource library. Because of the positive response, a second workshop was scheduled.

Community Development

Cooperative Extension educators actively support communities in determining and meeting child care needs. Educators participate with business and industry leaders, serve on special task forces, and provide community outreach on child care issues. As a result of a local child care planning meeting, Wayne County extension staff organized meetings for employers, entitled *Exploring Employer Options for Child Care*.

*Impact/Accomplishment:*

A total of 21 people, representing 12 businesses, attended one or more of the meetings. These meetings resulted in:

- more discussion and publicity surrounding the issue,
- discussion on pursuing a \$50,000 grant to develop quality day care,
- interest in working with existing child care providers to improve quality of care,
- a survey of bank employees' child care needs, and
- establishment of an on-site child care facility at a local business.

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific, Multistate Extension (46 states across the country participate in Better Kid Care program), and Integrated Research and Extension.*

## **KEY THEME – Parenting Education, Aging Issues, Family Structures, Family/Youth Resiliency**

### **Parenting Education**

Extension educators continue to provide parenting programs for a variety of audiences across the Commonwealth, from grandparents, fathers, and foster parents to teens and underserved populations such as prison inmates. In Venango County, 19 inmates attended at least one segment of a six-part program and five completed the entire program. One father, who had no relationship with his children, used the materials to write to his children.

a. *Brief description of the activity:*

Butler County educators presented six (1-hour) programs on parenting to 180 men (84 percent African American) in Beaver County at the Tom Rutter House for Alcohol and Drug Rehabilitation. Four (2-hour) programs on parenting skills were presented to 28 inmates at the Butler County Prison. A 2.5-hour program on single parenting was presented to 16 pregnant teens at the Butler Senior High School.

b. *Impact/Accomplishment:*

- 68 will employ two new methods of positive discipline (Tom Rutter House)
- 96 can identify 4 reasons or more to implement adolescent monitoring methods
- 16 from Tom Rutter House and 6 from Butler Prison will initiate contact with their children as a result of the program
- 9 pregnant teens can recognize six developmental steps of infancy as a result of parenting program

a. *Brief description of the activity:*

Many publications about parenting are developed and distributed by extension educators. An example is *Toddler Topics*, a six issue learn-at-home program that offers parents education in the home; 22,000 sets were printed and distributed within 34 counties last year. *Toddler Topics* is an effort of the nine southwest Pennsylvania counties. The Office of Child Development of the University of Pittsburgh has identified *Toddler Topics* as one of Allegheny County parents' favorite publications for information on parenting. *Toddler Topics* was posted on the Web, for the first time, and received the third highest number of hits for Westmoreland County's Web site.

*Tween Topics* is designed to help parents navigate the 'tween' years. Last year 10,000 copies were printed and distributed within 34 counties. When a Luzerne County educator was making arrangements to distribute the *Tween Topics* publication to the parents of Wyoming Valley West sixth grade students, their guidance counselor voiced concern about the abnormally difficult time the sixth-graders were having transitioning from elementary to middle school. After brainstorming ideas, it was decided that a 'tween' development presentation be offered for class members. The interactive presentation delivered by the guidance counselor and the extension educator was well

received, judging by students' appropriate behavior and responses. More than 400 students participated in the educational experience.

*b. Impact/Accomplishment:*

- 134 (37%) parents of Wyoming Valley West sixth grade students responded to the *Tween Topics* Reader's Survey
- 96% rated the publication overall good or excellent
- 68% increased their knowledge about communications with teens

## **Aging Issues**

With the elderly population ever increasing, those that work with the elderly need updated and pertinent information related to this population. In Pike County, 38 service providers attended Enhancing Skills for Eldercare this programming year. Two, 6-hour training sessions on Personal Care Home Training were held for 84 participants in Westmoreland County.

*a. Brief description of activity:*

Twenty-three persons were enrolled in a workshop series for personal care home providers in Allegheny County to increase their knowledge and skills in caring for disabled and elderly persons. Fifty persons visiting the extension exhibit at Senior Fairs conducted in one area of the county learned about extension resources on aging issues.

*b. Impact/Accomplishment:*

Twenty-three personal care home providers completed mandated 6-hour training to maintain certification status as personal care home providers.

*a. Brief description of activity:*

Cooperative Extension collaborated with the Elder Services Committee in obtaining funds to create a directory of all services available for seniors living in Susquehanna County (abuse, adult day care, consumer information, counseling, education, health care facilities, emergency assistance, employment, financial assistance, food banks, government, home health services, hospice services, housing, legal services, Medicare, medical equipment, personal care homes, social security, skilled nursing facilities, transportation, veteran affairs, and volunteer opportunities).

*b. Impact/Accomplishment:*

Funding was obtained from several local banks and the Area Agency on Aging to print 20,000 copies of the directories. The directories were circulated in a free weekly county publication that is sent to over 17,800 people in Susquehanna County. Other directories were distributed at senior centers, health care facilities, and other agencies. Many positive comments have been received by the entire committee involved with this project.

## **Family Structures**

Cooperative Extension provides programming to strengthen the capacity of families in various family structures and reaches a variety of audiences. Employees in industry have a need for programs that help them with stress management, time management, family communications, and other topics in the family living area. In Lycoming County, extension educators used their contacts in industries to provide information about family living programs. A brochure distributed to industry staff during a visit described the lunch or dinner hour programming. Nine sessions were planned and 130 people attended. In an evaluation conducted with several classes of time/stress management training, 50 percent of the participants indicated that they were using time/stress management techniques 1 month after the training.

### *a. Brief description of activity:*

Bradford County extension educators are responding to meet the needs of families of different cultures in the area. They are providing resources in Spanish on family strengths and are collaborating with the Migrant Education Program and Bradford County Literacy Program to begin planning an event for Mexican families who have moved into the county for employment. They also contacted Human Resources staff at Taylor Meat Packing (employing 75 Mexicans) regarding needs of these families.

### *b. Impact/Accomplishment:*

- Family strengths information in Spanish is available from the extension office
- Taylor Meat Packing requested a list of Spanish materials available

## **Family/Youth Resiliency**

### *a. Brief description of activity:*

Educators in Luzerne County are involved in a program entitled "Improving Schools and Communities Utilizing PATHS" for at-risk children and families. The South Wilkes-Barre and Heights sections of Wilkes-Barre City were designated by former Pennsylvania Governor Tom Ridge as a Weed and Seed Area. This specification corresponds with high crime and unemployment rates, inadequate housing, economic difficulty, and other community problems. The extension educator was contacted to help address the educational needs of those living in the specified area. Working with the Children's Alliance and the Executive Directors of the city's Weed and Seed Programs, a proposal for educational intervention was submitted based upon the risk factors evident in the school-age population and the underserved population. An intervention incorporating the PATHS (Promoting Alternative Thinking Strategies) curriculum for elementary school students and the Functional Family Therapy program for at-risk families with middle school students was chosen to address the educational needs of the community.

PATHS focuses on creating a pleasant classroom environment where more learning can take place. This intervention curriculum has proven highly effective in reducing violence and in teaching social/emotional competency and social problem-solving skills

to children in grades K–6. PATHS began in January of 2001 at Kistler, Heights, and Flood elementary schools in the Weed and Seed sector of Wilkes-Barre City. The curriculum was implemented in the first and second grade classrooms of these schools with 508 students. Fifty-one Wilkes-Barre Area School District personnel received 16 hours of PATHS curriculum training. Teachers accomplished an average of 30 lessons from February through June of 2001.

*b. Impact/Accomplishment:*

The PATHS curriculum was implemented for 255 first graders and 253 second graders by classroom teachers in the Wilkes-Barre Area School District, marking the completion of year one of four. Student outcome data from the first year is not available for analysis because it is currently being coded and entered. However, results of a preliminary analysis from part of the implementation are promising. These findings provide strong evidence that the PATHS program is being implemented as designed. This is important because PATHS has been proven effective in previous robust scientific investigations. Thus, if the program is implemented as designed then similar impact can be expected. Qualitative data reveal that some teachers find the curriculum so practical that they are applying the emotional control skills to other parts of the school curriculum. Teachers also noted that students seem to like the program and look forward to the opportunity to be named the PATHS Kid for the Day.

*a. Brief description of activity:*

Jefferson County is one of several Cooperative Extension offices involved in after-school programs. They are offering the FAST After School Program to improve the quality of life for children, youths, and families at risk, and help students develop life skills and maintain and improve their academic standing. A program is held at a local elementary school 3 days a week during the school year. Children are provided a nutritious snack, receive help with their homework, and are engaged in a fun, educational learning experience. There are also special programs planned for families and the community.

*b. Impact/Accomplishment:*

- 37 students enrolled in the FAST After School Program during the first month of the program year
- 73% completed the program
- Based on a comparison of grades from the first grading period to the second, academic performance of the students enrolled in the FAST After School Program increased by at least one letter grade in all subjects
- Based on quarterly teacher ratings, 27 percent of the students who completed the FAST After School Program showed an increase in homework completion from the first to the second grading period
- Based on quarterly teacher ratings, the 34 students who completed the FAST After School Program showed improvement in six selected life skills

*c. Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

## **KEY THEME – Other**

### **Prevention of Youth Alcohol, Tobacco, and Other Drug Use**

a. *Brief description of activity:*

Tobacco use is the single most preventable cause of death and disease in our society. Most people begin using tobacco in early adolescence, typically by age 16; almost all first use occurs before high school graduation. Annually, tobacco use causes more than 430,000 deaths and costs the nation approximately \$50–\$73 billion in medical expenses alone. The Teens Against Tobacco Use (TATU) program provides training for teens in school districts where they can develop a peer education prevention model. The teens act as role models for the younger children to reinforce the positive aspects of being tobacco free and to help children understand that most teens do not smoke.

Teams of teens from all school districts throughout Somerset County received 5 hours of TATU training conducted by educators from Cooperative Extension, Twin Lakes Center, and Somerset Hospital.

b. *Impact/Accomplishment:*

- 40 teens who received training and their TATU advisors taught elementary and middle school students the dangers of tobacco
- 36 programs were presented to 2,688 elementary and middle school students

In Montgomery County, an extension educator and a member of the Montgomery County Coalition for Tobacco Free Youth conducted three TATU training programs.

*Impacts:*

- 14 schools attended the training
- telephone surveys of participants over the past several years indicate that 13 schools reported starting TATU peer educator groups, five received grant money, and 12 offered an educational program for younger children

The Pike County Tobacco Free Coalition was awarded a \$16,000 grant for tobacco prevention activities for the period of October 2000 – June 2001. The grant is awarded by the Pennsylvania Tobacco Prevention Network (PTPN) and funded by the Pennsylvania State Health Department and facilitated through the Pike County Cooperative Extension office.

*Impacts:*

- 50 Delaware Valley High School students received TATU training
- 10 teams visited 53 elementary classrooms, grades 2 through 5

a. *Brief description of activity:*

Extension and Schools Enhancing Life Skills (EXSELS), funded by the National Institute on Drug Abuse, is a collaborative, school-based drug prevention project being conducted in eight Pennsylvania middle schools. The EXSELS project entails

replicating the 2-year Project ALERT drug prevention curriculum and testing an adaptation in program deliverer. The school program is taught by community program leaders hired through Cooperative Extension instead of by teachers, as in the original clinical trial. This first year, half of the seventh grade project classrooms were taught the 11 Project ALERT lessons by the adult program leaders assisted by high school teen leaders.

The following eight counties participated in EXSELS: Beaver, Erie, Luzerne, Northampton, Westmoreland, York, Pike, and Wyoming. A total of eight site coordinators, eight program leaders, and 48 teen leaders across the eight counties were given training to conduct the project. As an example, in Luzerne County, the prevention partners include the Wilkes-Barre Area School District, the Caron Foundation, Penn State Cooperative Extension, and Penn State's Social Science Research Institute. Important to the Wilkes-Barre implementation was the selection of teen leaders to match the school population. Consequently, four Caucasians and two African Americans were selected.

An extensive program evaluation of the project is being conducted over 4 years. Given the multiyear nature of the program and its evaluation, results after 1 year are limited.

*b. Impact/Accomplishment:*

Across the eight counties:

- adult program leaders (alone) delivered the Project ALERT curriculum to 326 seventh grade students
- adult program leaders assisted by teen leaders delivered the Project ALERT curriculum to 288 seventh graders
- preliminary results indicate that seventh grade students in both types of program classrooms perceived less alcohol and tobacco use by their peers than did comparison group students, an encouraging finding since lower perceived peer drug use has been associated with less drug use

Pike County

- Adult program leader delivered 11 lessons to four seventh grade classes
- 86 youths participated in an adult-led or a teen-assisted program

*a. Brief description of activity:*

In addition to TATU and EXSELS programs, six counties report involvement with community coalitions for the prevention of youth alcohol, tobacco, and other drug use. The Susquehanna County Smoke Free Coalition and the Tobacco Free Youth Coalition of Monroe County were awarded grants by PTPN: \$27,000 and \$20,000 respectively. These county coalitions focused on issues such as encouraging smoke-free areas, monitoring businesses that sell tobacco products, surveying the nonsmoking seating capacity of local restaurants, and conducting training for peer leaders (Start SMART, a peer-led drug and alcohol prevention program). One of the coalitions is highlighted next.

The Take Action for Tobacco Free Youth (TAFTY) is a unique coalition of youths and adults in Wayne County. Youths are full and equal members of the coalition and provide unique perspectives on the programs. TAFTY members serve as an advisory committee to set goals, and create projects and activities to achieve the goals.

*b. Impact/Accomplishment:*

- coalition is self-sustaining and actively works to prevent use of tobacco by youths
- TAFTY members convinced local school officials not to distribute antismoking book covers from Philip Morris
- students successfully advocated for change and increased awareness of tobacco company marketing tactics
- youths learned advocacy skills from participating in coalition conferences and used these skills in talking with legislators about how to use the tobacco settlement funds in Pennsylvania

*c. Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

*d. Scope of Impact—State specific and Integrated Research and Extension.*

## **Planned Program – *Community Capacity Building and Decision Making***

### **KEY THEME – Community Collaborations, Communications, Understanding Community Change, Public Policy**

Extension educators across the Commonwealth actively participate in programs that support community decision making and capacity building. They work with a variety of public officials, community leaders, and nonprofit groups on strategic visioning and planning, grant writing, board development, and volunteer management. An excellent example is the Charting the Future of Your Community program offered in Clearfield County. It is designed to bring together community leaders, local officials, community organizations, and business leaders to develop a community strategic vision, long- and short-term goals, and action plans that engage multiple sectors of the community to attain the goals. University specialists and Community Development Agents identified the need for a statewide Strategic Visioning curriculum, and a series of four workbooks and supporting materials have been developed. A 6-hour in-service for extension agents was planned for October 2001.

### **Community Collaborations**

By working with a broad base of community groups, extension educators provide educational programming for diverse audiences. These collaborations include groups with different view points on educational programming, as educators expand their reach in communities, serve new audiences, and introduce audiences to Cooperative Extension services. In Fayette County, educators collaborate with organizations and groups to effectively provide a wide range of services and educational programs. They have



worked with the Fayette Coalition To Prevent Teen Pregnancy, Penn State Fayette Campus, American Red Cross, "Celebrate The Family" yearly event, East End Community Center, and Child Care Information Service. In Dauphin County, the extension educator continues to build and sustain family living programming collaborations and partnerships, working with the Family Living Advisory Committee to review community capacity building, participating in "Envision Harrisburg," a think tank organization planning the future capacity of the tri-county area, continuing to support the community-based "SuperCupboard" committee, and expanding the membership of "Building Strong Families" committee to include additional representative from the health professions.

Responding to the need for a comprehensive summer recreation program for youths in an at-risk environment, Montgomery County educators worked with several agencies to deliver an affordable program for families. In collaboration with the Pottstown Parks and Recreation, ACLAMO, Rolling Hills Community, Montgomery County Learning Center, and St. Patrician's Society, children from diverse backgrounds living in at-risk environments participated in summer day camps held in Pottstown and Norristown communities.

a. *Brief Description of the activity:*

In Centre County, extension educators continue to develop collaborations focused on important public issues. In the past year, Centre County introduced Communities That Care (CTC) and involved community leaders in the process of building community support. A community risk and resource assessment was conducted that identified community priority risks and gaps to be addressed.

b. *Impact/Accomplishment:*

- developed a 3-year plan to address priority risks using research-based strategies that have evidence or show promise of effectiveness
- received a planning grant for Communities That Care
- received an Implementation grant to continue the Community Mobilization with the CTC initiative in the Bald Eagle, Bellefonte, and Penns Valley communities

## **Communications**

a. *Brief Description of the activity:*

The Potter County Community Information Network (CIN)—a Penn State Cooperative Extension and Outreach Initiative in partnership with the Potter County Education Council, the Northern Potter School District, and several additional community partners—provides universal community access to critical communication technologies. The network, developed collaboratively, will provide common virtual space for sharing activities and information to enhance the feeling and function of community. The goals of the project are to: (1) Provide relatively easy, convenient access to the CIN and the Internet to all residents of Potter County; (2) provide education and support in the use of the CIN; (3) increase access to community information and sharing among organizations and institutions; and (4) promote life-long learning.

The mission of the CIN is to provide access to critical communication technologies and to build a sense of unity among the diverse and geographically separate communities within Potter County. The population of Potter County is about 17,160, spread over 1,081 square miles. Nearly 25 percent of the children are living below the poverty line. The CIN, when fully functional, will allow everyone within the community to use information technology tools to support life-long learning and to obtain local and global information, thus transitioning to the information age.

As a service project to the community, a Web site was created by high school students at a previous Information Technology (IT) Camp <<http://www.pottercountypa.net>>. The IT Camp, a 2-week intensive day camp experience, was provided at no charge for high school sophomores and juniors. Participants developed Web sites, learned life skills for working successfully in teams, and were exposed to a range of information technology career opportunities. The career component included field trips to potential work places that use information technology, as well as to the University Park campus of Penn State for an orientation to potential future academic endeavors.

*b. Impact/Accomplishment:*

As a result of the continuing collaborative effort of the CIN, a grassroots task force is working to create a virtual community for Potter County. A community center has been developed and is operating at Northern Potter High School for the Ulysses and northern Potter County area. An individual has volunteered to serve as Web master for the county CIN site.

Impacts of 2001 IT Camp included those experienced by the students attending the camp, as well as the Potter County Human Services Agency. Students developed the Web site for the Human Services Agency. As a result of the students' efforts, a new Web site with more than 100 pages of informative content for this nonprofit agency is now online. This project provides the lead for other county and local government offices to see the potential of the network and seek information about how they can become a part of the network.

Evaluations completed by students indicate that the camp experience met all three of the program goals and excited interest in information technology. The students who have participated in the IT Camp in 2000 have been actively involved in a community visioning process for Potter County. It is believed that the IT Camp's emphasis on leadership development helped foster this extracurricular involvement from these students.

## **Understanding Community Change**

*a. Brief Description of the activity:*

Many organizations and agencies need to understand and be aware of current economic and demographic information in order to do strategic planning and funding applications. Since many of these organizations do not have skilled staff to both

compile the data and identify the implications of the trends, the extension educator in Fayette County will compile data and identify comparisons and trends. Data will be presented on the county Web site with links to economic data analysis performed at Penn State.

A faculty member in agricultural economics provides underserved audiences across the Commonwealth with data and tools for measuring local economic performance. He also teaches about trends and causes of local, state, and national employment shifts. This information allows participants to understand data implications for their regions.

*b. Impact/Accomplishment:*

Respondents indicated increased knowledge of the local economy. Participants were able to identify growing and declining sectors and better understood local employment development options.

*a. Brief Description of the activity:*

Five years ago, extension educators in Lackawanna County recognized that Hispanic families in the county needed assistance; however, few agencies had bilingual staff who could communicate with them to meet their needs. The same few bilingual providers, including Cooperative Extension, were being tapped to assist in ways that were beyond their mission. As a result, extension formed a coalition of human service providers, businesses, and other interested organizations to create awareness and understanding of differences to overcome barriers.

*b. Impact/Accomplishment:*

In 2001, the Diversity Coalition sponsored four free community speaker series programs. Topics addressed were the *Holocaust*, *Native American Culture*, *What Is Diversity?*, and the *History of the Underground Railroad*. More than 100 people attended these programs.

*a. Brief Description of the activity:*

Students in Westmoreland County were involved in a community change and decision-making program entitled "Impact of the Mon Valley Expressway." A new highway proposed for the county offers opportunities for economic development, but also will impact farm land and the environment. As part of an economics class in Latrobe and Derry Township, students were asked to make decisions regarding the proposed Mon Valley Expressway. Students were presented information from many vantage points. Extension educators provided instruction on the impact of the highway on the local agricultural industry and the contributions that farming makes in the county.

*b. Impact/Accomplishment:*

Forty-two students participated and gained an understanding of the many issues involved with land-use planning.

*c. Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

*d. Scope of Impact—State specific and Integrated Research and Extension.*

## **Planned Program – Youth Development and 4-H**

### **KEY THEME – Youth Development**

#### *a. Brief description of activity:*

Cooperative Extension educators across the Commonwealth engage youths in a variety of hands-on educational experiences that increase knowledge and develop interest in topics such as animal science and natural resources. Other youth programs offer opportunities that enhance leadership, citizenship, and personal growth. In addition, an array of camp experiences provide enrichment activities for youths during the summer months, many to underserved youths.

#### Animal Science and Embryology

Embryology: The Study of Life is a hands-on, life science educational program designed for use in the classroom. Building on their natural curiosity, students can develop an understanding of biology concepts through direct experience with living things, their life cycles, and their habitats. The curriculum also helps students develop life skills. The 4-H/Youth Development embryology program provides interested classroom teachers, primarily in grades 3–5, with fertile chicken eggs and with incubators, and candlers as needed, and extension educators can introduce the program in the classroom. Nearly 53,000 students in 56 counties have participated in the program. For example, in Mercer County, 1,279 students in 14 school districts completed the embryology program, and 1,555 youths in 10 school districts in Beaver County participated. Students in 89 classrooms in Lancaster County participated, and teacher evaluations indicated the following learning: 96 percent respect for living things; 94 percent care for chicks; 92 percent embryo development; 90 percent parts and functions of the egg.

Youths and volunteers involved in the 4-H Livestock Program need to receive high-quality educational programming on topics such as quality assurance, ethics, and sportsmanship. In Erie County, 57 percent of the county's livestock members attended training and received certification as "quality assured livestock producers." As a result of the quality assurance meetings in Mercer County, at least 75 percent of the members showed a better understanding of quality assurance.

#### Natural Resources

In Westmoreland County, watershed or water quality programs are offered to a variety of audiences: middle school and high school students at several schools, students at camps, YMCA residents, and members of other community groups. Approximately 336 third-grade students from one school district participated in the Turtle Creek Watershed Program. After students toured a landfill and experienced the wetlands, they learned about the watershed in which they live and how activities in their watershed can pollute the water.

### Leadership, Citizenship, and Personal Growth Experiences

Penns Woods Leadership 2001—designed to provide technical and hands-on experiences useful in the development of leadership and recreational skills—provided participants an opportunity to learn from experts in the field and their coparticipants. The target audience for this program was individuals who lead recreational programs throughout Pennsylvania. Nearly 1,500 4-H members attend camp each year, hundreds of 4-H teen leaders are trained as camp counselors, and thousands of Pennsylvania youths are served through 4-H day camp programs. Participants in the leadership program indicated that the hands-on, interactive approach gave them the experience needed to use the information in their own programs.

The 2001 Pennsylvania State 4-H Capital Days hosted over 120 4-H members representing 45 counties from across Pennsylvania. During 4-H Capital Days, each 4-H member visited one of 11 state agencies. After visiting their agency, the 4-H members wrote grants to support the agency and defended their grant proposal to a grant board. Grants could be written up to \$100,000 and had to have a detailed budget. Over 70 legislators attended the Legislative Breakfast during which winning grants were announced, and 4-H members had an opportunity to visit with their legislator at their state office.

Many Mexican citizens come to Chester County to work for the mushroom, dairy, livestock, and green industries, and for small businesses. For the fourth consecutive summer, Penn State Cooperative Extension 4-H staff, 4-H alumni from Mexico, Chester County Migrant Education teachers, and local artists have teamed to deliver the 4-H Creative Arts Program In Self Esteem Development to fifth grade Mexican migrant students. An impact of the strengthened Penn State/Migrant Education Program/CommUnity partnership is the Posada Navidena/Family Care Package program, an outgrowth of 4-H teen leadership and community networking to meet the needs of Mexican families. Mexican migrant youths who participate in 4-H and community leadership initiatives serve as spokespersons and teachers and have also participated in local/international 4-H programs.

### 4-H Day Camps

This year's day camp program in Schuylkill County included Health and Nutrition Housing Project Day Camps offered at five locations. Extension educators worked with the Schuylkill County Housing Authority to plan and implement each of the camps. More than 90 youths, ages 3–17, from underserved populations attended the camp program.

The day camp at Casa Guadalupe in Lehigh County was offered in response to identified needs. Casa Guadalupe provides tutoring services to more than 200 children during the school year, and in the summer some of these children need a safe place to stay and learn during the daytime. Health issues and the opportunity for creative expressions were identified as needs of the youths, and were the focus of the camp. Seventeen youths, ages 8–12, enrolled and attendance was more regular than experienced in past years. Evaluations indicated students gained knowledge in the

following areas: how to make a decision, how to act sensibly when angry, how to memorize things, how to say "no," and how to do simple first aid.

The Summer Fun Science Camp, cosponsored by Penn State Cooperative Extension and the Fulton County Conservation District, is offered to Fulton County youths ages 8 through 11. This 3-day camp provides instruction on topics ranging from computers, watersheds, crafts, and cooking to communication. Both agencies provided staff, and 4-H adult and teen leaders were also involved.

b. *Impact/Accomplishment:*

The impact of 4-H and youth development programs is significant, and the number of participants—more than 158,000—continues to increase. Over 115,000 of these youths have demonstrated increasing valuable life skills. Additionally, data from the *Pennsylvania 4-H Facts 2000–01* indicate that 122,568 youths in Pennsylvania were enrolled in 4-H programs. Programs range from organized 4-H clubs, special interest programs, school enrichment and camping programs to school-aged child care education programs.

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

## **Planned Program – Develop Leadership Capacity in Adults and Youth**

### **KEY THEME – Building Leadership Capacity**

a. *Brief description of the activity:*

Penn State Cooperative Extension offers numerous opportunities for leadership training and development for adults and youths throughout the Commonwealth. A variety of educational programs provide training for volunteers, community leaders, 4-H members, and other youths. Many areas of leadership skills development are offered through these programs: i.e., communications, public speaking, camp counselor training, team building, diversity training, and life skills. Examples of a few of the programs for teens include the annual 4-H Ambassador Conference, 4-H Leadership Congress, 4-H County Council, Teen Council, and Camp Counselor Training. Adult programs involve leadership training for volunteers, advisory committees, and extension boards. These programs offer adults and youths opportunities to learn new skills, demonstrate knowledge in specific subject areas, as well as to plan, develop, and implement program activities and events in a variety of venues.

b. *Impact/Accomplishment:*

A Teen Leadership Series was offered in Montgomery County. These workshops—presented to a Norristown High School at-risk class and to St. Gabriel's (Mitchell Program)—included communication skills, goal setting, handling peer pressure, and stress sessions. The educator also offered a series of workshops for social workers at St.

Gabriel's Hall to assist them in working with the parents of the teens. These workshop lessons included discipline techniques, stress, and communication skills.

- 16 high school youths and 40 St. Gabriel's teens participated in leadership series
- 7 social workers attended workshop series and reported implementing ideas presented
- as a result of sessions at St. Gabriel's, an embryology 4-H enrichment program is in place and a gardening program will be implemented in the spring

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

### **KEY THEME – Volunteer Management and Development of Volunteer Skills**

a. *Brief description of activity:*

Cooperative Extension activities and programs require the assistance of many volunteers to ensure the success of various programs. Volunteers are involved in many different types of activities from 4-H leadership and Better Kid Care Advisory Committees to Master Gardener projects. Recruitment and selection of volunteers to fill program needs is an ongoing responsibility. In addition to annual reviews of program needs, extension educators provide a variety of training opportunities for volunteers and continuously update their skills and knowledge in areas such as policy and guidelines. Another important function of volunteer management is the recognition of volunteer service, and many educators coordinate these events.

b. *Impact/Accomplishment:*

- Mercer County 4-H Development Committee received a \$16,000 Keystone matching grant from the Pennsylvania Department of Conservation and Natural Resources
- committee established the Mercer County 4-H Foundation; purpose of the foundation fund is to receive charitable gifts from friends who wish to support special capital projects and expenditures, start up programs, and scholarships
- educator worked with commissioners to acquire 17 additional acres that would double the size of the 4-H park

a. *Brief description of activity:*

Extension educators are actively developing programs for diverse audiences and realize the necessity of providing access to underrepresented audiences. For example, educators collaborate with teachers and community groups, work with advisory committees to ensure 4-H programs meet the needs of diverse audiences, and work with subcommittees and staff to recruit board members that represent the entire community.

b. *Impact/Accomplishment:*

York County, realizing the benefits derived from gardening programs, expanded their horticulture program to include minority and urban audiences. The children from the "Garden of Angels" participated as vendors at *GardenWise* this year. These children are part of a vermiculture program affiliated with Grace Lutheran Church in downtown York. They actively raise red wiggler worms and sell the worm castings to raise funds.

The extension educator also began a dialogue with the Crispus Attucks Development staff to partner with them to help tenants create flower/vegetable gardens in their backyards.

- Children of the Garden of Angels realized a profit of about \$150 from their vendor booth. This was their first experience selling their products.

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

## **Planned Program – Understanding Public Policy Issues**

### **KEY THEME – Public Policy and Citizenship**

Local officials, community organizations, and individuals need to be informed about and understand federal, state, and local government priorities and regulations; continuing economic pressures; and environmental, agricultural, and local land-use policies that impact their communities. An informed citizenry is essential to the development of healthy communities, and Cooperative Extension plays an important role in providing relevant educational programming and services. For example, in Tioga County, a meeting was held and personal assistance was given for landowners considering signing gas and oil leases. In all, 184 people from five counties (56,000 acres) attended a meeting that involved an attorney, a drilling company, and a faculty member from the College of Earth and Mineral Sciences.

a. *Brief description of the activities:*

#### Carbon County

Following a 1999 county-wide reassessment, Cooperative Extension initiated a Clean and Green educational program in 2000 in an attempt to inform land owners of their options, what was involved in the program, their obligations, and how to enroll. The educator then took the program "on the road" to areas of the county and to many different groups.

#### *Impacts:*

- 26,653 acres enrolled
- 581 people/families enrolled
- \$61,284 in county tax savings to those enrolled
- \$13,636 in local tax savings to those enrolled
- \$1,311,349 in school tax savings to those enrolled
- 85 people attended Clean and Green programs in 2001

#### Mercer County

New elected township officials need training in their job responsibilities and current information on issues and new developments in local government. A four-session school for township officials was conducted in Mercer County in 2001. Topics were selected by a planning committee of township officials and county commissioners.



They included new state planning laws, traffic concerns, Pennsylvania Agility program, changing assessment and taxation, understanding local open space, sustainable forestry issues, safe public trees, and updates from several agency representatives and township solicitors.

*Impacts:*

- an average of 110 officials participated each night
- over 90% of 52 respondents who evaluated the series rated the educational value of the series good or excellent

Wayne County

The Basic Course for Zoning Officials provides zoning hearing boards and zoning officers in-depth instruction on the technical aspects of zoning, as well as guidance for building effective working relationships among zoning hearing board members and the public.

*Impacts:*

- overall rating of the course was 4.6 (on a scale of 1–5 with 5 being excellent)

Clinton County

The extension educator assisted the Planning Commissions in both Potter and Clinton Counties in designing, administering, and analyzing surveys on quality of life, priorities, land use, and other issues.

- collaborated to conduct an analysis of revenues versus costs of different land uses
- assisted with the formation of the Friends of Big Fishing Creek, a watershed association

*Impacts:*

Surveys provided essential information to Clinton and Potter Counties, enabling the decision makers to plan on future issues

- 618 responses in Potter County, approximately 1,000 in both Clinton County and Penns Valley
- data will guide decisions affecting land use, economic development, conservation of natural resources, and many other issues

Wayne County

The Basic Course for Planning Commissioners was offered; it provides in-depth instruction on the technical components of land use planning and regulation, as well as guidance for building effective working relationships among the commission members, governing body, and the public.

*Impacts:*

- overall rating of the course was 4.3 (on a scale of 1–5 with 5 being excellent)

Franklin County

- educator assisted the Pennsylvania Farmland Preservation Association in conducting two daylong workshops for county farmland preservation program administrators
- 92 percent of the workshop participants who completed a follow-up survey indicated increased knowledge of current farmland preservation issues

- cooperated on a research project concerning the importance of agriculture to local economies; \$20,000 grant was secured from PDA to conduct the research which will include interviews with farmers and agri-business representatives
- presentation on land use planning for 15 members of a citizens group concerned with a local development project. As a result of the presentation, 11 of the participants indicated that their understanding of local government and land use planning had increased
- two municipalities created new Agricultural Security Areas (ASA) and four municipalities conducted a 7 year review of their existing ASAs
- 27 farmers received assistance from extension which resulted in their increased understanding of "Clean and Green," ASAs, and the Farmland Easement Purchase Program

c. *Source of Federal Funds—Smith-Lever 3b&c, and State matching funds.*

d. *Scope of Impact—State specific.*

## **Stakeholder Input Process**

During FY2001, Penn State Cooperative Extension developed and delivered extension educational programs based in large part on stakeholder input obtained during the comprehensive needs assessment of more than 7,000 citizens and stakeholders undertaken to develop the FY2000–04 Plan of Work, as described in our Plan of Work submission. In addition, each county conferred with their local advisory groups such as County Extension Boards, Program Development Committees, and volunteers as they determined the local focus of their educational programs prior to the beginning of the FY2001 program year. In a similar process, extension faculty in academic departments conferred with their industry and producer stakeholder groups to determine appropriate discipline-related focus of Plan of Work activities for FY2001.

At the regional and state level, administrators conferred with and received suggestions on program direction from advisory groups such as the Pennsylvania Council of Cooperative Extension Associations and the Penn State Agricultural Advisory Council <<http://agcouncil.cas.psu.edu>>.

Penn State Cooperative Extension's stakeholder input process was very useful this year in refocusing/reaffirming priorities and in identifying emerging issues. For example, during the course of the FY2001 program year, critical issues and concerns emerged among our stakeholders, which had not been priorities during the needs assessment and subsequent program development processes. Plum pox threatened Pennsylvania's stone fruit producers, and the West Nile encephalitis virus was identified in Pennsylvania. Resources and program priorities were quickly shifted to allow Penn State Cooperative Extension faculty and field-based educators to develop integrated, multistate response teams to deliver extension educational programs to affected and potentially affected areas of Pennsylvania and the nation. Additionally, the Foot and Mouth outbreak in England heightened the awareness of the vulnerability of our agricultural system, and Cooperative Extension has responded by participating in special meetings focused primarily on foreign animal disease and disseminating information to the public.

Penn State Cooperative Extension encourages and supports broad-based representation of all facets of Pennsylvania's citizenry on all local, regional, and state advisory groups.

## **Program Review Process**

No significant changes were initiated in Penn State Cooperative Extension's Program Review Process during year two (FY2001) of the Plan of Work.

## **Evaluation of the Success of Multi and Joint Activities**

### **Multi-State Activities**

Penn State Cooperative Extension continues to collaborate with other states on important extension and extension/research activities. Many of these ongoing and successful educational activities had not previously been formalized by memoranda of agreement or other contractual arrangements. Support for many of these activities was not auditable to Smith-Lever dollars. Since the implementation of the current plan of work, the director and associate director have entered into discussions with their colleagues in other states to formalize agreements in support of both ongoing and new multistate cooperative programs. Fiscal support for Penn State Cooperative Extension's ongoing and new multistate extension educational programs has been realigned so that it is auditable to Penn State's appropriated Smith-Lever funds.

### **Integrated Activities**

Penn State under President Graham Spanier, is dedicated to the goal of becoming "the premier university in the nation in the integration of high-quality teaching, research, and service." Penn State Cooperative Extension and Penn State's Experiment Station continue in their commitment to integrating research and extension activities. More than 70 percent of all Penn State Cooperative Extension faculty and staff working at the University Park campus have joint extension and research responsibilities. These faculty and staff members conduct and support basic and applied research which informs and shapes extension programs. Joint appointments are, and will continue to be, the norm in the College of Agricultural Sciences.

Funds supporting the extension portion of joint positions total 30 percent of Penn State Cooperative Extension's Smith-Lever appropriation.

### **Multidisciplinary Activities**

All educational activities under Penn State Cooperative Extension's FY2000–04 Plan of Work were developed by multidisciplinary teams of faculty and field-based educators. Each of our Key Program Components has a multidisciplinary component. During the past program year, Penn State Cooperative Extension has been a major participant in University-wide integrated, multidisciplinary efforts such as the Penn State Children, Youth, and Families Consortium; the Life Sciences Consortium; and the Environmental Consortium. In addition, formalized agreements were forged between Penn State Cooperative Extension and other Penn State units (College of Medicine, College of Engineering, College of Health and Human Development, College of Earth and Mineral Sciences, College of Arts and Architecture, and Public Broadcasting, WPSX-TV) to provide multidisciplinary research and program support in critical educational program areas.

### **Guideline Questions**

- Penn State Cooperative Extension educational programs and activities—single state, multistate, multidisciplinary, and integrated—are based on the critical needs identified in our comprehensive statewide needs assessment of more than 7,000

citizens and stakeholders conducted in preparation for the development and delivery of the FY2000–04 Plan of Work, and on the ongoing feedback of our network of local, regional, and state advisory and stakeholder groups.

- Each county monitors and records their success in reaching underserved and under-represented populations. Our Web-based reporting system currently captures under-represented audience contacts as well as other target populations like participants from Anabaptist groups and people with disabilities. Additionally, as part of the annual County Desk Audit Review, which is required under our Civil Rights Performance Plan, all staff report information related to "best practices" in reaching out to and serving under-represented audiences. This information is provided to their regional directors by October 15. Regional directors then compile a summary of all information from their unit and forward to the director's office for review and approval.
- The expected outcomes and impacts of all Penn State Cooperative Extension program objectives are described and tracked through the Web-based planning and reporting system. Each field-based educator and faculty member with an extension appointment has access to this system for planning and reporting and is encouraged to enter outcome and impact data on a regular basis.
- Analysis of the outcome and impact data and narratives in the Web-based planning and reporting system continues to show very successful multi and joint program activities for all areas represented in the FY2000–04 Plan of Work. In succeeding years, we will be able to report on improved year-over-year program effectiveness and/or efficiency.

**U.S. Department of Agriculture  
 Cooperative State Research, Education, and Extension Service  
 Supplement to the Annual Report of Accomplishments and Results  
 Multistate Extension Activities and Integrated Activities  
 (Attach Brief Summaries)**

**Institution:**

Pennsylvania State University

**State:**

Pennsylvania

**Check one:**

- Multistate Extension Activities**  
 **Integrated Activities (Hatch Act Funds)**  
 **Integrated Activities (Smith-Lever Act Funds)**

**Actual Expenditures**

<b>Title of Planned Program/Activity</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>F</b>
Lake Erie Regional Grape Research & Extension Center		91,877		
Natural Resource, Agriculture & Engineering Service		16,949		
NASULGC AESOP Extension Service		9,090		
NASULGC Extension Program Resources		3,827		
NASULGC ECOP Assessment		8,168		
Regular Land-Grant Membership		8,250		
Northeast Leadership Development Program		8,227		
Mid-Atlantic Apicultural Research & Extension Consortium		15,720		
Commercial Vegetable Guide		15,148		
Northeast Wildlife Damage Management Research & Outreach Coop.		5,278		
Community Economic Impact Models		14,778		
Penn Jersey Extension Partnership		14,102		
<b>Continued on next page</b>				

**Director**

**Form CSREES-REPT (2/00)**

**U.S. Department of Agriculture  
Cooperative State Research, Education, and Extension Service  
Supplement to the Annual Report of Accomplishments and Results  
Multistate Extension Activities and Integrated Activities  
(Attach Brief Summaries)**

**Institution:**

Pennsylvania State University

**State:**

Pennsylvania

**Check one:**  **Multistate Extension Activities**

**Integrated Activities (Hatch Act Funds)**

**Integrated Activities (Smith-Lever Act Funds)**

(continued from previous page)

**Actual Expenditures**

<b>Title of Planned Program/Activity</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
Plum Pox Virus		18,954			
Protecting Farmland at the Fringe		3,581			
Mid-Atlantic Fruit and Vegetable Conference		9,018			
Plant Growth Regulator School		5,616			
Northern Appalachian Leadership Initiative on Cancer		3,185			
Tri-State Conservation Tillage Conference		5,244			
Celebrating Midlife Conference		10,837			
Managing a Hispanic Workforce		3,400			
The Solution Source		17,839			
Change Agents States for Diversity		15,589			
4-H Leadership Youth Development		7,077			
Local Government Needs Assessment		3,418			
<b>Total</b>		<b>315,172</b>			

**Director**

**Date**

Form CSREES-REPT (2/00)





## Multistate Extension Activities Brief Summaries

### Lake Erie Regional Grape Extension Team

The Lake Erie Regional Grape Program (LERGP) is a regional, educational and research program between Penn State and Cornell Universities, and the grape industry. The educational component of the program is conducted by a four-member Grape Extension Team which consists of an area business management extension educator, area viticulture extension educator, senior area grape IPM (Integrated Pest Management) extension educator, and county extension agent (viticulture/commercial horticulture). There are currently 118 members in the LERGP from Erie County, Pennsylvania.

The Lake Erie Regional Grape Extension Team collaborated during the FY2001 year offering a broad range of programs and information to growers in Pennsylvania and New York. The educational activities are listed below:

- *Lake Erie Regional Grape Growers' Conference.* This annual conference was held in Pennsylvania with 193 attendees from across the grape belt.
- *Coffee Pot Meetings.* Ten coffee pot meetings were held on farms distributed throughout the Lake Erie Grape Belt. At least 130 farmers discussed topics affecting their vineyard operations.
- *Grape Research Funding Events.* Grape farmers from Pennsylvania and New York were invited to participate in a roundtable review and discussion for projects funded by Lake Erie Regional Grape Processors, Viticulture Consortium, Grape Production Research Fund, and New York Wine and Grape Foundation. This meeting, held in New York, focused on three subject areas including: (1) Optimizing Plant Protection; (2) Genetic Improvement of Grapes; and (3) Improving Production Practices. A tour was conducted showcasing funded research projects at the Lake Erie Regional Grape Research and Extension Centers in North East, Pennsylvania, and Fredonia, New York, and at the Betts Farm in Westfield, New York.
- *Sprayer Demonstration Days and BBQ.* A series of meetings were held in New York and Pennsylvania coordinated by Dr. Andrew Landers, pesticide application technology specialist, Cornell University, and the Grape Extension Team. Over 240 growers attended the meetings in New York and Pennsylvania. Ninety Erie County growers received pesticide recertification credits.
- *Grape Berry Moth Management Trial.* Based on research conducted at the Lake Erie Regional Grape Research and Extension Center in North East, Pennsylvania, and at Penn State, a new protocol for management of GBM is being investigated.
- *Lake Erie Grape Farm Cost Survey.* Economic data about vineyard operations is continuing to be collected by Barry Shaffer, area business management extension educator.
- *Lake Erie Regional Grape Program's (LERGP) Information Transfer.* The LERGP Web site <<http://lenewa.netsync.net/public/lergphom.htm>> includes information concerning IPM, cultural practices, business management, extension, research, grape recommends, and a variety of other information.

### **Natural Resource, Agriculture and Engineering Service Progress Report**

As a funding partner of NRAES, Penn State Cooperative Extension faculty and field-based educators and stakeholders across the Commonwealth are entitled to a variety of educational resources to support or enhance programming efforts. The NRAES effort allows for collaboration on projects and activities between field-based educators, faculty, and stakeholders at participating universities. Annually, the NRAES director provides an overview of accomplishments, which includes publications (manuscripts, conference proceedings, fact sheets) developed and distributed; and conferences in planning stages and/or completed. The director also reports participation by Penn State faculty, staff, and Pennsylvania agribusiness industry representatives in the development, implementation and evaluation of the above program/activities. The most recent report (distributed to Northeast extension directors in January 2001) indicates that:

- 12 faculty, staff, and Pennsylvania agribusiness industry representatives participated in the planning and/or served as speakers or program resources for three regional conferences on the topics of biotechnology, dairy manure systems, and milking systems sponsored by NRAES. Such conferences are attended by agents as well as stakeholders. Eight participants authored or coauthored one or more conference papers for conference proceedings (one publication in press).
- 3 faculty members authored NRAES publications.
- 18 faculty, staff, and agribusiness industry collaborators served as peer reviewers for NRAES publications.

Penn State, participating as a collaborator, providing both direct financial support and involvement of faculty and staff resources, allows the residents of the Commonwealth to receive the latest research and production practices information in four areas: horticultural production, dairy production, animal waste management, and consumer education while drawing on the expertise of faculty and staff at the 14 participating land-grant institutions.

### **NASULGC—IMPACT**

#### **NASULGC AESOP Extension Service**

Penn State has participated as a member of NASULGC to retain the services of AESOP Enterprises, Ltd. to represent the policy positions of extension and agricultural research on budget and other legislative matters.

**Extension Program Resources**—mandated assessment to support the work on behalf of the Extension System of Dr. Myron Johnsrud and Ms. Linda Kay Bennett. An important component is the receipt of information and funding possibilities available to enhance programming related to critical issues facing the Commonwealth.

**NASULGC ECOP Assessment**—to support the work of the extension committee on Organization and Policy. Dr. Theodore Alter, Penn State Cooperative Extension Director, currently serves as a member of ECOP.

### **Regular Land-Grant Membership (ADEC)**

ADEC, an international consortium of state universities and land-grant institutions, provides high-quality, economical distance education programs and services via the latest and most appropriate information technologies. Penn State benefits by its partnership with ADEC in two ways: (1) Penn State receives a vast variety of program and course opportunities that are offered by the consortium members; and (2) Penn State uses ADEC as a venue to market and deliver programs, seminars, and courses to a national and international audience.

### **NeLD – Northeast Leadership Development Program**

NeLD is a regional leadership development program that provides a forum to build a leadership network by bringing together people who have the potential to shape their future. Faculty and extension staff are involved in seminars, small group activities, mentoring, and change projects. Stipends are provided by Penn State Cooperative Extension to support their involvement in NeLD activities.

### **MAAREC—The Mid-Atlantic Apiculture Research and Extension Consortium**

Pennsylvania has taken the lead in an effort to establish a regional research and extension program to address the pest management crisis facing the beekeeping industry in the Mid-Atlantic region. A working group has been established with representation from the beekeeping associations, departments of Agriculture, and land-grant universities from each of the following states: New Jersey, Maryland, Delaware, Pennsylvania, and West Virginia. In addition, the USDA/ARS (Beltsville Bee Lab) also participates. This working group meets twice a year to identify research and extension priorities for apiculture in the Mid-Atlantic region, review research and extension proposals, review the progress of the research and extension programs, and assist in obtaining funding for the apiculture and extension and research effort. A formal Memorandum of Understanding exists between the collaborating universities and the USDA.

To date, the working group has established standard operating procedures for MAAREC. A MAAREC listserv has been established to improve communication between members, and a "research and extension" priorities list will be established. Publication activities include the *BeeAware* newsletter, new postings on the MAAREC Web site, as well as the revision and preparation of extension leaflets.

### **Extension Activities**

MAAREC Web site <<http://MAAREC.cas.psu.edu/>>

The MAAREC Web site was recognized for excellence by StudyWeb and very positively reviewed in the October 2001 *Bee Culture* column, Beekeeping in the Digital Age. The hit counter indicates very heavy usage with over 68,000 hits in May and more than 56,000 in August 2001. Penn State staff also updated addresses for contacts and posted copies of the *BeeAware* newsletter and other publications on the Web site.



### Beekeeper Surveys

A survey on winter losses appeared in April 2001 *BeeAware* and information is being compiled by Penn State. A survey of Delmarva beekeeper losses and mite control techniques was completed. Both Maryland and Delaware worked extensively with mosquito control personnel relative to West Nile related mosquito spray protocols after surveys detected potential problems. Delaware prepared and implemented a formal MOA between Department of Agriculture, Department of Natural Resources, and the beekeepers for the season.

### Educational Meetings

MAAREC, in cooperation with the Maryland State Beekeepers Association, conducted the second MAAREC Intermediate-level Beekeeping Short Course. One hundred seven people registered for the course. The EAS Short Course (in Massachusetts) was organized by Dewey Caron (Delaware) and had a record attendance of 180 individuals. In addition, MAAREC personnel appeared on programs of local, regional, and state beekeeping/grower meetings, and members of the MAAREC team presented at the American Bee Research Conference held in conjunction with the National American Beekeeping Federation meetings.

### **Commercial Vegetable Guide Progress Statement**

The Mid-Atlantic Commercial Vegetable Production Recommendation Guide is a cooperative effort of vegetable extension specialists from Delaware, Maryland, New Jersey, Pennsylvania, and Virginia. Extension specialists met in August 2001 in Newark, Delaware to discuss information in the current *Commercial Vegetable Production Recommendation Guide* and suggest changes for the 2002 *Commercial Vegetable Production Recommendation Guide*. Specialist in horticulture, entomology, plant pathology, and weed science from the five participating land-grant universities participate in the annual revision and production of this guide.

### **Northeast Wildlife Damage Management Research and Outreach Cooperative (WDM Co-op)**

One of the primary goals of the WDM Co-op is to conduct research that may be utilized in the future to develop techniques for reducing conflicts between people and wildlife. A list of products developed by the WDM Co-op and activities undertaken this year follow.

- Foldable, tabletop display created to publicize the WDM Co-op; highlights the Co-op's goals and objectives.
- Manuscript, *The Human Dimensions of Wildlife Damage Management: A Practitioner's Guide*, reviewed and comments provided to the guide's authors at Cornell. Printing and distribution anticipated in early 2002.
- WDM Co-op Web site in final stages of creation. Input solicited from WDM Co-op members on appropriate state agency/organization linkages to this site. Intended as a source for information sharing among WDM Co-op states and others interested in wildlife damage management.
- WDM Co-op funded three research projects in 2001 through an RFP process.

- WDM Co-op issued a RFP for projects to be funded in 2002. RFP was sent to WDM Co-op members, Agricultural Experiment Station Directors WDM Co-op states, and USGS-BRD Cooperative Fish and Wildlife Research Units.
- The State of New York has funding for 2002 to develop a model curriculum to train nuisance wildlife control operators. It will allow for the possibility for other states in the Northeast to contribute to this effort.

### **Community Economic Impact Models**

Penn State continues to develop and implement a fiscal and economic impact model, CIM-PSU. The modeling efforts are aligned with national efforts under the Community Policy Analysis Network (CPAN) of the Rural Policy Research Institute (RUPRI). In this initiative, involving more than 15 states that are developing similar models, models are used to examine how change affects local economies and governments. Two faculty members also represented Penn State at the annual CPAN meetings in Chicago.

During the year, this model was used in more than 12 Pennsylvania communities. The issues addressed included: The Role of the Allegheny National Forest in the Warren County Economy; The Potential Impacts of a New Manufacturing Plant in Susquehanna County (our work was critical in getting local backing and subsequent approval for this project); and The Role of Production Agriculture in Pennsylvania's Economy.

### **Penn Jersey Extension Partnership (PJEP)**

This partnership is a program planning and implementation collaboration between extension educators in Pennsylvania and New Jersey. The mission of PJEP is to provide Enhanced Extension Agricultural Programs that have demonstrable positive impact on agriculture in Pennsylvania and New Jersey. Activities during 2001 included: the Northeast Small Farm and Rural Living Exposition and Trade Show (approximately 2,600 attendees); a Web site, <[www.cropmaster-icm.org](http://www.cropmaster-icm.org)> (it includes crop scouting schedules, links to crop management information, and weekly crop reports and alerts); a pasture management newsletter (distributed to 900 producers); and several educational programs. The National Association of County Agricultural Agents presented their highest award—the "Search For Excellence Award"—to the group for program excellence.

### **Plum Pox Virus (PPV)**

During 2001, Penn State Cooperative Extension continued its leadership role in collaborating with state and federal departments of agriculture, growers' associations, legislators, and community members to develop extensive educational and research programs to educate growers, government officials, and the general public about PPV and effective eradication methods. In November 2000, Penn State conducted a PPV symposium for over 120 state extension fruit specialists and agents and state and federal agricultural departments from around the United States and Canada. A Penn State extension and research program developed in response to the outbreak of plum pox has been recognized with Awards of Excellence from both the Northeast Extension Directors and the Northeast Experiment Station Directors.

## **Protecting Farmland at the Fringe: Do Regulations Work? *Strengthening the Research Agenda***

With support from the Farm Foundation, Dr. Charles Abdalla, Penn State, convened a planning committee meeting of faculty from eight land-grant universities in November 2000. The committee developed a conference concept and a proposal for funding to the USDA's National Research Initiative's (NRI) Rural Development Program. The principal investigator for this project was Dr. Lawrence Libby, Ohio State University. Funding in the amount of \$10,000 to Ohio State was secured. Additional conference sponsors included the Northeast Regional Center for Rural Development, Farm Foundation, USDA Natural Resource Conservation Service (NRCS), the Swank Program in Rural-Urban Policy at Ohio State, and six different organizations and agencies from Maryland. All four regional rural development centers provided travel scholarships.

The conference was held in Baltimore, Maryland, September 5–7 with about 100 attendees, representing 25 states and one Canadian province. The audience included professional planners from state and local units of government, state and federal (USDA-NRCS) land use agency representatives, citizens active in local planning, economists, and other social scientists from universities from throughout the country. Keynote speakers addressed rural zoning, right to farm laws and “smart growth” regulations, and a speaker provided greater detail about a particular state or local program in each category. A summary proceedings was prepared by conference cochair Dr. Abdalla with primary sponsorship by the Northeast Regional Center for Rural Development (NERCRD). Copies may be obtained from the NERCRD.

## **Mid-Atlantic Fruit and Vegetable Conference**

This annual meeting is the largest in the eastern United States to provide educational programs to fruit and vegetable growers from Pennsylvania, Maryland, and New Jersey. In addition to the official participating states, producers also attend from West Virginia, Delaware, New York, Virginia, and Massachusetts. The conference takes place for 3 full days with multiple concurrent sessions. The program results from cooperative meetings between extension, research, and industry representatives at which they design the conference sessions to address their educational needs and to provide the latest information on new technology. Over 1,800 growers, exhibitors, and university personnel attended the conference in 2001.

## **Plant Growth Regulator School**

This Mid-Atlantic region multistate meeting was designed to bring the commercial fruit growers, fieldmen, and county extension personnel up to date on the most recent theory on application of plant growth regulators. Approximately 100 growers attended this meeting, jointly sponsored by the Fruit Research and Extension Center at Penn State and the Adams County extension office.

## **Northern Appalachian Leadership Initiative on Cancer (NALIC)**

The mission of the NALIC is to build local sustainable cancer control coalitions bringing cancer services and educational programs to the families of rural medically-underserved Appalachian communities. NALIC partners include Penn State and Cornell University

Cooperative Extension, The American Cancer Society in Pennsylvania and New York, the Pennsylvania Department of Health, Cancer Control Programs, and other agencies. A Penn State county-based educator collaborates on programming with the Venango-Forest Cancer Coalition in northwestern Pennsylvania.

### **Tri-State Conservation Tillage Conference**

The Tri-State Conservation Tillage Conference reaches out to producers in western Pennsylvania, eastern Ohio, and western New York. The program originated in 1998 as a response to a programming need identified by agents. The programming committee for the conference is comprised of producers, representatives from Cooperative Extension, Natural Resource Conservation Service and Conservation Services, and agriculture industry representatives. The goals of the conference are to (1) introduce producers to conservation tillage and provide information so that they can make the transition from conventional tillage, and (2) provide best management practices to those already using conservation tillage, keeping them economically viable. The conference has been well supported, averaging over 200 in attendance.

A survey conducted in 2001 showed that 94 percent (62) of the participants were planning changes in the way they manage crop residues as a result of attending the conference. Seventy-nine percent of those surveyed were likely to increase conservation acres. Eighty-seven percent were considering using cover crops while 83 percent planned at least one change in weed control management. Of the 43 who attended past conferences, 63 percent indicated they had made changes in their weed management, and 53 percent purchased conservation tillage equipment as a result of the program.

### **Celebrating Midlife Conference**

Over 33 Cooperative Extension educators from Maryland, Ohio, Pennsylvania, and West Virginia have been working this year to finalize the first-ever multistate conference on midlife issues. The Celebrating Midlife: The Best Is Yet To Be conference will be held in April 2002 in West Virginia. The objectives of the conference are to (1) address the changing needs during midlife; (2) identify ways to enhance one's quality of life; and (3) identify/recognize resources to strengthen one's ability to find success in midlife. The conference will feature 45 workshops that showcase popular and practical research-based programs <[www.celebratingmidlife.org](http://www.celebratingmidlife.org)>. The conference is targeted to both lay and professional audiences, with professional development credits available to participants.

### **Managing a Hispanic Workforce**

Penn State and Cornell University forged a partnership to design and deliver a conference for the Northeast dairy industry—Managing a Hispanic Workforce. The conference was held in January 2001 in both Pennsylvania and New York. In the tight farm labor market of the 21st century, dairy producers are increasingly turning to the large population of Hispanic agricultural laborers to fill their workforce needs, and dairy producers need to be aware of cross-cultural issues in managing their human resources.

The goal of the conference was to educate dairy producers about supervising, training, motivating, and valuing a multicultural workforce. Presentations focused on valuing



diversity in culture, religion, and social expectations. Special emphasis was placed on motivating dairy farmers to address language issues in their own management practices. One hundred eighty-seven participants—including dairy farm owners, managers, employees, and dairy industry representatives—attended the conferences. Participants completed an evaluation of the daylong conference. The overall rating for both conferences was 4.38 on a 5-point scale.

### **The Solution Source**

The Solution Source is an electronic information system being developed collaboratively by Penn State and Rutgers University. The system will have 700 to 900 mailboxes and 24 incoming phone lines, which will allow clientele to obtain educational information 24 hours a day, 7 days a week. Permission has been granted to use some scripts from similar systems in Minnesota, Wisconsin, and Maryland.

Penn State will record the voice scripts. Over 900 scripts have been written, edited, and entered into the database. This was accomplished through the collaboration of numerous agents and specialists at both universities. The computer hardware has been purchased for both Rutgers and Penn State. Rutgers is providing the technicians to program the system and developing marketing materials. It is anticipated the system will be available in the summer of 2002.

### **Change Agents States for Diversity**

The Change Agent States for Diversity (CASD) project is a catalytic step in beginning the transformation of the land-grant system. A consortium of eight states, it is dedicated to supporting greater cultural diversity in the system by bringing technical skills and training to member states. Through a collaborative approach, the consortium will develop successful models and strategies that can be applied throughout the system. The Pennsylvania catalyst team includes faculty, state program leadership, and field-based educators.

### **4-H Leadership Youth Development**

The Penn State program leader for children, youths, and families serves as a member of the National 4-H Leadership Trust. She participated in four national work sessions and monthly conference calls in support of the overall purpose of the Trust: to craft and implement a unified voice and a national presence for the stewardship of 4-H youth development as supported by the Cooperative Extension system and its partners. In the first year of operation, the Trust developed a business statement, operating principles, and shared leadership; determined a decision-making model and roles for the Trust for the National 4-H Strategic Plan; addressed issues about the 4-H Centennial; and built communication strategies with organizational partners. The state program leader also serves as the Northeast region 4-H state program leader liaison, conducting conference calls with the program leaders in the 13 Northeast states. An annual meeting was hosted to strengthen program planning and coordination between the National 4-H Leadership Trust and the State Program Leaders.

**Local Government Needs Assessment**

West Virginia, New York, and Pennsylvania are involved in this needs assessment project. Data analysis of three surveys was completed and results were presented at the Northeastern Agricultural and Resource Economics Association annual meeting and the Community Development Society annual meeting. Several outreach publications were prepared in the three states, including a newsletter article in Pennsylvania.

## **Integrated Research and Extension Activities**

Penn State's College of Agricultural Sciences, Penn State Cooperative Extension, and Penn State's Experiment Station have a long-standing commitment to integrating research and extension activities at Penn State. The College of Agricultural Sciences Strategic Plan Update for July 1, 1997 – June 30, 2002 states:

Research programs contribute to the education and outreach missions of the college by covering a broad range of scientific issues, from questions of fundamental science to the mission-oriented research dedicated to helping people, communities, and industries solve problems. Close integration with the college's cooperative extension program creates a research program that is both relevant and responsive to the needs of society. . . . These ongoing research efforts and related education programs are vital to assuring profitability of American food and fiber systems through internationally competitive agricultural production, a safe and secure food and fiber system, harmony between agriculture and the environment, quality of life of citizens, and well-prepared graduates.

At the dean's level, each associate dean has responsibility for cross-functional initiatives and activities. Each of the 12 academic department heads has an appointment split evenly between extension, research, and resident education. The dean, associate deans, academic department heads, and the directors and associate director meet regularly to discuss current and future issues in integrated and extension programming.

The vast majority of faculty with research responsibilities in Penn State's College of Agricultural Sciences also have appointments in either extension or teaching. These faculty members conduct basic and applied research, along with their colleagues, which inform and shape extension programs.

**U.S. Department of Agriculture  
 Cooperative State Research, Education, and Extension Service  
 Supplement to the Annual Report of Accomplishments and Results  
 Multistate Extension Activities and Integrated Activities  
 (Attach Brief Summaries)**

**Institution:** Pennsylvania State University  
**State:** Pennsylvania

**Check one:**  **Multistate Extension Activities**  
 **Integrated Activities (Hatch Act Funds)**  
 **Integrated Activities (Smith-Lever Act Funds)**

**Actual Expenditures**

<b>Title of Planned Program/Activity</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
Joint Extension/Research Personnel appointments		2,808,040			
<b>Total</b>		2,808,040			

**Director** \_\_\_\_\_

**Date** \_\_\_\_\_

