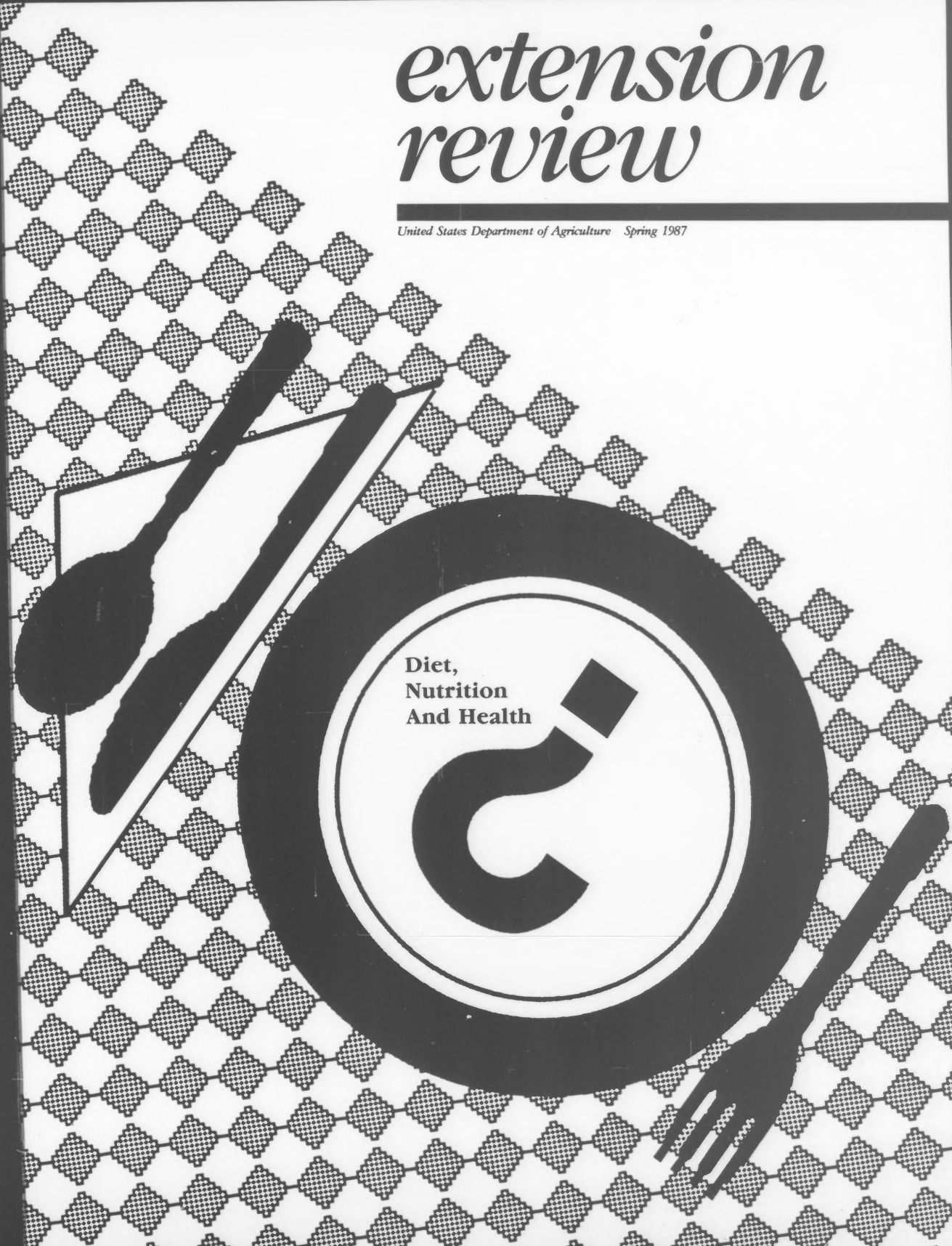


# *extension review*

United States Department of Agriculture Spring 1987

A stylized graphic illustration on a checkered background. It features a large, dark circular plate with a white border. Inside the plate, the text "Diet, Nutrition And Health" is written in a bold, sans-serif font. A large, stylized letter "C" is positioned below the text. To the left of the plate, a spoon and a fork are depicted in a dark, solid color. The background consists of a repeating pattern of small, dark squares arranged in a grid, creating a checkered effect.

**Diet,  
Nutrition  
And Health**



## Improving Nutrition, Diet, and Health

On the pages of this issue of the *Extension Review* are examples of the well designed programing that has been targeted to the needs of people at the grass roots level. As we assess the future via the Nutrition, Diet and Health Task Force of the National Priority Initiatives, we find the Cooperative Extension System a major force in addressing the public's food and nutrition concerns. It also has unparalleled potential for meeting future challenges and opportunities in food and nutrition education. To better focus the Cooperative Extension System, the Task Force has identified the following critical food and nutrition issues and educational objectives.

### Situation

Members of the food system, from producer to consumer, make decisions affecting the nature of the food supply. Decisions reflect changing consumer needs; technological advances in food production, processing, and distribution; and research findings related to food, nutrition, and health. Increasingly, the economic success of the food industry and the nutritional quality and safety of food is becoming intertwined.

New and developing research implicates diet as a possible risk factor in health problems. This has had two consequences: demand for agricultural products has changed, and demand for reliable advice on dietary practices has increased. The nation's rapidly changing demographic picture is another major challenge facing nutrition educators. Foods and diets must meet the needs and preferences of a population that is aging, is ethnically diverse, and is experiencing dramatic changes in family structure and lifestyle.

### Issue 1.

#### Health Problems Related to Dietary Practices and Lifestyle Factors

##### Extension Goal:

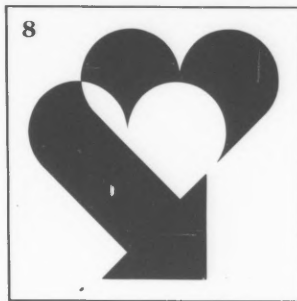
Improve the nutritional and health status of the population through nutrition education, resulting in the adoption of recommended dietary practices.

##### Educational Objectives:

1. Adults and youth will be aware of and follow the practices recommended in *Dietary Guidelines for Americans* in order to achieve and maintain optimum weight and reduce the risk of chronic health problems.
2. Pregnant teenagers and adult females will eat foods to meet their nutrient needs, gain adequate amounts of weight, and receive prenatal care throughout pregnancy in order to achieve an optimum pregnancy outcome.
3. Adults and youth will be aware of and adopt recommended fitness and health promoting behaviors, including physical activity, stress management, responsible self care, and appropriate use of the health care system.
4. Parents and caregivers will follow recommended infant feeding practices and help children establish good food and exercise habits for optimum long-term health.
5. Adult and youth consumers will recognize and use reliable nutrition information and thereby minimize nutritional inadequacies and abuses in foods, diets and supplements.

(Continued on page 47)





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## Health Fair Shines At Sunbelt Expo

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**Ann Peisber**  
Extension State  
Program Leader  
Food, Nutrition and  
Health  
and  
**Janet Rodekobr**  
Extension News Editor  
University of Georgia,  
Athens



Farm equipment rumbled over the demonstration plots. Corporate banners snapped in the breeze over hundreds of exhibition tents. However, for an impressive number of farm families last October at the Sunbelt Agricultural Exposition near Moultrie, Georgia, the real attraction was a mini-health fair coordinated by the food and nutrition staff of Georgia Extension.

The new nutrition exhibit, bearing the slogan, "Your Health Is Our Business—Nutrition Assessment Counseling," attracted almost 1,700 participants during the three days of the South's biggest farm show. At six stations located in part of the Consumer-Family Living area, participants obtained a blood pressure check, a blood glucose reading for diabetes, a height-weight measurement, a cholesterol reading, a diet assessment, and individual nutrition counseling.



"We did not expect the nutrition exhibit to be so popular," says Ann Peisber, Extension state program leader for the food, nutrition and health unit at the University of Georgia. "A phenomenal number of people waited in line—some for as long as 40 minutes for the health assessment tests."

Georgia Extension is one of the major sponsors of the Sunbelt Agricultural Exposition which is moving into its tenth year. The Expo attracts about 500 commercial exhibitors who show

the latest in agricultural equipment to over 200,000 visitors. Extension home economics staff set up the nutrition center as a way to take advantage of an ideal teaching situation.

### **A Cooperative Venture**

To stage the mini-health fair, Peisber and her staff of food and nutrition specialists and county agents worked with the following organizations: the Medical College of Georgia, the



Opposite top: The tent of a mini-health fair coordinated by Georgia food and nutrition staff proves popular with participants at the Sunbelt Agricultural Exposition near Moultrie. Below: Participant discusses a blood glucose reading for diabetes at one of the six health stations. At left: Farmer receives a height-weight measurement; many participants were curious about their ideal body weight.



Georgia Egg Commission, the Georgia Affiliate of the American Diabetes Association, the Colquitt Regional Medical Center, the American Heart Association, and the Moultrie Vocational Technical Training Program. More than 100 volunteers assisted during the three-day program.

While the visitors waited in line for the tests, they filled out data forms to supply demographic information, and family and personal health history. For the counseling session, participants discussed diet and exercise programs with an

Extension home economist or medical nutritionist. The entire process took a few hours, counting computer time for diet evaluation and cholesterol testing.

Volunteers and staffs put in long days trying to keep the lines moving. "I heard few complaints," Peisher says. "I saw job satisfaction mirrored on so many faces. When you get direct feedback from people who appreciate your work, it makes you feel good about what you do."



JoAnn McCloud-Harrison, EFNEP coordinator, agrees with Peisher. She worked the scales and often had to inform participants about their ideal body weight. "Some people were curious about these measurements," she says, "while others were seriously concerned."

#### Performing A Real Service

Visiting Nurses Association Director Vickie Parker believes a worthwhile service was performed for many participants. "Our test disclosed a number of people who had high blood pressure and were not aware of it," she says. "This test gave us the opportunity to hand out educational material on hypertension, diet, and reducing stress levels. We suggested several people see their doctor."

The Georgia Egg Commission offered a valuable test. With the help of members of the American Egg Board and United Egg Producers, representatives of the commission hooked up the Kodak Ektachem DT-60 Analyzer—a self-contained computer that uses colorimetric slides to measure glucose, cholesterol, and other levels. The estimated laboratory cost for this test ranges from \$25 to \$35.

The analyzers are in use in other states and all test data is fed back to the Egg Nutrition Center to collect a state, regional, and national profile of cholesterol levels.

Extension is in the process of computerizing and analyzing all data collected at each test station and on the biographical sheets. There will be a questionnaire followup to verify how much participants recall and heed advice given at the mini-health fair.

Much of that advice came from the final health station where 564 people participated in a personal counseling session. Betty Gass, Extension agent, Dade County, conducted many of these sessions.

#### Counseling Sessions

"We had so many questions and many of the answers surprised us," Gass says. "Participants appreciated this service. Some said it was the best thing at the Expo. We feel we made a lot of contact and helped a lot of people."

Peisher says the first thing they pointed out at the counseling sessions was that they could

not diagnose health problems based on a one-day reading. They asked participants to take any advice or measurements "as a flag." "Whenever the tests indicated problems," Peisher says, "we stressed awareness and directed people to their family physician."

Dispensing health advice can be a risky business. Fortunately, the mini-health fair was supported by the Medical College of Georgia and a physician was in the testing area throughout the show.

#### Clear Goals Necessary

Peisher emphasizes the importance of agreeing about goals when working with multiple outside groups. "You have to be sure the goals are all understood," she says. "Of course, each group will have its own agenda to meet its needs. However, we as the coordinating agency had to be sure all groups agreed on the overall thrust."

Extension wanted to offer a service that could be replicated in the counties. Agents saw the Expo as a model to make health education a segment of local fairs or lawn and garden shows. "Our underlying theme," Peisher says, "is to teach agents how to make a difference in their communities by getting them involved in significant issues. People call our Extension offices all the time with life's little problems—we want them to look to us for help on the big issues as well."

One participant, Virginia Pannell of Sylvester, Georgia, waited in line to visit each station on the last day of the Expo. "I think the nutrition center is great," she proclaimed. "It is why I came to the Expo. Extension is offering a good service. Often, people don't take the time to take advantage of this type of opportunity. I plan to go through all of it." ▲

*Opposite top: Participant receives a blood pressure check. Below: The final health stop is a personal counseling session. At left: A computer diet assessment measures glucose, cholesterol, and other levels.*



## Get Heart Smart

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Wendy L. Douglass  
Extension  
Communications  
Coordinator  
and  
Mary Hartman  
Extension  
Communications  
Agent  
Front Range District  
Colorado State  
University, Fort  
Collins



Reviewing program materials for the Healthy Heart Program are Maureen Brew (left), program assistant, and Jennifer Anderson, Extension nutrition specialist, Colorado State University, a creator of the program and its current director.

Eating habits are hard to change!

"For many persons, overconsumption of fat, cholesterol, and salt is tied to long-established eating habits," says Jennifer Anderson, Extension nutrition specialist at Colorado State University.

In response to these and other dietary problems linked to heart disease, Colorado Extension developed the Healthy Heart Program—Eating and Your Heart.

"The program was designed for consumers who are concerned about heart disease and who want to reduce their own risk of developing it," says Anderson, a creator of the program and its current director.

**Emphasis On Improving Diets**  
Healthy Heart focuses on reducing dietary fats and calories, and improving the

overall quality of individual diets. The program is offered to both health professionals and consumers.

"Healthy Heart helps individuals assess and analyze their own health so they can pursue a style of eating that is based on informed choice," says Anderson.

The classes—usually four 2 1/2-hour sessions—teach participants self-monitoring skills, key facts on heart health and nutrition, how to modify recipes, and prepare foods using new techniques.

**Employee Wellness Program**  
In 1986, the city of Arvada sponsored three 6-week programs designed to educate city employees about the relationship between diet and heart disease.

"We chose the Healthy Heart Program after a 3-year search for an employee wellness plan," says Dana Shea, city personnel analyst and spokesperson for the project.

Registered dietitians taught the weekly 2-hour sessions held during the workday. Approximately 90 of Arvada's 460 employees participated in the program.

Lieutenant Steve Troop of the Arvada Police Department says his blood pressure has gone down and he has lost 23 pounds since participating in the program.

"Step by step through the program and after it is completed, we have had the full support of Colorado Extension," says Shea.

**Developing Healthy Heart**  
Anderson and Extension Health Specialist Susan Gunn developed the Healthy Heart program in 1978. Initially they targeted the program for patients in cardiac rehabilitation but later emphasized the risk to the "hale and hardy Howies" whom Anderson describes as those who think they are healthy but are at high risk for heart problems.

"Because eating habits are hard to change," explains Anderson, "new approaches to this subject were initiated including choosing local people to be program leaders, training these leaders in educational techniques, and dividing them into teams so their time and skills could be pooled, using the Extension network for access to rural and hard-to-reach audiences."

Long distances and limited resources outside the Denver metropolitan area make it difficult for nurses, dietitians, and other professionals to keep abreast of new research in the field of diet and heart disease, according to Anderson.

"Training can, in many cases, provide the updating necessary for these individuals to function as effective educational program leaders," Anderson says.

In 7 hours of formal classroom training, program leaders review basic concepts of nutrition, obesity, dietary fats, fibers, sodium, sugars, nutrient density, and trace nutrients. Anderson presents current research findings on the obesity and heart disease connection, the dietary fat and fat-content-in-blood connection, fibers, and other controversial factors.

Dietary analysis techniques from the Heart Association are explained and the group learns to work with NUTRI-FIT, a computerized food and activity analysis program from Extension, and to organize and present educational programs for lay people.

#### **Financial Support**

Initially the Poudre Valley Hospital Foundation and the University of Colorado Health Science Center SEARCH program provided grants to



develop and test program materials. The Colorado Heart Association provided support for 3 years, which facilitated the program leaders' training and development of consumer materials on a statewide basis.

More recently, the Colorado Beef Council provided funds to develop print materials targeted at the corporate sector and to purchase support materials. The National Turkey Federation agreed to support the development of videotapes to train program leaders.

Other funding sources include the Metropolitan Life Foundation, which provided a grant to redesign materials for 7th grade

health, science, and home economics classes. A 4-H unit also is being piloted.

Currently, the Healthy Heart dietary recommendations are being used in a restaurant nutrition education project. In addition, other states have adopted Colorado's program for use in their educational efforts.

"Such avenues expand Extension's impact in areas where people are making decisions about food and their health," says Anderson. ▲

# Nutrition Education With Impact

Jennifer Anderson  
Pat Kendall  
Karen Wilken  
Extension Food and  
Nutrition Specialists  
Colorado State  
University,  
Fort Collins

Today Coloradoans need unbiased information and assistance to evaluate the increasing number of public messages on nutrition and health, many of which are disseminated by vested interest groups.

Colorado Extension food and nutrition specialists are working with volunteers, groups, and organizations to meet these needs and maximize the impact of the state's limited Extension dollars.

## Fitness And Weight Control

Coloradoans, like Americans across the country, want an easy answer to their weight control problems. This creates a rich breeding ground for misinformation fed to consumers by profit-making interests and sensation-seeking media.

To provide consumers with sound, unbiased information, Extension staff developed a Summary Chart of Weight Reduction Diets. Updated regularly, the chart lists approximately 45 currently popular weight loss diets. Included for each diet are characteristics, good points, bad points, and comments by Extension nutrition specialists.

When possible, Extension specialists discuss the diets with their promoters.

## Nutrition And Heart Disease

The association between diet and heart disease is of concern to many. Often people need support and assistance to make changes in their diets. For the last several years, Extension's Healthy Heart program offered in Colorado and across the country has addressed this need. (For more information, see the article, "Get Heart Smart" on page 8.)

## Information Via Computer

For several years, Colorado has used computers to provide clients with nutrition information. With the advent of microcomputers, the main-frame food and activity analysis programs (NUT-CAL and NUTRI-FIT) were re-written for the IBM-PC or compatible computer.

Extension agents have used the programs at health fairs, schools, consumer group meetings, 4-H clubs, and fitness centers. Also, non-Extension clientele, including dietitians, physicians, food service managers, exercise physiologists, and wellness program coordinators, have purchased the programs.

## Safe Food Preservation

Foodborne disease is a major public health problem. In most Colorado counties, Extension is the only local source of personal response to food preservation and food safety questions.

Following the lead of the Master Gardener Program, Colorado, like several other states, developed a Master Food Preserver (MFP) program. The program uses trained volunteers to assist county agents, thereby extending Extension's resources and increasing the outreach of Colorado Extension.

Response to the program has been favorable. Last year, 16 counties participated. Fifty-six new volunteers and 51 veteran MFP volunteers donated some 2,757 hours of service and provided nearly 10,000 consumers with information on safe food preservation methods. Numerous others were reached through the media, booths at farmers markets, and the multiplier effect of information passed from consumers to family and friends.

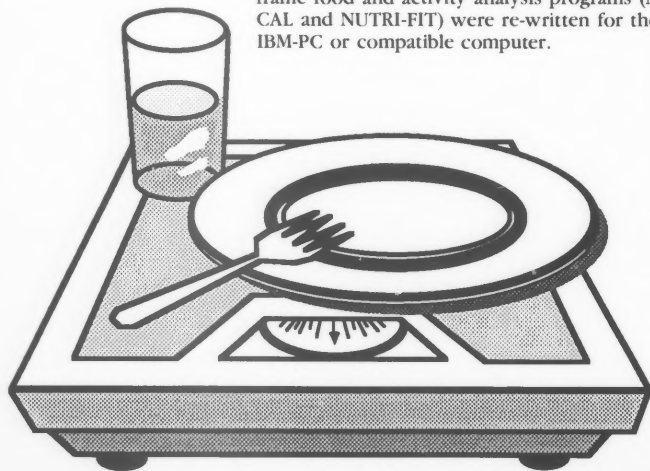
## Expanding Extension's Audience

With more women employed outside the home, an increasing number of men and teens are shopping for family groceries. Extension needs to target food-shopping skill programs to include this broader audience.

Recently, Colorado developed a pilot supermarket point-of-purchase nutrition education program. Extension specialists anticipate that by working through supermarkets, they will reach more men and teens.

A top priority in Extension is to offer programs designed to revitalize rural Colorado. One such effort is a Food Research and Development Center within Colorado State University's Food Science and Nutrition Department. The objective of the Center is to provide technical assistance in the areas of food processing, product development, and food marketing to interested individuals and firms in the state. Extension's role is to provide assistance on consumer needs and desires, trends in food purchasing, and information on product acceptability.

Nutrition specialists see the Center as an exciting expansion of traditional food and nutrition Extension programming that can add value to Colorado-grown commodities and contribute to economic growth throughout the state. ▲



# EFNEP— Nutrition Education In Action

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In 1968, USDA initiated the Expanded Food and Nutrition Education Program (EFNEP), and it was congressionally funded the following year. Extension Service (ES) administers the program, in cooperation with State Extension Services in each of the 50 states, American Samoa, Guam, Micronesia, Northern Marianas, Puerto Rico, and the Virgin Islands. EFNEP is the largest federally funded nutrition education program in the United States, with appropriated funds of about \$60 million for each year since fiscal 1981.

The mandated purpose of the program is to help low-income families, particularly those with young children, improve their diets by teaching them the essentials of nutrition. County Extension home economists train and supervise paraprofessionals, mostly from low-income families, in teaching the basics of good nutrition. These paraprofessionals then recruit low-income homemakers interested in learning more about nutrition. They enroll interested participants through references from other agencies, door-to-door canvassing, and neighborhood contacts. The paraprofessional teaches a nutrition curriculum lesson and enrolls participants in small groups or on a one-to-one

basis. Extension nutritionists and program managers provide support, the educational materials, and the structure needed to implement and maintain the program.

Today, 813 program sites, across the Nation, low-income homemakers with young children and 4-H age youth learn the importance of good nutrition. Currently, 4,185 paid paraprofessionals and 50,924 volunteers teach these adult and youth participants.

About 2.5 million families have enrolled in EFNEP since the program began in 1968. This equates to 10 million family members. Over 6.4 million have participated in the 4-H Youth component of EFNEP.

Families enrolled in EFNEP learn to plan nutritionally adequate meals, to buy food with food stamps which meets nutritional needs within the available budget, to serve meals that are nutritious, and to apply recommended storage, safety, and sanitation practices.



Since its inception, EFNEP has been continuously evaluated to ensure increased effectiveness in carrying out its intended purpose. Annual data collected from operating sites describe the status of the participants and the racial/ethnic composition of homemakers, youth participants, volunteers, and paraprofessionals.

Data collected annually from a sample of homemakers provide more details on family characteristics, the size of the family, and their participation in food assistance programs. Food consumption data are collected by paraprofessionals through the 24-hour food recall method at the time of program entry and exit.

## Evaluation Studies

The EFNEP program effectiveness can best be determined by the participants' retention of knowledge and adopted practices. Two recent studies found that participants retain nutrition knowledge and continue their improved nutrition practices. The California EFNEP Evaluation Study (1979-81) showed that the participants' eating habits improved after EFNEP enrollment. In 1983, 2 to 3 years following this evaluation study, a followup investigation was made of the long-term effects of the program in 4 of the original 15 participating California counties. In this instance, 73 EFNEP participants

**Nancy B. Leidenfrost**  
**National Program**  
**Leader, EFNEP**  
**Extension Service,**  
**USDA, with**  
**Contributing authors**  
**noted in parenthesis**

*Left: Betty Milbourn (far left), an EFNEP paraprofessional in Vigo County, Indiana, shares her knowledge of nutritious meal preparation with two homemakers. Right: State EFNEP faculty in Brevard County, Florida, consistently provide training that furthers the group teaching emphasis.*

*Photographs courtesy of Cooperative Extension, Purdue University, Indiana*

**EFNEP Family Profile**

- 91 percent have annual incomes below the poverty level
- 66 percent receive food stamps
- 35 percent are enrolled in the WIC (Women, Infant and Children program)
- 96 percent have children under 5 years of age
- 63 percent of these children are in the Birth to 2-year-old age category
- 60 percent of EFNEP families are minorities

were studied using the 24-hour food recall (FR). Results show that all of the improvements seen in the original study were still present in the followup study. In milk, protein, and fruit and vegetable consumption, as well as in variety, vitamin A-rich, and vitamin C-rich fruit and vegetables, families retained the improved food practices.

The Orleans Parish, Louisiana, Evaluation Study (1983-86) also indicated that low-income homemakers enrolled in the program improved their dietary practices. Homemakers sustained this improvement in dietary behavior for 6 to 12 months after graduation and at a significant level when compared to entry.

Earlier studies verify these Louisiana findings: Brown and Pestle (1981) and Kateregga (1981) also found that dietary improvements were sustained 1 year after graduation from EFNEP. Dietary behavior changes could be attributed to

education rather than significant differences in age, income, educational level, participation in assistance programs, or family size. The majority of homemakers participated in USDA food assistance programs, and have one to three members in their family. They tend to be below 35 years of age at entry into the program, have less than a 12th grade education, and monthly incomes of \$419.00 or less.

**EFNEP Evaluation**

The Extension Service and USDA's Food and Nutrition Service conducted a pilot project in 1981, which tested various program delivery concepts and demonstrated that flexibility is possible in delivering the program. Subsequently, innovative methods have been encouraged and are being developed by states.

Findings from these studies indicate that participants prefer more structure in program delivery, that they like a predetermined, regularly scheduled time for the teaching series to take place, that they are likely to sign a commitment statement to complete the program, and that they want teaching sessions more frequently than twice a month. Under these conditions, participants felt more responsibility and often notified the paraprofessional when they could not be available for the teaching sessions.

States are now widely using the national or a state EFNEP curriculum: they teach more frequently, and are graduating families within 6 to 12 months. The use of combinations of delivery methods mainly as a result of educational methodology research has increased effectiveness and efficiency in the program. Multi-delivery methods often begin with the one-on-one and progress to small cluster groups supported by the use of a predetermined curriculum. Some states have tested a combination of one-to-one, telephone, and mailed lessons. These practices are result-

**EFNEP Youth Profile**

- 61 percent are in the 9-to-13 age category
- 91 percent are in the 6-to-13 age category
- 53 percent are female
- 46 percent of youth live in central cities of over 50,000 population

ing in a larger number of families having an opportunity to participate in the program.

**EFNEP Serves Minorities**

EFNEP is not unlike other Extension programs, but it has adapted its message to reach low-income families of all ethnic groups. In recent years, many states have made intensified efforts to reach Southeast Asian refugees. California, Oregon, Minnesota, Hawaii, and Virginia report employing Laotian, Hmong, Vietnamese, and Cambodian paraprofessionals. As reported by Virginia staff, helping people who don't understand English, food stamps, running water, electric bills, and how to adjust from a rural Asian lifestyle to urban life in Arlington, Virginia, is a special task that takes specially trained people.

**International Connections**

The EFNEP concept and its program delivery method have demonstrated their effectiveness in projects beyond the U.S. mainland. The Kellogg Foundation funded an Oregon 4-H/Costa Rica 4-S club nutrition project and Margaret Lewis, nutritionist, served as the consultant. An EFNEP nutrition aide along with Lewis traveled to Costa Rica to learn about the needs of agents of the Ministry of Agriculture in respect to delivering Nutrition Education. As a result of that



visit, a week-long workshop was planned and implemented to update the Costa Rican counterparts in areas of infant and child nutrition. (Information supplied by Margaret Lewis, Oregon)

Partners of The Americas is a voluntary, non-profit organization committed to extending friendship, understanding, and expertise between states of the United States and countries in Central and South America and the Caribbean. Through exchanges and joint projects, volunteers work together toward development goals. Periodically, Partners sponsors special workshops to focus attention on key issues of a region. In August 1986, Aileen Mills, Julie Michael, and Dawn Harris as well as three Extension home economists from Michigan, an EFNEP aide, Josie Taube, accompanied counterparts from those partnerships—Belize and the Dominican Republic—to a conference in El Salvador on nutrition and health. During the conference, participants visited nutrition and health projects; identified common problems, issues and priorities; and began planning outreach efforts in their respective countries. The workshop involved 26 participants from eight Central American and Caribbean countries and seven U.S. states. (Information supplied by Mary Andrews, Michigan).

EFNEP paraprofessionals, Marjorie Gordon and Norma Zaldivar, provided training to the home economics officers in Belize on using the "Eating Right Is Basic" curriculum. They also introduced it to some groups of community volunteer leaders. (Information supplied by Linda Nierman, Michigan)

Through the Partners organization, the respective countries can apply for small grants to try out new educational programs. Training grants are also available to help staff members gear up for new responsibilities.



*Time for a picnic! An EFNEP 4-H Food And Fun Group in Vigo County, Indiana, enjoy themselves while learning the basics of good nutrition.*

As a result of intensive planning, the Belize group identified three possible education thrusts: nutrition education to prevent anemia in pregnant and nursing women, "Say Yes to Belize Agriculture;" and "How to say No"—sex education for youth.

The Dominican group set into motion a process to review and disseminate a dietetics manual for hospitals and began planning for a series of nutrition courses that may be added to the science curriculum at the Universidad Nacional Pedro Henriquez Urena in Santo Domingo.

"This trip was a revelation in that I was able to see firsthand the problems in today's world regarding hunger," wrote Julie Michael. "The Cooperative Extension Service has a role to play...as we extend ourselves as people, we let others know that we care and are willing to try to address their problems—not paternalistically, but as partners."

In June 1984, Janice McRee, home economist in South Carolina and former EFNEP coordinator, attended an international workshop in Bogota, Colombia, "Women: Partners in Development," sponsored by Partners of The Americas. Following the workshop, McRee spent a week with a host family in southwestern Colombia studying the

living conditions of the rural population with a main interest in nutrition and food preservation. (Information supplied by Janice McRee, South Carolina)

FUNDAEC, an organization like Extension, trains individuals from given rural communities and they in turn must share their new knowledge and skills with a certain number of others in the community who in turn teach others (a chain concept). The program in its initial stages closely resembles EFNEP. Upon returning to the states, McRee wrote a grant proposal for specific work in five rural villages utilizing the FUNDAEC network. This effort was to provide nutrition education in combination with production, preservation, and marketing of fruits and vegetables. McRee receives project reports and continues to be a resource person on the Partners of The Americas project.

"This experience not only broadened my perspective of people and their way of life," McRee concludes, "but afforded new opportunities for me to use my knowledge and experiences to help others. It also gave me a greater knowledge base to use in my local programming efforts." ▲

# Guidelines To Eating Right

## 14 Extension Review

Mary Harvey  
Information  
Coordinator,  
Extension Home  
Economics  
ANR Information  
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Michigan State  
University,  
East Lansing

Helping people make difficult changes in their diets to stay healthy...that's the aim of new educational materials being developed by Michigan Extension nutrition specialists.

The materials—teaching packets and bulletins—are based on the recently revised **Dietary Guidelines for Americans** developed by the U.S. Departments of Agriculture and Health and Human Services.

The seven guidelines suggested for most Americans—those who are already healthy—are:

- Eat a Variety of Foods;
- Maintain Desirable Weight;
- Avoid Too Much Fat, Saturated Fat, and Cholesterol;
- Eat Foods with Adequate Starch and Fiber;
- Avoid Too Much Sugar;
- Avoid Too Much Sodium; and
- If You Drink Alcoholic Beverages, Do So in Moderation.

"It seemed that much of what was being done nationally through USDA revolved around the seven dietary guidelines," says Extension Specialist Judith Anderson. "At the same time, we noticed that our home economists were increasingly asking us to prepare materials to support them in program efforts that center around helping people change dietary behaviors to prevent heart disease and cancer."

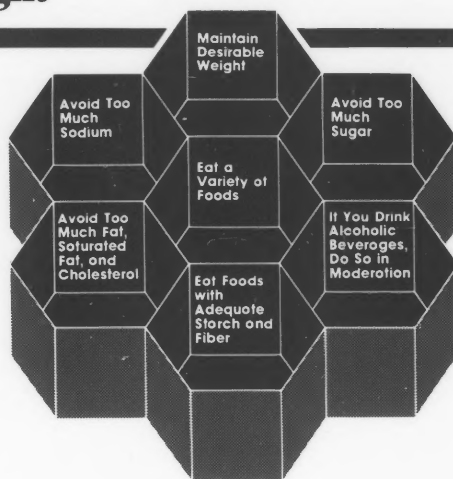
So far, Michigan nutrition specialists have developed two kits, "Shake the Salt Habit" and "Take Heart in the Kitchen."

### Kit Contents

The kits vary according to the topic, but generally each contains: a slide set with script, transparencies with script, a lesson plan with suggestions on ways to use the material, handouts that counties can duplicate, a list of suggested activities and supporting materials, reference materials, sample food cartons or labels, and evaluation materials.

"Take Heart in the Kitchen" is basically about fat in the diet. The kit includes empty food cartons with label information containing the amount of fat in the product. The amount of fat in a food may be greater than expected, since not all fat is clearly visible as solid or liquid fat.

Anderson says the program, with its wide variety of activities, first imparts some knowledge about the issue. Participants then assess their own diets.



"We're trying to effect results at a lot of levels, from knowledge changes to actual behavior changes," adds Anderson.

The pre- and post-test evaluation can be completed with a single program or a series of programs. Counties that choose to conduct an indepth evaluation can use a followup telephone or pencil-and-paper assessment of participants' success at making dietary changes.

The lessons are structured so home economists can include food preparation activities. Although food preparation is not the focus of the program, such activities may reassure participants that low-fat or low-salt food can be nutritious and taste good, too.

### Enthusiastic Response

Response to the kits has been enthusiastic, according to Anderson. They reached 5,000 people with the "Shake the Salt Habit" program during the first year it was used. "Take Heart in the Kitchen" is expected to reach 10,000 people its first year.

### Ongoing Efforts

Currently Michigan Extension staff are developing a kit, "Eat Food with Adequate Starch and Fiber," which will help home economists answer requests for information on fiber. The next kits they plan to develop are "Maintain Ideal Weight" and "Avoid Too Much Sugar."

Michigan staff also developed a series of educational bulletins. Last year, they distributed 5,000 copies each of "Dietary Fat," "Sodium," and "Dietary Fiber." Two new ones, "Vitamin A" and "Managing Food Choices," were printed last July. By the year's end, 2,000 copies of each had been distributed.

For more information, contact Judith Anderson, Department of Food Science and Human Nutrition, 165 Anthony Hall, Michigan State University, East Lansing, MI 48824. ▲

## Catalyst For Cooperation

Extension Review 15

Health issues can be controversial—especially when the topic is red meat consumption and the audience includes families with an economic interest in beef and pork production. But in Iowa, the assumed controversy has become a beneficial partnership.

"I'm thanking Betsy over and over," says Nancy Degner, home economist for the Iowa Beef Industry Council.

"Betsy" is Iowa Extension Nutritionist Elisabeth Schafer. As chair of the risk factor committee for the Iowa affiliate of the American Heart Association, she asked Degner to meet with the group.

"I knew that both the beef and pork industries believed themselves besieged by recommendations for a prudent diet, while the Heart Association felt it was battling a defensive meat industry," explains Schafer.

"Getting them together sparked a team effort that continues to grow, benefiting Iowa consumers," she adds.

### Pioneering Effort

"When we sat down face to face, we discovered that the 'conflict' between our two groups seemed more obvious to the media than to ourselves," says Degner. "Our aims were actually the same—to promote the concept of healthy eating."

Past President of the American Heart Association's Iowa affiliate, Marvin Stromer calls it a "pioneering combination."

"I'm not aware that the combination had existed anywhere else in the country to the extent it did

in Iowa," says Stromer. "I was convinced that the groups could work together to the benefit of all—and it's working."

### Educating Consumers

Since that initial meeting, in the spring of 1985, the two groups have joined forces to tell consumers how to include red meat in a heart-healthy diet.

In September 1986, 250 grocery stores participated in the Second Annual American Heart Association Food Festival and reached 40,000 Iowans.

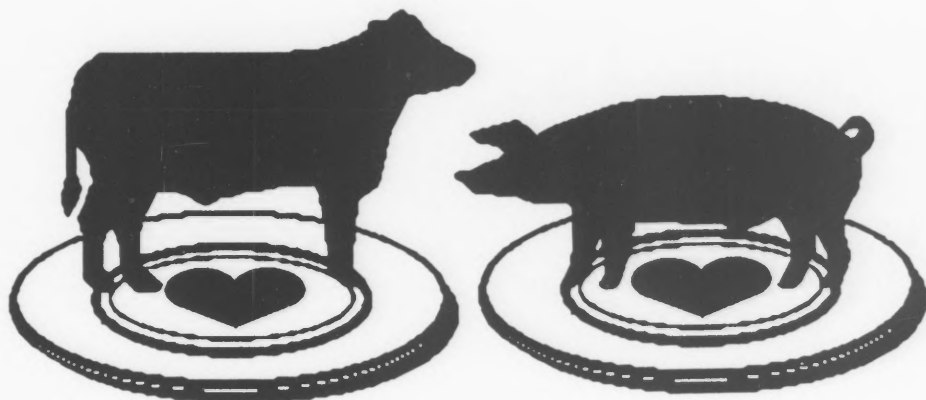
At a state meeting of restaurant owners, Degner explained how portion size and preparation methods can be changed on existing menu items to meet the Heart Association's heart-healthy guidelines.

Producer groups funded a research project to help educate health care professionals on ways to include red meat in healthy diets. Followup studies will check for attitude and behavior changes.

"It's a message Iowa cattle and hog producers want to spread," Degner says. "Our goal is to help nutrition-conscious consumers find ways to continue including red meat in their diets. The majority no longer want a 12-ounce steak, but most can accept a 3-ounce slice of lean roast."

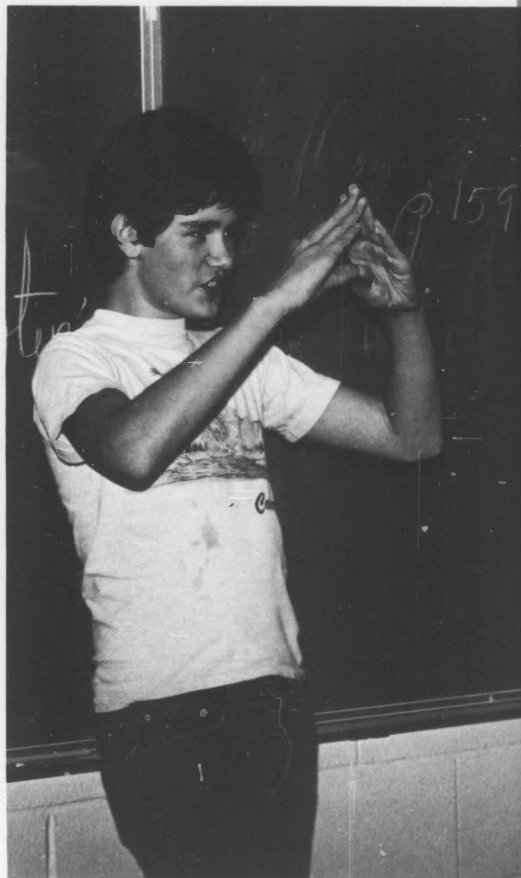
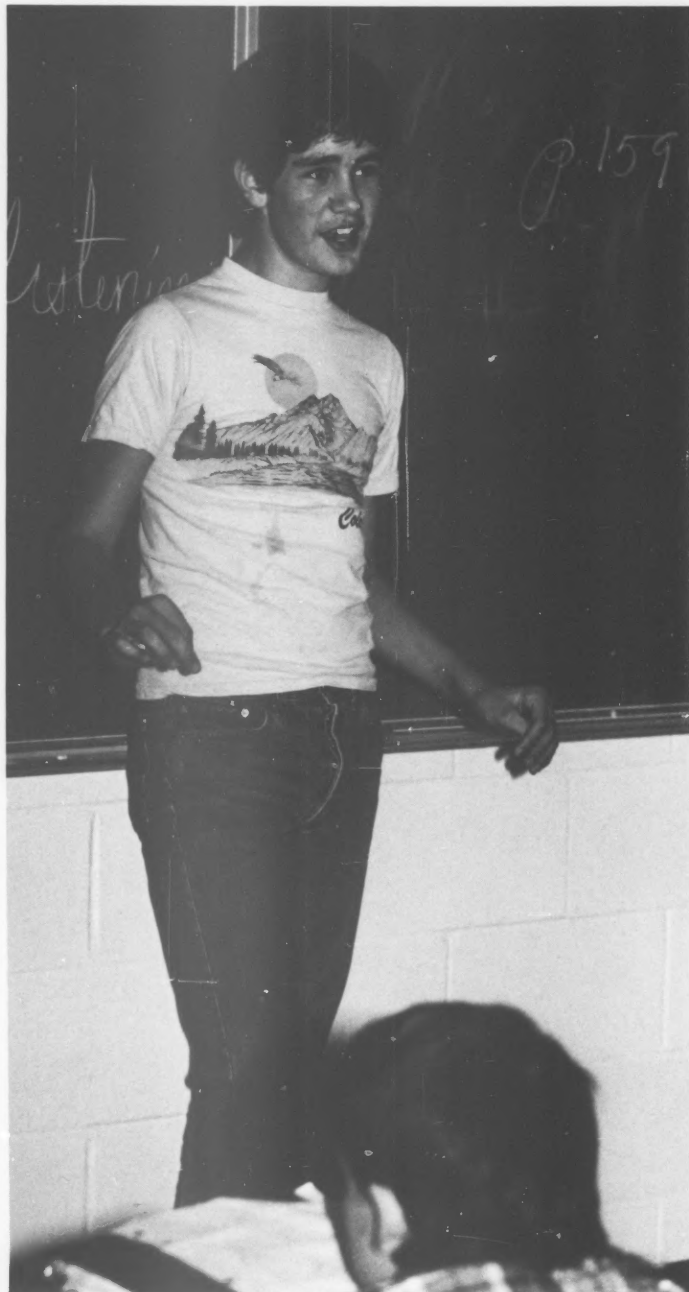
"Overall, consumers are the winners," says Extension nutritionist Schafer. "As a result of this cooperation, consumers now hear a consistent, unified message." ▲

*Diane Nelson  
Communications  
Specialist, Home  
Economics  
Iowa State University,  
Ames*



## DARE To Be You!

16 Extension Review



How can we help youth reduce the risks of alcohol, tobacco, and drug use; unwanted pregnancies; and school dropout?

Can we teach adolescents to resist peer pressure?

How can we help youth develop skills and attitudes that will help them through their teen years?

Colorado schools, health agencies, youth clubs, law-enforcement agencies, and other organizations are tackling these and similar teen problems through Extension's "DARE To Be You" program.

The program incorporates strategies known to be effective in reducing problem behaviors in youth.

"It can be used alone or to supplement existing programs," says Jan Miller-Heyl, Extension health specialist at Colorado State University and creator of the program.

**Katherine Timm**  
*Extension Special  
Projects Editor  
Colorado State  
University,  
Fort Collins*



### Enhancing School Efforts

"Schools often are given the bulk of responsibility for reducing adolescent problem behaviors," says Miller-Heyl, "but adolescent problems do not belong solely to the educational system—they belong to the entire community."

The impact of programs in the educational system can be greatly enhanced if an adolescent receives the same message through other sources as well.

In DARE's pilot program in Weld County, evaluations over a 2-year period showed significant increases in self-responsibility, assertiveness, and decisionmaking skills in youth who participated in the program as compared to the control group who were not exposed to the DARE program.

### Increasing Skills And Knowledge

DARE training covers a series of developmental concepts and provides strategies used in daily interactions. Activities and workshops to develop skills and increase knowledge are important components of the program.

Learning materials include a worksheet on decisionmaking that explains the options a person has when faced with a difficult situation—such as being pressured by peers to drink or smoke.

"If we provide young people with the tools to honestly and effectively deal with decisions, while at the same time remaining positive about themselves, they will realize that despite peer pressure the final decision is up to them," explains Miller-Heyl.

To be most effective, these skills and support systems should be developed before the ages of 13 and 14 when the greatest adolescent changes occur. Miller-Heyl targets the program to 8- to 12-year-olds but strongly encourages others to participate.

Alternative Education Teacher Paulette Giambattista at Ignacio High School uses DARE in conjunction with computer assisted instruction and jobskills training to create a personalized learning environment for her students.

"The program has taught me skills I can teach to the kids," she says. "It provides different ways to get kids to think."

For more information on DARE, contact Jan Miller-Heyl or Wanda Shores at 116C Veterinary Science Building, Colorado State University, Fort Collins, Colorado 80523. ▲

*Youth at Miller Junior High School in Colorado participates in an exercise in breaking down the "communication barriers" for the "DARE To Be You" Extension Program. A major objective of DARE is to help adolescents develop effective communication skills and attitudes of self esteem that will reduce problem behaviors.*

So far, DARE has reached 20,000 people in state and local agencies throughout Colorado; 26 other states have requested copies of the training manual.

### Community Approach

The program is designed to allow for individual community needs and expertise, and yet provide a framework for developing a community approach to reduce problem behaviors.

DARE helps participants develop characteristics including:

- D—Decisionmaking abilities;
- A—Assertiveness in dealing with peer pressure;
- R—(Self) Responsibility;
- E—(Self) Esteem

DARE is unique because it recognizes that adolescents are affected by every aspect of their community—peer groups, teachers, parents, and adults as they interact in youth organizations.

According to Miller-Heyl, many youth agencies influence a wide range of youth but often don't have access to basic prevention information or easy-to-apply strategies and activities. DARE addresses this problem by providing training to parents, teachers, and a wide cross section of youth-serving groups.



# Dangerous Interactions— Food And Drugs

18 Extension Review

**Connie Betterley**  
*Former Extension  
Program Assistant,  
Home Economics  
Iowa State University  
Ames*

Consumers spend nearly 14 billion dollars annually on approximately 1.5 billion prescription drugs. Thirty-five percent of these consumers leave their doctor's office with no information about the drugs that were prescribed. Few consumers ever ask their pharmacist about over-the-counter drugs they purchase. Few consumers suspect that the medications they take might interact with the foods they eat.

The likelihood and seriousness of food-drug interactions depend upon many factors. Most food-drug interactions are minor; serious food-drug interactions are uncommon. But if the public learns to take certain precautions when taking prescription and over-the-counter medications food-drug interactions can be avoided entirely.

Food can alter the way a medication reacts in the body. The food itself or the nutrients in food may cause a drug to be less potent, or in some cases, more potent. For example, when tetracycline and dairy foods interact, the calcium binds with the drug. This prevents the drug from being absorbed and renders it ineffective.

**Program Support Materials**  
In 1985, to educate the public about the potential for food-drug interactions, Iowa Extension developed a set of program support materials for use by Extension home economists.

Extension designed the materials to help clientele become aware of some of the potential problems associated with food-drug combinations.

The program materials that were developed included the following: a slide/tape set, lesson plans, a quiz, a game, two publications, two displays, media releases, a videotape, and five 60-second taped TV spots.

"All people who take medications are a potential audience for programs on food-drug interactions," says Elisabeth Schafer, Extension nutritionist at Iowa State University.

"However, certain people are more likely to experience interactions. These people include the elderly, people with chronic health problems, and people with poor dietary and health habits."

## Slide/Tape Presentation

Barbara Buffington, Extension home economist in Mills and Montgomery Counties, gave slide/tape presentations to 80 senior citizens. "Most of the senior citizens were aware of some of the problems of food-drug interactions with prescription drugs," she points out. "But many did not realize that over-the-counter drugs can cause problems. Some of the senior citizens also felt that many doctors were remiss in giving instructions about taking medications. The truth is that how and when you take a drug can influence its effectiveness."

Extension home economists advised consumers to follow these steps to avoid food-drug interactions: Question your doctor or pharmacist about food-drug interactions; follow all directions for medication use; talk with your doctor about potential interactions and side effects; take drugs with water; avoid alcoholic beverages when taking drugs; and eat a balanced diet.

Patti Dillon, Extension home economist, Fayette County, stressed the importance of communication with the doctor or pharmacist when taking medications.

## TV PSA's

Charlotte Young, Extension consumer and management specialist, Cedar Rapids, made extensive use of the TV PSA's. The PSA's were aired several times a day on KGAN-TV and KCRG-TV the week after Christmas. These spots, coupled with a live call-in radio show, resulted in over 200 requests for the Extension bulletin, "Facts About Food-Drug Interactions."

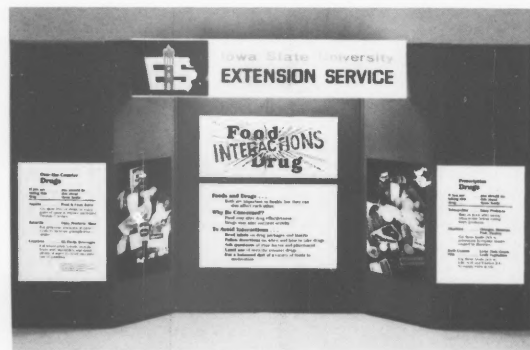
In other Iowa counties, displays were set up in libraries, pharmacies, malls, health fairs, and restaurants. Bulletins were mailed to participants who requested further information.

## Program Evaluation

The program was evaluated year-round as the educational materials were used. Some programs were evaluated by use of pre- and post- questionnaires at the lesson to measure knowledge change. Other home economists evaluated the program by means of a telephone survey to determine behavior change.

In a random sample of 237 participants, 73 percent indicated that they continued or increased their practice of reading medication labels. Sixty percent of the respondents indicated they would ask their doctor or pharmacist questions about the food-drug interactions about their medications. Twenty-seven percent of the respondents indicated they were decreasing their use of over-the-counter drugs or changing their diet while on medications. ▲

*Display for Iowa Extension's program educates about the potential dangers of over-the-counter medications or prescription drugs and their interaction with foods consumers may eat.*



# Food, Medicine, And You

Extension Review 19

When a program of food-drug interactions was first developed in Indiana, Extension specialists in other states who reviewed it expressed this concern: Is this information too complex for Extension audiences?

Specialists felt clientele would lose interest in the program because of the technical level of the information. And if this were the case, wouldn't clientele turn to less reliable sources of information? This concern has also been expressed in regard to other topics dealing with relationships between nutrition and fitness. Health concerns about heart disease, osteoporosis, and cancer are sometimes considered to be too technical or controversial to explain to the general public.

Extension at Purdue University is offering a statewide program on food-drug interactions—Food, Medicine, And You—that combines a 15-minute slide/tape presentation with a publication that participants can take home and use as a reference. When conducting the program, which was developed in 1984, the Extension home economists usually invite a health care professional (usually a doctor, pharmacist, dietitian, or nurse) to attend the presentation and answer questions about specific drugs. Food, Medicine, And You has been given multiple presentations since its development.

Before and after the program, participants are asked to complete a questionnaire. Approximately 3 months later, a followup questionnaire is sent to all participants.

## Survey Results

A survey of approximately 500 participants in the program, who attended sessions held in 10 counties in southern Indiana, revealed that the information was both understandable and useful to them.

According to the survey, participants not only learned more about possible food-drug interactions (test scores increased 12 percent after the presentation), but they retained the new knowledge through the followup test given 3 months later.

Seventy-five percent of the participants who returned the followup questionnaire stated they had purchased some medicine since attending the program. Ninety percent of those who had purchased medicine indicated they had used information from the program.

Participants indicated they now read medicinal labels more carefully, checked to make sure they had the correct prescription, followed instructions exactly, questioned their doctor or pharmacist when unsure of instructions, and checked for possible food-drug interactions.

One participant, who had been taking medicine for a year and was experiencing dizziness, headaches, and nausea, requested information on the medicine from her pharmacist after the program. She discovered she was supposed to take the medicine one hour before or four hours after eating, not

during her meal. "Now, I can eat, sleep, and I am no longer dizzy," she wrote. "I can now work 8 to 10 hours a day." It was obvious that the program information helped her to stop and think about possible food-drug interactions.

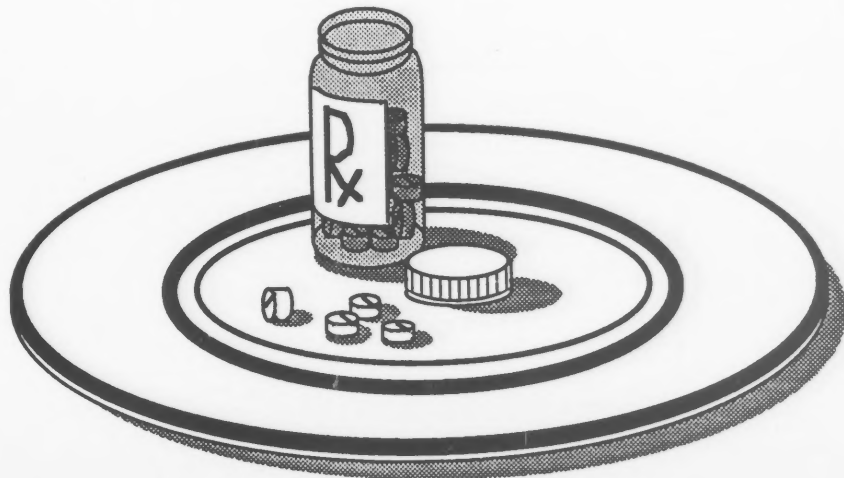
## Understanding Broadened

Program responses indicate that people want information about nutrition, health, and fitness. TV, newspapers, and magazines have made technical terms more familiar and broadened the public's understanding of scientific terms and vocabulary. Everyone does not have the same familiarity with the science of nutrition or pharmacology, but many people now have a basic understanding of human physiology and biochemistry.

In an increasingly complex world, it is important to address audiences at a level of sophistication that gives them the most benefit. In the area of nutrition and health that level of sophistication may be much higher than many of us realize.

▲

**William D. Evers**  
Extension Nutrition  
Specialist  
Department of Foods  
And Nutrition  
Purdue University,  
West Lafayette Indiana



# Dine Out—Dine Healthy

20 Extension Review

**Carolyn Leontos**  
Area Extension  
Nutrition Specialist  
and  
**Amanda Penn**  
Dunkerly  
Extension  
Communications  
Coordinator  
University of  
Nevada-Reno



Many Las Vegas chefs now feature dishes that are healthful as well as gourmet because of Nevada Extension's nutrition thrust in cooperation with the American Dietetic Association. Here, Nancy Wellman, chair, Dietetics and Nutrition department, Florida International University, samples a Gourmet diet creation of Chefs Gilbert Stouvenot and Chris Cook of Diamond Jim's restaurant.

Las Vegas, vista of glittering hotels, gambling casinos, and lavish buffets has never been noted as a site where moderation reigns at the table or one counts calories before chips or the house odds. That is, until a week in October 1986 when it served as the location for the 69th annual meeting of the American Dietetic Association (ADA).

That week, when over 10,000 conventioners journeyed to southern Nevada to attend the ADA event, Las Vegas was known as "the city of good nutrition" because of Extension's nutrition thrust toward healthier dining.

Carolyn Leontos, Extension nutrition specialist in southern Nevada, encouraged local Las Vegas area chefs to feature healthful creations of fish, poultry, salad entrees, soups and appetizers—not just for the convention but year-round. In conjunction with the ADA program theme—"New Visions, New Ventures"—many Las Vegas area restaurants welcomed the dietitians with a "New Ventures In Good Eating" special for the week.

A recent American Dietetic Association national survey revealed that nearly 50 percent of Americans stated they would order low-fat, low-cholesterol or low-calorie foods if restaurants made them available.

Emphasizing this point to local chefs, Leontos won many of them over to the idea that good food can be both tasty and healthful. "In the past," Leontos says, "many restaurant owners assumed that people would not eat healthful food when dining out. Today, we are seeing that myth shattered. I don't believe this is a passing fad. And I don't believe the food industry does either."

### Public Demand For Healthy Meals

Statistics from the American Heart Association show that the most exceptional growth in last year's restaurant food offerings occurred with salads, vegetables, and fresh fruits.

Participating chefs at the ADA convention followed the USDA Dietary Guidelines set for Americans—low salt, fat, sugar, and cholesterol and high fiber. Leontos reviewed and approved all recipes as a registered dietitian on the Nevada Advisory Committee for the convention and president-elect of the Nevada Dietetic Association.

### Incentives To Restaurants

Early restaurateurs participating in the "New Ventures" program had their recipes printed in a special booklet—"New Ventures In Good Eating In Las Vegas"—that was distributed to all convention attendees including several thousand exhibitors. The booklet, published by the ADA (with an appreciation to the Nevada Cooperative Extension for assistance), doubled as a restaurant guide with a listing of all cooperating eating establishments.

The major press event of the week at the convention was a food tasting the opening day of the ADA meeting. Leontos designed the event to generate publicity for the nutritious menu specials available in Las Vegas restaurants as well as to highlight ADA's presence in town.

### Nutritious And Tempting Meals

Las Vegas chefs practiced what Leontos preached and created new, mouth-watering gourmet creations. The Frontier Hotel served Chicken Bacchus Salad, accented with strawberries, grapes, and herbs. The Showboat Hotel offered South-of-the-Border Red Snapper, a "not for dieters only" fish dish featuring mozzarella cheese, fresh guacamole, served on a bed of spinach noodles. Chefs at the Las Vegas Hilton served their popular Ratatouille Omelette as cholesterol-free cuisine, complete with diced onion, tomato, green pepper, and zucchini.

"New Ventures" dishes shattered the myth that healthy restaurant fare is "boring." The statistics and the event indicate the trend toward healthier dining out is here to stay.

For a free copy of the recipe booklet, "New Ventures In Good Eating in Las Vegas," write to:  
Carolyn Leontos  
Nevada Cooperative Extension  
953 East Sahara Avenue  
S.T. & P. Building, Room 207  
Las Vegas, Nevada 89104

# Solving The Diet Puzzle

Extension Review 21

Today, "fad" diets abound in America, all guaranteed to melt pounds off effortlessly, even while we sleep. But to many overweight Americans, confused by countless extravagant claims, dieting is nothing more than an insolvable puzzle.

However, Rose J. Davis, Extension nutrition specialist at the Pee Dee Research & Education Center, Florence, South Carolina, is fitting the pieces together with the Diet Puzzle Program she designed.

The 12-lesson Diet Puzzle Program, which will have statewide exposure in 1987, involves sound nutrition principles, a diet plan based on the food exchange list system, low-calorie food preparation techniques, lifestyle modification, and an exercise program involving walking.

The program is designed for persons who need to lose no more than 50 pounds. "Special needs of the grossly obese person need to be addressed by a registered dietitian," Davis comments. "I felt that home economists would be much more successful with a less overweight group, and when they're successful they'll want to conduct the program more often."

Susan Eaddy, an Extension agent in Clarendon County, would agree with Davis. Recently, Eaddy conducted two Diet Puzzle Programs and received letters from grateful participants. "Anyone conducting the course must be very careful," Eaddy cautions, "because you have the responsibility for leading people who have made one of the greatest emotional commitments in their entire lives."

## Enrollment Agreement Required

Participants in the program must make three agreements in writing before they are enrolled. First, they must agree to use the low-calorie diet as it relates to the exchange list system. Next, they must agree to the walking program which is graduated by time and distance and adjusted for different age groups. Finally, they must assent to a modification of lifestyle, such as stress reduction through relaxation exercises.

When potential participants begin to call, Extension agents conduct an interview to determine their eligibility. Participants must be at least 18, no more than 50 pounds overweight, not on a special diet, and must not have such health problems as diabetes, arthritis, or kidney and heart diseases.

## Program Lessons

In Lesson One, participants are taught how to maintain their food records and weight charts as well as calorie intake.

Lesson Two covers more specifics of the food exchange list—a system which enables the dieter to select a preferred food from a list for a specific food group. The prescribed serving size is given for each food.

Lesson Three allows the participants to develop their own walking exercise program based on their age and physical ability.

Lesson Four teaches behavior modification techniques and includes a checklist of lifestyle modification ideas.

Lesson Five relates to food purchases, especially label reading. Lesson Six teaches participants low-calorie cooking techniques. Lesson Seven demonstrates stress reduction through relaxation techniques. Lesson Eight introduces the USDA Dietary Guidelines while Lesson Nine describes ways to use herbs and spices in cooking to reduce or replace salt, sugars, and fats.

Lesson Ten is devoted to vitamin supplements. Participants learn to determine their specific needs. Lesson Eleven evaluates many of the popular weight loss diets. Participants are asked to bring in examples of diets they failed at and then learn why this occurred.

Lesson Twelve, the last, is one of the most important. Prior to it, most participants have been losing the recommended 1 to 2 pounds per week in a mutually supportive, goal-oriented environment. At this point, they are asked to proceed by themselves and maintain the new lifestyle to which they made a commitment eleven weeks before.

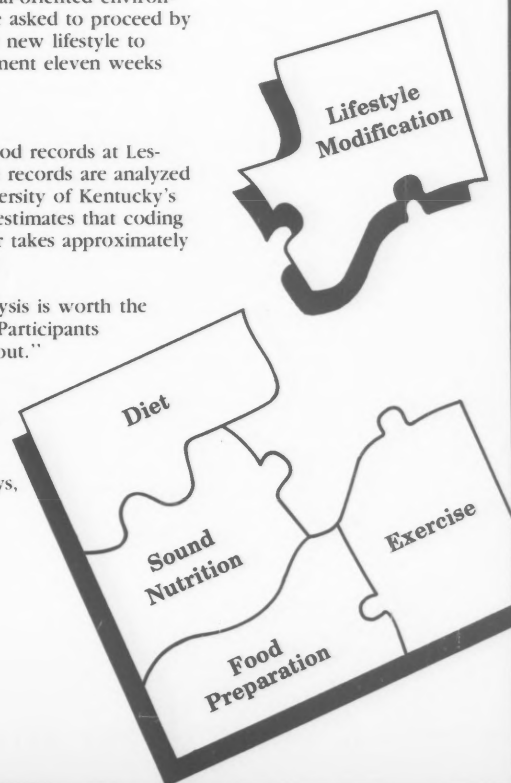
## Computer Analysis

Participants turn in 3-day food records at Lessons 1, 2, 3, 8, and 12. The records are analyzed by computer using the University of Kentucky's DIETANAL program. Davis estimates that coding and typing for the computer takes approximately 30 to 45 minutes per client.

"We feel the computer analysis is worth the effort," Davis comments. "Participants learn much from their printout."

Currently, interest is high in the Diet Puzzle Program, Davis reports. "Despite competition from other weight-loss groups," she says, "in 1987 more than 20 counties plan to offer the program." ▲

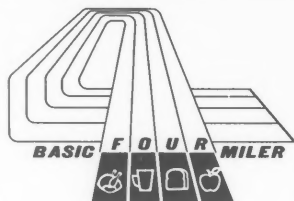
**Jerry Dyer**  
Area Extension Editor  
Pee Dee Research &  
Education Center  
Clemson University  
Cooperative Extension  
Service  
Florence, South  
Carolina



# Community Fitness Event

22 Extension Review

**Carol Walter**  
Extension Food and  
Nutrition Specialist  
South Dakota State  
University, Brookings



Imagine one day of the year when each person in South Dakota has the opportunity to participate in a "fun run or walk" in their county. Not only do they get outside for some enjoyable exercise, they also learn about food, nutrition, and fitness.

This vision was brought to life for a trial run last October 4 when five South Dakota counties each held a fitness event—the Basic Four Miler. Extension Food and Nutrition Specialist Carol Walter and Dairy Council Program Leader Beth McIntyre initiated the fitness race.

Participants had a choice of three events—a 2-mile walk, a 4-mile run, or a 6.2-mile run. They could enter individually in one of seven age categories, or as part of a four-member family or corporate team.

**Information And Activities**  
Four-H'ers helped organize the event. During registration, they

displayed posters and gave demonstrations on food and fitness topics.

Registration packets contained T-shirts, pin-on numbers, and course information along with bulletins explaining the dietary guidelines for health and the importance of drinking water during exercise. Post-race activities included a breakfast buffet and an awards ceremony.

Included in news packets promoting the event were a series of columns targeted at persons who would be starting an exercise program to prepare for the event.

**Pleased With Turn-Out**  
The first annual Basic Four Miler drew 185 walkers and runners. Participants ranged in age from 8 to 71.

"We were very pleased with the turn-out," says McIntyre, "especially since we purposely chose less populated sites so things wouldn't get too hectic."

Extension agents who coordinated local arrangements were also pleased with the event. Cheyenne County Agent Linda Benning organized volunteers and then participated in the 4-mile run.

"The event gave me an opportunity to set and then reach a personal goal of running 4 miles," says Benning. "But more importantly," she adds, "sponsoring the event gave us a chance to model the nutrition and fitness behaviors that we have been teaching the past few years."

## Community Support

Extension agents gathered community support by asking high school track coaches or running clubs for help in planning and marking the course, and timing the races. Local grocers donated food; businesses sponsored prizes for winners.

The Basic Four Miler proved beneficial to the 4-H program. Money collected beyond what was budgeted for the event was donated to the 4-H Foundation of South Dakota, Inc.

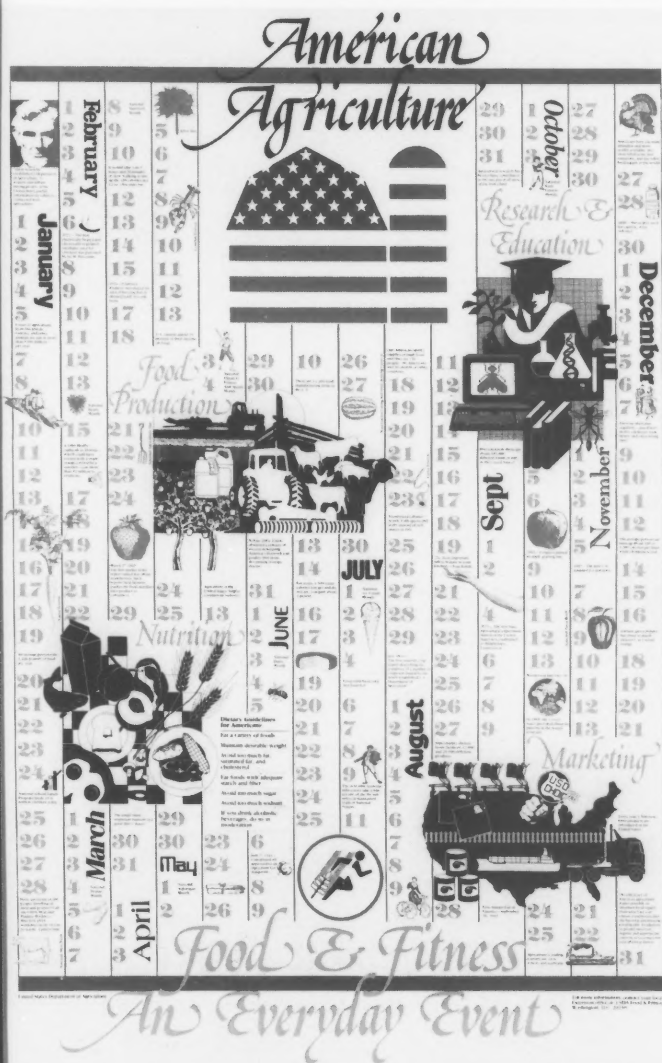
With the success of the first Basic Four Miler, more Extension agents are ready to take on the challenge of holding the event in their counties. The race proved a positive activity that exposed South Dakota Extension to new audiences, and a fruitful, cooperative venture that was embraced by local communities. ▲

*You choose your age category when you run in the Basic Four Miler—a fitness race initiated by South Dakota Extension food and nutrition leaders. Five counties participated in this event where 185 walkers and runners entered by age category, as family members, or as part of a corporate team.*





## Poster Promotes Food and Fitness Awareness



Since its introduction in the fall of 1986, a unique and informative poster, "Food and Fitness—An Everyday Event," a project of USDA's Food and Fitness Program, of which Extension Service is the lead agency, has been receiving national and international attention.

The colorfully illustrated poster resembles a 365-day calendar and mentions all

major food groups and commodities. It is designed to increase Americans' awareness of the abundance and variety of food provided in the United States and the relationship of diet and exercise to good health. The poster visually highlights the functions of the Food and Fiber System—food production, protection of the food supply, distribution and marketing, and research and education. Twenty-two USDA agencies contributed to the poster's design.

Fifteen USDA agencies have purchased the poster to distribute to their local offices. The Foreign Agricultural Service has placed the poster in their offices around the world, and OGPA reports many requests for it from foreign countries. Farmers Home Administration sent copies to their State Wellness Coordinators; Forest Service placed copies at their offices at the National Forests. Regional Food and Nutrition offices used the poster during National School Lunch Month.

### Presentation Ceremony

In Fall 1986, in a ceremony which received wide press coverage, Assistant Secretary for Science and Education Orville G. Bentley presented a poster to Secretary of Agriculture Richard E. Lyng which was hung in the Secretary's Reception Area. Over 100 copies of the poster were sent to the press nationally along with a press release explaining the purpose of the Food and Fitness Program.

Stu Sutherland, Extension information specialist, Information and Communications Staff, developed a quiz in camera-ready form to be used by state food and fitness contacts along with the Food and Fitness poster.

The poster—measuring 23-1/2 inches by 35-1/2 inches—is available for \$4.25 (domestic) and \$5.35 (foreign) from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. You may also call GPO at (202) 783-3238. Orders of 100 or more copies mailed to one address receive a 25 percent discount.

For more information on food and fitness, or about the quiz, contact:

Bonnie Tanner  
Executive Director, USDA  
Food and Fitness Program  
Room 3438-S, South Building  
Washington, D.C. 20250-0900  
or phone: (202) 447-8855 ▲

# Florida Focus: Food Flash

24 *Extension Review*

*Lizette L. Murphy  
Extension Consumer  
Food Marketing  
Specialist  
Home Economics  
Programs  
and  
William R.  
Summerbill  
Extension Program  
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Evaluation Specialist  
and Associate  
Professor  
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University of Florida,  
Gainesville*

Florida Extension home economists in six rural, economically stressed counties are cooperating to pinpoint the problems of target audiences, set future priorities, and develop effective programs in food management.

Extension home economists are aware that critically important trend shifts require new programming strategies and technical answers. To develop effective programs in food management, Extension home economists in Baker, Hamilton, Jefferson, Madison, Suwanee, and Taylor counties each tapped the expertise of their district Extension director, and their state specialists in home economics programming, home economics consumer food marketing, and program development and evaluation. Together, they devised a strategy to assess the specific needs of Florida clientele and evaluate the ability of both staff and programs to meet those needs.

Data was obtained from 2,500 households, a response rate of 65 percent. Comparison with Census Data showed that the survey responses were representative of the county populations for income, household size, and race. Income levels of households in all six counties were below the national average. Approximately half were single or two-member households; the ethnic segment of the respondents was representative of most rural north Florida counties.

## Findings

The survey findings revealed no significant differences among the six counties. In all of the counties, household size, race, and income appeared to be related to some food purchasing and management practices, sources of food, amount of money spent on food at home and away from home, and the nutritive value of food consumed per household per day.

Survey data revealed that the majority of shoppers do not regularly use the following economizing measures: plan meals before shopping; use cents-off coupons or refund coupons; read ingredient labels on products; compare products for nutritional value; and purchase generic brands if available. The lower income respondents were less likely to use shopping lists, coupons, advertised specials, and unit pricing when shopping.

## Food Management Practices

The survey disclosed that food waste was a major problem. Discarding edible food was the practice most strongly related to food waste. Although the sample was from a rural area, approximately one half of the households did not grow home gardens or preserve food. Lower income households were less likely to grow and preserve food.

## Food Consumption Patterns

To provide data on food consumption patterns food served on a daily basis was categorized according to the four basic food groups. The most significant finding was that a high percentage of households lacked a daily serving of milk and dairy products and the fruit and vegetables group. Lower income respondents were less likely to have a daily serving from all food groups.

## New Information Welcomed

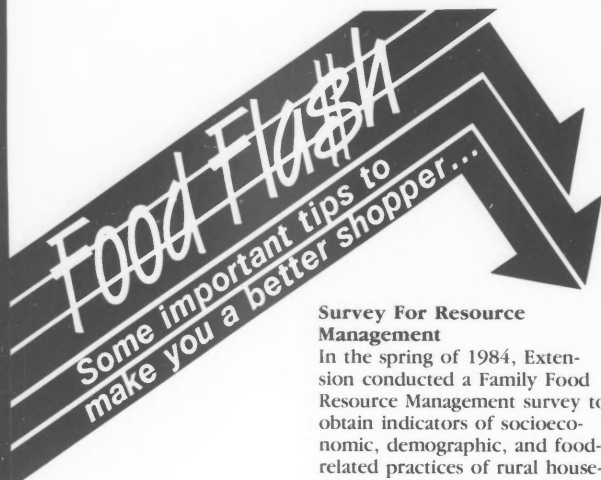
The survey results provided important implications for program methodology. Almost 80 percent of respondents indicated they would like to receive new information about food and nutrition. Newsletters, pamphlets, and learn-by-mail were strongly preferred over other traditional methods of receiving information. Eighty percent of the respondents stated they did not like group meetings.

## Unique Approach: "Food Flash"

A Florida Extension multi-county team is proving that directional planning and targeting specific information to the needs of clientele can make a difference through a program called Food Flash.

The Food Flash Program is designed to address specific problems of food shopping and management through the following delivery systems:

- A Food Flash "mobile information center" used as a stand-alone display board in stores with a pocket stocked with "Tip-Of-The-Week" cards. The cards contain one-concept messages that are restocked each week with an appropriate topic;



## Survey For Resource Management

In the spring of 1984, Extension conducted a Family Food Resource Management survey to obtain indicators of socioeconomic, demographic, and food-related practices of rural households in the counties and to identify potential target groups.

The survey was designed to identify similarities among county populations and within the state population that would encourage multicounty program development and implementation.

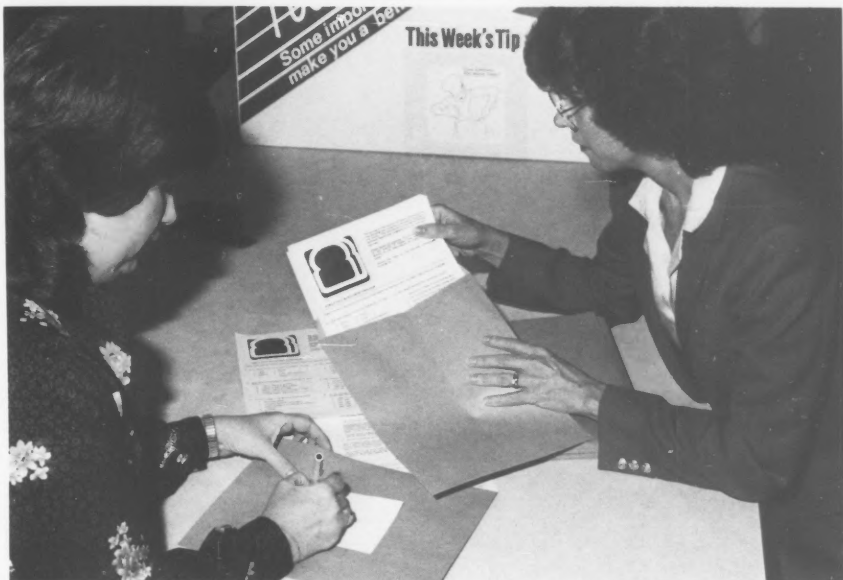
- Food Flash in-store audio-tapes that offer shoppers point-of-purchase information;

- A Food Flash "Tip-Of-The-Week" that is published in supermarket newspaper food advertisements; and

- A Food Flash "mini program" presented at in-store or agency locations.

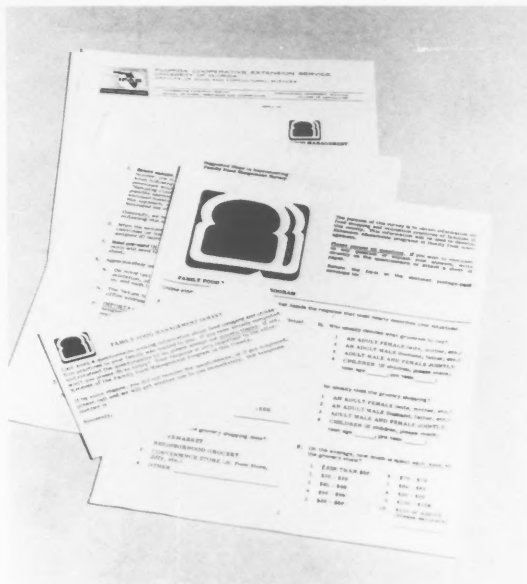
Food Flash has been packaged and marketed by Extension county home economists to deliver a message that will appeal to various clientele. For example, in Madison County, Delores Jones and Janet Thigpen documented an increase in knowledge and changed practices for food stamps with WIC recipients who were reached with Food Flash information. In Jefferson County, Phyllis Kennedy has been successful using Food Flash programs with the elderly at aging centers. Meredith Taylor of Suwanee County used a mobile unit to conduct cooperative programs with food retailers at supermarkets. Deborah Humphries of Taylor County employed Food Flash as an auxiliary information system for the county health department.

Through the efforts of these and other agents, Extension has gained recognition for conveying food management educational information with other government agencies who serve seldom-reached audiences. Because of their visibility and credibility these efforts have resulted in new partnerships with the food industry and business community. Home economists in Florida and other states are successfully using the resources they have developed.



#### The Meaning of Teamwork

"Teamwork—with home economists joining together in a multicounty long-range programming effort—takes dedication and a cooperative spirit that recognizes each team player's expertise and role," says Muriel Gravely, Hamilton County Extension director and home economist. "The real challenge is a good plan today, a better plan tomorrow." ▲



Top: Finalizing the mailing of the Family Food Resource Management questionnaires are Florida County Home Economists Muriel Gravely (left), Hamilton County, and Meredith Taylor, Suwanee County. Below: Samples of Family Food Resource Management Surveys with pre- and post-survey correspondence.

## For The Health Of It

26 Extension Review

**Janet Usinger-  
Lesquereux**  
Extension Area  
Specialist, Food and  
Nutrition  
Washoe County  
Extension  
University of  
Nevada-Reno

"Judy Fast" is the high school cheerleader who's always on the run and eats at the fast food restaurant where she works evenings. "Jock Star" is the star quarterback of the high school football team who works out daily and whose nutrition habits are based on an unrealistic self-image.

Judy and Jock are fictitious, but along with "Al Natural," "Dee Dieter," and "Joey Norm" they represent "typical teen" dietary types that high schoolers identify with when they assess their habits in "You: For The Health of It," a two-week Nevada nutrition education program. Developed in 1986, health/physical education teachers have responded enthusiastically to the program whose ultimate goal is for teens to make wise food choices within their varied lifestyles.

To identify a specific direction for nutrition education that would be pertinent to teens, Cooperative Extension and a number of local health agencies cooperated and gathered information at Washoe County high school fairs from 1982 to 1985 on many health-related issues. Several agencies addressed the problem of weight assessment and control. There was particular concern about teenage girls, who succumbed to peer pressure and followed "fad diets" that could possibly compromise their health.

In addition, a questionnaire, developed by Marsha Read, professor, School of Economics, University of Nevada-Reno; Janet Usinger-Lesquereux, Extension Western Area specialist, Washoe County Extension; and Marilyn Goad, Northeast Area specialist, 4-H, Elko County Extension, provided new dietary data on northern Nevada adolescents. The questionnaire revealed teenage dietary practices, activity levels, and use of supplements. In addition, the form provided information on height, weight, frame size, and percent of body fat.

### Questionnaire Findings

This data provided the basis for a nutrition curriculum for high school students. One significant finding was that approximately 40 percent of participating teens did not feel they maintained their ideal body weight. Yet, none of these teenagers were above or below their normal weight range.

This discrepancy in the way teenagers perceive their ideal body weight led to the first activity of "You: For The Health of It:" a slide/tape program aimed at students developing a more realistic self-image. "The Perfect 10: Your Idea Or Theirs?" explains body types and their genetic



determination. The program puts the weight components—muscle, fat, and bone—into perspective with regard to body types. It attempts to combat such media influences as movie stars, fashion models, and other role models, and asks students to think about their own body type and evaluate their self-image.

The program explains how nutrition affects each of the components of weight. It compares popular weight reduction diets with sound nutrition practices.

#### Assessing Dietary Habits

The second activity has the students assess their own dietary habits. Students typically have erratic eating patterns that reflect their extremely active lifestyles. They tend to have irregular mealtimes, or skip meals altogether. Often, they supplement their diet with "junk" food. Yet for teens, this is a particularly critical time when nutritional requirements are at their peak to ensure a healthy adulthood.

Students are presented with sample diets that have been analyzed. These samples are of fictitious "typical teens" that students can easily recognize. They include "Al Natural," the marathon runner, who avoids junk foods and eats only health foods; "Dee Dieter" who diets as a result of peer pressure, is overweight yet active in sports suitable to her heavy musculature, but who nevertheless wants a model's figure; "Joey Norm," a typical high school student who is on the baseball team, works weekends, and eats regularly with his family; and "Judy Fast" and "Jock Star" mentioned earlier.

After learning the nutritional advantages and disadvantages of these fictitious "typical teens," students learn to analyze their own diet and assess it for overall nutritional quality using a simple computer program. The goal is for teens to make wise food choices within their varied lifestyles.

After assessing their individual dietary practices, the students then determine their overall fitness. The goal of this final phase is to incorporate exercise into a healthful lifestyle.

"You: For The Health Of It" is currently being pilot tested in western Nevada high schools. Pre- and post- pilot tests, included in the package, will be used to measure results. ▲





## The Heart Of The Matter

28 *Extension Review*



Heart disease is the number one cause of death in America—and in Alabama. Recent "Heart of the Matter" meetings, however, have motivated Alabamians to make dietary and lifestyle changes that can reduce their risk of developing the disease.

At each meeting, health professionals presented the latest information: A physician gave an overview of heart disease; a registered nurse exercise physiologist spoke on the value of exercise; and an Extension nutritionist presented the afternoon program, "Cooking Lite, Eating Right."

Extension volunteers prepared heart-healthy foods—low-fat versions of lasagna and apple crunch—which were served to participants during mini-breaks.

### Positive Feedback

More than 1,700 consumers attended the day-long Cardiovascular Update '86—Heart of the Matter seminars offered in 12 locations throughout the state.

Consumers' response to the meetings were positive. Frequent comments were: "The meeting summarized information I had read in many different sources..." (The program) motivated me to make positive health changes..." (The meeting) informed people of the importance of the relationship of health and food, activity, and habits—they all play a part in reducing the risk of heart disease."

According to Escambia County Agent Peggy Bracken, the 32 people who attended in her area were "very enthusiastic about making changes in their lifestyle." One local dietitian who attended says she wishes she could have received educational credit since the program was more informative than many of the continuing education meetings she attends.

Janice Jarrett, Montgomery County agent, wrote, "...another excellent program! The meeting flowed smoothly, the speakers were excellent, the recipes were different enough to be interesting, and, most importantly, the participants loved it."

### Promotion Aids

State staff provided marketing packets to help agents promote meetings. Each packet contained newspaper releases, photographs of speakers with cutlines, and radio scripts. Sample invitations for senators, legislators, local government officials, hospital directors, dietitians, and local newspaper and radio contacts were included. The packet also contained a sample letter addressed to physicians asking them to encourage their patients to attend the meeting.

Articles and sample invitations made available on computer diskettes from the state Extension office saved agents a lot in preparation time. They simply filled in the appropriate local information and printed needed copies.

### Educational Packets

Each participant received a packet containing educational materials, including publications from Extension and the American Heart Association/Alabama Affiliate; the heart-healthy recipes; a program agenda; and an evaluation form. Most participants indicated that the handouts were "excellent and very educational."



**Barbara Struempfer**  
*Extension Nutrition  
Specialist*  
Auburn University,  
Alabama

### Research Data Gathered

The area meetings allowed Extension staff to collect research data via questionnaires and tests from a large population segment. Analyses of pre- and post-meeting tests taken by participants showed a significant increase after the meetings in their knowledge of risk factors associated with heart disease.

### Cooperative Effort

Cardiovascular Update '86 was funded by Alabama Extension; the University of Alabama at Birmingham (UAB) School of Medicine; the UAB School of Public Health; the American Heart Association/Alabama Affiliate; the Alabama Department of Public Health; the Alabama Commission on Aging; the Cooperative Health Manpower Education Program; Food World, a regional grocery store; the Alabama Gerontological Society; and the UAB Center for Aging.

### Award Winning Project

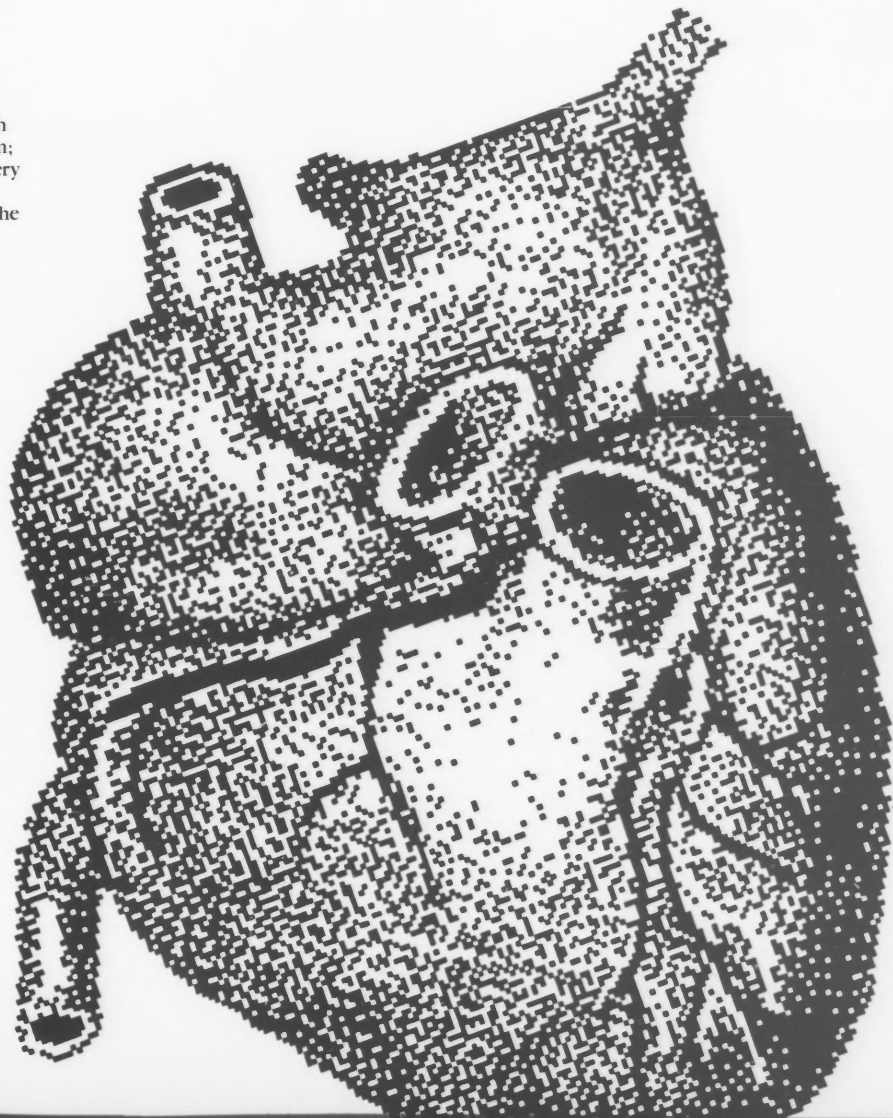
Recently Alabama's Department of Public Health selected the "Heart of the Matter" update as one of five projects deserving statewide recognition in the first annual Alabama Health Education Award Program.

Extension Nutrition Specialist Barbara Struempler will receive recognition for the project at the annual Alabama Public Health Association Conference to be held in Birmingham in May.

### Update '87 Planned

Area health update meetings have proved popular in Alabama. They began with Arthritis Update '85. In July, Diabetes Update '87 meetings will be offered. The program format will be similar to Cardiovascular Update '86. ▲

*Opposite top: In 1986, Extension nutrition specialists at Auburn University drew more than 1,700 Alabama consumers to Heart of the Matter seminars to reduce their risk of heart disease. Below: Extension nutrition specialist Barbara Struempler, Auburn University, holds jars representing the average (left) and recommended (right) salt consumption of American consumers. Cardiovascular Update '86—Heart of the Matter won statewide recognition in the First Annual Alabama Health Education Award Program.*



## Eating Right Is Basic 2

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**Mary Harvey**  
Extension Information  
Coordinator  
Home Economics  
ANR Information  
Services  
Michigan State  
University, East  
Lansing

Michigan Extension is offering two new food and nutrition education curricula for national implementation. Eating Right Is Basic 2 has a curriculum for adults and one for youths.

In 1982, Michigan Extension received a USDA grant to develop the curricula. This followed recommendations after Congress, in 1979, directed an independent evaluation of the Expanded Food And Nutrition Education Program (EFNEP). The study recommendations, completed in 1982, included the development of core curricula for adults and for youths that could be implemented nationally in EFNEP.

Upon award of the grant, a national curriculum advisory committee was organized. This committee included state, county, and national EFNEP representatives, supervisory home economists, 4-H youth specialists, paraprofessional nutritionists, and program administrators.

Eating Right Is Basic 2 uses a "competency-based" educational approach. First, the advisory committee identified the food and nutrition behaviors they believed to be most essential for adults and for youths. Approximately 160 EFNEP staff members from 23 states reviewed the competency lists. They also pretested selected lessons in the adult and youth curricula. Then, Michigan EFNEP staff developed lessons and evaluation tools for the specific competencies.

### Cost-Effective Approach

Eating Right Is Basic 2 is a total learning package. After a homemaker is enrolled in EFNEP, EFNEP administers a needs assessment to determine which skills and behaviors are lacking. Lessons are then tailored to meet only those needs. EFNEP requires 80 percent mastery in post-testing for graduation.

"This approach makes the program more cost effective," says Kendra Anderson, Extension nutritionist and one of the project coordinators.

"Previously, everyone in our state who went through the EFNEP curriculum took the same lessons, no matter what their skill levels. Feedback from Michigan staff members who are using the adult curriculum indicates that the emphasis on skills is the strength of this program."

The adult curriculum consists of 19 lessons. Twelve of these lessons cover such topics as food preparation, meal planning, food storage and sanitation, shopping skills, and basic nutrition. The other seven are special topic lessons covering weight management, maternal/infant nutrition, and gardening and food preservation.

### Youth Curriculum

The youth curriculum consists of 12 age-graded lessons. Six lessons cover topics such as basic nutrition, food preparation and storage, and food choices. Six "special topic" lessons cover fast food, food-related jobs, food production, food and fitness, advanced food preparation, and food preservation. Each youth lesson offers a variety of activities. The curriculum is packaged to allow for some structure and a lot of flexibility.

"Though the curricula were developed especially for EFNEP's target audience, Eating Right Is Basic 2 can be used with any audience that is interested in nutrition. Persons of any age or income level can benefit from these food and nutrition lessons," Anderson says. Some of the basic programs that can be offered under the program's umbrella, she points out, are single parent workshops, pregnant teen workshops, and others.

In 1986, Eating Right Is Basic 2 was officially introduced to EFNEP coordinators. Since then, 44 states have ordered approximately 2600 adult sets and 1300 youth sets.

### Program Package

Each adult and youth set includes 9 x 12 inch flipcharts with easels, booklets, meal planners, food stickers, camera-ready handouts, and instructor support materials. The youth curriculum package also includes posters, games, and story booklets.

All EFNEP homemakers in Michigan are being taught using this curriculum. During the summer of 1986, EFNEP home economists and paraprofessionals received extensive training, and all EFNEP counties switched to the curriculum in October. That summer the youth curriculum was also implemented in all Michigan EFNEP counties.

### For National Adoption

ES-USDA is recommending that EFNEP nationally adopt these unified curricula. This will improve cost effectiveness because it clearly identifies the food and nutrition behavior and skills believed to be the most essential for adult and youth participants. ES-USDA further recommends that the curricula be adopted for other audiences as appropriate. When results of the program are measured and reported, they will be based on the same curricula and methods of evaluation.

For more information on Eating Right Is Basic 2 contact either:

Linda Nierman or Kendra Anderson  
Expanded Food and Nutrition Education Program  
202 Wills House  
Michigan State University  
East Lansing, MI 48824 ▲



# Living With Less Sodium

The Living With Less Sodium Program teaches participants to actively evaluate and modify their sodium intake at the supermarket, during meal preparation, and at meal time. The 2-hour Extension program offered to consumers in Salem County, New Jersey, presents current information concerning sodium and its relationship to diet and health.

Excess sodium in the diet is believed to contribute to high blood pressure and stroke in some people. High blood pressure is related to the Nation's number one killer: heart disease. An estimated 60 million Americans have high blood pressure or are marginally hypertensive. In 1985 in Salem County, New Jersey, where the Living With Less Sodium Program was researched and developed, 6,500 people out of a population of 64,000 were screened for high blood pressure at a doctor's recommendation.

## Marketing The Program

The marketing process was intrinsic in the development of the Living With Less Sodium Program. The first step was to create an awareness of this timely issue.

Before the presentation of the first program, contact was made with editors of the two Salem County newspapers and the general manager of the local radio station. Anne-Michelle Marsden, Extension home economist, authored feature articles for both newspapers about sodium and health and was interviewed by the local radio station for their phone-in talk show.

This use of media, prior to the announcement of the program, created an awareness of the issues surrounding sodium consumption. Consumers were eager to obtain more information which resulted in a high attendance at the programs. Also, media personnel gave priority to program publicity issues.

During the initial stages of this marketing process, the program was pilot-tested at three nutrition sites at the Department of Aging in Salem County.

## From Label Reading To Intake

The 2-hour program has been offered seven times to 348 consumers in Salem County. Consumers are taught to recognize the sources of sodium in their diets and modify their intake with practices such as label reading.

Other issues covered include: sodium and its relationship to high blood pressure; sodium's role in normal body functioning; and what constitutes "safe and adequate" intake of sodium according to recommendations by the National Research Council.

The program, illustrated by overhead slides, includes a "Sodium I.Q. Quiz" and five demonstrations to reinforce concepts and encourage class participation. The quiz offers consumers an opportunity to test their knowledge of sodium content in various foods. Both the quiz and the demonstrations show consumers that it is relatively easy to modify some dietary habits.

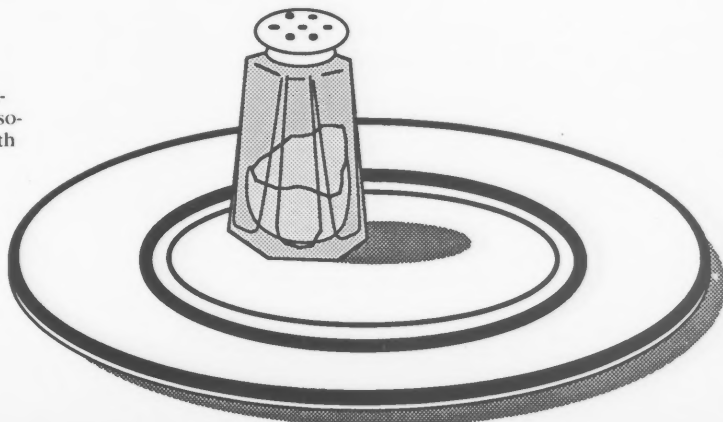
## Evaluation And Results

A followup survey sent to program participants after attendance showed an excellent return rate. Ultimately, the survey was returned by 271 consumers or 78 percent of program participants.

According to the survey, most participants had changed their attitudes toward sodium consumption because of the program. Nearly all participants indicated they had changed their eating habits after attending it. Over half of the participants were using less salt when preparing meals and using salt substitutes such as herbs, spices, and other flavorings. Many participants indicated that as a result of the demonstrations they learned which types of food were high in sodium; participants were also now reading labels to ascertain sodium content in foods they purchased.

The Living With Less Sodium Program continues to be taught in Salem County with the aim of reaching new audiences, increasing awareness of sodium, and helping consumers recognize techniques to reduce their consumption. The Home Economics Department of Cook College, Rutgers Cooperative Extension, has endorsed the Living With Less Sodium Program and it will soon be implemented by other Extension home economists throughout the state. ▲

Anne-Michelle  
Marsden  
Extension Home  
Economist  
Salem County  
Cooperative Extension  
Service  
Woodstown, New  
Jersey



# Nutrition Van Go

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*Rose Pruyne  
Extension Intern  
and  
Charlotte Murphy  
Extension  
Communicator  
Agriculture  
Information Services  
The Pennsylvania  
State University  
University Park*



You don't have to travel far in Pennsylvania to get the latest information about nutrition.

Nutrition Van Go, created by The Pennsylvania State University's Nutrition Education Center, brings up-to-date information to professionals throughout the state. But without the planning ability and expertise of Extension agents and their links in local nutrition networks, Nutrition Van Go's job would be a lot harder.

Nutrition Van Go is a 25-foot, customized van that travels across Pennsylvania and adjacent states. It serves teachers, Extension home economists, dietitians, nutrition aides, food-service directors, and others who need nutrition information.

## **Cooperative Ventures**

"We made 44 trips with the van in 1985," says Suzanne Pelican, former director of Nutrition Van Go. "Seven of the trips were coordinated by Extension home economists in Pennsylvania counties.

"We consider these trips the most successful because Extension home economists are familiar with local nutrition networks and are experienced program planners. Because Extension agents themselves have responsibilities for community nutrition education, our visits to counties are truly cooperative ventures.

"In fact," says Pelican, "we publicize county Extension offices as local information resources on every trip we make with the van, not just on Extension-coordinated trips."

The van is equipped with a microcomputer, filmstrips, slide projectors, a videoplayer and monitor, and several cabinets filled with information files. It accommodates about five people at a time, and visits are

free. Information packets cost \$3 for preschool teachers, \$4 for elementary school teachers, and \$5 for secondary school teachers.

Schools, however, are not the only stops for Nutrition Van Go. On request, it travels to hospitals, senior citizen centers, and community groups.

## **Van Services**

The Nutrition Center staff continually incorporates new material into the van service, and regularly offers workshops for interested professionals.

This year, Nutrition Van Go instructors gave workshops at 10 YMCA clubs in Pennsylvania, teaching coaches and parents about nutrition for young athletes. The Metropolitan Life Insurance Company is sponsoring a contest through Nutrition Van Go for the best display created by a young YMCA athletic team showing information about nutrition for athletes.





Opposite: The Nutrition Education Center at The Pennsylvania State University employs a 25-foot customized van to spread up-to-date nutrition information to professionals in Pennsylvania and adjacent states. At left, top: Inside the van materials are handy to serve teachers, Extension home economists, dietitians, and others who need nutrition information. Bottom: Visits are free to the van which is equipped with information packets, a microcomputer, and other equipment.



Nutrition Van Go staff also worked this year with high-school science teachers to incorporate nutrition information into regular science curricula.

"Our main functions are to act as a resource preview center," says Madeline Monaco, current director of Nutrition Van Go, "and to put teachers in contact with other sources, such as county Extension offices, health departments, and their local dairy council.

"We work with Extension to serve a wide variety of professionals, but we mainly serve educators by giving them information and activities. And that makes their jobs a lot easier." ▲

## EFNEP: Education Connection For The Hungry

34 Extension Review



**Ellen Schuster**  
*State Coordinator and  
Assistant Program  
Leader, EFNEP  
Minnesota Extension  
Service  
University of  
Minnesota, St. Paul*

Food shelves, food drives, and food assistance programs all attest to our Nation's concern for the hungry. The need is real. Last year in Minnesota, for example, about 1.25 million food shelf visits were accommodated, nearly 40 percent more than the previous year. Fully one-third of Minnesotans living in poverty must rely on food shelves to meet some of their nutritional needs.

Is there a connection between hunger and education? Is the long-term educational approach to beating hunger—a key part of the success of the Expanded Food And Nutrition Program (EFNEP) since its inception—assuming a diminished role?

The Expanded Food and Nutrition Program (EFNEP) does not provide food or money to its participants. Instead, EFNEP provides nutrition education in one-to-one or small group sessions. All that it requires of its participants is a willingness to learn. EFNEP strives to provide the information and skills to improve people's lives through the use of paraprofessional instructors, many of whom come directly from the low-income communities they serve. Lessons concentrate on improved nutrition, food buying and budgeting, meal planning, food preparation and sanitation, and food preservation and gardening.

The skills and information that EFNEP imparts can enable the program graduates to decrease

their dependence on food assistance programs and food shelves. This is vital at a time when food shelves, which began as temporary emergency measures, are becoming permanent resources for those without food.

### **Valuable Skills**

Shirley Baugher, assistant director of Extension home economics and Assistant Dean of the College of Home Economics at the University of Minnesota, comments: "Once again we can see that a home economics program such as EFNEP allows individuals and families to gain self sufficiency skills and knowledge that are valuable to themselves and their community."



*Opposite: Southeast Asians are just one of the ethnic groups EFNEP works with and food preparation is an integral part of the teaching to make full use of donated and other foods. At left: EFNEP teaches both adults and youths about food and nutrition—one of the ways in which it is a unique program.*

Comments such as the following attest to the way EFNEP makes a difference in the lives of its participants:

"EFNEP has been of great value to my family in the area of health. Because of the things I have learned my 19-month-old son has been given a good start in life."

"The EFNEP program has helped me to make my money stretch to the end of the month."

"Since I went through all the EFNEP lessons I can stay off Welfare. I have a job now and I don't need Food Stamps anymore."

#### **Brochure Series Begins**

Last year, Minnesota Extension launched the first of its FYI (For Your Information) series of brochures. The first issue was devoted to the connection between hunger and education and Extension's role in that linkage.

The FYI brochures focus on issues that are pertinent to home economics programming. Their intended audience includes policymakers, legislators, personnel from other agencies, and local Extension committee members.

The FYI brochure, "Hunger And Education—The Connection" drew a strong response. Extension staff members in each of Minnesota's 87 counties reported their small shipments were used up quickly. An EFNEP program in one other state is considering adapting the brochure for its use.

#### **EFNEP: Vital Link**

EFNEP continues to instill self-confidence and pride in its participants. "I was convinced I couldn't change my way of life," said one EFNEP participant. "But after I began learning about nutrition through EFNEP I began saving money and feeding my son and myself better. Graduation was a stepping stone for me. I wanted to accomplish much more, and with the encouragement I had received, I felt that I could do it."

As one agency professional emphasizes when commenting on EFNEP as Extension's link between hunger and education: "EFNEP is not a 'give-away' program. It is a training and education program for those who really need it. This program is an effective way to help people get out of the welfare cycle."

For further information on obtaining a sample copy of the FYI brochure contact:

Ellen Schuster  
State EFNEP Coordinator  
Minnesota Extension Service  
Phone: (612) 624-7479. ▲

# Food And Fitness By Mail



36 *Extension Review*



**J. Lynne Brown**  
*Extension Nutrition Specialist*  
*The Pennsylvania State University, University Park*

Pennsylvanian Donna Ebhart, the mother of several small children, was concerned about the calcium intake of her family but had no time to attend meetings at the local Extension office. When she saw an ad for an Extension learn-at-home lesson on calcium, she ordered it.

Now Ebhart wants Extension to offer more of these learn-at-home lessons. They provide her the convenience of learning at home when she has time—plus, she doesn't have to hire a sitter.

Ebhart represents one type of audience, mothers with young children, to whom learn-at-home lessons appeal. Others who like this delivery method include those who can't drive or who are fair-weather drivers, people who are homebound, and working parents.

## Focus On Food And Fitness

In the early 1980s, Pennsylvania county home economists began noticing dwindling attendance at meetings. In 1983, state Extension Nutrition Specialist Lynne Brown discussed developing a food and fitness program with members of the Pennsylvania Extension Family Living Nutrition Task Force. They suggested using learn-at-home lessons as the delivery method.

As a result, Pennsylvania has been offering learn-at-home lessons on food and fitness topics for 3 years. During this time, their use and popularity have grown. Topics covered include the role of fiber, fat, complex carbohydrates, iron, calcium, and vitamin A in maintaining health; weight control; food shopping tips; exercise; health-promoting snacks; and calcium-rich foods and osteoporosis (a condition that decreases the body's bone mass).

County home economists provide Brown with suggestions for lesson topics. All lessons have the same format: an introductory letter, a pretest, a background information section, a worksheet, and a posttest with a few evaluation questions.

## Using The Lessons

Home economists have made innovative use of these lessons. In Monroe County, Dawn Olson offered the lessons to Extension clientele through her normal newsletter channel the first year they were available. When a bank officer on her mailing list contacted her about providing these lessons to bank employees as part of a worksite wellness program, she enthusiastically agreed. She offered the lessons coupled with a computer analysis of a 24-hour dietary recall. Bank personnel handled advertisement, registration, and the distribution of materials while Olson completed the dietary analyses.

Ten percent of the bank employees completed at least one lesson. Of these, 85 percent reported making one positive change in their food habits.

For the majority of participants, this was their first contact with the Monroe County Extension Service.

Other home economists have used the lessons with selected Expanded Food and Nutrition Education Program (EFNEP) families, as an offering at point-of-purchase educational displays in supermarkets, with homemaker groups, in "Safe Slimming" classes, and with private weight control groups such as TOPS.

## Evaluation Strengthened

In 1986, Brown developed a more extensive evaluation of the impact of a specific lesson, "The Calcium Game," distributed that year. The lesson emphasizes the value of dairy products and other foods as sources of calcium, and addresses the role of exercise and supplements in reducing one's risk of osteoporosis.

Twenty counties mailed 1,700 copies of the lessons to clientele, and received 410 pre- and post-tests, a return rate of 25 percent. After studying the lesson, those responding gave correct answers to an average of 5 more questions on the 10-question test.

Eight weeks after home economists distributed the lessons, each conducted telephone interviews with a sample of 10 participants. Of 128 women completing the telephone interview who read the lesson, 82 said they learned something new from the lesson. A number of those interviewed said they were surprised to learn they were not consuming enough calcium. Sixty-nine percent reported the lesson inspired them to make changes in their personal habits to improve health. The most commonly reported changes were increasing or monitoring calcium-rich food intake. Fewer reported starting an exercise program and using calcium supplements.

Participants said they favored learn-at-home lessons almost two to one over meetings, and seven to one over videotapes. Since much of Pennsylvania has been severely affected by the decline of the coal and steel industries, videocassette players may not be as plentiful here as in other parts of the country where the local economy is healthier. Thus, learn-at-home lessons are a cheaper alternative.

## Commitment Reinforced

Results of the evaluation reinforced Extension's commitment to use the learn-at-home delivery method to reach busy Pennsylvanians. The majority of participants who use the food and fitness lessons learn new facts and change behaviors affecting their health. Clearly an increasing number of Extension's clientele like the convenience of learning on their own. ▲

# Irradiated Foods—A Hot Topic

Extension Review 37

What's for dinner in the year 2000? Irradiated chicken breast? X-rayed strawberries for dessert?

This possibility is not far fetched, says Richard Matthews, Extension food scientist with the University of Florida's Institute of Food and Agricultural Sciences. "Irradiating food to preserve freshness could become as common as canning, freezing, or microwaving by the year 2000," Matthews believes.

Exposing some fruits and vegetables to low doses of radiation—the first step toward the dinners of tomorrow—has been approved by the Food and Drug Administration (FDA) and a few irradiated food items may show up on supermarket shelves as early as next year. Since 1983, irradiated dried spices and seasonings have been used in some salad dressings, sausage, and frozen foods.

"Irradiated food items are probably not going to be a hit with consumers right away," Matthews says. "At best, consumer acceptance will be slow. I believe the food industry itself will be conservative about adopting this new technology."

## Radiation And Consumer Reaction

"Radiation is a scary word to many people," Matthews says. "Many people wince at the thought of consuming anything treated with radiation, even though there is absolutely no radioactivity created in the food from the process. A person doesn't become radioactive from dental x-rays and foods do not become radioactive from this process."

Consumers will be able to identify irradiated foods, Matthews points out, by looking for a new international logo on the food item. The logo must be accompanied by the words "treated with radiation" or "treated by irradiation."

Phrases such as "to control spoilage" or "to extend shelf life" also may be added.

The food treatment process is a simple one. Foods are placed on a conveyor that exposes them to radiation inside a shielded chamber. Gamma rays from cobalt 60 or cesium 137 can be used or foods can be exposed to x-rays or high velocity electrons. Once exposed to these low doses of radiation, foods must still be refrigerated and handled like regular foods not treated with radiation.

Food processors and members of the nuclear industry claim that irradiation is a safe alternative to pesticides, fumigants, and preservatives for controlling mold and other microorganisms. Low doses of radiation will be used initially on potatoes, onion, and some fruits to prevent maturation, kill insect pests, and extend shelf life.

## New FDA Regulations

The new FDA regulations permit a "low dose" of radiation of up to 100,000 Rads or one kiloGray. (Rads and Grays are measures of radiation energy.) The next step, according to Matthews, would be a dose of 10 kiloGrays that could be used on meats, shrimp, and other food products to destroy non-spore-forming bacteria like salmonella that cause food poisoning.

An even higher level of radiation—up to 50 kiloGrays—eventually may be approved to sterilize a product, Matthews says, but approval of the 50 kiloGray level is not likely anytime in the near future.

"More research is needed on what chemical or flavor changes occur in foods exposed to these high levels of radiation. The molecular changes that occur in foods at the FDA-approved one kiloGray level



are minimal—less than those that occur when foods are cooked or canned," Matthews explains.

One way to reduce chemical or flavor changes, he points out, is to keep the food product cool when exposed to radiation. Also, the lower the level of water in the product, the less chemical change. This is one reason dried spices were approved for irradiation in 1983.

At least 10 different agencies, including the World Health Organization and the American Medical Association have concluded that irradiated foods pose no risk to consumers. The U.S. Institute of Food Technologists, for which Matthews is a spokesperson, also has committed itself to a public education campaign on the process.

To date, 20 nations have approved the use of irradiation of foods, some up to the 10 kiloGray level, on the following products: chicken, frozen shrimp, frog legs, papaya, mangoes, strawberries, dates, onions, potatoes, bananas, and rice. ▲

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# An International Agenda In Food and Nutrition

38 Extension Review

**Nancy Leidenfrost**  
**National Program**  
**Leader, EFNEP**  
**Extension Service,**  
**USDA**

*A learning situation in Belize, Central America. Belize is just one of the international areas where food and nutrition specialists conduct a project which contributes to the quality of life of the population.*

Extension home economists can make a vital contribution to international development programs, either through collaboration in the agricultural sector, or through establishing independent programs. Their concern for families, the human condition, and the environment, as well as their efforts to meet food and nutrition needs in developing countries is directly connected with "development".

For many years home economists have been involved in international work, contributing significantly to the quality of life of families through their work. For this article we have identified only a few of the food and nutrition projects which Extension home economists and nutritionists currently conduct around the world.

Many of Extension's food and nutrition specialists hold joint Extension and research appointments which probably has led to increased involvement in projects which require both.

## Belize Project

James W. Nordstrom, food and nutrition specialist, Lincoln University, Missouri, serves as director on the "Nutritive Value of Leafy Green Vegetables Grown in Belize" project. Funded by AID, this project was developed in response to concerns by health officials in Belize, Central America, about possible vitamin and mineral deficiencies in their population. Preliminary surveys suggest that eating more fruit and vegetables—especially leafy greens—could help alleviate this malnutrition.

The fertile soil and favorable climate of Belize produces a wide variety of fruits and vegetables. The project objectives are: to identify domesticated and wild edible plants that are either presently utilized or have a potential as green, leafy vegetables in Belize; to determine the nutrient content of leaves and stalks of edible plants grown in that country; and to assess the amount and frequency of consumption of greens by small farm families in Belize.

Samples of plant leaves were collected and are being analyzed in Lincoln University's laboratory for nutritional content. Dietary information, collected during the past year, provides base line data on nutritional status as well as giving an indication of fruit and vegetable utilization in diets. The sample population was based on a random selection of children attending six different village schools. A trained school teacher collected 1-day food recalls on 90 school children, or a younger pre-school brother or sister and/or the mother or main food preparer of each family. Nordstrom worked with a nutrition council of educators and public health personnel to



distribute radio and newspaper releases encouraging the eating of a more balanced diet in Belize. Other educational interventions are planned when the study is completed.

## Hawaii Projects

Nancy E. Johnson, chair of the Department of Food Science, Human Nutrition, University of Hawaii, is involved in a campus-based project, with a graduate study of calcium bioavailability and aluminum toxicity in Guam. She also has a commitment from Wisconsin, as an adjunct professor at the Institut Agronomique et Veterinaire Hassan II, Rabat, Morocco, to work on a project to compare food balance sheet data and food consumption data to make projections about future food availability in Morocco. Johnson has also served as a curriculum consultant on a community nutrition program in Indonesia, collaborated with colleagues on research in community nutrition in Brazil, and conducted a case study of national nutrition programs in Sri Lanka.

Mary Keith, Extension specialist, foods, served as a member of AID's University of Illinois design team to Peshawar, Pakistan. Keith evaluated the situation and made recommendations for the NWFP Agricultural University development plan relative to women's roles at the university, in agricultural production, and in the food processing industry; and related need for and means to increase Extension/outreach to rural women. Work was conducted in the departments of Food Science, Agricultural Chemistry (effectively nutrition), and Extension education. Since the final signing of the agreements, Keith has been involved in the search committee for the Extension/Outreach coordinator position.

## Other Projects

Evelyn F. Crayton, Extension foods and nutrition specialist, Alabama, trained 16 Peace Corps volunteers heading for assignment in Tunisia, Cameroon, the Central African Republic,

Morocco, and Niger, in home food preservation and food safety. They received intensive 2-day training in canning, freezing, drying, and smoking of fish, plus packets of training materials to take to their host countries.

Crayton also worked with faculty and staff of the School of Fisheries at Auburn University who provided information on fish biology, processing, preservation, pond construction and engineering, aquaculture systems, and Extension aquaculture philosophy and methods for the Peace Corps Inland Captive Fishery project.

Patricia Wagner, Florida nutritionist, was involved in a field observation in the Republic of Cameroon, in the area of intergrating human nutrition in the agricultural curricula of the University Center of Deschang. Doris A. Tichenor and Barbara E. Taylor, also from Florida, were the principal investigators on a study to analyze the need and potential for the introduction of a home economics curriculum at the University Center of Deschang in a project sponsored by AID.

The study revealed an acute need for more adequate agricultural extension services for women, not only to assist them in food production and marketing practices but also with their household responsibilities of food management, nutrition and family health, and child rearing.

Data gathered from personal interviews and discussions strongly reinforced the need for a home economics curriculum that could prepare women professionals at the mid-management level to coordinate and train field technicians to work with women in local communities in these areas. The study also clearly defined the need for a non-traditional home economics curriculum focused on the specific needs of women at this stage in the development of Cameroon. This field study recommendation was submitted to University Center of Deshang for consideration.

Ruth D. Harris, Virginia Polytechnic Institute and State University, served as chief of a 2-year institutional "strengthening" project in Guinea. The project developed a strategy for increasing the agricultural food productivity of small landowners in Guinea through an Extension model. The project was sponsored by AID, while Virginia Tech, North Carolina A&T, and Fort Valley College were involved in projects through the Southeast Consortium for International Development. The four food components focused on during the project included rice, vegetables, cassava, and corn. No Extension infrastructure existed in Guinea to reach the people. To implement the project a model, based on our United States Extension program, was employed.

In a Peruvian project funded by IRI Research Institute in New York, Guillermina Valdez,

EFNEP home economic specialist in Texas, helped organize "Clubes de la Mujer Rural" (CMR), a similar organization structure to our Extension women clubs. She used this structure to teach rural women how to plan balanced diets and improve home sanitation practices and other related home economics skills. "Social promoters" were hired to organize the club and to deliver the educational program. Valdez taught the "social promoters" motivational techniques in rural development, leadership development and methods, and information needed to teach food and nutrition and related home economic subject matter.

Margaret Lewis, Extension Oregon nutritionist, served as chair of the Agriculture/Fisheries Committee for Oregon's "Partners of the Americas". Oregon and Costa Rica have been partners for 20 years. The Committee has funded projects for developing family and community gardens and raising rabbits.

#### **EFNEP-related Programs**

EFNEP delivery methods have proven to be the applicable in other countries. Janice McRee, South Carolina, home economist and Michigan Extension Home Economists, Margaret Bucklin, Arleen Mills, Marian Prince, Julie Michael, Dawn Harris, and EFNEP aide Josie Taube have all accompanied their Partners of Americas counterparts to Columbia, Belize, and the Dominican Republic to conduct field observations, and to help plan and implement workshops using EFNEP teaching concepts.

Extension home economist Geri Peeples, Saginaw County, Michigan, worked with counterparts at the Grenada Food and Nutrition Council to initiate a new project of popularizing local fruits and vegetables, according to Mary Andrews, director, International Extension Training Program at Michigan State University. With marketing of local products underdeveloped, many island consumers preferred imported foods. Expanding the use of local produce is a major goal of the agricultural sector.

A 2-week staff training workshop, conducted by Geri Peeples and Maria Noel, Food and Nutrition Council coordinator, provided hands-on experience in assessing educational needs, developing strategies, designing demonstrations, and preparing resource materials. Peeples also shared with the Grenada staff the Michigan-developed USDA curriculum for EFNEP, "Eating Right is Basic".

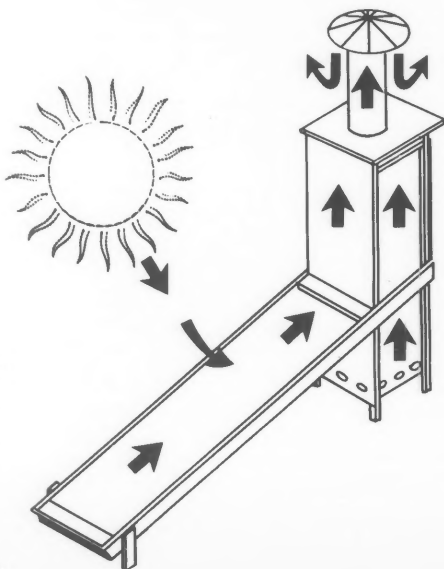
Katherine P. Riddle, Women in Development coordinator, International Programs, and Nebraska's Extension specialist in Food and

Nutrition has recently retired, but she is still concerned with the improved nutrition status of women and their families both in this and in less developed countries. Before coming to Nebraska she worked in Nutrition Projects in India and China and has since been Nutrition consultant with projects in African countries. She helped to establish a Nebraska Nutrition Network for local groups (including home economics) concerned with the status of nutrition and programs for nutritional improvement. This same group has expanded vision to consider breastfeeding promotion, participation in World Food Day activities, and global food-related issues.

She developed an 18-page study booklet "Women and the Development of the World" which is available at no cost through International Programs, IANR, 210 Ag Hall, Cooperative Extension Service, University of Nebraska, Lincoln, Nebraska 68583, as part of a study lesson for home Extension clubs.

#### Solar Drying Project

Through the Agency for International Development (AID), staff from the University of Idaho Postharvest Institute for Perishables (PIP) were requested to work with the Philippine Root Crop Research and Training Center (PRCRTC) of the Visayas State College of Agriculture (ViSCA) in the Philippines. ViSCA requested assistance in developing and implementing a training course on the Preservation of Tropical Fruits and Vegetables by Solar Drying with Supplemental Heat. Marilyn A. Swanson, Extension food and nutrition specialist, and Kenneth D. Hoyt, training coordinator at PIP, became resource personnel for the project.



Extension specialists in the Philippines developed and tested a prototype solar dryer for tropical fruits and vegetables. After modifying the dryer, Extension trained a university staff who introduced the dryer to three Philippine communities for training and incorporating new ideas and methods.

Swanson and Hoyt developed and tested a prototype dryer including a fire chamber that provided supplemental heat from renewable energy sources such as coconut husks, charcoal, and wood. After testing a variety of foods under various weather conditions modifications to the original model were made. After running drying trials, they designed a training manual which included class schedule, outline, reference materials, supplemental heat sources, food preservation techniques and practices, and bibliography.

Next they trained 15 university staff from agriculture engineering, food science, home science, and rural Extension. The course included demonstrations and hands-on experience in solar dryer construction, operation, food preparation, drying procedures, storage of dried foods, rehydration, and utilization of foods.

After modifying the dryer based on this initial training, the team began a community planning effort working with three Philippine communities, each working with a PIP-trained team from the university. After this training, both the PIP and ViSCA participants evaluated the dryer and training and incorporated new ideas and methods.

#### World Food Day

Across the country, Extension home economists participate annually in World Food Day activities. The Alabama Food and Nutrition Home Economics staff each year co-sponsors the day-long World Food Day satellite teleconferences on October 16 at Auburn University. Study packets are prepared for county staff and news releases inform the public and invite their involvement in the satellite program. Local and national food related issues are discussed during the satellite teleconference.

"Women in Development" committees were first established on campuses in 1983, often initiated by Extension staff. These groups promote international efforts, and study issues that impact on women in developing countries. The committees serve to support and provide cultural experiences for international students, and create awareness in the general public. By doing this, these committees were, in many cases, the forerunners of development education.

Extension Home Economics should continue to find and expand its role in International Development. It can enable individuals to obtain access to skills and knowledge, to increase their productivity and well being, and foster human resources development which affects future generations. ▲

# Home Food Preservation: Alive In Washington State

Home food preservation is far from a dying art in Washington State. For a variety of reasons, home food preservation is still widely practiced. Washington State home food preservers were surveyed to find out why they preserve foods, their sources of food preservation information, and other data. See Tables 1 and 2 accompanying this article for some of the significant findings of the survey.

The survey group consisted of 592 participants who were randomly selected from a list of persons who had received food preservation information from Extension in the state of Washington.

### Who Preserves Food?

Most of the persons who participated in the study were experienced home food preservers. Sixty percent had been preserving food more than ten years and only 7 percent had less than two years experience. Almost all were female (96 percent) and married (88 percent). Forty percent were between 20 to 39 years old; 43 percent were between 40 to 64 years old; and 17 percent were over age 65. Almost all of the respondents (92 percent) had finished high school and 27 percent had completed college. More than half (56 percent) had an income greater than \$20,000 per year.

### Value of Preserved Product

The average market value of the foods preserved at home was \$485 per household per year. If these respondents are typical of the 65,000 persons who receive food preservation information from Washington Extension each year, then the total market value for food preserved by Extension clientele exceeds \$30 million. If these respondents are typical of home food preservers nationally, then the total market value for foods preserved by American households exceeds \$14 billion.

Table 1  
Why Do People Preserve Food?

Respondents Reasons For Preserving Food	Very Important percent	Somewhat Important percent	Not A Factor percent
Foods taste better	75	22	3
Foods are better quality	70	23	7
Personal satisfaction	58	35	7
Prevents food waste	54	29	17
Allows wider food food variety	44	36	21
Saves money	43	42	14
Meets special diet needs	17	12	71

Table 2  
Where Do Home Preservers Get Their Information?

Information Sources	Use Frequently percent	Use Regularly percent	Use Occasionally percent	Almost Never percent
Canning company publications	42	27	23	8
Extension and USDA publications	22	18	48	12
Relatives	12	9	46	33
Magazines and newspaper articles	5	11	50	35
Extension workshops	5	4	25	66

Note: Percent does not total 100 percent because many respondents obtain their information from more than one source.

### Summary

The survey shows that in Washington State the primary reasons for preserving foods are related to personal satisfaction from producing high quality foods.

The primary sources of food preservation information are publications from canning companies and Cooperative Extension. (See Table 2). Much of the preservation information in canning company publications originally derived from USDA and Extension publications.

Most home food preservers use recommended methods. Persons under 40 years of age are more likely to know and use correct food preservation practices than their elders. Twenty-nine percent of the 592 persons surveyed had recently made changes in their food preservation practices in order to adapt their practices to USDA recommendations. ▲

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Washington State University, Pullman

# Fun With Food And Fitness

42 Extension Review

**Nan A. Baumgartner**  
Extension Home  
Economist  
and

**Gregory J. Matysik**  
4-H and Youth Agent  
University Extension  
Fond du Lac County,  
Wisconsin



Like most Americans, Wisconsinites need to be poked and prodded into eating better and exercising regularly. But Fond du Lac County Extension staff have discovered that incorporating some fun into their nutrition and exercise program is effective in getting their message across to a wide variety of audiences.

The program, "Fun With Food and Fitness," combines songs, skits, and the audience's involvement to motivate participants. Since the program began in 1983, it has reached over 2,500 youth, volunteers, Extension professionals, and school and community groups around the state.

What started as a 2-hour program in one Wisconsin county has developed into a 28-minute video, a peer teaching program, in-service training for professionals, and a curricular package for schools and community groups throughout Wisconsin. "Fun With Food and Fitness" is a joint programming effort between Wisconsin Extension's Youth Development and Family Living Education areas and the United States Department of Agriculture.

## Program Content

The program addresses four specific areas:

Thinking Fit, Acting Fit, Eating Fit, and Fitting It All Together.

**Thinking Fit** helps participants examine their attitudes and beliefs about nutrition and exercise through an "attitude survey" they complete. The survey compares attitudes of participants to their actual behavior. Next, simple tests to determine body fat percentages are demonstrated.

**Acting Fit** addresses the four types of exercise: flexibility, muscular strength, muscular endurance, and cardio-respiratory endurance. Participants determine their target heart rate zone; evaluate their own fitness level through completing a "How Fit Are You?" test; and make plans for a personal exercise program by completing an exercise contract.

**Eating Fit** focuses on the seven dietary guidelines for proper nutrition with special emphasis given to maintaining desirable weight and reducing the amount of fat, sodium, and sugar in one's diet.

**Fitting It All Together** summarizes program highlights and explores the concepts of energy balance, calories, and the research link between diet and exercise. Participants test their knowledge of exercise and nutrition by playing the game, "In Pursuit of Food and Fitness."

## Videotaped Program

After co-teaching the program for almost a year, 4-H and Youth Agent Greg Matysik and Home Economist Nan Baumgartner received a \$2,000 grant to transfer sections of the "live" program onto videotape. The video program features "Little Richard Slimmons" who, along with Dr. Fred Smith, explores energy balance, target heart rate, and basic warm-up exercises.

"Our Magazine" star "Julia Shields" and host "Gary Collards" discuss the benefits of nutritious snacking, while the "\$10 Pyramid" game show introduces the Seven Dietary Guidelines to viewers. Baumgartner and Matysik respond to common nutrition and fitness questions in "Talking It Over With Greg and Nan." There's even a music video segment to let viewers know "there must be 50 ways to lose your blubber."

The video currently is available to Wisconsin Extension agents through the state Extension library.

## Peer Teachers

The video program opened doors to a greater variety of clubs, organizations, and individuals. To extend the program further, Baumgartner and Matysik began a "peer teaching program." In cooperation with home economics teachers at a local high school, they recruited six Future Homemakers of America—Home Economics Related Occupations (FHA-HERO) students to become volunteer peer food and fitness teachers. Matysik and Baumgartner provided them 6 weeks training in both subject matter and teaching techniques.

## In Service Training

Youth, families, and communities are not the only ones benefiting from involvement in the food and fitness program. Recently, Baumgartner and Matysik cooperated with the Wisconsin Dairy Council in presenting in service training to high school and elementary teachers in a local school district.

## Making Lifestyle Changes

Evaluation results from program participants show that they are making positive changes in their lifestyles. In a followup survey with a group of local 4-H leaders, 69 percent felt that as a result of attending the program they were continuing to learn more about how exercise and fitness can improve their health. Fifty-eight percent say they've made changes in the kinds of foods they prepare for themselves and their families. ▲



Fitness 7—a comprehensive health and fitness educational program—has become one of Michigan's most popular home economics programs, because of cooperation between Michigan and Alabama Extension in 1983.

Michigan Extension learned about the Fitness 7 Program—which Alabama Extension developed with a USDA grant—at a time when Michigan's governor called for a state-wide health promotion conference. The conference's major recommendations urged agencies to approach health education from a holistic viewpoint.

Fitness 7 materials fit in very well with conference recommendations, says Doris Richardson, Extension home economics program leader at Michigan State University. With the full cooperation of the Alabama staff, Richardson revised the materials for Michigan.

"Alabama Extension was very cooperative and excited about Michigan's doing this," Richardson says. "At that time, we were the first state to approach them about using their materials in a major way."

**New Unit: Environment**  
Michigan made one major change in the units: nutrition and weight maintenance were combined in one unit and a new unit was created on environment.

"We wanted to keep it seven units to use the logo and the title," says Richardson, "but we did want to fulfill the mandate of the governor's conference and have a unit on environmental issues and how they affect health."

The environmental unit, she points out, deals with families and the effects of toxic chemicals in their lives. For use with the exercise unit, Michigan added a bulletin on walking whose material originated in Virginia. Last year, 6,000 of these bulletins were distributed.

### Health Risk Appraisal

The Fitness 7 Program uses the Health Risk Appraisal form as an integral component. Participants fill out the appraisal, which is then analyzed by computer. The appraisals are then used as a starting point for the program.

Richardson notes that the biggest drawback to using the appraisal was the expense. "Each appraisal cost close to \$5, which put it out of the reach of many elderly and low income persons," she says.

Computer specialists at the university adapted the program to floppy disk and made it available to all home economists.

"This adaptation to microcomputer has really expanded the program," Richardson says. "We've found that volunteers are an ideal group to process the appraisal forms. The computer program is easy, but it is time-consuming to run."

As an essential component of Fitness 7 in Michigan the program is always delivered with a health professional—a nurse, doctor, or health educator. "We feel that the appraisal needs to be interpreted, not just handed out," Richardson says. "We are dealing with health risks that can be modified."

Extension at Michigan State University has discovered that the Fitness 7 Program has greatly expanded Extension contacts in the local health communities. Also, many small business owners have

approached the home economists to ask for programs in health education.

The Michigan Association of Extension Homemakers has also adopted components of Fitness 7 for use in their study clubs. Homemakers have used the program as an opportunity to forge linkages with local health agencies.

Since 1985, 14 different counties (out of 83) have offered the entire Fitness 7 Program to 600 participants. Individual program components have been offered 107 times and reached approximately 10,000 people. Nearly 200,000 copies of the bulletin have been distributed to date.

### A Popular Program

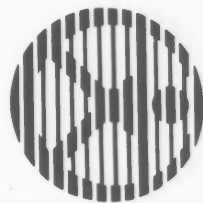
"One reason the program has been so popular," Richardson says, "is that Extension was the first agency to provide a complete health-fitness package. But we couldn't have done this without the head start provided by the Alabama materials."

Richardson estimates it cost approximately \$3,000 to adapt the materials to Michigan. This includes a quarter-time salary for six months for editorial help when having the bulletins revised.

For more information about the Fitness 7 Program contact:

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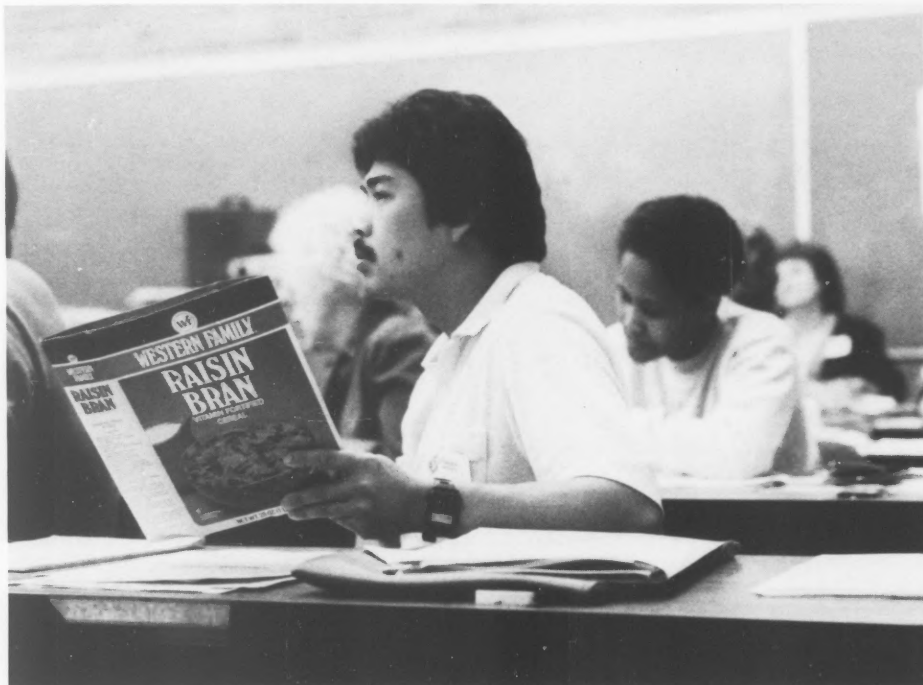


# FITNESS 7

## Wellness Workshop— Class Acts In The Classroom

44 Extension Review

**Nancy Kershaw**  
4-H Extension Agent,  
Washington County  
and  
**Susan Baumgartner**  
Former Extension  
Agent, 4-H  
Oregon State  
University



*Opposite: Participants discuss computer-generated health assessments with resource people from St. Vincent hospital in Oregon. Above: The workshop "Making Wellness Fun For Kids," organized by Extension 4-H and EFNEP in the Portland area, is fun for the elementary teachers who learn inexpensive methods of making nutrition instruction enjoyable.*

Cereal box labels. Puppets and computers. Nutrition games and experiments. These were some of the features of the second annual Extension-sponsored inservice workshop for teachers: "Making Wellness Fun For Kids." The workshop, a fun subject for the teachers as well, was organized by a group of Extension 4-H and EFNEP (Expanded Foods and Nutrition Education Program) agents in the Portland metropolitan area.

The idea behind the workshop was to highlight Extension at Oregon State University as a source of effective materials for teaching nutrition and related subjects. The workshop, conducted in cooperation with the Oregon Department of Education, trained elementary school teachers to use EFNEP/4-H materials in the classroom.

For years, Extension at Oregon State University has been successful in spreading the message of "good health"—many educators in other states now use the EFNEP/4-H materials in their elementary classrooms. But as Carolyn Cannon, Multnomah County EFNEP Extension agent, pointed out in 1984, despite the wide usage there were problems.

"Oregon State University EFNEP materials are nationally recognized," Cannon stated then, "but teachers often receive them without getting the nutrition background and tools to use the materials effectively."

### Brainstorming Session

Cannon brainstormed with Michael Holroyd, Extension youth EFNEP/4-H specialist, and the teacher inservice idea was born. The planning team grew to include three 4-H agents from the Portland metropolitan area: Linda Erickson, Clackamas County; Gilbert Shibley, Columbia County; and Nancy Kershaw, Washington County.

This group set three goals: to train and encourage elementary school teachers to use EFNEP and 4-H materials; to create an awareness in the educational community of Oregon State University Extension as an educational resource; and to increase teacher participation in the Oregon Department of Education Inservice Program.

In October 1985, cooperating agents taught the first workshop, "Making Nutrition Fun For Kids," during a statewide teacher inservice day. The Oregon Department of Education publicized the session through its listing of inservice training programs. Agents sent promotional fliers to



elementary school teachers. The four-hour workshop was attended by 87 teachers from 11 different school districts, including two from Washington State.

Upon registration, participants received resource packets, samples of Extension publications, enrollment information for 4-H School Enrichment, and instructions in ordering publications. The teachers worked in small groups and rotated through five different learning stations: nutrition games; snacks; experiments; puppets; and computers. Each session was taught by one of the cooperating agents, and teachers were allowed to try the practical ideas out.

#### **Evaluation**

After the workshop, participants completed a written evaluation. The inservice workshop received "high grades."

The workshop drew such comments as the following:

"The sessions were brief, but informative and inspiring . . ."

"I liked the active participation. There was no wasted time. This was really appreciated by busy teachers."

"The handouts were very useful."

"The workshop was an added boost to my present effort to improve the nutrition of my own family."

About one-half the participants stated they would attend the workshop again and a third expressed

an interest in a similar workshop on health and fitness. Five teachers volunteered to field test new nutrition materials.

The success of the 1985 workshop generated enthusiasm for another the following year. In 1986, the theme was expanded to "wellness" and included nutrition, fitness as a lifestyle, and stress management. Other agencies were invited to participate, and the workshop was approved for Teacher Inservice Credit required of Portland School District teachers.

The four-hour workshop, "Making Wellness Fun For Kids," was held as part of a statewide teacher inservice day, and featured exhibits and educational materials by National 4-H, the American Cancer Society, and the Oregon Dairy Council. Phillip O'Neil, professor of Human Development Education and Family Studies, Oregon State University, opened the workshop with a general session focused on the inter-relationship of nutrition, fitness, and stress. Then, the 67 teachers were split by grade level to attend sessions on stress management and nutrition.

#### **Accent On Practicality**

Activities varied during the sessions with an emphasis on practical ideas teachers could use immediately in the classroom. At the nutrition session, teachers analyzed cereal box labels to determine sugar content and counted sugar cubes to represent the amount of sugar in popular soft drinks. At the stress management class, teachers monitored their own stress levels by using temperature sensitive patches and received a checklist of stressful events to hand out to their students.

At the last session, the entire group explored fitness as a lifestyle. Participants learned exercises to tone muscles, strengthen heart and lungs, and increase body flexibility.

Evaluations of the workshop ranged from "good" to "excellent." The sessions on stress were rated the highest.

#### **Promising Future**

"I'm excited about the potential of these workshops," Michael Holroyd comments. "This concept can be applied in other regions of the state, not to mention other subject matter areas."

Agents from Central Oregon have expressed an interest in organizing a similar program for Fall 1987. In addition, a group of southern Oregon schools recently contacted Holroyd to invite Extension at Oregon State University to participate in an annual wellness training program. ▲

# Extension Food And Nutrition Programs—A National Assessment

46 Extension Review

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What is the driving force in food and human nutrition program planning? Which delivery method or material is cited by Extension agents as the most popular? What is the primary method used by agents to evaluate their programs?

Researchers at the Institute for Policy Research and Evaluation, The Pennsylvania State University, obtained the answers to these and other significant questions as a result of their national assessment of Extension's food and nutrition programs. Funded in 1984 by ES-USDA, the study was not of EFNEP exclusively or an impact evaluation of the effects of nutrition programs on clientele. The research objective was to conduct a descriptive study of the content, scope, and extent of Extension programs in food and human nutrition.

Researchers collected primary data from May through July 1985 in 16 states—4 states from each Extension region.

In addition, researchers analyzed the content of nutrition-related state Plans of Work (POWs) from the sample states.

## Some Major Findings

Some of the following findings of the study under "Program Planning and Topics:"

- Ninety-three percent of the state specialists and 80 percent of the county agents cited clientele preferences or the expressed needs of clientele as the driving force in their food and human nutrition program planning.
- Health and wellness showed up as one of the three most frequently covered topics in both the specialist and agent databases.

Under "Delivery Methods and Materials" the study reveals the following:

- Fifty-one percent of the agents chose demonstrations as the most popular delivery method. Thirty-seven percent

of agents chose newsletters, and 35 percent and 32 percent, respectively, chose workshops and meetings. Twenty-seven percent of the agents chose one-on-one counseling as their most popular delivery method.

Under "Evaluation and Impacts" the study discloses the following:

The primary method agents report relying on for evaluation is questionnaires.

Also, 75 percent of the specialists reported evaluating at least half of their food and nutrition POWs. Their evaluation methods were primarily those designed to measure educational change or practice change, not changes in end results.

Under "Clientele" the study showed that 57 percent of the agents identified adults with interest in or need for specialized dietary information as one of their three major clientele groups.

The two topics for "Future Research" that both agents and specialists believed would most benefit their food and human nutrition programming efforts were: 1.—the relationship of nutrients to health and disease, including information on weight control and diets to reduce the risk of heart disease and cancer; and 2.—the relationship of food and exercise to health.

Regarding "Appointments," only 18 percent of the specialists in the sample had a joint appointment that included a research component, but 41 percent reported conducting some research.

## Conclusions

The study demonstrated the depth and breadth of Extension's diverse activities in food and human nutrition. This diversity, the researchers believe, makes it difficult to document clear-cut, consistent impacts.

Study findings may provide opportunities to strengthen program delivery and the assessment of program impacts in the following ways:

1.—Extension needs to identify its priorities within the food and human nutrition area and, in conjunction with the states, target its efforts toward specific programming areas where there can be realistic achievement of the greatest impact.

2.—Extension may want to place a more direct effort in its programming on the relationships between food, diet, and health. Because of its unique perspective, Extension can provide research-based diet and health information, and family-centered nutrition education.

3.—Extension should examine the possibility of expanding its target audiences in food and human nutrition. Researchers believe that more targeting may be warranted to the elderly, singles, children (particularly "latchkey children") and adolescents.

4.—Researchers feel that agents may need to adopt more sophisticated delivery techniques to reach a more diversified clientele audience.

5.—Local Extension staff need to better understand the linkages between information content, delivery methods, evaluation procedures, and documented impacts.

6.—Ties between Extension personnel and researchers need to be strengthened at both the federal and state levels.

With additional resources directed toward improving delivery methods, and the strengthening of formal linkages to a research base, the study concludes that Extension cannot help but have a positive impact on the health and quality of life of its clientele. ▲

**Issue 2. Consumers' Concern About the Safety, Composition, and Quality of the Food Supply.**

**Extension Goal:**

To improve the ability of consumers to make informed choices related to food safety, composition, and quality.

**Educational Objectives:**

1. Consumers, food service personnel and food processors will improve handling and processing practices in order to prevent foodborne illnesses.
2. Consumers and producers will increase their knowledge of the benefits and risks to health from contaminants, additives, and naturally occurring toxicants in food.
3. Consumers will increase their knowledge of food composition, food processing techniques, and food regulations, thereby making informed food management decisions.

**Issue 3. Concerns of Consumers, Producers, Processors, and Food Handlers About the Interrelationships of Producing the Food Supply to Meet Consumers Needs.**

**Extension Goal:**

To improve the knowledge base and understanding of producers, processors, food handlers, public opinion makers, and consumers about the needs of each other in the food supply chain.

**Educational Objectives:**

1. Producers, processors, food handlers and public opinion makers will increase their knowledge and understanding of laws, rules, and regulations protecting the food supply.
2. Producers, processors, food handlers and public opinion makers will increase their knowledge and understanding of the real and/or perceived needs of consumers and modify their products to help meet those needs.
3. Consumers will increase their knowledge and understanding of the safeguards and requirements used in the production, processing and marketing of food.

---

*Suggestions and guidelines for helping to achieve these goals will be presented at a later date. Comments regarding these issues, goals, and objectives are welcome and should be directed to the Co-chairs of the Task Force: Marilyn Purdie, State Leader Home Economics, CES, Mississippi State University, Mississippi State, Mississippi 39762 or Milton Baldauf, Assistant Deputy Administrator, HEHN, Extension Service, Room 3443-S, U.S. Department of Agriculture, Washington, D.C. 20250-0900.*



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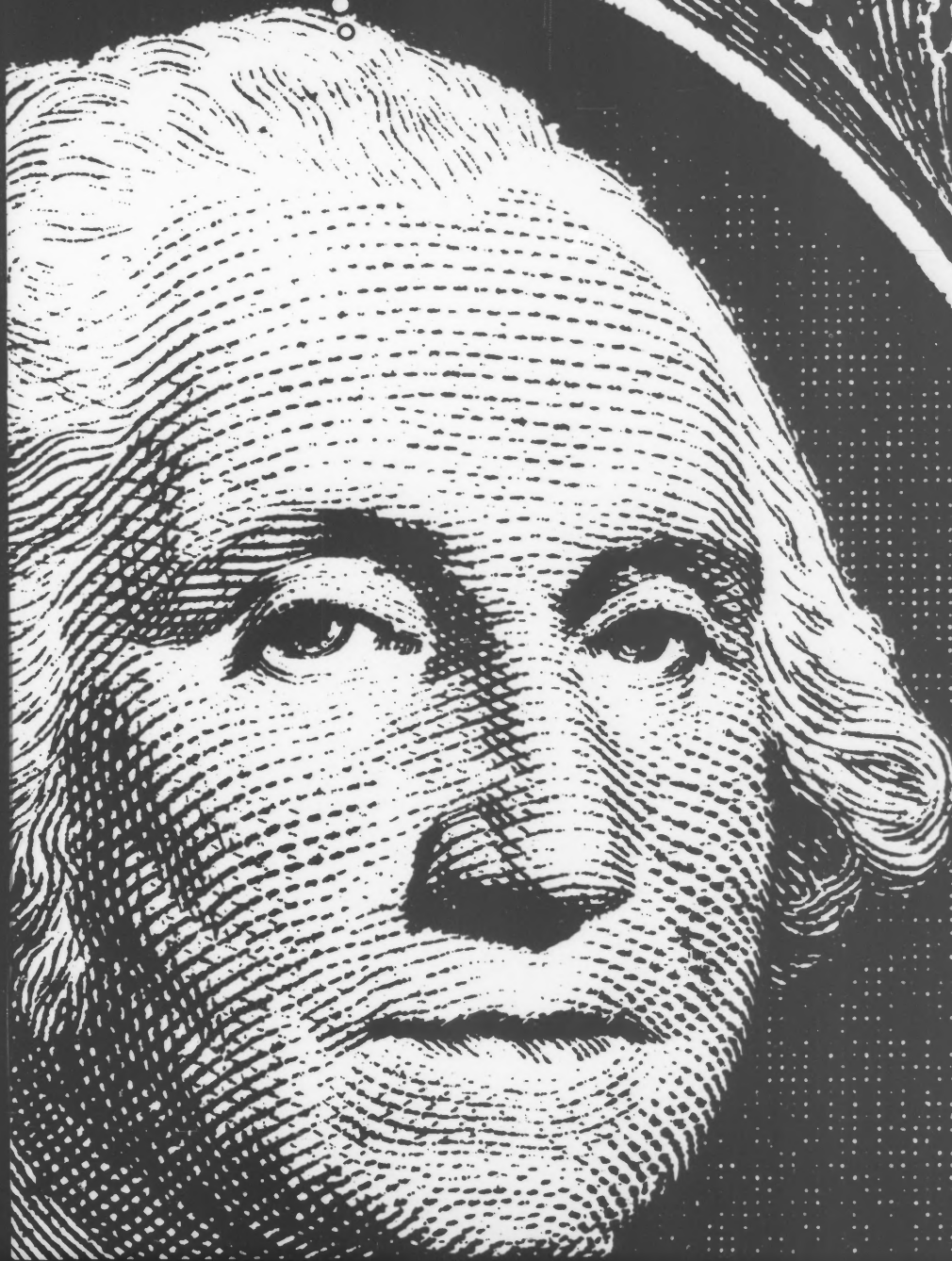
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*Financial  
Strategies*

# *extension review*

United States Department of Agriculture Summer 1987





## Improving Family And Economic Well-Being

In these articles of **Extension Review** are many examples of Extension programming targeted to the financial needs of people on the farm, home, and community. In the area of Family and Economic Well-Being the National Initiatives Task Force has identified the following critical issues with correlating educational goals and roles for Extension.

**Situation**

The family is the most effective and the most economical system for rearing children and nurturing adults. Strengthening American families so they develop decisionmaking and management skills, manage their financial resources, acquire self confidence, and become responsible, satisfied members of society is essential to this nation's future.

Our families live in a very different world from the one we inhabited as children. During the next decade, families will face unprecedented challenges as our society adjusts to technological advances, fluctuating employment patterns, and demographic changes.

The current transition of our society from an industrial to a service economy means a decrease in available income for some families. Between 1970 and 1985 the number of one-parent families more than doubled, adding both emotional and financial stress to the complex job of parenting. Youth are increasingly vulnerable to influences outside the family as well as disruptions within. Increased life expectancy and its accompanying expanded period of need can create a societal situation where too many elderly are too dependent on too few young and middle-aged working people. These factors point up many of the problems today's families must confront. Family instability profoundly affects every aspect of our society now and in the future.

**Critical Issues:**

To meet national challenges, the Cooperative Extension System will direct resources toward five critical issues:

**Issue 1.**

**Family Financial Instability**

The economic well-being of families is being affected by changing employment opportunities, eroding purchasing power, fluctuating income, and limited resource management skills.

**Extension's Goal:**

Help families improve their financial stability and position by gaining and maintaining control of finances and other resources.

**Extension Roles:**

Teach young families and the working poor the financial, management, and personal skills required to become and remain self-sufficient. Provide research-based information to community leaders and decisionmakers when analyzing policy choices. Assist families to make sound housing and health care decisions. Teach youth financial, management, and analytical skills.

**Issue 2:**

**Children At Risk**

Parenting is a complex and demanding role and responsibility. Families experiencing stress and deprivation caused by poverty, unemployment, family disorganization, inexperience or limited support are more likely to experience difficulties in being responsible parents.

**Extension's Goal:**

Empower families and caregivers to develop the confidence, knowledge, and skills needed to be effective parents.

**Extension Roles:**

Build on family strengths and enhance the development of skills associated with effective parenting to reduce such problems as neglect and abuse. Create community-based support networks to address parenting needs including child care. Provide experiences for youth to learn the roles and responsibilities associated with parenting.



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## So Farmers Survive When Banks Fail

✦ *Extension Review*

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Extension Farm  
Management Specialist  
and

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In 1986, when two Nebraska Panhandle banks failed within three months, Extension formed a financial consulting team that cooperated with Federal Deposit Insurance Corp.(FDIC) to rescue agricultural lenders and the community from financial disaster. Here, security guards load files of the Gering National Bank when the FDIC completed their job of liquidating assets.

Photographs in this article courtesy of the Scottsbluff-Gering Star-Herald.



In 1986, two of the largest bank failures in Nebraska history occurred in the Nebraska Panhandle. The Gering National Bank failed in late July. Gering National was the largest of the 26 banks that have failed in the state since 1983, and one of the largest agricultural banks to fail in the nation.

The second Panhandle bank failure of 1986 also occurred in the city of Gering, when the Bank of Gering failed in late October. This bank had a long history as an agricultural lender and was the third largest bank to fail in Nebraska since 1983.

Because there were two bank failures within three months many residents wondered if a wave of farm foreclosures would follow. Farmers with problem loans are most vulnerable when a bank fails. They must convince a new lender they are credit-worthy to stay in business.



The bank failures held a potential for disaster for 122 farm borrowers with loans totaling \$44 million. Their loans were not accepted (regarded as sound) by the acquiring banks and it fell to the Federal Deposit Insurance Corporation (FDIC) to collect; the FDIC is named (receiver) to close failed banks by the appropriate Federal or state bank regulating agency.

### Extension Responds

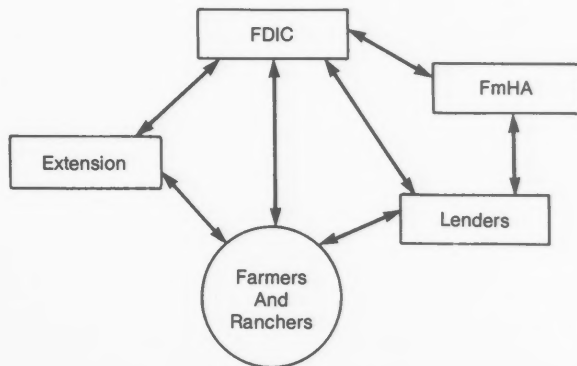
This potential for economic disaster was averted through the efforts of a financial consulting team composed of several District Extension staff members who established a rapport and strong working relationship with officials of the Federal Deposit Insurance Corporation (FDIC).

Fortunately for the regional economy, other local banks purchased the assets and some of the liabilities of the two failed banks. A very large number of agricultural loans, however, were not picked up by the buying banks. FDIC had the responsibility to liquidate those loans.

When the Gering National Bank failed, Extension staff established a cooperative relationship with the FDIC Liquidator-In-Charge and other key FDIC officials. The FDIC agreed to refer agricultural producers, whose loans they had acquired, to James G. Robb, Extension farm management specialist at the Panhandle Research and Extension Center (PHREC).

FDIC required a financial statement (balance sheet) and cash flow plan for the current operating year from the producers and agreed to use Nebraska Cooperative Extension forms. The Nebraska Extension Service Office at Gering offered packets of these forms to the agricultural producers with completion instructions, and offers of counseling.

### Bank Failure Information Flow



Soon after the bank failed, FDIC presented a "phone-in" radio program on a local station to answer questions. Stan Haas, Extension Communication Specialist at PHREC, informed the public of the interest and ability of the Extension service to assist producers. A newspaper release also fostered awareness among producers about Extension assistance, and the availability of the packets.

At a town meeting in Gering, FDIC requested that Robb appear on the program to describe how Extension reallocated resources to help the producers. Other Extension staff—financial analysts and a Scotts Bluff Extension agent—also appeared at the meeting.

Because the initial response of the producers was less than expected, Extension held a special open house to encourage their participation at the Gering Extension Service office. However, attendance by "borrowers" was very limited and it was evident that many were hesitant to face their problems.

### New Phase

A new phase began when the FDIC decided to invite lending institutions within 100 miles of Gering to bid on the loans that it held. Plans were made for the Farmers Home Administration (FmHA) to review and provide loan guarantees for producers taken over by another lender.

At this time, an Extension Response Team was established and meetings were held with the FDIC and Extension Response Team Members. The Response Team included a farm management specialist, two financial analysts, and a county agricultural agent.

Important details—such as prices and forms to be used, valuation of assets—were agreed upon. In the process, the Extension Response Team and the FDIC staff gained mutual confidence, and a good working relationship resulted.

It was agreed that the best alternative for most of the borrowers was to work at getting a new lender or, if necessary, negotiate with FDIC directly. The Extension Response Team developed consultation time schedules and gave them to a designated FDIC staff member who contacted borrowers and set a time for the consultation. Consultations were confidential and involved the borrower working with an individual Extension Response Team member at the PHREC.

Material provided by the borrower and the consultation resulted in a portfolio of information that included such items as a completed FmHA Farm and Home Plan; background information on the borrower's

*The Extension Response Team at the University of Nebraska meets to help agricultural lenders during the bank crisis. Seated (Left to right) are Extension Farm Management Specialist James Robb and Financial Analysts Ron Diffendaffer and Jean Cook. Team member not present at this meet: Scottsbluff Extension Agent Tom Holman.*



farm/ranch operation; income tax returns for the 3 preceding years; a crop history showing acres and yields for the last 5 years; and an estimate of credit needed to get through the current operating year, if necessary.

After the initial consultation with the Extension Response Team, many borrowers subsequently requested followup assistance from Extension staff members.

In addition to the borrowers, four parties were involved in the Extension Response Model that resulted—Extension, FDIC, FmHa, and Lenders. Extension assisted clients in developing portfolios of information for the next operating year and developed credit requirements, when necessary, for the current operating year.

#### **Impacts**

About 90 farm and ranch operations with problem loans were involved in consultations with

Extension. Consultations started in October and were completed by the end of December 1986. In April, 1987, the FDIC closed the Gering office. At that time only two bankruptcies had been filed and 62 farmers and ranchers had a new lender and a restructured financial position.

Every farm and ranch operation was evaluated separately in the process of seeking new lenders. The FDIC collected 98 percent of their estimated total liquidation value for agricultural loan sales completed in Gering. Thus, the FDIC was able to collect at least as much as they could through liquidation.

The Gering experience proved that an operational format involving independent organizations (Extension, FDIC, FmHa, and banks) can be implemented to respond to bank failures. Based on previous bank failures in Nebraska, and the initial experience of Extension in Gering, a successful response to a bank failure can only be achieved with the type of model that was implemented in

Gering. This Extension response model has now been used successfully in a number of bank closings in Missouri and is being incorporated into the Extension response to bank failures in Kansas. Undoubtedly, it will be used by many other states in the future.

For further information, or a copy of the "Extension Response Model" that was developed in response to the Gering, Nebraska bank failures, contact:

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Scottsbluff, NE 69361  
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# SOYBEAN TRADER— Serious Software

You are sitting at a computer terminal in New Orleans—a hub of frenzied activity in the high-powered world of international trade—facing critical decisions only you can make. Should you buy, sell, or stand firm? Should you insure those cargo vessels threatened by terrorists in Japan? The news from Chicago is that this shipment either gets through or you'll lose your shirt. What to do?

There's no need for any anxiety. Fortunately, you're just role playing, deeply immersed in a highly realistic computer game called SOYBEAN TRADER developed by Earl Brown and Richard Levins, Extension agricultural economists at the University of Maryland. Brown is recognized nationally for his educational efforts in international trade; Levins is well known for his work in computer applications in agriculture.

"As an educator," Brown says, "my task was to find a way to make a complex subject—international trade—easier to understand and, at the same time, interesting to a broad audience."

In fact, Brown received a \$200,000 grant from ES-USDA that was contingent on developing ways to educate farmers and students about the economically dampening effects of international agricultural trade expansion over the last decade.

Brown chose not to go the traditional publication route to educate farmers, students, and others about international trade in soybeans.

SOYBEAN TRADER, Brown points out, is the equivalent of a 2- to 3-week college course on a floppy disc. "The program manages to be fun and realistic. The situations a player will face," Brown says, "are based on real life situations experienced by an international trader in soybeans."

### A Reinforcement Mechanism

The program, which will run on any IBM-PC or compatible with 256K of memory and a color graphics adapter, has three large databases. "This means the chances of running into identical situations every time you play the game are pretty slim," he says.

"SOYBEAN TRADER is a reinforcing mechanism to learning," Brown emphasizes. "If you just play the game 10 or 15 times, you will pick up some of the subtle nuances of international trade. The game works best when it is used in conjunction with classroom instruction or workshops."

Brown has shipped complimentary copies of the game to the Cooperative Extension Service's of every state. In Maryland, the game is catching on with the state's farmers—a group whose future is increasingly dependent on understanding the complexities of international trade. "They are a real target audience," Brown says.

### Future Plans

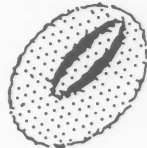
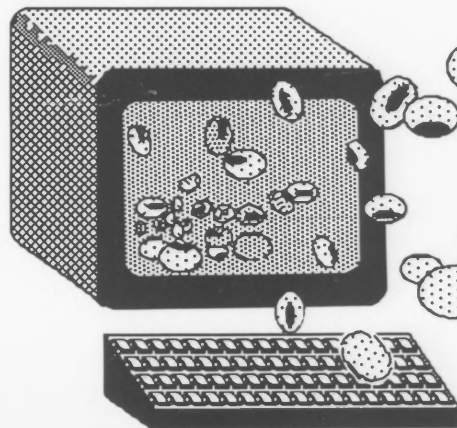
"Kids were initially attracted to the color graphics of the game," he says. "But soon farmers and other adults lost their inhibitions about computers when they learned how easy it was to play."

"We're working now on a new computer game for commodities trading," he says, and a national satellite feed for a teleconference on international trade."

For additional information contact:

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## More From Your Money

8 *Extension Review*

*Jeanne M. Hogarth  
Assistant Professor,  
Extension Faculty  
and  
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Senior Extension  
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Economic changes affect all families. In order to keep on track toward achieving their goals for financial stability and security, families must continually adjust financial management plans.

Limited-income families have unique financial problems because they have little flexibility in their budgets. In many cases, they lack successful experiences in setting or achieving management goals. They also must deal with the pressures of maintaining or achieving eligibility for public assistance programs. Coping becomes a day-to-day activity with little opportunity to make or implement management plans.

Extension agents and human service professionals in New York State saw the need for a resource management program for limited-income families. The main emphasis, they suggested, should be on budgeting and food resource management. They wanted a program that would enable participants to gain knowledge and skills in management strategies and to improve resource use.

### The Response

"More From Your Money," a multi-media, bilingual program in financial and food resource management is the response to that request. Jeanne M. Hogarth and Josephine Swanson, Extension specialists in consumer economics at Cornell, are the developers.

The teaching materials include an instructor's guide, camera-ready handouts for participants, a series of instructional flipcards, a 12-month calendar featuring food resource management messages and budget reminder stickers, and an audiocassette relating personal budgeting strategies. The handouts, calendar, and flipcards are in English and Spanish.

Initial training of home economics agents from 27 locations took place in spring 1984. Since then, the program has been used widely throughout New York and other states in varied educational settings and with a variety of clientele. The majority of New York county Extension programs are now using More From Your Money (MFYM) program materials.

### Help For EFNEP

The primary audience envisioned for MFYM was Expanded Food and Nutrition Education Program (EFNEP) homemakers and their families. The goal was to help these households adjust their spending so that more resources would be available for food purchases. One New York City EFNEP homemaker indicated that, thanks to MFYM, she no longer needs to use credit at the little "mom and pop" stores in her neighborhood.

EFNEP aides have reported that the calendar and stickers remind homemakers of resource management principles, when the aide will visit again, and—very importantly for families—when monthly bills are due. MFYM helped them pay their rent and other bills on time, cut back on using credit, and in general helped them purchase more things and save more money.

One aide says, "In a world that is becoming increasingly oppressive and expensive, our clients are generally finding it harder to 'manage'. Budgeting is a large problem for many. I feel the calendars help them organize their resources."

An EFNEP homemaker in Saratoga County comments that thanks to MFYM she was able

to avoid having her electricity and phone service shut off. Another reported that before the program she was renting a washer and dryer; after using the MFYM materials, she took the rental back, started saving money, and was able to buy a secondhand set.

### Broader Audience

County agents soon realized that these materials could be used to reach a much broader group of low-income families.

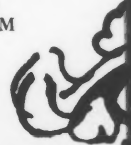
Mary Sienkiewicz, home economics agent in Albany County, conducted training for caseworkers at the county Department of Social Services (DSS). Shortly afterward, DSS offered a day-long workshop for clientele, using the MFYM materials. To maximize participation, DSS paid for transportation and child care. After the successful event was publicized in a statewide DSS newsletter, other counties began receiving training and providing similar workshops.

Other agencies and organizations also have provided a network for using MFYM materials. Barbara Patrick, home economics agent in Nassau County, has used the materials with Displaced Homemakers and Head Start parents.

One participant states, "I saved receipts for 3 months to learn where my money was going. I have a different attitude about the control of my money than I previously had. I'm more conscious of how it's being spent."

Patrick reported that a random survey showed that 80 percent of the participants had adopted one or more management practice changes to improve their household's resource status.

Madelene Umscheid, home economics agent in Tompkins County, has used the MFYM



materials in basic budgeting classes and in budget counseling sessions with county residents who found themselves overburdened with debt.

Marion Rutan, Mary Raymond, and Barbara Smith (home economics agents in Tioga, Genesee, and Chemung Counties, respectively) have used the MFYM materials to train volunteer budget counselors in their counties.

Within the Extension organization during the first 18 months of the program, over 430 human service professionals and EFNEP aides were trained in the use of the MFYM

materials, reaching an estimated 5,300 EFNEP clientele. And 125 volunteer budget counselors reached nearly 750 households with the MFYM materials.

#### **Economic Control**

When asked what the biggest change in her budget was since using the MFYM materials, one homemaker said, "I keep a better budget now and know if or when I'm overspending in any area. I also keep track better of what I need to save for in the future or before the next paycheck."

Reflecting on the origin of the program and the problems for families with limited resources, it is clear that programs such as More From Your Money can empower family members to exercise more control over the family's economic status. By identifying alternative management strategies, MFYM provides participants with the opportunity to experience successes in achieving goals for their families. ▲



MORE  
FROM  
YOUR  
MONEY

Cornell Cooperative Extension



# Strategies For The Small Farmer

10 Extension Review

Sheila A. Carrington  
Extension Information  
Officer,  
Virginia State  
University, Petersburg



Most small farms are operated like large farms, with the same enterprises, the same machinery requirements, and the same low profit margin. The increasing costs of production have severely hampered the agricultural sector—especially the small-farm operator.

Small-farm operators who have traditional enterprises (corn, wheat, soybean, dairy) have very high overhead costs per unit of sales. In Virginia, small and part-time farmers make up 80 percent of the state's total farm population.

### Small-Farm Program

The Virginia Small-Farm Program, administered by the Extension Service at Virginia State University, provides diverse educational opportunities to help small-farm families improve their quality of life. It emphasizes the development of new or alternative enterprises.

As a direct result of the program, Virginia farmers have already begun many new enterprises: Christmas trees and native shrubs in southwest Virginia, a vegetable industry in the traditional tobacco area of southside Virginia, and the

production of shiitake mushrooms in several counties around the state.

An important aspect of the program is that it focuses on the human problems of the families it serves. These targeted families usually have gross farm incomes of \$10,000 per year or less and depend on farming for a significant part, though not necessarily a majority, of their income. They often are located in areas where there is little or no off-farm employment. Even when off-farm employment is available, the hours sometimes conflict with farm work.

“Technicians” are the key to implementation of the Small-Farm Program. These technicians, who are operators of small farms themselves, are located in nine counties across the state.

Small-farm technicians provide one-on-one assistance in production and management. The educational assistance they provide is designed to help small farmers adopt new production and marketing practices, establish alternative enterprises, and increase involvement in programs sponsored by Extension and other USDA agencies.

### Direct Marketing

Another important facet of the Small-Farm Program is its support of marketing associations. According to Mitchell Patterson, agriculture specialist at Virginia State University, the primary purpose of developing marketing associations is to give the limited-resource farmers an opportunity to sell the largest possible quantity of their crop without the need for a large cash flow or expensive labor crews.

Two vegetable marketing associations—the Southside Grower's Association and the Southwest Virginia Grower's Association—continue to prosper due to the efforts of the Small-Farm Program.

The identification of new buyers of produce and the addition of grading and packing equipment have further strengthened the efficiency of these marketing operations. The 176-member Southwest Virginia Vegetable Grower's Association grossed \$200,000 in 1985.

A farmer's market established recently in Prince Edward County is providing 25 local farmers with the opportunity to market their produce directly to county residents on

weekends during the growing season. In the first year of operation, they sold \$13,000 worth of produce.

#### Financial Management

To further strengthen the farmers' decisionmaking skills, the Small-Farm Program sponsored workshops on farm financial planning. Farmers got help in developing farm enterprise budgets, and Extension workers helped them understand the effects of the quota systems on peanut production and increasing profits.

Faculty members have provided financial counseling to more than 300 farmers and have helped them with loans and with debt restructuring. As a result of this assistance, about 45 farmers who were close to foreclosure have been able to remain in farming.

#### FmHA Grant

Virginia State University received a Farmers Home Administration (FmHA) grant to provide technical assistance to small and family-sized borrowers in Halifax, Pittsylvania, Campbell, and Charlotte Counties.

These four counties are located in south-central Virginia, traditionally a part of the tobacco belt. Changes in the federal tobacco program (reduced quotas and support prices) have reduced the value of tobacco significantly. Most farmers in these four counties are aware of the program changes and understand the need to explore alternative enterprises.

FmHA identified a group of farmers in these counties who could benefit from intensive technical advice, supervisory assistance, and training. These farmers are facing such problems as underdeveloped managerial ability, limited education, the need for improved production practices, and other related factors.



*Opposite: The Virginia Small-Farm Program, administered by Extension, is supporting marketing associations so that limited-resource farmers can sell crops inexpensively at farmer's markets like this one. At left: Virginia farmers visit a shiitake mushroom demonstration. Below: Farmer inspects growth of shiitake mushrooms, an alternative crop whose production is being stimulated by the program.*

Two agricultural management specialists have been employed to implement the project and are working in Halifax and Pittsylvania Counties. Their goal is to help the participating farmers to improve their production practices, be more efficient farm managers, reduce costs of production, improve farm financial management, and adopt suitable alternative enterprises.

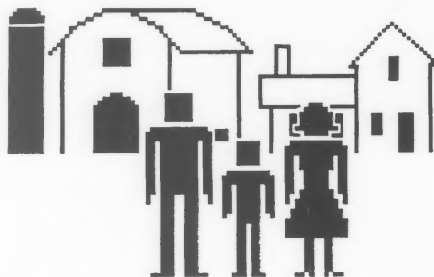
After the participants have assembled their 1986 income and expense receipts, the microcomputer program FINPACK will be used to prepare annual financial documents (net worth and income statements) for each farmer. ▲



# Managing For The Future

12 Extension Review

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"It would be nice if agriculture could simply be a way of life," says Tom Culp of Lexington, Ohio, "but it has to be a business first and then a way of life. It's important to plan ahead."

Since the spring of 1986, that's exactly what Culp, his wife, and nearly 500 other Ohio farm folks have been doing. They've been able to plan a future in farming with the help of a new Ohio Cooperative Extension Service program. "Ohio Farm Families: Managing for the Future" teaches people to first set goals, then talk about them, before making them part of both business and family plans.

Participants go to four 6-hour sessions and do followup work at home. The 40 programs held to date feature Extension faculty from all program areas and include both new ideas and concepts borrowed from other states.

Program development and promotion were funded by USDA; participants pay for their own materials. The idea is to get Ohio farm families to look at where they are and where they could be in the future.

## **Goal-Setting and Communication**

It's not quite a magic formula, but Managing for the Future (MFF) brings Ohio farmers more profits and draws them closer to their families. The program helps farm families make plans and prioritize goals.

The first step is a series of questions designed to make the participants think about farming and what they like and don't like about it. Extension home economists and community development specialists also discuss skills related to off-farm jobs. This prepares participants for the goal-setting session.

Goal-setting is the heart of the program. Family members develop both business and personal goals. Once goals are set, it is a matter of prioritizing both parts of the family's lifestyle.

## **Computer Analysis**

Financial Long-Range Budgeting (FINLRB) is a computer program used in Managing for the Future. "It gives farm families the chance to compare their long-range profitability, debt repayment capacity, and potential for net worth growth under three different management situations," says Warren Lee, Extension farm finance specialist. "FINLRB helps pinpoint potential trouble spots so you can do a better job of long-range planning. It's not foolproof, but it does give a good indication of whether change is necessary or not."

"We plugged in a lot of variables hoping to come up with something," Erie County farmer Frank Garwood says.

Garwood and his son Jim operate a 1,000-acre grain and beef farm. Their decisions surrounded Frank's retirement and Jim's desire to expand. Both families were involved in the decisionmaking process, and they credit the FINLRB analysis with allowing them to make an informed decision.

"It could be the farm family doesn't need any changes in the operation but needs to manage resources better," Lee says. "The FINLRB program gives them something on which to base their decisions."

Information about the individual farm is totally confidential. Families can enter data on their own floppy disk and keep it with them.

## **Total Management Plan**

The end result is a total management plan—both personal and financial. And once that plan is set, it's easier to track progress and to decide if changes need to be made next month, next year, or 5 years from now.

"There are just so many little things that some farmers don't do that would save them money or make them money," says Nita Hellwarth, Mercer County farm wife.

Little things, according to Hellwarth, are as simple as talking about the future of your farm. Husband and wife often have conflicting goals. Through discussion, a couple can decide priorities and set a time schedule that satisfies both.

## **Who Is The Audience?**

Managing for the Future is not a program for those being forced out of farming financially. Ohio has other programs aimed at those with severe problems. MFF is just what its name implies—a program to help managers take what they have and look at adjustments for any changes they may anticipate. It is designed for farm families who want to avoid being in a stressful situation some time later.

"Too often, farm stress is thought to be purely financial," says Jim Polson, district Extension specialist in farm management. "Financial matters are important, but frequently communication within the family and the establishment of common goals and priorities can go a long way toward reducing the pressures on the modern farm.

#### What's Next?

The goal-setting procedures used in *Managing for the Future* have been adapted to several other Ohio Extension programs. High school students are using it to set priorities in choosing careers and educational alternatives. Agricultural leaders are being trained to set goals. Extension professionals have used the same concepts with Farm Bureau groups and are using similar procedures with small business entrepreneurs.

Early surveys showed that 98 percent of the participants in MFF programs had learned new ideas

and that 46 percent of them were putting the ideas to work. Some of the first counties to hold programs are planning a second round.

Extension specialists say they still need to overcome the impression that *Managing for the Future* is for crisis situations. Getting people to commit to 4 days of meetings in a 4-week period also has been a problem.

A home study course called "Directions" has reached an additional 200 families unable to attend MFF programs. Promotional materials and campaigns have helped draw attention to the program.

"This approach takes some of the emotion out," Frank Garwood says. "But it kept us from getting excited and basically making a mistake." ▲

## For Better Lives On Post

Alabama Extension at Auburn University is providing both the specialists and the know-how to improve the lives of military families at Fort McClellan in Anniston, Alabama.

Since last April, a unique interagency agreement has seen the Alabama Extension Service and Fort McClellan working together to provide invaluable services in many different areas.

"Our agreement includes assistance in several different specialties," says Dorothy Tate, state leader for Extension home economics. "Extension home economists are conducting educational programs in financial planning, child abuse prevention, and working with exceptional family members. Warren McCord, state leader for community resource development, located in Auburn, heads up the fourth area of our agreement—the Family Member Employment Program."

#### Agents On The Post

Two Extension agents—Susan Wingard and Celvia Dobbins—are located on post at Fort McClellan to work with military personnel in Community Services and provide training and individual help in financial matters.

"We're there to teach classes and also to help individuals with such matters as budgeting," says Wingard.

An Extension agent and four program assistants work in the area of prevention of child and spouse abuse with the goal of improving the quality of life for families who need help.

The program assistants go into the homes to help with homemaking and parenting skills. "Many military wives are young mothers far from their own parents," Tate points out. "They need someone knowledgeable to turn to for advice."

#### Assisting With Services

The Exceptional Family Member Program was created to help families find schools and provide services for military family members with special needs. "It can be very difficult," says Tate, "to find the help you need for an exceptional family member, especially when you're new to an area."

The Family Member Employment Program is designed to help military family members find civilian employment. "We are happy to have military family members working for us in this program," McCord says. "They have a true understanding of the situation and enjoy helping people like themselves."

This employment program encourages local employers to hire military family members by selling them on the advantages. Job openings are listed in a job bank, seminars are held on self-assessment, how to interview, and resume writing.

#### A Model Of Cooperation

"Programs like these are conducted by the military all over the country," explains Tate. "Extension has worked with the military before. But this is the first time Extension has provided the personnel and the expertise to handle such a program. This agreement serves as a national model of how Extension and the military can work together." ▲

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## Coming To Grips In Idaho

14 Extension Review

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*Idaho Extension home economists have developed a pilot home-study course that is helping families come to grip with their finances. Opposite: Marilyn Shinn (left) and Mary Ann Lawroski, developers of the curriculum, review clientele responses. Above: Ann Hamrick, a Boise homemaker, works on newly-learned budget while her daughter observes.*



With many Americans feeling that their funds fall shy of their financial dreams, there has been no shortage of workshops and presentations on ways to narrow the gap. But two Extension home economists in Idaho have developed a pilot home-study class that helps clients work through their financial concerns privately and at their own pace.

Mary Ann Lawroski, of Bonneville County, and Marilyn Shinn, of Ada County, developed the five-lesson curriculum entitled "Coming To Grips With Your Finances."

The course is aimed at families with young children, consumers who want to begin or improve their financial management, and those who have found money to be a source of family conflict.

The response to newspaper articles, newsletter items, and personal letters inviting participation in the spring 1986 class exceeded expectations—enrollment was 104 in Bonneville County and 130 in Ada County. In spring 1987, the class was repeated in both counties.

### Beyond Budgeting

"There is more need for this kind of program than ever before," says Lawroski. "People are eager to learn. They are realizing the need for accurate, researched information on money management that goes beyond budgeting."

The lessons—each of which includes detailed worksheets—focus on values, goals, and budgeting; recordkeeping; credit; risk management or insurance; and savings and investments.

Every 2 weeks from March through May, participants were mailed a lesson, which included about eight pages of reading and a confidential, two-page worksheet. The total cost was \$4.

"I wanted a new delivery system," says Lawroski. Shinn agrees. "I think this is definitely an avenue of message-delivery that we need to be exploring."

Of those returning a followup survey, 92 percent in Bonneville County and 70 percent in Ada County reported being very satisfied with the home-study series method.

### Valuable Lessons

Maureen Ohme, wife of an Idaho Falls farmer and the mother of two teenage daughters, found the lesson on document-filing systems to be very



valuable. She also discovered through tracking the family's expenses that shortage of time was putting pressure on finances. "You can't stay home all the time. But I didn't realize we were spending that much money."

Cynthia Brooks, married to a student and the mother of three children under five, comments that she spent about 6 hours on the first lesson and about 2 hours on each of the next four.

"I didn't realize we had so much money," she says. "I was surprised that we made that much — and we spent it all." A gas-guzzling car swallowed far more of their income than she had thought, and even careful sale-shopping didn't keep their clothing costs within the guidelines she had imagined.

"Before, I thought I was too busy to do the lessons, but I made myself find the time." Brooks says the materials were so useful she sent copies to relatives.

"This puts it all in writing and has it outlined for me. I put them in a big binder I'm going to keep. Someday, I'm going to go through these lessons with my children."

The goal-setting section forced Brooks to sit down with her husband and examine differences in their priorities. She says that the risk-management section was particularly interesting. "I don't want to be pressured into getting more insurance than we need," Brooks says.

#### Changing Spending Patterns

In Boise, Ann Hamrick's husband, Brian, works solely on commission. Hamrick says she didn't know how much they needed to live on or how to plan a budget. "I was surprised by how much we spent on food and entertainment," she says. "We feel entertainment is important, but we hadn't budgeted for it."

Reducing the amount they spend on restaurant meals is only one area Hamrick identified for cutbacks in the family budget. Utility spending is another. Rather than writing checks for most of her spending, Hamrick says, she is now giving herself a cash allowance for gas, food, and entertainment.

She points out that she spent 1 hour a week on the lessons and "should have spent more time. I think it could be very beneficial."

#### Survey Results

Lawroski states that the pre-course survey of Bonneville County participants reveals that 79 percent want to improve long-term financial

planning, develop a workable recordkeeping system, and set aside a 2- to 3-month emergency fund. Eighty-five percent wanted to prepare a net worth statement, and 89 percent hoped to complete an up-to-date inventory of personal property.

Of the 25 percent of Bonneville County participants who responded to the post-course survey, all said they had discussed their values and goals; 85 percent were keeping a record of expenses, had developed or reorganized a home filing system, and had set savings goals; 69 percent had determined their net worth; 54 percent had established their insurance needs; and 46 percent had completed a household inventory.

In Ada County, 29 percent of the participants returned their post-course surveys. Of these, 77 percent said they felt in greater control of their finances either "to a great extent" or "to a fair extent."

Sixty-seven percent had studied their current debt situation; 60 percent had discussed values and goals; 37 percent had kept a record of expenses and set up or reorganized home file systems; and 33 percent had identified categories to cut back if needed and had set savings goals. Many more were still completing the lessons at the time of the post-course survey.

Of those participating in the Ada County class who returned the second survey, 27 percent had never heard of Cooperative Extension before. The corresponding figure for Bonneville County was 8 percent.

Most of the participants in both Ada and Bonneville Counties were between 30 and 39 years old and had at least some education beyond high school. ▲



# Salary Savings —Tool for Managing Budget Cuts

16 Extension Review

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The salary savings concept for managing a budget unit's personal services budget was developed and implemented by the Georgia Cooperative Extension Service in 1976. It was born out of an urgent need to increase starting annual salaries for county agents by \$2,000 during a fiscal year when no state funds were appropriated for salary increases.

To prevent serious salary compression for agents with 0 to 5 years of service, it was also necessary to give salary increases totaling approximately \$600,000 to this group. The salary savings concept successfully recovered this over-expenditure of personal service funds.

In short, the salary savings concept is a plan which permits administrators of individual budget units considerable freedom in the management of vacancies and salary amounts, while ensuring that the total Extension organization can meet its staffing goals within prescribed budget limitations.

## Lapse Amounts

It is typical for an organization such as a state Extension service to have more positions budgeted than funds available for those positions. In other words, if all budgeted positions were filled at the beginning of the year and remained filled throughout the year, personal service expenditures would exceed funds allocated by an amount referred to as the "lapse" amount.

Normal turnover and the time it takes to fill a vacated position prevent this from happening, if the lapse figure is reasonable. Our experience indicates that a lapse figure of 1-1/2 to 2 percent

of the total personal services budget is appropriate when vacant positions are filled as quickly as normal hiring procedures permit.

For a variety of reasons, this lapse figure may need to be increased beyond this 1-1/2 to 2 percent range. The salary adjustment plan discussed here is one reason. Budget cuts such as those created by the Gramm-Rudman-Hollings Act are another reason. A third reason is the need to create new positions in a critical area when additional funds are not available.

## Budget Unit Responsibility

A lapse figure higher than 2 percent must be managed on a day-to-day basis. The Georgia Extension Service has successfully managed it by giving each major budget unit a salary savings budget. Each unit is responsible for generating their fair share of the lapse amount.

The units do this by keeping positions vacant for varying periods of time, thus creating "salary savings" that will reduce their personal services expenditures. Each budget unit produces a monthly report indicating salary savings realized compared to their salary savings budget.

Since Georgia Extension has been doing this for more than 10 years, we have obtained a degree of confidence and sophistication in our management of salary savings. The latest development is a computer program using a microcomputer and an electronic spreadsheet for the budget unit to calculate and project its salary savings for the fiscal year.

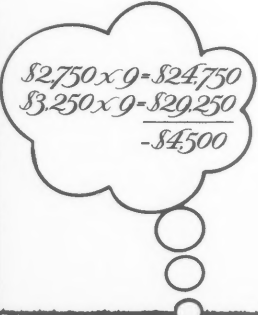
Under this salary savings plan, administrators of the budget units have become totally involved in the management of their personal services budgets. They have assumed greater responsibility, but also have gained considerable flexibility in determining where and how to spend their personal services dollars.

## Recurring Savings

A clear understanding of the distinction between salary savings generated for the current year and the recurring salary savings generated to adjust next year's budget is critical for the proper implementation of this plan.

In Example 1, "Bill" was hired at a smaller salary than "Steve" was making when he was terminated. The difference between \$36,000 and \$30,000 results in an annual recurring salary savings of \$6,000.

In Example 2, "Betty" was appointed at a higher salary than her predecessor was earning. Thus, the negative difference between the \$33,000 and \$39,000 salaries results in a recurring salary need of \$6,000.


$$\begin{array}{r} \$2,750 \times 9 = \$24,750 \\ \$3,250 \times 9 = \$29,250 \\ \hline -\$4,500 \end{array}$$



### Calculating Savings

The mathematics of calculating the salary savings realized from a personnel action is not difficult, but training in this area is highly desirable. A few examples of the process are shown below.

#### Example 1

"Steve" was terminated on September 30, earning a salary of \$36,000 per year (\$3,000 per month). "Steve" had no accumulated annual leave. "Bill" was hired on January 1, at an annual salary of \$30,000 (\$2,500 per month).

Time vacant = 3 months

Time from appointment to end of fiscal year = 6 months

#### Accumulated Salary Savings

While vacant            3,000/mo. x 3 mos.  
= \$9,000

Since appointment to end of fiscal year  
\$3,000/mo. x 6 mos. =     \$18,000  
\$2,500/mo. x 6 mos. =     -15,000  
   \$ 3,000

Total salary savings for  
year                                     \$ 9,000  
   +3,000  
   \$12,000

#### Example 2

"Susie" was terminated on July 31 and had 21 days of annual leave accumulated. Thus, her last paycheck was August 31, since she opted to take her leave. "Susie's annual salary was \$33,000 (\$2,750 per month). "Betty" was appointed on October 1, at an annual salary of \$39,000 (\$3,250 per month).

Time vacant = 1 month

Time from appointment to end of fiscal year = 9 months

#### Accumulated Salary Savings

While vacant            \$2,750/mo. x 1 mo.  
= \$2,750

Since appointment to end of fiscal year  
\$2,750/mo. x 9 mos. =     \$24,750  
\$3,250/mo. x 9 mos. =     29,250  
   \$ -4,500

Total salary savings for  
year                                     \$ 2,750  
   -4,500  
   \$ -1,750

In the first year of the salary savings plan, each budget unit is given a salary savings budget based on a "fair share" of the lapse amount. In subsequent years, the unit's budget is adjusted to reflect the personnel transactions that occurred in the previous fiscal year that will have a recurring effect on the budget.

Additional adjustments may be required to accommodate such factors as budget cuts and extraordinary salary adjustments. The Extension director usually makes these adjustments based on a percentage of the unit's personal services budget.

#### Objective Approach

In conclusion, the salary savings plan has enabled us to "soften the blow" of significant budget cuts. It also has allowed us to phase in the reduction of positions in one area, increase positions in another, and make salary adjustments in specific areas. Administrators are more actively involved in managing their personal services budget; this, in turn, has led to a more objective approach to individual salary administration.

#### Some Definitions

**Fiscal Year**—The accounting period used by the organization; University of Georgia's is July 1 through June 30.

**Lapse Amount**—The difference between the total amount budgeted for Personal Services and the actual funds allocated for Personal Services. Use of the lapse concept enables the organization to overbudget the Personal Services allocation. The Personal Services Budget, after lapse, must be equal to the funds allocated from various sources for Personal Services.

**Personal Services Budget (Before Lapse)**—Total includes line item positions (salaried monthly and salaried biweekly), lump-sum hourly positions, and fringe benefits.

**Recurring Salary Savings**—The difference between what was budgeted in the position at the beginning of the year and what was budgeted in the position at the end of the year before next year's salary increases.

**Salary Savings (or Needs)**—The difference between what was budgeted in the position at the beginning of the year and what was actually spent in the position during the entire year. ▲

*This article was originally presented in October 1986 at the Administrative Management Meeting in Seattle, Washington.*

# Harvesting A Crop Of Financial Skills

18 Extension Review

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Farmers across the country are harvesting a crop of financial management skills thanks to a new Extension program that uses videotapes and workbooks to deliver its messages.

Extension and Farm Credit teamed up to produce the Business Management in Agriculture series, which features some of the Nation's top farm management specialists on videotape.

Each of the nine modules in the course targets a specific financial skill. In one videotape, for example, a Nebraska economist shows how to develop written goals for the farm and the family. In another, a Minnesota farm management specialist tells how to analyze farm business changes with a budgeting technique.

Other specialists talk about how to develop recordkeeping systems and financial statements and how to plan for an uncertain future.

Producer workbooks—containing a videotape script, exercises for practicing the concepts introduced in the tape, answer keys, and work sheets—supplement each module.

What makes the course special?

"Delivery," says Carl O'Connor, Extension agricultural economist at Oregon State University and coordinator of the project. The course uses a newly accessible medium—videotape—to deliver the financial lessons of specialists, via local facilitators, to producers and loan officers around the country.

"To work, the Business Management in Agriculture series requires the skills of both the specialist and the local county agent," says O'Connor. "You have to have both of them. You can't expect the local facilitators to know all these things, and you can't expect the specialists to be everywhere."

## **Flexibility: A Strong Point**

One of the advantages of the series is that it's flexible; it can stand alone or supplement an existing Extension program. Art Barnaby, an Extension economist with Kansas State University, incorporates three Business Management in Agriculture videotapes into his regularly scheduled workshops on computerized financial planning. The three modules provide the financial foundation on which he builds a workshop, Barnaby says. They also save him time and effort.

In Michigan, county agents decided at the last minute to incorporate seven Business Management in Agriculture modules into a three-county Extension program that had been 6 months in the planning.

"They taught lessons we wanted to teach and gave us an opportunity to bring in Farm Credit personnel," says Joanne Davidhizar, Extension agriculture agent at Stevensville, Michigan.

Producers who attended the Michigan program, called "Who Will Be Farming in the 21st Century?," personalized the videotaped messages by sharing experiences with other workshop participants.

For example, one farmer stressed the importance of good financial records by sharing vital financial statistics from his swine business, telling how he was forced to make changes when the figures showed he was losing equity.

## **Success In New Jersey, Oregon**

Personal sharing also played a key role in the success of a recent New Jersey Business Management in Agriculture program.



Opposite: Craig Anderson, production coordinator at the Communication Media Center, Oregon State University, previews a new "Business Management In Agriculture" videotape. At left: Gene Nelson (left), head of the Agricultural and Resource Economics Department at the university, rehearses a videotape script on strategic financial planning with Bart Eleveld, a farm management Extension specialist.

During each of the breaks in the videotape on setting goals, John Dumschat, an agricultural agent with Rutgers Cooperative Extension in Sussex County, New Jersey, told "a little story about my own time on the farm, things my wife and I did, how we set goals."

Thirteen producers attended the 5-week series that Dumschat and County Agent Bruce Barbour taught. "Their enthusiasm was wonderful," says Dumschat. "It really encouraged us."

The course has been well received by Oregon producers also. Gordon Cook, agriculture agent in Union County, Oregon, reports that after completing a 9-week course, "Some of the producers in the class said we should have had this 20 years ago."

#### Farm Credit's Role

Although Extension provided the majority of funding for the Business Management in Agriculture series, Farm Credit contributed about a third of the project's total cost and handled the actual videotape production.

"We realized we could use the course to help train loan officers and to promote communication between producers and lenders," says Tom Powell, senior training officer in the Human Resource Planning and Development division of Farm Credit Services, St. Paul, Minnesota.

Art Madsen, branch supervisor of Farm Credit Services of Southeast Minnesota, says the financial management series helps bridge the communication gap between producers and lenders by teaching such skills as goal setting.

Madsen recently helped teach the financial management course to 21 farm families.

#### Timely Series

The financial management series comes at a critical time. To obtain credit in today's risk-laden farm economy, producers must be able to back up their loan requests with detailed records and financial statements, says Dick Wittman, one of the videotape presenters and an Idaho rancher and farm financial management consultant.

"Lenders are looking at financial management more and more," says Wittman, "wanting assurance that producers can manage finances in addition to managing production."

In the long run, Wittman believes, educational programs like Business Management in Agriculture should help farmers become as skilled at financial management as they are at production. ▲



## Turfgrass Farms: Instant Green In Arizona

20 Extension Review

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From cowboy to sod farmer . . . with Extension advice. And Bob Prosser, manager of the Bar-T-Bar Ranch near Flagstaff, is pleased with the results.

On the ranch, Prosser runs 1,600 head of cattle and currently, after consulting with Extension specialists, grows 40 acres of Kentucky bluegrass sod. "Bar-T-Bar Sod" is the only sod grown north of the Mogollon Rim and the only Kentucky bluegrass sod farm in Arizona. Bar-T-Bar Sod has already sold 60 percent of the sod that will be produced this year.

The 3-year-old sod farm is benefitting from the growing recreation industry in Flagstaff, as well as its increasing population. Baseball, soccer, and golf are extremely popular, thus increasing the demand for carefully cared for sod, some of it from the Bar-T-Bar.

"Arizona's turfgrass industry is growing by leaps and bounds," says David Kopec, Extension turfgrass specialist, University of Arizona. "Approximately 1,500 acres are devoted to growing sod in the state, mostly between Phoenix and Casa Grande."

### Choosing The Best Blend

Kopec and other University of Arizona specialists worked with Prosser to figure out the best blend of Kentucky bluegrass varieties. Following their recommendations, Prosser planted a mixture of six varieties that are suited to cool temperatures, tolerate low moisture, and are resistant to such diseases as snow mold and dollar spot.

In 1986, Bar-T-Bar Sod sold 1.5 million square feet of sod, half of it in Flagstaff. In 1987, Prosser added another 30 acres of sod to extend his market to Sedona and the White Mountains.

As one of the University's two turfgrass experts, Kopec gets frequent calls from golf course superintendents who want him to solve problems with watering, fertilizing, and using chemicals. "Developers often call," he says, "to find out how the water consumption of different grasses varies."

### Elk-Proof Fencing

When grazing elk found the tender grass at the sod farm hard to resist in the winter, Prosser received advice from John Stair, Extension wildlife specialist at the University of Arizona. Stair, verifying that the elk left footprints in the sod that formed rips and holes when the sod was harvested, devised a double row of electric fencing whose harmless shocks encourages elk to graze elsewhere.

The wildlife still offers problems. "I wish we could just fence out the geese," Prosser comments. "They fly in by the thousands in the fall and tear up the sod."

Harvesting sod requires special equipment that is only manufactured in Canada. The cutter blades adjust automatically to cut a precise 18-inch-wide strip that feeds into a conveyer belt which wraps the sod into a 5-foot-long roll.



Opposite and Above: Charles Kopec (left), Extension turfgrass specialist, and Charles Mancino, plant scientist, both of University of Arizona, work at grass level while studying water consumption of various turfgrasses. Below: Kopec and Mancino test turfgrass on an experimental green in Tucson. Arizona's turfgrass industry is expanding rapidly to match the rapid growth of its population and recreation industry.

### Turfgrass As A Crop

Once loaded on a wooden pallet, the turf is ready to be trucked to a new baseball diamond, soccer field, or somebody's yard—"instant green" from a cattle ranch high in the mountains of Arizona.

Bartley P. Cardon, dean of the College of Agriculture, University of Arizona, recently predicted that 70 percent of all agriculture in the state will, someday soon, be related to turfgrass and horticulture.

"Golf courses can be thought of as farms," David Kopec points out. In Arizona, their "crop" of closely-clipped green grass is worth "just as much as traditional crops, plus livestock."

In 1984, tourists brought approximately \$40 billion into the state; the Arizona Golf Association estimates that \$4 billion went to hotels and resorts featuring golf courses. Revenue from golf courses, nurseries, and equestrian activities equalled \$1.7 million in 1985; crops plus livestock earned \$1.65 million.

Each of the state's 189 registered golf courses spends approximately \$750,000 each year to keep their links green, clipped, and healthy, Kopec states. The University of Arizona is currently involved in a survey to evaluate the economic impact of the golf course industry.

### Irrigation Needs

Professionals responsible for caring for large areas of grass in golf courses and parks are very concerned about proper irrigation schedules. Kopec is using new technology to measure how the turf reacts to being stressed by various levels of irrigation.

"Water is a chronic problem grown acute," Kopec says, "and is very much on the minds of everyone in the turf-grass industry." He points out that golf course caretakers take pride in using only the precise amount of water necessary.

Large users of turfgrass will tend to use effluent, treated water from city sewage systems wherever possible, Kopec believes. Some of these users are experimenting with tail-water from mines. But homeowners are interested in keeping their lawn-watering to a necessary minimum, too. That is where the problem lies—what's necessary? What's the minimum?

In cooperation with Western Sod, a turf farm near Casa Grande that produces 20 million square feet of sod every year, Kopec developed a lawn watering guide for the southern Arizona desert based on data gathered by William Kneebone and Ian Pepper, scientists with the University of Arizona. More than 100,000 copies of the guide have been printed by the Arizona Municipal Water Users Association and offered to consumers with water bills in six Arizona cities.

The guide's directions for watering are correlated with the daytime high temperature. Kopec says the guide makes citizens aware of water conservation. "It teaches citizens there is no need to water daily," he says.

Despite some desert-loving Arizonans who desire a return to natural desert vegetation, Kopec believes strongly that turfgrass is beneficial. "Grass lowers the temperature in urban environments," he says, "and absorbs pollutants and noise. Grass is a source of oxygen. And the aesthetics of green, cool-looking grass are undeniable."

*Extracted from an article in Arizona Land & People, published quarterly by Agricultural Communications, College of Agriculture, University of Arizona, Tucson. ▲*



# Alaskans: In Control

## 22 Extension Review

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In 1986, the price of oil declined and oil states such as Oklahoma, Louisiana, Texas, and Alaska are having to cope with the economic challenges that come from a rapidly changing economy.

For Alaska, especially, these adjustments will be substantial. No other state is as dependent on oil revenues to operate state government. Such taxes previously accounted for over 90 percent of the state's operating budget. The crash in oil prices left about 27,000 Alaskans (11 percent of the labor force) unemployed in November 1986, the highest rate ever recorded for that month. Alaska's economic experts predict that the state's economy will not pull out of the current recession for several years.

Within this backdrop, the Alaska Cooperative Extension Service has designed a program titled "In Control..."—a major effort to help Alaskans remain in control of housing, finances, family relationships, and their communities in this time of economic trouble.

James Matthews, CES director, says the statewide campaign is a rapid-response reaction to the recent pull-of-the-plug on Alaskan oil prices. "Every family and community is feeling the drain," he says. "CES, with its statewide network, has the resources to help Alaskans sort through their options, keep a roof over their heads and food on the table, deal as a family with the stress, and minimize problems with creditors."

### **Food or Shelter?**

When income drops, house payments and utility bills are even more important than food bills, according to Extension budget expert Natalie Thomas. Through a series of fact sheets (**Coping With Creditors, When Bills Aren't Paid, Job Frauds and Schemes, Outside Financial Help**), Thomas helps people deal with the financial difficulties that may result from being out of work.

The fact sheets explain, for example, what people may expect to happen if they get behind on their payments and how best to deal with the pressure in a positive manner. Credit counseling services, consolidation loans, and bankruptcy are other subjects addressed in the series.

### **Unified Effort**

The "In Control" theme has been a unifying factor that has helped bring wide-ranging aspects of Extension to bear on this difficult situation. Topics that have been incorporated include "Eating Well While Cutting The Food Budget," "Careful Energy Choices Cut Housing Costs, and "Home-Based Business Development."

"In Control" is being coordinated by Pat Barker, of the Bethel Extension office. Extension has involved outside resources as part of the overall program effort.

Cooperators have included the Western Rural Development Center and experts from other Western regional land-grant universities. One such cooperator was Dr. Martha Lamberts, Extension human development specialist from Washington State University. She explained the effects of stress to groups of community agencies and organizations during a series of workshops coordinated by the Anchorage and Sitka district Extension offices. Stress and how to deal with it is a "matter of life and death," she says.

### **Changing Times**

The coming years are certain to bring major fiscal adjustments for Alaska's local governments, especially the smaller rural communities who derive a significant amount of their operating revenues from the state.

The changing economy was the theme of the 1986 Local Government Training Conference sponsored by Extension in cooperation with the Alaska Department of Community and Regional Affairs and the Alaska Municipal League. Grants, budgeting, economic development, and lobbying were among the subjects addressed. Sixty-one representatives from over 30 "bush" communities throughout rural Alaska participated.

The 1987 conference theme is alcoholism and other drug abuse problems that can be worsened by the effects of economic stress. "This is one of the most critical social and economic problems facing rural Alaska," says Don Peter, who directs Extension's Alaska Native Human Resource Development Program. "Local government efforts are crucial in addressing this issue."

Extension also has worked with the University of Alaska's rural education program to deliver numerous village workshops for community administrators.

### **Long-Term Response**

Unfortunately, unless Alaska's oil fortunes change substantially, this program effort will be a major Extension focus for several years. Families, homes, and communities are all affected. Extension, with its limited staff and resources, will continue to work with other agencies and organizations to help Alaskans remain "In Control." ▲



# Financial Counseling: Extension Outreach

Extension Review 23

**"I hear, I forget;  
I see, I remember;  
I do, I understand."**

This is the philosophy taught in a financial management program offered to Philadelphia agencies. The six-session series educates paid staff and volunteers to counsel low-income families, many of whom have limited reading skills. To become effective financial counselors, agency personnel enrolled in the program are required to understand their own financial situation and complete the assignments for each session.

This Extension outreach was the result of an August 1985 request from two agencies serving human needs in Philadelphia County. They wanted Extension to give one-on-one counseling to housing authority residents in financial difficulty. With only one home economist to meet the family resource management needs of a major urban area with over 1.7 million people, this request was impossible to consider.

Instead, Extension developed a basic money-management program designed to prepare others to work with limited-resource families. The educational objectives were to help participants: (1) learn the basic managerial process; (2) apply the process to family financial management; (3) improve their money-management skills; and (4) learn how to counsel persons of limited income.

Teaching outlines and class materials came from many sources. Some were developed in Philadelphia; others were adapted from existing materials used in other programs. Throughout the development process, considerable guidance was provided by Marilyn M. Furry, Extension specialist in family resource management; and Diane Brown, regional program leader for family living.

## **Pilot Program**

The program was piloted early in 1986 for 26 community outreach workers from the 12 field sites of the Mayor's Office of Community Services (MOCS). These workers serve a potential audience of 320,000. Classes covered a variety of teaching strategies to help individuals master the subject matter and to enhance their teaching abilities.

At the end of 1986, MOCS reported that trainees had counseled 2,261 families. Most of the families came to a MOCS food cupboard and were required to undergo financial counseling before they could receive food. The director of field services for MOCS has reported a decline in the number of repeaters seeking food, suggesting that counseling has been effective. A volunteer interpreter at one site reported that families in the class were "beginning to make it with less."

Attending the program during 1986 were 90 selected staff members from agencies such as WIC, U.S. Naval Station Family Support Service Program, Philadelphia Corporation for the Aging, Philadelphia Geriatric Center, Philadelphia Center for Older People, Homemakers Service of the Metropolitan Area/a residence for homeless mothers, Lutheran Settlement House, and the Bucks County Opportunity Council.

## **Evaluation**

A systematic plan was developed to determine if the design of the six sessions would facilitate an evaluation of the individuals completing the financial management program. Pre-tests and post-tests, as well as review of assignments given during each session, were used for some formal evaluation.

Agency staff who have completed this program indicated that they received new, comprehensive, and useful information. For example, 66 percent of the participants learned how to make and manage a spending plan. Participants also took some management action: 35 percent kept detailed spending records and 25 percent had opened or were able to add to a savings account.

## **Ongoing Programs**

The series is offered on a cost-recovery basis, with a \$20 fee for each participant. Participants receive a workbook, materials, and a framed certificate, which is beginning to appear on agency walls. Participants who attend all six sessions receive 1.5 Continuing Education Units from Penn State.

## **Inservice Training**

Penn State Extension's annual staff inservice education week included a day-long session on using the financial counseling materials. This inservice training was intended to educate Extension agents in other Pennsylvania counties about the program and to improve their financial management teaching skills.

One-on-one counseling is not a viable option for any Extension office in Pennsylvania. However, educating personnel of other human service agencies to counsel their clientele about money provides a much-needed educational program. This approach helps to integrate the counseling process so that only one counselor is helping the client.

Some may question whether Extension should be educating other agencies' personnel. Considering the potential impact on clientele, however, this is perhaps the best way to extend both the information Extension has to offer and the outreach of one home economist in a metropolitan county. ▲

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Extension Home  
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## Soft-Shell Crabs Spell Success

24 Extension Review

**Robin Sheeley**  
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In the soft-shell crab business, every crab means money.

When Donald and Robin Doxey, owners of a new soft-shell crab business in Pamlico County, North Carolina, started losing crabs they became frightened. All their profit was disappearing before their eyes. After several days of wondering what to do, Robin Doxey called the Pamlico County Extension Service to ask for help.

That was the Doxey's introduction to Terry Setzer, an agricultural technician in the A&T Farm Opportunities Program (FOP). Setzer immediately called a specialist who tested the Doxey's water and determined their problem. When the crab loss ceased after a few days, the Doxey's were sold on Extension and Setzer.

"Setzer and Extension have been a tremendous help to our new business," says Robin Doxey. "He has helped us with questions about water quality, marketing, and taxes." Setzer even helped them, she says, with advice on a small garden they weren't having much success with.

The Doxey's decided they wanted to apply for a grant to improve their small business.



Once again, Setzer was available to help them. Although they didn't get the grant, writing the proposal helped them to start thinking about record-keeping and plotting a direction for their business.

### Easy To Advise

"These are just good people to work with," says Setzer. "They are trying to run a business and they are looking for good advice. I try to help them as much as I can. They aren't afraid to try anything."

The Doxey's started their soft-shell crab business 4 years ago.

The two quit their jobs and left their home in Virginia Beach to move to the coastal community of Paradise Shores located on Pittman Creek in Pamlico County.

Donald Doxey used to catch crabs from the Chesapeake Bay as a child, raise them until they shed their shells, and sell them to the local marina. Robin Doxey knew nothing about soft-shell crabs and, in fact, had never tasted one. "But both of them had the will to succeed," Setzer says, "even if they were unsure about how to go about operating the business. That's where I would like to think I stepped in. I've worked with them as a resource person armed with technical information."

*Opposite top: After shedding, a male soft-shell crab (left) looks almost transparent next to a brother hard-shell crab or "Jimmy." Middle: Crab taken from Pamlico Sound, North Carolina. Below: Robin Doxey (left), co-owner of a soft-shell crab business in Pamlico County, meets with Terry Setzer, Pamlico County Extension, who helped Doxey's new venture succeed. At right: Crabber counts the catch in his trap on Pamlico Sound in eastern North Carolina.*





### Increased Catch

One piece of advice Setzer gave the Doxeys resulted in a 35-percent increase in the number of crabs they catch. Setzer suggested to Donald Doxey that he change the color of the crab pots to more resemble a crab's natural habitat. Setzer knew that the larger "Jimmy" crabs, (males) were attracted to rusted pots, so he suggested the Doxeys paint some of the pots dark brown. The female crabs like a darker pot, Setzer informed them, so they painted other pots black. Almost immediately, the Doxeys noticed a substantial increase in their crab catch.

"The Doxeys were already using a paint on the pots with a chemical that slows down barnacle growth," Setzer comments. "I just suggested they mix this paint with colors that would attract more crabs."

### Involved In Extension

Impressed by Setzer's work with them, the Doxeys both have become involved in other Extension programs and activities. Robin Doxey now serves as a member of the local Extension Advisory Committee, a group that advises the local Extension Service on needs and problems. In addition, the Doxeys and Setzer developed a recordkeeping book for local fishermen.

"They both work real hard for themselves and with me," Setzer says. "And working with them is a pleasure." ▲

*Extracted from Dimensions, a publication of the Agricultural Extension Program at North Carolina A&T State University, Greensboro.*



## Day Care Expands 4-H Outreach

26 Extension Review

**Nancy B. Stevens**  
Extension Agent,  
Family Living  
Montgomery County  
Extension  
Creamery,  
Pennsylvania

*"Mom, when will your meeting be over?" The target audience for the parenting seminars offered by the Montgomery County 4-H Center, Creamery, Pennsylvania, was largely young mothers with young children. Montgomery County Extension and the county 4-H program purchased an old elementary school, and, through volunteer time and donations, established a day care center where children receive quality care while parents attend educational seminars on family life.*

Early in 1984, a foundation board of lay persons, acting on behalf of Montgomery County Extension and the county 4-H program, purchased an old elementary school, located in the suburbs of Philadelphia, would serve as the new headquarters for Montgomery County Extension and the county 4-H program. Preliminary surveys disclosed that many of the new clientele in the community surrounding the 4-H center were young mothers at home with young children.

These low- to middle-income parents were the target audience for "Strengthen The Family," a major Pennsylvania Extension program thrust. How could Extension tap into this new audience?

The new location offered a large vacant space in the building's lower level. Foundation-members suggested the space at the 4-H Center be used to provide quality child care and thus attract homemakers into attending educational meetings.

**Volunteers Make It Possible**  
The building's space needed repair and renovation. A crew of volunteers worked many hours removing damaged flooring and peeling paint. Homemaker groups raised money and private donations provided the funds necessary for new flooring, painting, and electrical and plumbing work. Changes were made to meet strict child care regulations. Volunteer time and donations to the project exceeded \$10,000.

Studies by foundation members concluded the easiest way of providing drop-in-babysitting was to lease the space to an outside group to operate it. This alternative, they felt, would reduce insurance liability, assure the quality of care,





and produce additional income for the 4-H Center. A committee of volunteers agreed to read proposals and interview persons interested in operating the Day Care Center.

#### **State-Licensed Child Care**

Today, as a result of these efforts, the state-licensed Day Care Center is open for business. Children ages 3 months to 5 years are accepted for care on a part-time, full-time, or

hourly basis. Clientele attending Extension meetings must make a reservation for their child or children at least one day in advance. They are assured their child will receive quality care at a minimal cost.

The Center also provides the option of child care for Extension employees at the worksite. The Center is also available for children during evening hours, a real advantage for Extension

staff and volunteer leaders. In addition, clients of several other agricultural agencies housed in the 4-H Center also use the child care services.

#### **Parenting Seminars Planned**

Plans for the future include a series of parenting seminars with child care included; this will provide experience for 4-H'ers involved in babysitting projects. Staff from local child welfare agencies will work with Extension to conduct educational sessions for their low-income families at the 4-H Center. "Child care scholarships" will be given to children of these needy families. Clientele will receive information on improving parenting skills.

To date, the response to the Day Care facilities at the 4-H Center has been overwhelming. Extension staff will continue to take advantage of similar opportunities to build marketing strategies and expand programming outreach in the future. ▲



## Alternatives After The Farm

28 Extension Review

**Mary Harvey**  
Information  
Coordinator, Extension  
Home Economics, ANR  
Information Services  
Michigan State  
University, East  
Lansing

Betty Pattullo, Tuscola County Extension home economist, Michigan, welcomes a farmer to the Displaced Farmer Program she coordinates for a five-county area. Below: Pattullo, aided by Kay Pettiprin, program assistant, explains use of computer in the program to a participating farmer (standing).



For many farmers, farming is more than a job—it's a way of life. The satisfaction of making a living off the land often compensates for all the uncertainties brought about by Mother Nature and fluctuating economies. But for some farmers the time comes when, for whatever reason, it is no longer possible to continue farming. They must give up the farm and look for other ways to support themselves and their families.

Michigan farmers, like farmers all around the country, are increasingly finding themselves in this position. Fortunately for some area farmers, Betty Pattullo and the Dislocated Farmer Program are there to help make a difficult transition easier.

Pattullo, Tuscola County Extension home economist and coordinator of the Dislocated Farmer Program for a five-county area, has been working on the project since spring 1986. In the past year, 179 farmers have come through her office seeking help in making the transition off the farm.

The program is part of the Governor's Job Training Partnership Act, a statewide initiative coordinated by the Cooperative Extension Service.

### Getting Started

Farmers hear about the program in several ways, Pattullo says. They may have been referred as a result of an EMAT visit. (EMAT's are Extension Management Assistance Teams which work with farmers under financial stress.) Many farmers hear about the program from other farmers who are in it. Pattullo says it's not unusual to get six additional inquiries when a client goes back to his community and tells neighbors about the program.

To be eligible, farmers must have been active on farms from which they were displaced, have a debt-to-asset ratio of 40 percent, have received notice of foreclosure, or be on the verge of or in the process of bankruptcy.

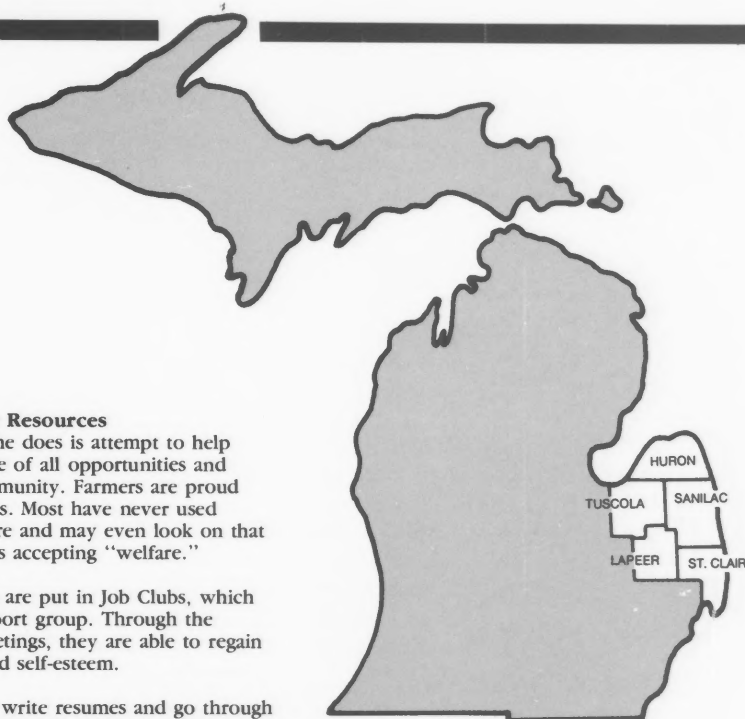
When a farmer comes for the first visit, Pattullo takes down all the information she can. Together they explore the farmer's work history and look at strong points and areas of interest. If a farmer is really undecided about what he or she would like to do, they may schedule assessment tests.

A major function of the first meeting is to listen, Pattullo says. Most of the farmers are just coming out of the denial state and accepting the fact that they need to get out of farming.

"What they need most of all is someone to listen who won't push or judge. I often find if a farmer talks long enough and hard enough, he can come to his own decisions and solve his own problems," she says.

One thing she seldom does at the first meeting is open the book of job leads. Many farmers just want us to give them the lead so they can go and apply for work. "That often sets them up for failure," Pattullo says. "Very few of them are ready for a job interview at this point."





### Using Community Resources

The second thing she does is attempt to help them take advantage of all opportunities and services in the community. Farmers are proud people, she observes. Most have never used social services before and may even look on that kind of assistance as accepting "welfare."

Finally, the farmers are put in Job Clubs, which also serve as a support group. Through the process of club meetings, they are able to regain their confidence and self-esteem.

They learn how to write resumes and go through mock interviewing situations that are videotaped and critiqued. They also have three sessions on stress management to help them identify and deal with their unique stressors.

"After they have attended four or five meetings, you can see a real growth—a blossoming," Pattullo says.

### Finding Jobs

Results have been very encouraging. Many farmers have found jobs. Some have gone to work in Detroit as \$12-per-hour heavy equipment operators. Others have become roofers, electricians, credit analysts, receptionists. Some have gone into business for themselves and are doing well. One farmer now works for an auto dealership, and several others have found hard-to-get production jobs.

"It was a lot of work pulling everything together, but it finally fell into place. The program is paying for the training they will need, and is also paying half-wages for their first 6 months on the job," Pattullo says.

"The most rewarding and fun part of this job is hearing about the placements. Most of the people call to tell me about the jobs they find, and it's really exciting to share their happiness."

### "Safe Place" For Farmers

The program cooperates with a wide variety of community agencies and enjoys their support, but Pattullo feels Extension is the proper agency to be coordinating the program.

"Extension is a safe place for farmers to come," she explains. "They would hesitate at going to a mental health or other social service office, but it's OK to go to the Extension office. No one even knows why they're stopping by."

Other agencies often don't provide the stress counseling that Extension does, she continues, and they may have only one service to offer. At the Extension office, farmers get a well-rounded program in the company of other farmers.

### Good Things Happen

"When all the people in a program are in the same situation, very effective kinds of networking and support often begin to happen," Pattullo says. "A farmer may express feelings of failure or inadequacy and be surprised to hear that every other farmer in the room feels the same. Good things start to happen when they can get beyond thinking they're at fault."

The program runs through June 30, and a 6-month extension has been requested.

Working with so many people in distress can be an emotionally exhausting experience. Would she do it again?

"Absolutely," Pattullo says. "I consider it a challenge. I've been able to leave things behind at work, for the most part, and it's really been exciting to help these farmers. They are fantastic to work with." ▲



# Master Money Manager

30 Extension Review

**Josephine Turner**  
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Extension Service,  
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and  
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*R. Ann McAfee, Extension county agent, home economics, Lauderdale County, Alabama, poses as "Dollar Woman," during publicity campaign for the Master Money Manager Program which provides indepth training to volunteers who then teach Alabama families financial management.*



Alabama was facing double-digit inflation, double-digit unemployment, and the highest personal bankruptcy rate in the nation. The climate was right for new teaching strategies to help families manage and survive during economic hard times. With the support of the state leader for home economics, a team was formed and the Master Money Manager (MMM) program was born. The concept behind the master program is to provide intense indepth training to a few volunteers who will expand Extension's outreach by teaching others what they have learned.

### Program Development

If the program was to make a difference, it had to be ongoing—not a one-shot effort. With this in mind, the team members—a family economics specialist, a family life

specialist, and a county agent with a strong background in family economics—went to work. After an extensive review of current nationwide Extension programs and related research, they developed ten 2-hour lessons covering: goal-setting, budgeting, recordkeeping, income taxes, credit, savings and investments, insurance, family transitions, counseling techniques, and the importance of confidentiality.

The training manual for agents/teachers included teaching strategies; lesson activities; checkup quizzes; and recommendations for program announcements, recruitment, the selection process, delivery methods, and followup activities.

A slide set helped "market" the program to county agents. Program leaflets were distributed by "Dollar Woman" at the annual meeting of the state association of Extension home economists.

### The Volunteers

Criteria for becoming a master money manager were clarified and volunteers were selected accordingly. Each volunteer master student must successfully complete 20 hours of training, correctly respond to at least 70 percent of questions on checkup quizzes, and contribute 30 hours to expanding the money management program of their county's Extension office. Graduates of the program receive a certificate of course completion, special recognition, and continuing education units.

County agents were cautioned to match volunteers with activities compatible with their nature. Two key areas were stressed—confidentiality and values.

It has been said that people are more secretive about their finances than about any other aspect of their lives. A person must be trusting to disclose personal money problems to a Master Money Manager. If that trust is broken, the volunteer, the program, and the Cooperative Extension Service lose credibility. An agent unsure about a volunteer's ability to honor confidentiality would assign that volunteer to activities that did not require confidentiality.

The importance of values was also stressed. Without proper training, a volunteer might be tempted to give advice based on his or her personal values. They learned techniques for helping people make decisions for themselves.

#### Program Implementation

Before the Master Money Manager program was launched, county agents received training in subject-matter, materials, delivery, recruitment, and marketing strategies. A feature article in one local newspaper resulted in an immediate enrollment of 50 volunteers and a waiting list for the next session. That county has had a waiting list for each new training session.

Many MMM volunteers are first-timers to Extension programs. They include bankers, social workers, state troopers, businesspeople, real estate agents, and college professors.

#### Managing in Hard Times

MMM has been successful in helping Alabamians manage during hard times. Since the program was launched in fall 1983, one-third of Alabama's 67 counties have offered it at least once. At least 317 volunteers have completed the program and have contributed more than 5,300 hours of assistance to county money management programs. In addition to helping others, the volunteers also reported that they have increased their own savings, established workable budgets, set goals, and decreased debts.

Sherwon Frederick represents the successful experiences of many MMM volunteers. Frederick says that the course really changed her life. She made changes in her credit behavior, established credit in her own name, has not had a single month of over-spending her budget since completing the course, and has paid off all existing charge accounts for the first time.

Her 16-year-old daughter also gained from her mother's participation in MMM. She found a

part-time job and has purchased a \$500 certificate of deposit with her savings.

#### Future Directions

Although the recession is technically over, many of Alabama's families continue to suffer from hard times. Families involved in farming, mining, textiles, and light industry continue to need help from Master Money Manager.

Changes in taxes, insurance, and credit regulations necessitate periodic updating of materials, but the Master Money Manager Program is making a difference in the lives of Alabamians and plans are to keep it current.

Copies of the program have been shared with Extension specialists in all states and territories. Extension Services in Wisconsin, California, Nebraska, New York, Texas, North Carolina, and Georgia are adapting the Master Money Manager for their own use.

The program has been introduced at the national meetings of the American Home Economics Association and the National Association of Extension Home Economists. MMM has won a national award for Excellence in Consumer Education and has received nationwide publicity.

Alabama Extension home economists can be proud of their Master Money Manager program, which—along with many other excellent Extension programs—is serving Alabamians well. ▲



# Getting Help—The First Step Towards Farm Health

32 *Extension Review*

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and*

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**Meredith C. Taylor**  
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In Madison County, north Florida, a young farm wife sits on the porch of her house looking out at the empty fields. She thinks about the bad financial situation she and her family are facing. She's frustrated and fearful.

Her husband keeps all the information about the farm operation to himself, particularly financial information. He says he's the man of the family and that she should not worry. She feels isolated and powerless to help deal with their problems. "How am I not going to worry?" she thinks. "That's all I can do."

This woman needs help but doesn't know where to find it.

Thirty miles east, in Suwannee County, a middle-aged farmer talks with a neighbor about how he has seen a budget counselor for help with his financial problems. He's been depressed because he isn't making enough to improve his home and educate his children the way he had planned. He still has serious problems, but he feels better about the future since his visit to the counselor.

He thinks back on how hard it was to talk about things. All his life he'd believed you didn't talk about the farm business with anybody outside the family. "Sure am glad I did, though," he tells his neighbor.

This man got help, but he had to give up a long-held attitude to do it.

## The First Step

Similar stories can be told hundreds of times across the rural counties of Florida's northern tier. And in every case, the first step in improving farm profitability is to help members of the farm family cope with the stress produced by the current farm crises. It isn't easy.

Extension workers in north Florida have found that reaching financially stressed farm families can be difficult. "They experience humiliation, despair, and isolation. They may be reluctant to talk about farm finances and family problems with outsiders," says Nayda Torres, family and consumer economics specialist at the University of Florida, Gainesville.

In some cases, traditional attitudes of self-sufficiency stand in the way of seeking assistance. Unfortunately, most assistance programs require individuals to take the initiative and request help themselves.

People who can benefit from financial and family stress counseling have to take the essential first step of calling their county Extension office or some other agency. The effectiveness of programs designed to assist farm families is often hindered by their withdrawal and their unwillingness to express their needs.

## A Communication Response

Recognizing that financially stressed farm families are a "hard-to-reach audience," Extension staff from Madison and Suwannee Counties got together with Extension communication specialists at the University of Florida to discuss the role that mass media, particularly radio, could play in motivating people to ask for help with their farm problems.

As a result, a campaign using radio public service announcements (PSA's) is underway to persuade farm people that it is socially psychologically acceptable for them to ask for support from community agencies.

Each radio PSA presents a family member "thinking out loud" about some aspect of stress that he or she is coping with as a result of farm financial



difficulties. Using various characterizations and local people as narrators, the radio spots offer "models" with which farm families experiencing stress may identify. Each spot closes with a suggestion to call a clergyman, a counseling service, or the county Extension office.

Eighteen spots have been produced. They are being released in groups of six and will be changed every 3 to 4 weeks. The idea is to keep the campaign fresh by changing voices and topics frequently.

New spots will be produced as experience in Extension stress management identifies new topics. County Extension agents are handling contacts with broadcasters to give the effort the strongest possible local identity.

An important consideration in the design of the radio PSA's was that farm people should be helped to overcome feelings of guilt or incompetence about the economic situation they face. While the quality of farm management is certainly a factor in the profitability of individual farm enterprises, the farm crisis is generally seen as the result of policies and economic developments beyond an individual's control.

Emphasizing that the individual is not "responsible" for present economic problems, the radio

spots encourage listeners to seek assistance in dealing with financially related stress.

#### Objectives And Outcomes

The informational objectives of the PSA's are: (1) to let farm families know that Extension and other community agencies provide information and services that can help with financial and family matters, (2) to lessen feelings of guilt or failure by telling people that they are not alone in the situation they face—that it's all right to ask for help, and (3) to help people recognize that health and family relations are important to their economic survival. The anticipated behavioral outcome is a modest one: simply that farm families that need help will ask for it.

It's still too early to tell whether the radio PSA's will have the desired communication effect. An evaluation study is underway to find out about the role of radio, other information approaches that might be useful, and the support networks that are available in different communities.

"Various approaches and a great deal of effort are needed to reach these farm families. For many of them, financial stress means emotional stress," says Extension District Director Steve Ryan, "and one thing we do know—getting help is the first step towards family health and financial health."▲

*Opposite: Marshall Breeze, Extension communication specialist, University of Florida, gets ready to go "on the air" with a radio public service announcement (PSA) to motivate financially stressed farm families to ask for help. At left: Breeze tapes a PSA outdoors with a local volunteer.*



# Professionals Or Part-Timers: Agenda For Change

34 *Extension Review*

**Ronald W. Wall**  
*Extension Specialist,  
Family Economics  
College of Tropical  
Agriculture and  
Human Resources  
University of Hawaii  
at Manoa*

"Greta Johnson" is a full-time county Extension agent but only a part-time financial educator. Like many Extension home economists, "Greta" has program responsibilities that range from parenting to food preservation and from 4-H to EFNEP. In the midst of such diversity, she frequently feels frazzled, disillusioned, and inadequate.

The predicament of "Greta Johnson" may in part reflect a reality; she is fictitious but her problems may be shared by many of today's Extension home economists. When "Greta" first became an agent in the early 1950's, her audience was composed mostly of stay-at-home homemakers. She felt very confident with this audience. Trained as a general home economist, she had the knowledge and skill to address their needs surely and competently.

As the years passed, her clientele began to change. There were more men, more working women, more minorities, more college graduates, more white-collar workers, and more people with professional knowledge and skills in everything from business to education.

The fields of home economics which she taught had also changed, expanding drastically in both breadth and depth. Some of the subjects she had once taught with complete confidence had now become much more complex and sophisticated. Audiences still wanted to know how to can tomatoes, but they also wanted to know how to select retirement plans and make investments.

## Keeping Up

"Greta's" strong suit was foods and nutrition, so she felt confident she could keep up in that area despite all the new information regarding food additives, dietary supplements, fast foods, special diets, and a host of other topics of public interest and concern. She knew the basics well, and thus had little difficulty incorporating the updates from her state food and nutrition specialists into her projects. Financial education, however, was another matter. Despite the help of her state specialist in family economics, she felt much less confident in this area. Fewer and fewer of her clientele were canning tomatoes; more and more were making difficult financial decisions regarding their employee benefits, retirement plans, taxes, and investments. There was so much to learn—both for them and for her.

## Part-Time Expertise

"Greta" began to wonder about her part-time expertise. She was a full-time Extension professional with years of experience. But as a financial educator, she was a mere neophyte. The courses she had taken years ago weren't much help now; things had changed so much.

Needs had changed, too. People wanted more than simple budgets and common sense advice. They wanted relevant specifics regarding their financial options and alternatives.

"Greta" did, too, so she wanted to develop her knowledge and skills. The problem was that financial education was just one of her program responsibilities. She needed to keep up in the others as well. Where would she find the time or the energy?

## Adjusting to Change

It isn't easy or comfortable being a jack-of-all-trades and master of none at a time when tax-supported agencies are being increasingly scrutinized. It is also a matter of pride. The strength of Extension is that it embodies nonresident university faculty spread throughout the community so that university learning and research are made available to nonuniversity clientele through nonformal education. If this tremendous resource becomes diluted in its expertise, Extension will lose not only the confidence of its clientele but also the support of its proponents and its reason for being.

## A Plan for the Future

Why not envision networks of professional experts in such areas as family economics and resource management, food and nutrition education, family and community development, and 4-H and youth development?

Let us think in terms of "major programs" and "program teams" that share a common expertise and set of goals. Let us think of concentrating personnel and their professional development within these areas rather than splintering assignments and scattering energies.

Extension must move from the model of the generalist dispersing information broadly to that of the specialist providing clearly focused, professional expertise. Such change won't come easily, but Extension has a tradition of evolution and the personnel to fashion dreams into reality.

## Education and Expertise

Historically, there is little doubt that the primary role of Extension is education and that the county agent is, first and foremost, a teacher.



This role has been added to upon occasion. During the 1930's and 1940's, for example, Extension personnel became primarily operators of government farm programs, but returned to their educational role in the mid-1940's.

From the mid-1960's into the 1980's, Extension personnel became quite involved as coordinators and facilitators of federally targeted community programs. The result of this legacy may be with us still in the concept of agent as program facilitator.

The primacy of Extension's educational role has recently been reaffirmed. Edgar J. Boone, assistant Director, North Carolina Extension Service, states, "The foremost job of Extension is education."

John Reeves, director of the strategic planning project, Utah Technical College, Provo/Orem, Utah, and Ron T. Daly, national program leader for human development and family relations, Extension Service, USDA, point out that there must be some specification as to the scope of the education involved. "Extension education," they point out, "cannot be and should not be anything and everything."

Roy Rauschkolb sees that there will be a change in the type of people hired. Extension personnel need to be more technically competent with a solid base in subject matter. Seemingly, there is an inevitable recognition that not only is education the mainstay of Extension but that subject-matter expertise is the core of the educator.

#### Focused Professionalism

The future of Extension may well hinge on the quality of its programs, and the quality of its programs is dependent on the quality of its people. Fortunately, Extension is blessed with a talented and dedicated workforce. However, that workforce may need to evolve toward a more focused professionalism.

The very essence of a professional is the characteristic of concentrated expertise within a definable domain. To a professional golfer, the domain is golf; to a dentist, it is dentistry; and to a banker, it is banking. Few people would have confidence in the nutritional advice of their banker, the financial advice of their dentist, or the parenting advice of their golf pro. Should Extension expect anything different from the audiences which it serves?  $\Delta$



## Key To Competing: 4-H Commodity Market Meet

36 Extension Review

**Marlene J. Forbes**  
Print Media  
Coordinator  
Communications  
Division, National 4-H  
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One way to ensure that American agriculture will be able to increase its share of foreign and domestic markets in the future is to educate young people about commodity marketing.

For the past 35 years, the Chicago Board of Trade has sponsored a 4-H Commodity Marketing Symposium designed to help young people understand how the basic principles of marketing, distribution, and utilization apply to commodities sold in cash markets and traded in the futures markets of major exchanges.

The April 1987 joint Cooperative Extension and private sector symposium, arranged by the National 4-H Council, brought together 32 4-H'ers from across the country, each of whom had completed an outstanding commodity marketing project during the past year. They attended seminars on the use of futures markets as a management tool and learned to adapt market information and functions to their ongoing 4-H projects.

### Project Benefits

Through 4-H commodity marketing projects, young people can learn the economics of marketing and distribution, including everything from charting prices, earning profits, raising and selling raw commodities, forward contracting, and hedging, to the importance of supply and demand.

David Love, 16, of Northport, Alabama, incorporated commodity marketing principles into his food preservation, gardening, forestry, foods and nutrition, home management, and home environment 4-H projects. "Since I was spending all of my time working on these projects, I wanted to know more about making money and how to invest it," says Love, whose achievements earned him a trip to the symposium.

What the 4-H'ers study depends on individual interests as well as where they live. Volunteer leaders can help young people develop a commodity marketing component for any 4-H project.



### Profiting From Projects

Some 4-H'ers who attended this year's symposium have used commodity marketing techniques to earn substantial profits.

Larry Fowler, 17, earned more than \$34,000 raising and marketing corn, wheat, alfalfa hay, and cattle. "As a farmer with my own acreage I am very concerned about changing prices. I need to know all I can," says Fowler, who lives on a 3,000-acre Kansas farm and plans a career in agriculture.

He has visited elevators where grain was being milled and visited the port of Houston to see how farm products are exported.

Hertha Meyer, 18, sold honey, maple syrup, apples, cider, plums, and grapes for a profit of nearly \$19,000. Through her commodity marketing project she has learned how to produce and market several products effectively.

Elizabeth Ann Rigelsky, 18, grossed more than \$17,000 from raising and marketing tomato plants, beans, squash, melons, and vegetable plants. Her project helped her learn how different weather conditions affect crops, and how prices for various commodities are formulated. The Ohio State University student plans a career in marketing.

Roy Robbins, 17, earned more than \$12,000 raising and marketing sheep and \$3,100 selling fleeces. He credits his commodity marketing project with teaching him how to apply for government subsidies for wool, and how current events affect the market.





### Projects Lead to Businesses

For other symposium participants, commodity marketing projects have evolved into thriving businesses.

Adrienne Shaffer, of Knoxville, Maryland, started her "Flower Delights" business 3 years ago in the basement of her home on the family's 32-acre farm. Since then she has sold nearly 10,000 floral arrangements.

"Flower prices are greatly affected at holiday times because the demand is much higher than for all flowers," says Shaffer, who attends a community college and plans a career in biology research and floriculture. Through her commodity marketing project she has learned when to buy supplies to get the best available prices and when to market certain materials to get the highest profits.

Lee Logan lives on a 160-acre farm in Hale Center, Texas. He created a demand for decorated wooden spinning mill spools and earned a profit from selling them. He gathered the free spools, decorated them, and then sold them for \$5 each.

He says through his commodity marketing projects he has learned that all marketing decisions are based on supply and demand for a commodity.

Gretchen Murdock, 16, of Beaver, Utah, started a shaved ice business with her brother 2 years ago. "It has helped me to appreciate what it really takes to make a business work," says Murdock, who plans a career in business or fashion design.

Jason McCanna, 17, started a bee operation with two hives and borrowed equipment and earned a \$270 profit in his first year.

"I found out what commodity marketing is, how it works, and how to use it on my bee project. I tracked world sugar prices, visited a stock broker's office, and kept all the records on the computer," says McCanna, who is a high school junior in North Dakota. He says his project helped him learn how to change pricing with demand, what is involved in hedging, and the difference between cash and futures markets.

### Visit To Board of Trade

As part of the symposium, the delegates visited the Chicago Board of Trade, where they had the rare opportunity to visit the floor as the market opened and to shadow traders who bought and sold futures contracts. When trading closed that day, the 4-H'ers participated in a simulated pit trading exercise, met with Board of Trade officials, listened to traders and marketing representatives, and toured points of interest in Chicago. ▲

*Opposite left: 4-H delegates participating in the National 4-H Commodity Marketing Symposium listen to Chicago Board of Trade member Ronald Reum (reviewing tape) explain the fine points of commodity marketing. Opposite center: 4-H delegate receives individualized information from Chicago Board of Trade broker at the Symposium. Above: After visiting the floor of the Board of Trade, 4-H delegates practice their trading skills in the classroom with band signals they have learned.*

## Calculating Finances

38 Extension Review

**Ronald W. Wall**  
*Extension Specialist,  
Family Economics  
College of Tropical  
Agriculture and  
Human Resources  
University of Hawaii  
at Manoa  
and  
Marsba A. Goetting*  
*Extension Specialist,  
Family Economics  
Montana State  
University, Bozeman*

"\$232,832 for a \$66,000 house? That's incredible!"

"\$10,000 will grow to \$17,081 in 4 years? Wow!"

"A car payment of \$352? I can't afford that!"

These are typical comments from clientele in Hawaii and Montana who are discovering how a relatively inexpensive financial calculator can help them make better decisions about their money.

### The Hawaii Experience

Over the past 3 years, a project titled "Calculating Your Finances" has taught hundreds of Hawaii residents how to figure the bottom line for their financial decision-making. "Calculating Your Finances" grew

out of a desire to develop a program that could change people's fundamental approach to making decisions about money.

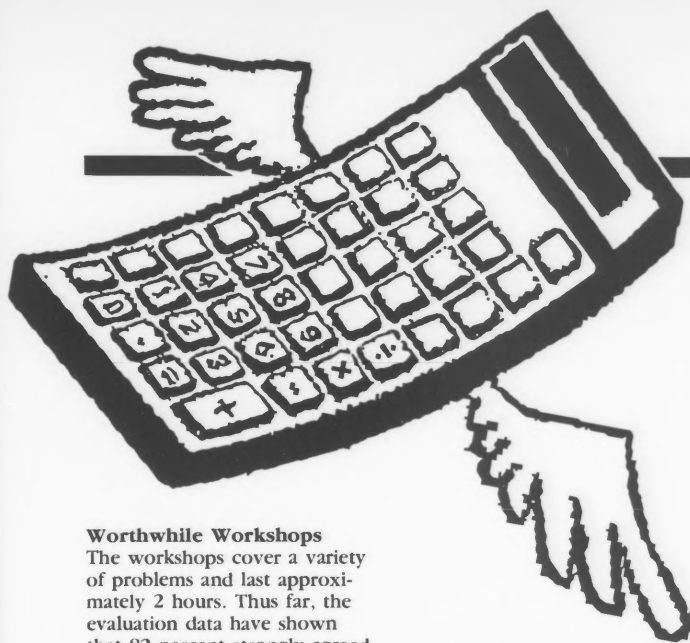
"I wanted clientele to come away from our program with an enduring skill of fundamental importance, since the average person makes a number of financial decisions without accurate figures or reasonable estimates," says Ronald Wall, family economics specialist, University of Hawaii at Manoa.

He describes the project as a combination workbook and hands-on workshop that can teach anyone—from teenagers to grandmothers—to make more informed financial decisions.

During the session, participants use a financial calculator to figure loan payments, plan savings programs, estimate returns on investments, compare retirement plans, and learn a host of other practical uses.

The Hawaii workshops use Wall's publication, "Calculating Your Finances," and a set of 22 Texas Instruments Business Analyst II calculators. Wall credits the purchase of these calculators to the foresight of Yukio Kitagawa, Extension administrator, who saw the potential of this project.





### Worthwhile Workshops

The workshops cover a variety of problems and last approximately 2 hours. Thus far, the evaluation data have shown that 82 percent strongly agreed and 18 percent agreed that the workshops were useful and worthwhile for them. No one disagreed or strongly disagreed, and only one person in the sample was undecided.

The knowledge and skills taught through this project have significant potential for large-scale economic impacts. For instance, when mortgage rates dropped from 12 percent to 10 percent, one couple used the calculator to discover that they could save nearly \$230,000 in interest by refinancing their \$130,000 home over 15 years rather than 30 years, which meant an increase of only \$60 in their monthly payment. (This calculation, however, does not include other factors such as taxes that need to be considered before refinancing a loan.)

### Montana's Adaptation

After hearing Ron Wall share his project at a national meeting of family economics specialists, Marsha Goetting, a family economics specialist, was impressed enough by the benefits of using a financial calculator to introduce the approach to Montana.

A working women's weekend retreat in Fergus County, Montana, provided the first opportunity. Participants, Goetting notes, could hardly wait to get home to share their newfound knowledge with their spouses. Nine of the 16 participants were so enthusiastic that they purchased financial calculators that very day.

In June 1986, a financial calculator class was held as part of the activities for a Woman's Week and Montana State University.

This year's plans include an expansion of classes so that more participants can be accommodated. Last year, 25 people who wanted to take the course were turned away because of lack of room.

The popularity of financial calculation seems well-founded. Financial calculators, Goetting points out, can make goal-setting much more realistic. "For years, I have emphasized the importance of setting financial goals," she says, "but use of the calculator quickly reveals to the client the result of a particular spending and saving pattern or some financial strategy."

Youth in Montana are also becoming enthusiastic about financial calculating. During Montana's 1986 4-H Congress, Home Economists Gayle Muggli, Kim Tompkins, Judy Knudsen, and Eileen Wilson taught a class for 4-H youth. They found that these participants learned how to operate the calculators even more quickly than many adults.

In September 1986, Goetting and Muggli published a self-study manual that included step-by-step instructions for the Texas Instruments BA-35 financial calculator.

### Future Directions

The experiences in both Hawaii and Montana have shown that financial calculating is a very teachable skill with broad potential for significantly affecting the financial planning and decisionmaking ability of families and households.

Both Wall and Goetting view financial calculating and the insights it generates as fundamental to many other components of financial education. It is a cornerstone project, one that can serve as a long-term building block for a variety of other programs. It is also viewed as a continuing element of the Extension education repertoire.

The long-term impacts of financial calculating education have yet to be determined, but the prospects seem bright. "All 60 of our calculators were checked out in January and February," says a surprised Goetting. "That left me without any for a class I'd scheduled, so I quickly purchased more."

The Extension educators involved in these programs predict that financial calculating will eventually become established as a valuable, effective tool in the financial planning, decisionmaking, and management of families, households, farms, and ranches. ▲



## Budget Basics

40 Extension Review

**Meg Gemson Ashman**  
Extension Head, Office  
of Information  
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Burlington

*Pamela Smith Williams,  
Extension home economist,  
Orange County, Vermont,  
conducting a money  
management workshop,  
discusses personal budget  
projections with Sid McLam,  
a workshop participant.*

What do senior citizens and young adults, professionals and homemakers, singles and marrieds have in common?

"They all want to do a better job of making ends meet," says Pamela Smith Williams, Extension home economist in Orange County, Vermont.

Williams offered a money management workshop last fall, the first of two 2-hour sessions. "The group," Williams notes, "ranged in age from 20 to 85 and included an academic dean, a secretary from a local college, several married couples, a widow, two dairy farm wives, and a few older women."

At the first session, Elizabeth Scannell, Extension Family and Consumer Economics specialist, University of Vermont, emphasized a basic theme during her instructive two hours: "Tell your money where to go instead of wondering where it went." Scannell explained the fundamentals of setting up a spending plan and the importance of recordkeeping.

### Identifying Goals

Scannell asked participants to identify the financial goals—both short and long term—they wanted to work toward. Participants were provided with

worksheets to set goals and keep track of spending. She also reviewed the advantages and disadvantages of using credit, associated costs, and cautionary factors. She distributed a worksheet for calculating credit debt load.

Scannell employed an Extension publication, **Money Moves**, to illustrate how to use a spending plan. She described how to allow for irregular expenses such as car insurance or Christmas purchases that are not calculated on a monthly basis. At the end of the session, participants were told to start a recordkeeping system by keeping track of expenses for 1 month.

The following month when the group next met—this time with Pamela Williams—they reviewed their recordkeeping systems. Williams met with group members individually while the rest discussed what worked for them.

### Followup Sessions

Some workshop participants met with Williams for followup sessions to review their individual progress. To answer more complex questions about credit or investment, Williams relied on resource people from a local bank.

Sid McLam, who works at a local college, was a workshop participant who believes the workshop taught him ways to save money and better manage his finances. "I keep all my records in a safe I bought on sale," he says, "and I now have a month-by-month record of my expenses. For the first time, I sit down and compare what I've spent against what I budgeted. Then I can make the necessary adjustments for the next month."

Williams is impressed with his and other participants progress since the workshop. Financial management workshops, like the one in Orange County, are offered throughout the state. The format is the same: Scannell presents information at the first session and the county home economist takes it from there. "In this way," Scannell comments, "workshop participants come to rely on their local resource—and that's how it should be."

### Teamwork A Success

"This is a good example of Extension teamwork," Williams says. "Scannell is definitely the expert on financial management but it is impossible for her to meet with every client in every county. Instead, we are being trained to counsel them. This really seems to work for us."



# Goats—New Market For Florida Farmers

Extension Review 41

Florida goat farmers have found a need—and they're jumping in to fill it. The state's growing Hispanic population—now over 1 million—has created a demand for goat milk and goat meat. This provides goat farmers with an instant market for a new "crop."

"The new goat market is good news for distressed farmers in Florida," says Ernest Bliss, Extension animal science specialist with the University of Florida's Institute of Food and Agricultural Sciences (IFAS), in Gainesville. "The farmers have tried various alternative crops," he says, "only to find there's little or no market for them. Now, there's a huge market in the goat meat business out there just waiting to be developed." Another reason for the growing popularity of goat farming, Bliss says, is that these animals are easy to raise and they're ideal for small-acreage farms anywhere in the state. "Five goats can be raised on the land required for one cow," he points out.

## Growing Market

Tom and Helen Hill, who raise meat goats near Lake Butler at the Tranquility Acres Farm, agree they have no trouble selling everything they produce either at local livestock markets or directly to Hispanics and other ethnic groups.

"It's not uncommon for Spanish-speaking people from south Florida to drive up here to north Florida," says Helen Hill, who helps her husband co-manage Tranquility Acres Farm, "just to purchase goat meat."

The market for goat milk, centered primarily in health food stores, has always been good. "It is even better now with the growing Hispanic market," says Reub Salado, who with his son Bill operates Lighter Pine Goat Dairy near Melrose, one of the two largest dairy goat farms in Florida.

"We have about 200 dairy goats and our pasteurized goat milk is sold to stores from Miami to Jacksonville," says Salado. "When our dairy goats stop being productive, we sell them at local livestock markets or to individuals looking for goat meat."

## Vulnerable To Dogs

"Goats are very vulnerable to stray dogs that stalk the herds and kill or maim livestock. Wild dogs as well as hunting dogs and ordinary pet dogs will dig under or go over fences to attack goats," Bliss points out. "For this reason, we recommend well-built fences to protect goats—electric fencing is most effective."

Goat milk is a good alternative source of calcium, notes Helen Hill, who is also secretary-treasurer of the newly formed North Florida Meat Goat Association whose membership includes some 50 farmers.

## Goat Burgers

"Goat milk is easier to digest than cow's milk because the fat globules are smaller," says Hill, author of "Goat Gourmet," a 140-page cookbook that includes recipes using goat milk, cheese, and meat. "A variety of cheeses can be made from goat milk, too. Feta cheese is probably the best known. Goat milk and cheese are available at almost every health food store. Goat meat is lean and can be used in almost any recipe that calls for beef, pork, or lamb. Goat burgers and bar-b-que are good examples of how it can be served."

Leather is a byproduct of all meat goats while Angora goats are raised for mohair. There are more than 460 million goats worldwide producing some 4.5 million tons of milk and 1.2 million tons of meat. "Goats," Bliss says, "are one of the smallest domesticated ruminants and have served mankind longer than sheep and cattle."

## Dairy Goat Conference

This past June, the 1987 Dairy Goat Conference, sponsored by IFAS, was held at the University of Florida. Barney Harris, IFAS Extension dairy specialist, served as program chair. Harris is the author of a new publication—"Feeding Dairy Goats"—soon to be available from IFAS Cooperative Extension Service. February 14-15, 1987, some 300 dairy goats were featured at the Florida State Fair, near Tampa. ▲

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**Charles T. Woods**  
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*Goats are a new alternative "crop" for Florida farmers. The growing Hispanic population has created a demand for both goat meat and goat milk. Experts claim the animal is easy to raise and ideal for small-acreage farms in the state.*



# Volunteer Financial Counselors In The Front Line

42 Extension Review

**Karen P. Goebel**  
*Extension Specialist,  
Family and Consumer  
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Family Resources And  
Consumer Sciences  
University of  
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**Mary Heisler**  
*Extension County  
Home Economist  
Fond du Lac County,  
Wisconsin*

In Fond du Lac County, Wisconsin, the Extension Family Living Education Program has set a high priority on family financial management.

Following a series of workshops that focused on assessing family financial situations and basic concepts of money management, many participants sought individualized help with their family economic problems. Publicity about the financial management counseling resulted in numerous referrals from the County Department of Social Services, court system, clergy, and other agencies. Demands for financial management help exceed that available and it was clear that additional resources were needed.

Recognizing this need, Mary Heisler, Extension home economist in Fond du Lac County consulted with Karen Goebel, state consumer and economics specialist, and examined existing materials from several other states. Heisler was able to select the appropriate educational approach for her county. In developing a program for volunteer financial

counselors, she melded approach and materials, as well as systems for recruiting, training, and supervising volunteers from other states.

## Preparing Counselors

Volunteer counselors are trained to understand the devastating effects financial problems have on family relationships and self-esteem. An important role for the volunteer counselor is the support of family members as they formulate and evaluate strategies, create a plan, and act on it.

The volunteer financial counselor program requires training in counseling techniques and the dynamics of family systems—sensitive topics that require interpersonal communication skills. All volunteers must supply references with their initial application and have a screening interview by the home economist.

Volunteer training emphasizes credit control, debt management, and communicating with creditors. They are taught strategies to address the immediate problems which must be solved before long-range financial planning can occur. The counseling format is successfully using computer programs developed to assist with various areas in financial management. Videotapes, developed at the state level, such as "Tracking Your Spending" and "Making Ends Meet" have also been useful as training aids for volunteers.

## Training Sessions

The volunteer training consists of four sessions of 2-1/2 hours each. Each volunteer has contracted for 1 year and is expected to counsel with at least one family during each 6 month period. This obligation usually involves three to five visits with a family, usually in their home.

Since the program began 1 year ago, volunteer financial counselors have worked with 15 families in Fond du Lac County. These include single parents, couples, and persons with chronic health problems as well as serious debt loads. Each family requires an individualized list of alternatives to start on the road back to financial solvency. The families' "homework" often takes the form of initiating spending records or contacting creditors with an adjusted debt repayment plan.

Preliminary evaluation indicates that the volunteers gain satisfaction from their roles as they, as well as the families they assist, gain increased financial competencies.

## Future Program

The county Extension advisory committee has expressed satisfaction with the program. The success with volunteer financial counselors in Fond du Lac County has prompted other counties to begin similar programs.

Additionally, Wisconsin has received funding from both USDA and Wisconsin Extension to develop volunteer financial counselors to work with farm families in several counties. Emphasis in the new program is being placed on stress management, recordkeeping, cash flow budgeting, and off-farm employment decisions. It is almost certain that these grassroots programs will lead to revised materials and techniques which will be implemented on a statewide basis. ▲

*Mary L. Heisler, (left),  
Extension county home  
economist, Fond du Lac  
County, Wisconsin, counsels  
young family in financial  
management. Heisler  
initiated a county program  
to train volunteer financial  
counselors to help families  
on the road to financial  
solvency.*



(Continued from page 2)

- Issue 3.**                    **Vulnerable Youth**  
 Youth face difficult decisions that can lead to such problems as substance abuse, teen pregnancy, suicide, and sexually transmitted diseases. Families and peer pressure play a key role in helping youth make decisions that will guide them toward a productive and self-reliant adulthood.
- Extension's Goal:**        Empower youth to make decisions that will guide them toward a productive and self-reliant adulthood.
- Extension Roles:**        Teach youth to develop a positive self concept, strengthen social skills, examine job and career opportunities, and explore options in order to establish personal goals. Help parents to enhance family relationships by strengthening communication and establishing realistic expectations. Work with interested agencies and organizations to develop community-based support and resources for youth and their families including after-school activities.
- Issue 4.**                    **Family Disruption And Dislocation**  
 Loss of a job, family farm or business, change in marital status or the death of a family member are disruptive and stressful to families. Family members affected by dislocation and disruption can become depressed, and unable to respond logically to the complex decisions facing them, and may withdraw from the community.
- Extension's Goal:**        Help families experiencing transition develop strategies to manage stress, identify and manage resources, generate realistic alternatives and implement a course of action.
- Extension Roles:**        Help people develop realistic expectations for themselves and their family members. Help individuals explore career changes and develop job-seeking skills. Provide stress management education. Teach families strategies to balance work and family responsibilities.
- Issue 5.**                    **Responsibility For Dependent Elderly**  
 Increased life expectancy is resulting in record numbers of people aged 65 years and older. This expanded period of need taxes the resources of family members. Today's elders have fewer children, and many of the traditional caregivers (women) are now employed outside the home. Middle-aged adults face a three-pronged problem: raising their own children, caring for and supporting elderly parents and attending to their own needs.
- Extension's Goal:**        Help middle-aged adults prepare for their parents' later years while meeting their own needs and those of their children.
- Extension Roles:**        Help middle-aged children recognize the "normal" aging processes of their parents and explore options for needed assistance. Assist families in developing strategies for financing the later years. Work with community-based agencies and organizations to provide intergenerational experiences, support, and resources for the elderly and their families.

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*Suggestions and guidelines for helping achieve these goals will be presented at a later date. Co-chairs of the Family And Economic Well-Being Task Force are Carol L. Anderson, Associate Director, Cornell Cooperative Extension, New York, and Jo Turner, National Program Leader, Family Resource Management, Extension Service, USDA.*

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# *extension review*

United States Department of Agriculture    Fall 1987

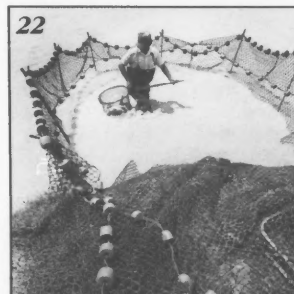
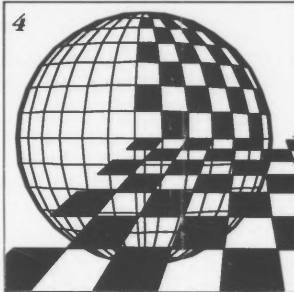


*Competitiveness and  
Profitability Of  
American Agriculture*



## Competitiveness and Profitability of American Agriculture

- Situation** Future profitability in American agriculture depends on the ability of producers to maintain competitiveness in a global economy. The potential for profit hinges on economically efficient U.S. production and marketing systems and supportive agricultural, macroeconomic, and international trade policies.
- Increased competitiveness and profitability will require development and dissemination of new technology. Furthermore, policies must be designed to enhance U.S. agriculture's competitiveness rather than detract from it. Educational programs in production management, financial management, marketing, and public policy must be integrated toward increasing competitiveness and profitability.
- Competitiveness* is defined as the ability of U.S. agriculture to increase its share of foreign and domestic markets. *Profitability* is defined as the ability to generate returns to land, labor, capital, and management equivalent to returns in other uses and to provide a reasonable chance for an acceptable return for risk.
- Critical Issues** To meet these challenges and opportunities, the Cooperative Extension System must address nine critical issues.
- Issue 1. Improve the economic efficiency and integration of the total agricultural system from producer to consumer.**
- Extension Goal And Roles:*
- Teach agricultural producers and businesses the management skills required to integrate production, financial, and marketing decisions for maximum profit.
  - Facilitate and stimulate coordination within the agricultural system.
- Issue 2. Develop, apply, and transfer technology.**
- Extension Goal And Roles:*
- Accelerate the discovery and adoption of competitive, profitable technology.
  - Develop interdisciplinary research and delivery methods and networks.
- Issue 3. Balance human wellness, nutrition, and environmental concerns with competitiveness and profitability goals.**
- Extension Goal And Roles:*
- Educate consumers and producers about trade-offs in health and environmental aspects of food and fiber production, marketing, and processing.
  - Provide education on the regulatory process and facilitate understanding of regulations through educational programs.
- Issue 4. Acquire timely, accurate information and education to adjust profitably to global changes in supply and demand.**
- Extension Goal And Roles:*
- Help producers understand the global market environment and obtain and interpret data for long-run decisions.
  - Teach producers strategic planning.
  - Assist producer groups and organizations in making institutional changes necessitated by changing markets.



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# Change Is The Watchword

4 *Extension Review*

**Myron D. Jobsrud**  
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The Cooperative Extension System, like all private and public organizations, is facing change which is more extensive, more far-reaching in its implications, and more fundamental in transforming programs than anything previously in Extension history. This change has ushered in an era in which public and private organizations must learn to operate in a new mode.

Last year alone, 4,000 business organizations, not including farmers and ranchers, were making the necessary adjustments to remain viable in this new environment, at a cost of \$200 billion. Over half the Fortune 1000 companies have been involved in this process since 1980.

The Cooperative Extension System must develop and implement plans for change. Or, we will experience the cultural shock that occurs to organizations when the critical mass of change exceeds their ability to assimilate it.

Are our current mission, size and mix of staff, organizational structure, ways of approaching our tasks, and perhaps some of the basic tasks themselves, appropriate to the new times and environment?

The real world is rapidly losing interest in elegant solutions to finite, individual problems. People want worthwhile products and services, the development of which usually requires a multitude of skills and a high degree of flexibility. Managing Extension programs which can successfully market educational products in the future means tackling real problems that often can barely be defined.

Recognizing what the world wants, assembling the resources needed to produce it, and orchestrating those resources so that they all work toward solving the real problems are tasks critical to how the Cooperative Extension System will meet clientele needs. Completing such tasks amidst uncertainty and competition is especially challenging. Yet doing so constitutes the System's current agenda, and it is why Extension administrators across this Nation are cooperating in a National Initiatives effort.

## **The Competitiveness And Profitability Initiative**

In the past, farmers and ranchers competed primarily with neighbors or with producers in another state. The global economic environment was fairly stable despite two world wars and the worst global economic collapse in modern history. U.S. monetary and fiscal policy had little impact on agriculture; farmers were protected with fixed prices for the major commodities and income transfers from the government. Helping farmers compete meant helping them adopt the latest in new production technology. If resulting increased production was not enough, farmers had government programs as a safety net. This explains in part why we have such a strong technology bias in our Extension programs. Today's

world could not be more different. Extension and the land-grant system must keep pace with this change to be relevant to the future competitiveness and profitability of American agriculture.

Wealth in U.S. agriculture has dropped drastically. Many rural Americans are undergoing an extremely disruptive process. When this period of transition is behind us—within the next 5 years—we will have lost 10 to 15 percent of existing farm families because of financial failure. Nearly three times that number will have struggled with economic problems and the human stress that accompanies lost dreams.

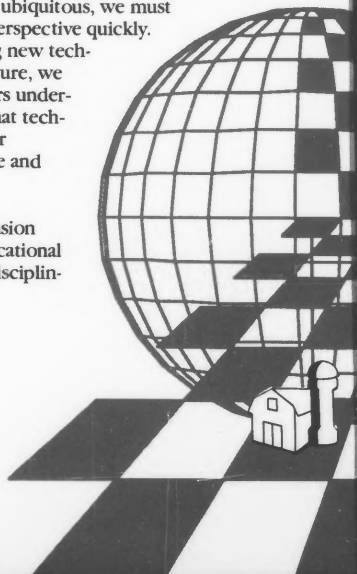
Those remaining in agriculture must sustain long-term profitability for their farms and ranches and regard agriculture as a business rather than a way of life. This challenge is the essence of the National Initiative on Competitiveness and Profitability of American Agriculture. Extension programs in most states are being redirected toward an emphasis of helping farmers improve long-range competitiveness and profitability. As states move to this type of issue-based programming, they are reallocating resources to reach more clientele than before with programs that concentrate on solving problems.

## **Role Of Technology**

Technology can be American agriculture's wild card of the future. Current technology, new technology, and, particularly, biotechnology will give a powerful comparative advantage and competitive edge to those who can apply these advances profitably. Thus, cost-benefit assessments must be made to determine the feasibility of technological changes.

A global economy demands from us a global perspective in our educational materials and programs. In an environment of fierce and often predatory competition where information and technology are ubiquitous, we must obtain this global perspective quickly. Besides introducing new technology into agriculture, we must help producers understand how to use that technology to keep their systems competitive and profitable.

Traditionally, Extension has conducted educational programs using a disciplinary approach.



This method of delivery was often confusing because the information and technology delivered were seldom in economic terms, were not integrated, and did not focus on profitability. Today, competitiveness and profitability needs of American agriculture demand that Extension use an integrated systems approach based on a profitability plan for producers. Producers must make economic comparisons and cost-benefit assessments of systems approaches. At the same time our natural resource base and environmental quality must be maintained.

Many of the technological tools essential for maintaining competitiveness and profitability of American agriculture are changing considerably, especially those used to control plant and animal pests. Thus, sustainability of agricultural competitiveness and profitability depends on a time-honored Extension approach, which involves safe and judicious use of these technologies.

#### Market Strategy Essential

Marketing is essential to agricultural competitiveness and profitability. Thus, the Extension National Initiative in this area must concentrate on market planning strategies which include a clear understanding of international trade and foreign markets. Policy factors are now as important as basic resource endowments in determining competitiveness and profitability of American agriculture. Thus, public policy educational programs must be integrated with production management, financial management, and marketing programs to address competitiveness and profitability issues. Also, producers must better understand risks and the assessment of risktaking in production, marketing, and business management decisions.

A rapid delivery network is vital in interdisciplinary integrated efforts. Database support is necessary for integrated systems approaches to problemsolving. Communication linkages between databases and real-time information are vital for production, marketing, and management decision-aid programs to function through integrated software. It may be more crucial for Extension to develop an informational management system to manage known technology than

to develop additional technological information, if it cannot be used effectively to enhance profits.

An extremely important component of interdisciplinary, integrated educational program delivery is teamwork. Thus, team efforts must be recognized and rewarded as part of the systems approach to problemsolving.

#### The Future

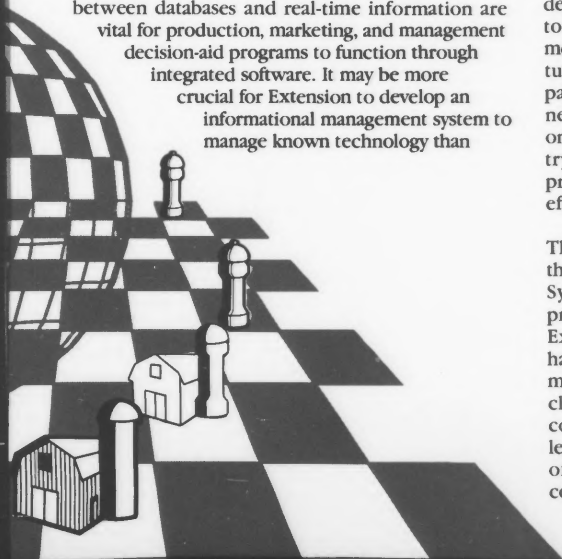
Some argue that worldwide growth in agricultural production has finally set the age-old problem of food shortages behind us. Where food shortages exist, they say, misguided policies, inadequate food distribution systems or poverty are to blame and the capacity to feed the world now and in the future is adequate. Others argue that our apparent excess production capacity stems from the exploiting of fragile resources, and that marginal soil, water or climate resources cannot sustain production indefinitely. Because the world population will continue to grow, and global improvements in personal income will shift the demand for food, food shortages or rising real prices in food and fiber will recur.

Both of these futures or some combination of them are possible. In the seventies, we could not produce enough. In the eighties, we do not know what to do with what we have. During both periods, the phrase "never again" was used with some conviction. Never again would surplus conditions exist. Never again would we face inadequate food supplies. The stock and trade of Extension is providing our clientele with effective decisionmaking tools. These tools must work independent of the job. Thus, we must develop strategies that are appropriate, whatever the future.

#### Flexibility The Key

A competitive and profitable agriculture will depend on flexibility—on our ability to respond to an uncertain and rapidly changing environment. This means we must learn to view agriculture as a system. We cannot be "smart in the parts" and "dumb in the whole." Competitiveness and profitability of agriculture will depend on the ability of Extension, research, and industry to use integrated systems approaches to problemsolving and to incorporate policy effectively into the decisionmaking process.

The National Extension Initiatives effort provides the environment for the Cooperative Extension System to evolve toward a more effective process of problemsolving than in the past. Extension staff at all levels of the System will have to take more risks, cooperate with all segments of the agriculture community and other clientele groups, develop coalitions, overcome constraints, and make things happen. Extension leadership systemwide needs the active support of all Extension employees for this effort to succeed. ▲





# Extension National Initiative: Competitiveness And Profitability Of American Agriculture

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The roots of the financial problems of farmers today can be traced to the environment of the seventies and the dramatic changes in that environment early in the eighties. The seventies can be characterized by high inflation rates, growing foreign and domestic demand for farm products, and low or negative real rates of interest. Farmers, willing to substitute asset appreciation for current earnings, borrowed heavily to purchase capital inputs and farmland to expand their operations. Then, in the eighties, interest rates rose to unprecedented high levels, and foreign and domestic demand for farm commodities declined significantly because of worldwide recession. Farm incomes dropped dramatically, and land values began a steady and relatively steep decline. Farmers with high debt loads found it difficult to service that debt with high interest rates, low incomes, and decreasing land values.

## **Extension Resources Redirected**

Extension Industry Resource Committees, established by ES-USDA and the Extension Committee on Organization and Policy (ECOP), raised the issue of profitability and the likelihood of an impending financial problem in American agriculture. Early in the eighties, profitability became the overriding goal of all Extension Agriculture and Natural Resource programs and a budget priority for ES-USDA and ECOP.

By 1984, up to 35 percent of Extension resources in some states had been redirected from other programs to address the farm financial crisis. Also, the Congress, in the FY 85 appropriation, provided \$1 million in special funding for ES to provide assistance to financially distressed farm families. These funds went for immediate program implementation of 21 out of 46 project proposals submitted by state Extension services.

To implement these programs, these institutions committed \$7.23 million of State and local funds. The Congress provided \$1.4 million for similar project funding in the FY 86 and FY 87 budget.

Intensive assistance provided by the Cooperative Extension System has helped a vast number of farm families deal with financial crisis. Nevertheless, about 25 to 30 percent of farmers remain in financial difficulty. They account for 50 percent of all outstanding debts. The income surge of 1986 and 1987 left this group of farmers relatively untouched, and they will continue to need Extension's assistance.

## **Systems Approach The Key**

In 1984, ECOP published, "Regaining Farm Profitability in America: A Cooperative Extension System Response." This report contained the policy that "The Cooperative Extension System will develop a total production systems approach to improve the profitability of agriculture by striving for maximum economic returns not maximum output." This policy provides the basis for Extension to take the initiative in addressing sustained long-term profitability of American agriculture.

In 1985, ES-USDA funded a cooperative agreement with Oklahoma State University for a feasibility study. Its purpose was to examine how the Cooperative Extension System might implement a total systems approach to improve agricultural profitability. This report concluded that Extension programs to increase agriculture profitability are feasible and provide examples of such programs. The report also concluded that Extension must expand the development and implementation of these types of programs even though there were major constraints in the programming process.

## **A National Initiative Developed**

Based on this feasibility study, ES-USDA and ECOP convened a national work group in July 1986 to draft a plan of action and implementation schedule for an Extension National Initiative to Increase Profitability of farmers and ranchers. The plan of action and implementation schedule developed were approved in August 1986. In December, ES-USDA and ECOP incorporated this initiative with seven others, and the Cooperative Extension System embarked on a national initiatives effort. The intent is to concentrate resources on issues critical to the economic and social progress of CES publics. This effort emphasizes efficiency, accountability, and clarity of mission.

When the eight priority initiatives were identified, Competitiveness and Profitability of American Agriculture evolved as the title for the national initiative to address the economic problems and opportunities of agriculture. After the priority initiatives were established, eight multidisciplinary task forces composed of Extension staff nationwide were appointed to develop each initiative.

## **Task Force Addresses the Issue**

The National Extension Task Force on Competitiveness and Profitability of American Agriculture met for the first time on December 16, 1986. Task Force members approved a National Forum which would involve a broad spectrum of the agriculture community in a process of identifying issues constraining agriculture competitiveness and profitability. This Forum, held February 17-19, 1987 in Washington, D.C. (see article on page 10 of this issue), provided the Task Force with a set of credible issues on which to develop a national initiative. Forum proceedings have been distributed to Forum participants, Extension directors, state

agriculture program leaders, and state competitiveness and profitability contacts who are helping implement this national initiative. The Task Force has also distributed a 27- and a 7-minute video of the Forum for state use.

Other products initiated and distributed by the Task Force are (1) a white paper on competitiveness and profitability issues, educational objectives, target audiences, potential linkages, programs and needed support and (2) a national assessment of Extension efforts to increase profitability of farms and ranches through integrated production, financial management, and marketing programs (also reported on page 8 of this issue).

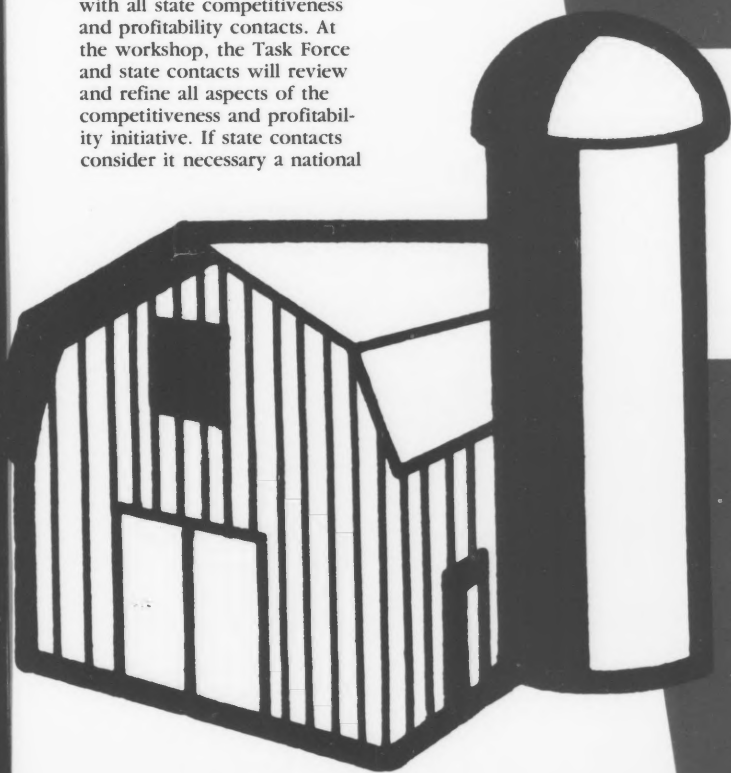
#### Future Plans

In March 8-10, 1988, the Task Force will hold a workshop with all state competitiveness and profitability contacts. At the workshop, the Task Force and state contacts will review and refine all aspects of the competitiveness and profitability initiative. If state contacts consider it necessary a national

satellite program could be held to further extend this effort to the Cooperative Extension System and clientele groups.

To make the Extension National Initiative on Competitiveness and Profitability of American Agriculture work, the Cooperative Extension System must function as a system in cooperation with research and industry. It is a futile notion to think change can be made without commitment from the people who must be involved in implementing it. Thus, the Task Force is committed to involving

a broad spectrum of the Cooperative Extension System and clientele groups in this process. Only such a wide confluence of effort can ensure success. ▲



# Improving Profitability Through Integrated Systems Programs

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Competitiveness and profitability of American agriculture have become major concerns and the targets for a national initiative for future work of the Cooperative Extension System (CES). Over the next 4 years, the System plans to commit 36 percent of its resources toward addressing competitiveness and profitability. The Extension Committee on Organization and Policy (ECOP) in 1984 stated that a key educational method of the CES is the integration of production, financial management, and marketing programs to help agricultural producers achieve maximum economic returns.

## Interdisciplinary Problemsolving

This approach to Extension education requires the resources of a team of specialists and agents who interact closely during program development and delivery. They assure that the recommendations are complementary and lead to accomplishing the objectives of the farmer or rancher. Issues such as declining agricultural profitability and competitiveness are not confined to disciplinary boundaries, but require interdisciplinary problemsolving. The traditional disciplinary or component approach to Extension education has been largely inadequate in dealing with the many interrelated aspects of the current agricultural crisis. Through an integrated systems approach, Extension educational programs will likely address more effectively than before the circumstances and objectives of farmers and ranchers.

In 1985, ES-USDA funded a cooperative agreement with Oklahoma State University to study the feasibility of conducting such programs. That study identified several programs across the United States and outlined some of the considerations in implementing them. Subsequently, ES provided funding to the Texas Agricultural Extension Service (TAEX) to conduct a broader scale assessment of current Extension programs which have implemented such an integrated approach. A report available from TAEX presents the results of that assessment, and this article gives the major findings and recommendations.

## TAEX Goal: Assessment

The overall purpose of the TAEX project was to develop and conduct a national assessment of current Extension programs employing integrated systems approaches to agricultural production, financial management, and marketing. The specific objectives were as follows:

1. Describe and analyze CES current efforts to improve the efficiency and profitability of farm enterprises through a systems approach combining production, financial management, and marketing.
2. Analyze the process through which current multiple-component integrated programs have been developed and implemented.

3. Identify alternative strategies for implementing integrated production, financial management, and marketing programs within the CES.

## Study Sources

Information used in assembling the report was obtained from three major sources. An extensive literature review provided background information on systems approaches and current issues in interdisciplinary programming. We included references on standard readings on systems theory and agricultural systems analysis, international experiences with farming systems research and Extension, interdisciplinary efforts in agricultural research, CES accomplishment reports (NARS), and state Extension service plans of work.

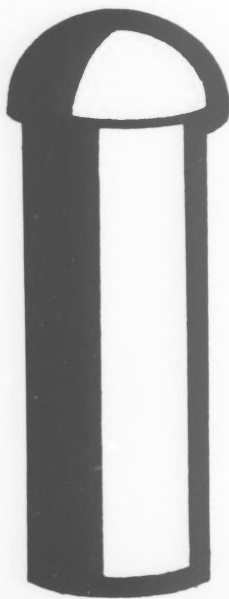
Two questionnaires provided the basis for a statistical description of current integrated systems programs. The first questionnaire was sent to agriculture and natural resource program leaders in all states and territories. These leaders identified programs which they felt met the general description of integrated systems programs. A second, more in-depth, questionnaire was mailed to contact persons for these programs, and about 60 percent provided usable responses.

Finally, a multidisciplinary team of specialists from TAEX visited 10 states to obtain qualitative information on program philosophy, problems encountered in implementing integrated programs, and methods used to deal with those problems. States visited were California, Washington, Idaho, Michigan, Minnesota, Illinois, Nebraska, Mississippi, Virginia, and New York.

The report includes a description of the programs, factors affecting program implementation, organizational support of the programs, rewards and incentives needed to encourage such efforts, and factors influencing team interaction and coordination.

## Findings From The Study

- Interdisciplinary work depends on the identification of a "real" problem facing Extension's clientele. All who work toward resolving this problem must perceive it as having major significance for the well-being of the clientele, and understand what role they play in helping to resolve it.
- Regardless of how an interdisciplinary group is initiated, its members must be free to elect to participate.
- People with allocated time and with a commitment to conduct integrated work are the cornerstones of integrated efforts in Extension.
- Flexible organizational structures and commitment of administrators are essential to the wider incorporation of integrated programming.



- The process of program startup requires substantial time and communication to establish agreed-on priorities and procedures.
- Physical co-location, while desirable, is not so important to integrated programming success as is effective, continual communication among group members.
- Skill in interpersonal relations and team processes is as important to interdisciplinary team success as is professional competence.
- Dynamic leadership is needed to integrate multiple perspectives, to coordinate team activities, and to promote the team, not individual accomplishments.
- Merit based on individual achievement and the departmental orientation of the university system discourage integrated teamwork.

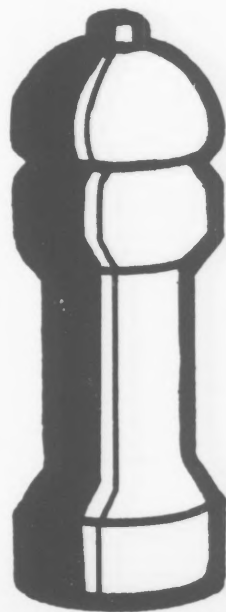
While interdisciplinary work is appropriate for many problems faced by agricultural producers, the need for good, effective disciplinary work remains.

#### Recommendations For The Future

- Extension staff and clientele must understand the value of integrated systems programs as indicated by the linkages and interactions which exist in agricultural production systems. This requires training in the concepts and procedures of interdisciplinary and systems programming. Likewise, increased effort is needed to clarify terminology. Otherwise, the potential of integrated systems programming in having an identified impact on agricultural profitability is diluted, as any and all related work become identified as integrated programs.
- Given the importance of identifying a "real" problem, Extension agents and specialists must develop cost-effective methods for generating and maintaining local databases.
- Extension administrators should inform clientele of the usefulness of a systems approach. Further, they should provide the environment for and encourage Extension staff to participate in systems-oriented programming efforts.
- Research administrators should recognize the value of interdisciplinary work in addressing and solving agricultural producer needs and problems. They should restructure rewards and incentives to encourage such efforts.
- Wherever possible, Extension staff in field centers should be encouraged to form interdisciplinary teams to address broad-based problems. Campus-based specialists must help to backstop these decentralized efforts.
- To facilitate successful program implementation, Extension and research administrators must provide interested team members sufficient release time from other obligations and give them adequate financial resources. Integrated systems efforts need to be viewed as credible, important undertakings and not be tacked on to existing workloads.
- Agricultural researchers and Extension specialists must expand their work to identifying and quantifying linkages among commodities, factors of production, financial resources, and markets. Information on these linkages is essential if agricultural producers are to make decisions which lead to profitability.
- Land-grant universities must prepare graduates to face a complex agricultural environment. Teaching administrators should examine curricula and learning experiences of students to determine those steps required to provide graduates with a broad perspective and appreciation of interactions within agricultural production systems.
- Extension and research administrators should increase efforts to establish innovative organizational liaisons which lead to more effective collaborative work.
- The Extension Service should develop a set of training/resource materials, which 11 individual states could adapt, with the following topics: (1) systems thinking for regaining agricultural profitability; (2) interdisciplinary programming— aspects and procedures; (3) effective teamwork; (4) participatory leadership of integrated programs; (5) identification and articulation of problems; and (6) local database generation. While training is not a panacea, the orientation of Extension staff and producers to such perspectives would seemingly facilitate a more widespread and effective application of integrated systems programs.

#### For Success

After completion of the study, it is clear that dedicated people, with time, can overcome most barriers—even those involving interdisciplinary endeavors. It is also clear that, depending upon people's talents and local circumstances, many structures and procedures can be used to implement integrated systems programs. However, as the Cooperative Extension System seeks to institutionalize cross-disciplinary programs, the study findings should be considered. Only by viewing agriculture from a systems perspective can the Cooperative Extension System effectively respond to the needs of farmers and ranchers who are confronted with a rapidly changing environment. ▲



# National Forum Identifies Key Issues Affecting Competitiveness And Profitability

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Over 100 leaders of the Nation's agricultural community worked intensively during 3 days last February to achieve consensus on the top issues affecting agricultural competitiveness and profitability today. They thus accomplished their main task at the national forum held February 17-19, 1987, in Washington, D.C. The National Extension Initiatives Task Force on Competitiveness and Profitability conceived of and conducted the forum. One of eight task forces organized in 1986 by the Extension Committee on Organization and Policy, the 17-member group is composed largely of individuals from various states who represent Extension leadership in competitiveness and profitability.

## Learn Key Issues

Extension's intent in holding the forum, as stated, was to learn what a broad spectrum of the agricultural community sees as key issues within competitiveness and profitability. This exercise has, as planned, laid the groundwork for fleshing out the Extension initiative on competitiveness and profitability, how it would be addressed through Extension programs and agricultural sector leadership. During the forum, small-group facilitators encouraged participants to visualize how the strengths of Extension and the agricultural community might together be used to solve problems and realize opportunities involving competitiveness and profitability of American agriculture.

Specific objectives included:

1. Surface and define key issues constraining agricultural competitiveness and profitability.
2. Identify roles that Extension and other segments of the agricultural community will play in addressing these issues.
3. Determine actions needed by Extension to implement a National Initiative on Competitiveness and Profitability of American Agriculture.

## Schuh Sets Stage

The stage for group interaction during the forum was set at the opening dinner on February 17, by Ed Schuh, director for agriculture and rural development with the World Bank. In his key-note, Schuh gave a "new agenda for Extension." He emphasized that while Extension is still strong in helping farmers adopt new technology, the world situation has changed and farmers now compete in international markets. Cooperative Extension must change with these changing global conditions or it is doomed, he said. "The public won't support it (Extension) if it is not relevant to their needs."

According to Schuh, Cooperative Extension must include in its new agenda the following: new environment for international trade, human capital, and competitiveness; new perspective on

rural development; and broader perspective on public affairs. "A major educational effort is needed on international trade," Schuh elaborated. "It is probably the most neglected and most poorly understood issue today. It affects our domestic programs, value of the dollar, our interdependence, and our balance of payments."

## Competitive Strategy Needed

Extension also needs to help farmers understand the technology they compete against in other countries so they can devise competitive strategies.

"Improving agricultural profitability is a matter of national security and power," Schuh stated. "Agriculture is still the only world-class industry this nation has. Extension must seize the opportunity and lead the way to change that will keep U.S. agriculture strong."

The next morning, participants heard presentations on three broad areas: monetary, fiscal, and trade policy; marketing and domestic agricultural policy; and production, marketing, and farm financial management. Participants then, within small groups, delineated and ranked issues within these three areas as they related to competitiveness and profitability.

Because of the involvement of a broad representation of the agricultural community, these issues are seen as firmly entrenched throughout American agriculture. Commenting on their breadth and degree of relevance, Vivian Jennings, deputy administrator for agricultural programs, ES-USDA, said: "The Extension Service will focus its efforts on educational programs to address them. The agricultural community has identified these issues as being of foremost importance in restoring the competitiveness and profitability of our farmers and ranchers," Jennings stated. "Through this involvement of people, we feel confident that the critical needs have been identified. We will be focusing on them through the Cooperative Extension System. We believe states can use these issues as guides to address specific concerns within their own boundaries."

## Total Systems Approach

Taskforce cochairs Walter Walla of the Texas Agricultural Extension Service and Dixon Hubbard of ES-USDA emphasized the importance of a total systems approach to handling the difficulties currently besetting this Nation's agricultural industry.





*Ed Schub, director for agriculture and rural development with the World Bank, delivers keynote address at the National Forum, conducted by the National Extension Initiatives Task Force on Competitiveness and Profitability, and held February 17-19, 1987, in Washington, D.C. At these meetings, agricultural leaders identified today's top issues affecting competitiveness and profitability.*

"American farmers must be competitive in a global economy, and U.S. production and marketing systems must be economically efficient," they state. "There must be further development and dissemination of new technology, and educational programs in production and financial management, marketing, and public policy must be integrated and targeted toward competitiveness and profitability."

#### **Nine Issues**

The 500 issues that surfaced initially were narrowed to nine, again through intensive small-group work. The nine issues are:

- Improve the economic efficiency and integration of the total agricultural system from producer to consumer.
- Develop, apply, and transfer technology.
- Balance human wellness, nutrition, and environmental concerns with competitiveness and profitability goals.
- Acquire timely, accurate information and education to adjust profitably to global changes in supply and demand.
- Strengthen business and community support systems.
- Develop long-term agricultural policy that integrates the economic and social needs of the Nation within the global economic system.
- Develop U.S. fiscal, monetary, and trade policies that are consistent with international agricultural trade goals.
- Integrate marketing strategies into the production management system.
- Enhance the supply of competent human resources in the agricultural system.

#### **Task Force Plan**

Based on input from forum participants and other clientele groups, the National Extension Initiatives Task Force on Competitiveness and Profitability has developed a plan which includes guidelines for national, state, and local programs to address the issues surfaced at the forum. For the initiative's goals to be achieved, enthusiastic support is needed at the state and county level. Many states (and counties) have already introduced or redirected programs relating to the initiative.

#### **Links With Other Initiatives**

Many linkages and interfaces exist between competitiveness and profitability and the other Extension initiatives. Initiative administrative advisors will have to ensure that these linkages and interfaces are recognized and addressed as other initiatives task forces develop program guidelines. The purpose of the national initiatives is to break with traditional programming and to increase Extension's ability to solve real problems. The initiatives are not intended to increase competition between and among disciplines or program areas.

The nine major issues that surfaced at the Forum for the Agricultural Competitiveness and Profitability Initiative make up the bulk of articles in this issue of Extension Review. Authors throughout the Cooperative Extension System look at how programming within each of the issues is addressing the needs of our clientele systemwide. Those of us attending the forum came away enthusiastic that tremendous need exists for Extension expertise in new, exciting ways. We have a mandate. Creative, challenging work awaits each of us, and it will demand our most innovative insights and thoughtful program solutions. ▲

## Marketing—A Window To Success

12 Extension Review

**Jerry Dyer**  
*Area Extension Editor*  
*Pee Dee Research and*  
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*Florence, South*  
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The roar of a diesel engine and the whine and whir of a forklift are music to Bill Witherspoon's ears. The clatter and clank of a processing line become symphonic. Combined, they are not a cacophony of harsh, mechanical clamor. They become both the sound of music...and the sound of money.

Above the din of men and machines sorting and shipping cucumbers at the Produce Market Association packing, grading, and shipping facility, Witherspoon roars out an explanation: "This is June and so far we've shipped 60 tractor-trailer loads of cabbage and the cucumber trucks are starting to back up to the loading docks. Later, it will be bell peppers, squash, and melons.

"Listen to that truck pulling out under that heavy load headed for Miami, New York City, Canada, and wherever! Man, that's the sound of money. Money for our farmers. It's a sweet sound!"

### Alternative Crops

Witherspoon, director of Clemson University's Extension Service for Horry County in northeastern South Carolina, beams through weary eyes. For the past 5 years, he has assisted in bringing farmers together with a multitude of political entities—packagers, processors, shippers, and buyers—to make vegetable growing a reliable agricultural alternative to the traditional row crops, especially flue-cured tobacco.

"Tobacco will always be the mainstay of our farmers here," he says, "but its acreage has fallen under quota control from 35,000 acres in 1940 to 11,000 acres in 1987. And we've gone from 2,300 farms in 1980 to less than 1,700 this year.

"Couple these figures with the fact that most of our farms average only 110 acres and the problem is obvious: how do they produce for a profit on such a small scale?"

Alternate crops such as vegetables were seen by some as a quick fix. However, Witherspoon and other Clemson Extension officials urged caution.

### Marketing—A First Step

"Vegetable production wasn't new to us, but marketing was," Witherspoon says. "We had to tell farmers that if they were going to try to grow vegetables like grandpa, then forget it. They've got to have irrigation, a labor force, proper harvesting, and most important...a market."

That meant Extension coordination with Horry County's elected council—men and women who committed funds to the market association facility. Under the guidelines, the produce delivered there is cleaned, graded, packed, and shipped to market. Farmers are paid only after what they deliver to the facility is received and sold to a buyer.

*William D. Witherspoon, director of Extension for Horry County, northeastern South Carolina, examines cabbages (opposite) and cucumbers (right) at the Produce Market Association. Extension is helping vegetable growers to understand the "market window" aspect of production.*

*Photograph courtesy of Clemson University, Clemson, South Carolina.*





During the process, Extension provided assistance in upgrading the quality of the vegetables, production and harvesting practices, and budget planning advice.

"We flat out had to tell some farmers who were in financial difficulties," Witherspoon relates, "that they'd be in worse trouble if they tried to get into vegetables. Some saw it as a way out of their problems after they experienced row crop failures. You can't operate that way in vegetables."

#### **Production Possibilities**

Many did not understand the "market window" aspect of vegetable production; the grower's knowledge of when to sell produce in his/her locale. "We've had folks who just started growing all manner of vegetables without the understanding that the buyers for bell peppers were taking everything Georgia had in May but could care less about what a fellow or two had up here in South Carolina," Witherspoon says. "That's changing. The lack of sales can really get a farmer's attention.

"Currently, we've got a contract for more than a half million pounds of chipping potatoes. We're growing and feeling the pains, learning from mistakes and picking the brains of our colleagues in other states.

"We have the soils, good climate, and location on the east coast that provides an opportunity for continued growth," Witherspoon says. "Most important, however, we have a good group of farmers who are adaptable to change. And we have a political structure ready and willing to give our farmers an opportunity to make the kind of money that will benefit the entire community." ▲

# Total Beef Program In Idaho

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**J. D. Mankin**  
Extension Animal  
Scientist,  
University of Idaho,  
Moscow

*Hereford cattle drink from a farm pond adjacent to their permanent pasture. Producers involved in Idaho's Total Beef Program (ITBP) are reaping the benefits of a "down-to-earth" cooperative educational thrust aimed at returning the state's beef industry to a competitive position in the food marketplace.*

*Photograph courtesy of the Soil Conservation Service, USDA.*



Idaho beef producers involved in Idaho's Total Beef Program (ITBP) can credit well over \$2.5 million annually in returns to participation in that program. As of March 1987, 27 of Idaho's counties, 27 Extension agents, and 157 beef producers on county committees were involved in the Total Beef Program. Also participating were 26 veterinarians and 16 agricultural lenders, two veterinary colleges, two other government agencies, and 12 allied industrial representatives of companies with products. Of Idaho ranches, 39 are "project" cooperating ranches representing 54 families.

## What Is ITBP?

What is the Idaho Total Beef Program? One Idaho banker calls it a "common sense, basic down-to-earth get-your-act-together approach that we can recommend." An industry representative calls ITBP "a great step in the right direction that will help the beef industry get back into a competitive position in the food marketplace." ITBP is a cooperative educational thrust responsive to needs of Idaho beef producers. Since 1984, its launch date, ITBP has been operated to fit

priorities of the state's beef cattle industry for the benefit of producers. Project longevity ranges from 1 to 5 years, each aimed at particular problems throughout the state.

Priorities are established by county advisory committees composed of producers, veterinarians, bankers, allied industry representatives, Extension, and research. The state Integrated Resource Management (IRM)-Total Beef Program committee acts as an umbrella group to direct funding and work with the county committees. IRM is a total systems approach to problemsolving while ITBP is the program itself. The overview committee does not decide on projects. Members listen to what the producer describes as the problem and provide advice and information. The producer controls the program.

## Economic Benefits Uppermost

The entire thrust of the Idaho Total Beef Program is to provide economic benefit to Idaho livestock beef producers. For example, the goal of a given IRM demonstration may be to measure growth response following parasite control in yearlings. The final report on

the trial will show any increase in weight. The evaluation of the success of the technique or product will depend on whether that product made the producer money. If the technique or product was not cost effective, any production increase was insignificant.

## Tangible Results the Key

The aims of ITBP are tangible results—four key indicators: more rapid growth of animals, fewer "open" cows, shorter calving season, and reduced calf losses. All of these lead to improved efficiency, optimum production, and increased profitability. For each of these four key indicators there are four key causes of variation—nutrition, disease, reproductive soundness, and management.

Once a key cause is isolated, a key change can be determined, initiated, and measured against the base data for results.

## Pegram and Boise River

Success of the ITBP has been demonstrated in two completed projects—Pegram and Boise River. In the Pegram project, the key indicator, baby calf loss, dropped from 26 to 2 percent between 1977 and 1979. In the 1980 to 1982 Boise River Project, a key change in

management—improved nutrition—reduced the number of “open” cows from 23 to 7 percent and decreased calf losses from 7 to 1/2 percent. It shortened the calving season from 140 to 60 days, and increased growth in heifers by 87 pounds and in steers by 60 pounds.

The following example of a typical producer in an IRM project shows likely benefits. This producer, who runs 350 mother cows and 350 yearlings, used management techniques that the ITBP has worked on for the last 3 years.

The first year, the producer identified eight subfertile bulls and three of them were infected with Trichomoniasis. These problems might have cost him 87 calves over the next 3 years, or \$30,000.

He increased calf survival with shelters, better nutrition, and closer attention at calving time. His calf death loss dropped 7 percent, or 72 calves, over the next 3 years, or \$25,000.

He initiated a parasite control program and a trace element supplementation program. These practices resulted in a 47-pound increase in yearling weights, or 14,000 more pounds of marketable product, which is \$8,400. Total gross benefits for all changes would be \$63,400.

The cost of making these management changes—including fertility examinations, materials for calf shelters, and de-worming medication for 3 years—totalled \$8,700. Net economic benefit to this producer is \$54,700. Net return per year is \$18,250, and net return per cow per year is \$52.14.

This example does not use exact slaughter prices and replacement costs. However, it shows the tremendous potential that IRM, with ITBP techniques, has to offer the beef cattle industry.

In 1985 and 1986, funding for ITBP projects totalled \$181,100. Of this total, \$40,000 was provided by the Idaho Beef Council, \$42,500 by Extension Service-USDA, and \$98,600 in “in-kind” contributions for services or products by counties, allied industry, and the University of Idaho College of Agriculture. Some funds were made available for county demonstrations, which takes some risk from the producers and gives some control to the county and state committee. Sharing resources in this way fits in with priorities of the Idaho Beef Council and the Idaho beef cattle industry. Their goal is to get information into the field and see technology adopted that will improve the efficiency of beef production.

ITBP began when the Idaho Beef Council decided to determine the true problems of the Idaho beef industry. The state's total Beef Committee, made up of representatives appointed from beef producers, the Idaho Veterinary Medicine Association (IVMA), agricultural lenders, allied industries, and the University of Idaho College of Agriculture, met to develop a course of action. Cochairs of the committee are the president of the IVMA, Jack Walker, and the director of Idaho Cooperative Extension, Harry Guenther. Committee members, lacking data to back up their opinions, decided a statewide survey of producers was needed.

#### Survey Shows Needs

The county committees conducted the survey within the time schedule of 6 weeks. Extension facilitated this process and compiled the data. Statewide problems were identified and lines of action developed. The survey found that producers had not kept records, which made it difficult, if not impossible, to

determine what problems had been over time. In 1984, to remedy this situation, the Idaho Beef Council compiled and introduced the first pocket recordbook for producers. (Several other states have now adopted use of these recordbooks.)

The state committee asked that project proposals for problems identified by counties be submitted by the county committee for funding by the state committee. The state committee formulated some guidelines for proposals. A number of these have been funded. As should be evident from this description, the Idaho Total Beef Program is problem oriented and directed with an integrated concept. The objective is always to work through the practicing veterinarian, producer, allied industry representative, and agricultural lender, and to bring in university specialists as necessary. ITBP is not a set program of activities. Its shape and direction depend on the particular problems identified by the producers in the state. By identifying their problems and working with Extension and others to develop appropriate programs, producers gain ownership in the process. They feel it is their own, not someone else's program.

For more information on the Idaho Total Beef Program, consult *Cow-Calf Management Guide*, *Cattleman's Library*, and the *Stocker-Feeder Management Guide*. Videotape programs and published reports are also available. You may also contact:

The Agricultural Communications Center  
Ag Science Building, Room 10  
University of Idaho,  
Moscow, ID 83843  
Phone: (208) 885-7982. ▲



# IPM: An Extension Success Story

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**Terry W. Canup**  
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Office  
Virginia Tech,  
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Integrated pest management (IPM) is a contemporary success story. At least 30 million acres have come under the influence of this management philosophy, which nets farmers one-half billion dollars a year and has helped create a \$400 million IPM consultant industry. Thanks in part to a national impact study, the success of the Cooperative Extension System's integrated pest management program is now well documented.

IPM, an environmentally sound way of protecting crops from pests and diseases, has been part of educational programs in the Cooperative Extension System nationwide during the past 15 years. IPM is a method that integrates chemical, biological, and cultural practices with field scouting, and monitoring to optimize control of pests and diseases in crops and livestock. Chemicals are used only when conditions warrant rather than on a calendar basis. In other words, IPM substitutes good management for capital expenditures.

IPM is a relatively recent phenomenon. Late in the sixties, Secretary of Agriculture Clifford M. Hardin had encouraged pest control that "provided the least potential hazard to man, his animals, wildlife, and other components of the natural environment." This support led to research studies which developed a database on which Extension programs could be founded. Funding for studies of research on alternate pest control methods followed, not only from USDA, but also from the Environmental Protection Agency and the National Science Foundation.

## Groundwork For IPM

Interestingly, the boll weevil, which prompted Seaman A. Knapp to develop the Extension concept, had been the focus of studies in the twenties that laid the groundwork for integrated pest management. Dwight Isley, professor of entomology at the University of Arkansas, studied the biology and ecology of the boll weevil and used this information to determine how many of the pests comprised a level dangerous to the crop. He developed monitoring and control techniques to use insecticides judiciously. As early as 1926, Isley had trained scouts to monitor insect populations in cotton fields. His work, however, was not widely used in many states from the forties to late in the sixties, because of general satisfaction with the success of scheduled applications of insecticides for boll weevil control.



Isley's principles re-emerged when Extension initiated two major pilot programs in 1971 on tobacco in North Carolina and cotton in Arizona. By 1978, many state Extension services had begun IPM projects. Some gathered data which showed that IPM was not only environmentally sound but a good economic move for farmers as well. By 1982, 53 land-grant colleges and universities had developed Extension IPM education projects.

## Extension Survey Users

In 1983, USDA requested proposals for a study to measure the social, economic, and other effects of IPM on clientele groups. A team from Virginia Tech won the grant. This national assessment of IPM was conceived and partly funded by Extension Service-USDA, which provided overall advice and review. The Virginia Cooperation Extension Service led the 32-month study, whose objectives were to measure IPM's impacts on users (clientele), characteristics of users, and scope of resources used in IPM programs. Virginia Tech researchers gained information from Extension IPM staff, farmer clientele, and private pest management consultants. The study included three components, two of which involved all 50 states and 3 of the U.S. protectorates. The survey of Extension staff showed that formal IPM programs directly affiliated with Extension in 1984 existed on 27 million acres. These involved over 250,000 rural people and segments of 40 crop, urban, and livestock programs.

In the case studies, gross revenue and net returns were higher for IPM users than nonusers in all but one state, where no difference was shown. The better returns, however, were not consistently related to lower pesticide costs, as data on herbicides, insecticides, and other pesticides were grouped together. In four states, IPM users had higher pesticide costs than nonusers of IPM, but these were offset in economic returns by better yields.

#### High Returns

The 32-month-long study concluded that the \$48 million spent nationwide by the Federal Government to support IPM between 1973 and 1983 was yielding high returns for the agriculture industry. IPM users realized an increase in net returns of over \$578 million more per year than did those not using IPM. Private IPM consultants nationwide may be grossing over \$400 million a year working with many of these growers.

These figures probably understate the effect of IPM, based as they are on only a portion of the United States. Most states have IPM programs and some IPM principles are applied on acreages outside of formal IPM programs.

#### Integrated Approach Necessary

"The interdisciplinary approach to IPM is the only way farmers can deal with the combined problems of various pests which can be controlled with different options," states Myron D. Johnsrud, Extension Service Administrator. "All of these options have differing mixes of environmental and economic consequences. This integrated approach is necessary in today's information age and is the only way 'best management decisions' can be made."

"Beyond the obvious public benefits that the IPM programs have yielded," Johnsrud continues, "are the lessons we have learned about how to package interdisciplinary educational programs. We plan to put these to work in our ongoing educational programs as well as in those developed within our nationwide initiatives to address critical issues."

#### New Business From IPM

Most private IPM consultants surveyed began their services after 1980; 94 percent had started after 1970. Thirty percent of the firms employed former Extension employees and most consultants looked to Extension and land-grant universities for advice and information. Seventy percent of the firms surveyed did not consider themselves in competition with Cooperative Extension for clients.

"This report is going to open people's eyes at how much money can be made in the IPM consulting business," says William A. Allen, Extension entomologist and a pioneer of IPM in Virginia.

#### Valuable Spinoffs

"Development of a new service industry, agricultural consulting for IPM, has been a valuable spinoff from this Extension program," reports David McNeal, Jr., Extension Service national program leader for IPM. "Through pilot projects in various crop and livestock situations, Extension programs demonstrated the value of this service. Farmers recognized the value of the service, and private enterprise has begun to provide packages attractive to farmers and profitable for the agricultural consultants."

The Virginia Tech research team was headed by Edwin G. Rajotte, formerly Virginia Tech research associate and now assistant professor of entomology at The Pennsylvania State University. The report provides summarized data from case-study reports from California, Massachusetts, New York, Indiana, Texas, Mississippi, Georgia, Virginia, Kentucky, North Carolina, Maryland, Washington, Idaho, Oregon, Montana, and Nevada. ▲



An IPM scout (opposite) shakes insects onto a cloth for counting. At left: IPM scout uses a sweep net to determine insect population count. For 15 years, Integrated Pest Management, an environmentally sound method of protecting crops from pests and diseases, has been one of the most successful educational programs in the Cooperative Extension System nationwide.

# Keeping The Farm Without Losing The Family

18 Extension Review

**Susan Covington**  
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It's 4:45 a.m. She only has time for a cup of coffee and then, like the mail carrier, rain or shine, her job's long day begins. Unlike the mail carrier, who gets Sundays and holidays off, her job requires 17 hours of work every day, 365 days a year. After the early morning milking of 78 cows she must take care of the kids, house chores, keep the books, and provide support for her husband who's in the field harvesting crops to feed the cattle. She's a dairy farmer's wife fighting to keep the family farm alive.

In this case, her name is Vickie Kensinger, a dairy wife from Seymour who is located in the south central part of the state where 69 percent of all Missouri dairy goods are produced.

To recognize and support women like Kensinger in their various roles, Extension at the University of Missouri and Lincoln University recently created the Dairy Wives Institute, a day-long event jointly planned by Extension staff and area dairy wives.

From June 1986 to early 1987, six institutes were held on a rotating basis in Mountain Grove, Marshfield, and Lebanon, Missouri. A total of 180 women attended the first two meetings.

## Advice: "Be Informed!"

On August 12, Kensinger joined 53 other south-west Missouri dairy wives for the first Marshfield meeting. Discussions covered the future of the dairy industry, how to stretch the "milk check," family communication techniques in stressful times, and quick and easy meal ideas.

Keynote speaker at the meeting was William Heffernan, Extension rural sociologist at the University of Missouri-Columbia. "Be informed," Heffernan told them. "Read and follow the farm press and follow what's happening to other agricultural commodities in the Midwest."

He stressed the importance of understanding regional marketing forces and warned his audience, "Never assume the system will survive without your input."

His warning caught Kensinger's attention. "He pointed out things I hadn't thought about — about the industry and where it's headed. There's been a question about where the family farm's going for quite a while—will it survive? I think our farm will survive because we're determined that that's what we're going to do."

*Opposite: Jane Statger, a Missouri dairy farm wife from Billings employs an Extension microcomputer program to assist in financial planning for the family farm. Below: Barbara Sears, dairy farm wife from Republic, Missouri, checks the farm's dairy calves in the early morning, the beginning of a long work day.*



The Kensingers began dairy farming nine years ago. By the early '80s, they were in debt because the market value of their 300 acres and 200 head of cattle had depreciated \$150,000. With limited power to borrow, the Kensingers turned to University Extension for advice.

Ron Young, Extension area specialist, dairy, Ozark, Missouri, advised them to increase their herd.

This work-harder ethic was foiled by three federal tax increases imposed on dairy farmers in 1985. These taxes take approximately \$750 each month from the Kensinger's co-op check.

As members of the Mid-America Dairymen cooperative, the Kensingers are guaranteed a monthly check paying \$11.70 per hundredweight of milk. But the cost of this "stable" market is high. In addition to taxes, the Kensingers pay the co-op a monthly hauling charge of \$400. The co-op takes approximately \$95 per month for investment, a sum that is not returned to the farmer for 7 to 9 years.

#### Help From Computer Programs

In these troubled times, farm families are relying quite heavily on University Extension services, says Bobby Moser, Extension program director, agricultural programs, University of Missouri. "University Extension now offers 32 computer programs in financial planning," he points out.

The Kensingers plan to take advantage of these programs. "We're considering adding 100 acres," Vickie Kensinger says, "and the programs can compute interest rates and tell us how much they vary."

Vickie Kensinger considers Extension to be a one-of-a-kind resource for their business. "I don't think you can get help anywhere else like we've been given," she says. "An Extension specialist from Bolivar, Missouri, helped us make the right decision when we contemplated buying a silo. Extension is there to be used, and I don't think people use them enough."

Despite the constant battle to make ends meet in the dairy business, Vickie Kensinger says, "I don't mind coming out and milking the cows. It's my profession. I like what we do."

Extracted from an article in *Exclaimer*, a publication of University Extension, University of Missouri and Lincoln University. ▲



# Enabling Crop Producers To Be Competitive

20 Extension Review

Regis D. Voss  
Extension Agronomist,  
Subject-Matter Leader  
For Agronomy,  
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Ames

In the early 1980s, many factors accounted for the depressed financial and income situations faced by Iowa farm families. Some of these factors relate to managerial ability, others lie beyond the control of the farm family. In crop production a major impediment to competitiveness and profitability is the failure to evaluate, adopt, and properly implement research-based crop production information, technology, and sound business management practices.

Extension area crop production specialists at Iowa State noted that during a critical period, when production efficiency was a requisite for survival, many crop producers were not evaluating the economic benefits and risks of each crop production practice. Extension specialists in crop production and protection also identified a problem in the decisionmaking framework of crop producers—priority setting.

"Because profitability had not been a problem in previous years, crop producers were not using information available to them," says Regis Voss, Subject-Matter Leader for Agronomy Extension, Iowa State University. "The producers were not considering alternatives for each production practice. They did not assess needs and assign priorities for production inputs."

An awareness that crop producers' problems were intensifying became evident at the twice-a-year inservice training sessions.

## Formulation Of Program Ideas

As subject-matter leader for Agronomy Extension, Voss arranges *ad hoc* meetings of central staff specialists in crop production and protection to discuss and formulate program ideas.

These *ad hoc* meetings, Voss points out, facilitate communication between central staff specialists on a common

problem. Currently, each central staff specialist in the crop production and crop protection subject-matter areas—agronomy, plant pathology, weed science, and entomology—provides leadership for a major Extension education program.

## Training For Enhanced Profitability

Two inservice training sessions for field staff, supported at the state level, were initiated at the university for area and county Extension personnel. The objective of this training was to enhance the potential of profitability in crop production—primarily of corn and soybeans—by providing essential information to crop producers.

Each subject-matter specialist provided educational materials to the area and county Extension personnel that could be used at educational meetings. These materials included a priority listing of inputs and decisions with the risks and benefits each producer should consider.

Specialists provided a priority listing for slides (in an outline format) which was supplemented by research data. Nine specialists cooperated to write an interdisciplinary publication for distribution to crop producers at meetings: *Profitability In Agriculture: Crop Management Decisions*.

Educational programs designed to reach clientele at the producers' level involve Extension personnel at state, area, and county levels.

An outgrowth of interaction between county, area, and central staff personnel was the development of crop enterprise records. This record system, initiated in a 1986 pilot program, permits producers to calculate their economic and production efficiency on a field-by-field basis. In 1987, the record system was revised.

## Program Results

The total impact of Extension's effort with crop producers is difficult to ascertain, but a 1984 random statewide survey disclosed that crop producers using Extension information averaged 6 bushels an acre—higher yields than nonusers. They also averaged a higher corn yield and 1 bushel an acre more for soybean yield. The survey also showed that 23 percent of crop producers are more likely to make soil tests compared with nonusers of Extension information.

In 1985, the estimated cash savings for producers involved in an Extension crop loss reduction program were \$1,152 per participant for a total of \$6.5 million. In 1986, producers using Extension information realized \$6 million in savings on corn crops not requiring insecticide treatment.

Because of Extension information, individual producers in one area estimated they saved \$1,150 per farm in fertilizer costs; six producers in another area reduced fertilizer costs an average of \$17,000 per farm while maintaining yields. By using the new crop enterprise record system, crop producers are precisely determining cost of production on a field-by-field basis.

This past year, interest by crop producers in research-based information is evidenced by over 22,000 one-on-one contacts with Extension. In addition, over 23,000 producers attended crop production efficiency meetings.

Extension central staff specialists at Iowa State University will continue to emphasize production efficiency through an interdisciplinary approach because producers make decisions in this framework. ▲



# Analysis Instead of Trial And Error

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From one viewpoint, agricultural production is a time-consuming trial-and-error process. It starts with a producer deciding to grow a particular crop or species of livestock and ends with the sale of the commodity produced. Throughout the process, the grower must make many decisions—but the cumulative result is known only at the time of marketing. In other words, the effectiveness of the grower's management is measured in yield per acre, pounds of animal produced, and price received.

To make the hundreds of decisions to produce even limited outputs, farmers have used rational analysis, personal knowledge, plain "gut" feelings, and management information from many sources. Indeed, the producer is the only one in agriculture who has to integrate so many kinds of production information.

## Software System Developed

To provide corn producers with an aid for making more profitable management decisions, specialists in Kansas Cooperative Extension have developed an integrated software system for use on microcomputers, modeled on the ways farmers plan their crop production. Central to this system is a piece of software called the "shell," which connects individual programs called "modules" so they are interactive. Changing a cost value in the fertilizer module, for example, will affect what occurs in the cost/return module and elsewhere. The design of the shell incorporates features of electronic spreadsheet programs and microcomputer graphics. The user can enter "what if" values and see results almost instantly and see how one decision affects others.

## Modules Form The System

Included in the system are modules on the major kinds of decisions a corn grower faces, such as hybrid selection, tillage practices, planting details, weed and insect control, harvest and

drying practices, and marketing. The bottom line of the shell concept—sharing production inputs and cost/return values—allows a producer to evaluate the cost-effectiveness of each productive input being considered.

The modules are organized by plant growth phases to deal with specific questions at a particular time during or outside the growing season. The design permits unplugging modules to modify them without disabling the entire system. Once the changes are made, the new versions of the modules are easily reinstalled. The shell can serve as a skeleton for additional systems involving other commodities and it can be applied to decisionmaking outside agriculture.

Development of the Corn Management System is virtually complete. Other decision aids are being worked on. For example, WHEATpro, for wheat producers, includes modules for cost/return analysis, formulating a fertilizer program, variety selection, wheat marketing strategies, and wheat price analysis.

Also under development is BEEFpro, a livestock production decision aid. It includes a cost/return analysis module and a troubleshooting module, which are nearly ready for distribution. The latter module evaluates current management practices and identifies areas for possible producer improvement. It also projects the dollar impact of implementing recommended changes. BEEFpro addresses cow-calf, wintering, grazing, and finishing. This system and one for swine are being developed under a multistate agreement by Extension workers.

## Use Outside Agriculture

In its first application outside agricultural production, the shell forms the central body of a system for use by commercial grain elevator operators. They will be able to evaluate the

feasibility of investing in grain cleaning equipment.

COMMUNITYpro is a decision aid for community development. This system analyzes flows of goods and income for a multicounty region. It generates forecasts of employment, production, and income under many scenarios.

The ability of the same shell to support multiple commodities has led to the adoption of the term "PROtag" for the whole set of programs. (An earlier term, "proSeries," was dropped because of a trademark conflict.) PROtag software is designed for use on MS-DOS (IBM-compatible) machines. Because the packages require up to 2.5 megabytes of memory, a hard disk drive is usually necessary.

## Shared With Other States

Initial funding for this ambitious software development project came in part from The W.K. Kellogg Foundation, matched by money from Kansas State. One of the terms of the grant from Kellogg was sharing the resulting software with producers in other states. Kansas has signed sharing agreements with 14 other state Extension services. Kansas trains participating specialists in PROtag module design and programming in exchange for any new software the signatory states develop.

County agents in Kansas will receive training in the PROtag Corn Management System this fall. After that, producers will be able to use the system at their county Extension offices or purchase a copy.

In summary, PROtag series software gives growers an analytical tool for making repeated "what-if" computer runs—both during and outside of the production season—to pinpoint immediately their best management alternatives. That certainly beats waiting all season to see how good their choices have been. ▲

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## Catfish Farming— New Mexico Fish Tale

22 *Extension Review*

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*Extension Associate  
Agricultural Editor,  
Publications  
and  
Tina M. Prow*  
*Former Newswriter/  
Photographer,  
Agricultural  
Communications  
New Mexico State  
University, Las Cruces*



*Opposite and right:  
Commercially raised catfish  
are harvested by net before  
transport to local processing  
plants. Extension fisheries  
and wildlife specialists at  
New Mexico University are  
proving catfish farming has  
a future in the state's high  
desert country.*

*Photographs courtesy of the  
Soil Conservation Service,  
USDA.*

Catfish farming in New Mexico's high desert country? It may soon be a reality. Last January, a recently formed organization—the New Mexico Catfish Growers Association—held a meeting at New Mexico State University (NMSU), Las Cruces, featuring discussions about production methods and marketing information. Approximately 100 people attended from all over the state, half of them ranchers.

"I was surprised at the number of ranchers, but perhaps I shouldn't have been," says

Knight believes that catfish farming, already successful in the Ozark Mountain region and in several south-central states, might have a future in New Mexico.

### **Reliable Water Supply**

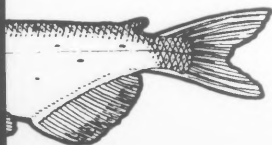
One farmer from Carlsbad who attended the meeting owns two center-pivot irrigation units fed from a reservoir. "He intends to grow catfish," Knight says, "in the reservoir that also provides water for his crops. Those are encouraging conditions. Still, we were careful at the meeting not to paint too rosy a picture. This region receives about 6 inches of rainfall a year but the evaporation rate amounts to about 6 feet. Purchasing water to compensate for 6 feet of evaporative loss can represent an automatic financial loss. Unless a farmer or rancher has a reliable source of free, or cheap water, the problem is obvious."

For years, New Mexicans interested in raising catfish have had a problem finding a market. If a farmer or rancher has year-round water, Knight points out, he can grow catfish and have a ready market. In Belen, a recently opened processing plant is already shipping 50 tons of catfish purchased every year from Mississippi catfish farmers to supply the Albuquerque and Santa Fe metro market. The owner of this plant has stated he would consider expanding, if there was a steady catfish supply from within the state.

This new processing plant, Knight believes, will allow people to concentrate on growing catfish and know they have a ready outlet once they are produced. In addition, a packing plant near Clovis is seriously planning a conversion to catfish processing.

James Knight, Extension fisheries and wildlife specialist at NMSU. "Most ranchers already have ponds and stock tanks where they can raise catfish. Some are even looking into raising catfish in irrigation ditches.

"We decided to set up the meeting," Knight says, "after getting several calls about catfish farming. These people had either seen catfish operations or had read about them somewhere."





Estimates on catfish growth are based on 1,000 1-pound catfish per acre of surface water annually. "This amount requires a 90-day growing season," Knight says, "where the optimum water temperature is 85 degrees F. Growing 4,000 pounds per surface acre is possible but creates some special problems. Cloudy days interrupt the cycle where sunlight causes oxygen to occur naturally from living organisms in the pond. On such days the catfish farmer must aerate the pond water through sprays or by injecting oxygen directly into the water."

**Water Temperature Critical**  
Evaporation cools the pond water, Knight points out, and during the summer catfish farmers may have to cover half the pond surface with plastic to raise water temperature to 85 degrees. Water temperature can be raised in a tank or pond with a solar breadbox heater, he says, and a solar cell array driving a DC motor and pump may be feasible in remote locations. But cost is a factor with these approaches.

Water temperature limits, Knight says, might force catfish farmers in the northern half of New Mexico to settle for one crop every 2 years. Catfish can live through a winter, even under ice, and reach the 1-pound market weight the second growing season.

#### Feed Costs

"Fish, like livestock, have to be fed," Knight says, "and feed costs determine, to some degree, who can afford to be in the catfish farming business. A farmer alone may have to pay as much as \$400 a ton for prepared catfish food. But if catfish farmers purchase a truckload of feed together or through an association then costs can be cut to \$100 a ton."

Knight points out there are problems that potential catfish farmers should consider. Fish diseases often appear when fish are stocked at rates heavier than 1,000 pounds per surface acre. And farmers need to find a reliable source of fingerlings (young fish). Initial cost of fingerlings is 3 to 7 cents each, depending on size, he says.

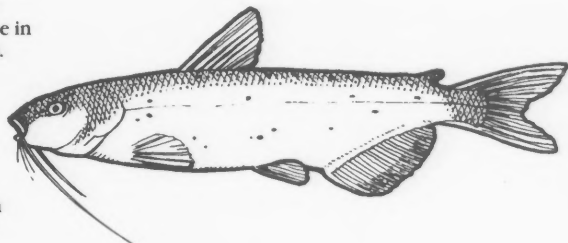
"Extension has the technical information that individuals need for catfish production," Knight says. "Information is also available on sources of fingerlings, floating food, and existing market prices."

Knight notes that the new organization, the New Mexico Catfish Growers Association, will offer expertise for catfish production and allow producers to exchange information.

#### Potential Market

Jay Wells of the Valley Grande processing plant reports that all of the catfish they are currently marketing come from Mississippi. "If New Mexico producers could supply us with catfish, I would be able to cut down on my trips to Mississippi," Wells says. "At the present time, I feel the market for catfish in the western United States is virtually untapped."

"It's obvious that once your initial costs are recouped," Knight says, "quite a bit of profit is available in catfish production. Catfish farming has potential in New Mexico."



For further information on catfish production contact:

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# Fit For Life Impacts Producers

24 Extension Review

**William Braden**  
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Communications  
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College Station

*The Texas Extension educational program—Fit For Life—has helped more than 3,000 Texans with weight control and overall fitness and eating habits.*

Extra attention is centering these days on the impact of diet and exercise on physical fitness.

Good eating—watching the diet—is paramount to physical fitness. And, that gets the attention of farmers and ranchers who work hard to provide quality food products—and remain competitive in the marketplace!

Producers want consumers to enjoy good nutrition and take pride in the fact that they play an important role in this effort. Helping consumers learn more about good nutrition can lead to an increased demand and market for certain agricultural products that fit today's active, weight-conscious lifestyles.

## Texas Effort

A successful effort dealing with weight control and exercise has been underway in Texas for about 2 years. Called "Fit for Life," the 12-week Extension educational program has helped more than 3,000 Texans control weight and improve overall fitness and eating habits.

Coordinators Mary Ann Heussner, health education specialist, and Alice Hunt, nutrition specialist, point out that the program focuses on long-term, permanent weight control.

## Program Results

Texas who took part in the 12-week program lost an average of 4 pounds each for a total of 12,000 pounds—or 6 tons! A follow-up survey indicates that participants not only maintained weight loss, but they continued to lose an additional 3.7 pounds each and 5.6 percent of body fat 1 year after completing the program.

Participants ate significantly more protein, fruits and vegetables, and dairy products as a result of the program and reduced their intake of sweets and fried foods, note the Extension specialists.

In addition to helping individuals lose weight and keep it off, "Fit for Life" also focuses on control of blood pressure, following dietary guidelines, improving cardiovascular fitness, and increasing flexibility.



## Improved Economic Health, Too

Improvements in health and fitness equate to improved economic health for Texas, Huessner and Hunt point out.

Good eating and exercise habits help control obesity—a risk factor for at least 5 of the 10 leading chronic diseases which account for the majority of health and medical dollars.

The economic implications of being overweight and not being fit can be severe. Obesity increases the chances that employees will suffer from back pain, and backaches account for 93 million lost workdays in the Nation annually, note Huessner and Hunt.

Additionally, people who are 40 percent overweight visit their doctors and miss work twice as often as the average individual. This costs the average employer an extra \$1,000 per year for each such overweight worker.

Huessner and Hunt say that nationally business and industry spent \$97 billion for health care in 1984. That same year \$387 billion—\$1,584 per capita or roughly 12 percent of the Gross National Product—was spent across the Nation on health and medical care. It took \$23 billion to cover health and medical costs of Texans that year.

## Future Trends

By the year 2000, health and medical care costs are estimated to be about \$4,000 per capita, which means that the medical and health bill for Texans will skyrocket to \$92 billion. That's one reason why good eating and exercise habits are critical to the control of obesity and its many associated health problems, emphasize the two Extension specialists.

Good, nutritional eating habits will influence future production of high-quality food products—sending signals to producers to adjust to a changing, but profitable market! ▲



# Profits From Pesticide Education

Extension Review 25

Without pesticides to control pests and diseases that thrive in the state's warm, humid climate, Florida farmers could not survive—much less turn a profit—in today's competitive marketplace.

But the use of pesticides in Florida is complicated by the danger of groundwater contamination and other sensitive environmental issues, by changing federal and state regulations on use of chemicals, and by agriculture's close proximity to rapidly growing urban areas.

"For these and other reasons, it's easy to see why education in the proper use of pesticides is important to agriculture in this state," explains Norman Nesheim, Extension pesticide information coordinator, Institute of Food and Agricultural Sciences (IFAS), University of Florida.

## Compliance Problem

"Probably the biggest single problem facing farmers—as well as commercial and public sector pesticide users—is the need to comply with an increasing number of environmental regulations, particularly from the federal Environmental Protection Agency (EPA)," Nesheim states.

Proposed EPA regulations to protect endangered species and groundwater, Nesheim points out, are of particular concern to growers. Nesheim is working with IFAS Extension specialists and industry commodity groups to determine how these regulations will impact on agriculture. They are investigating how various user groups can be trained to comply with restrictions while still having access to the chemical tools they need.

If pesticides are not used properly, Nesheim emphasizes, the state's porous, sandy soils and high water tables increase the danger of groundwater contamination. "We've had a few instances," he says, "where wells have been contaminated by EDB (ethylene dibromide) and aldicarb because of improper pesticide mixing and loading of spray equipment. These are the kinds of problems that can be solved by educating those who handle materials in the field."

## Pesticide Education Efforts

To demonstrate how pesticides can move through the state's soil profile and contaminate groundwater, a computer-based model developed by Arthur G. Hornsby, Extension soil and water management specialist, is being shown at Pesticide Fate and Transport Workshops around the state.

In addition to an ongoing statewide Extension pesticide education effort that uses videotape presentations, printed materials, and other educational media, Nesheim is working with county Extension offices that conduct pesticide applicator training schools around the state. This train-

ing is designed to help farmers and other users obtain state certification to apply restricted-use products. To date, more than 18,000 pesticide applicators have been trained and certified.

The Extension educational effort also includes Spanish language pesticide training for field workers in south Florida.

## Program On Agrichemical Legal Issues

An agricultural law program—a component of Florida's Extension pesticide education effort—received USDA's Distinguished Service Award in June 1987. Michael T. Olexa, project director and Extension legal specialist, says the effort is a national model on how to address pesticide regulatory issues.

The program, Olexa explains, deals with critical agrichemical legal issues related to chemigation (application of agricultural chemicals through irrigation systems). It also covers agrichemical runoff, pesticide drift, need for supportive data for continued use of some chemicals, farm worker safety, pesticide storage and disposal, and proper use of chemicals to protect public health and safety.

"The program has also alerted users throughout the nation to install irrigation backflow prevention equipment," Olexa says.

After Florida testing and development, the program was offered to other states. To date, 76 workshops and seminars have been presented to about 15,000 persons in 45 states. Approximately 12,000 copies of project publications have been disseminated and the concepts widely publicized in the farm press. ▲

**Charles T. Woods**  
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Editor, Editorial  
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Nesheim, Extension pesticide information coordinator, Institute of Food and Agricultural Sciences, University of Florida, checks a list of pesticides that may be restricted. Nesheim believes the competitiveness and profitability of Florida agriculture is linked to the proper use and continued availability of pesticides.





# Education—Effective Substitute For Regulation?

*Richard Standiford*  
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Agriculture and  
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and

*Peter C. Passaf*  
Extension Forest  
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Public awareness of environmental values has heightened across the Nation in the 1980s. This is particularly true in a state like California with its bountiful natural resources. In 1983, to address this issue, the California Board of Forestry appointed a Hardwood Task Force (HTF) to study emerging environmental and resource management issues as they pertain to the management of hardwood species on both commercial forests and rangelands.

Inadequate regeneration of some oak species on rangelands and a decline in rangeland wildlife habitat were impacted by land use change and increased firewood harvest.

## Hardwood Rangelands

The HTF coined the term "Hardwood Rangelands" for these oak-covered woodland areas of the state. The hardwood rangelands cover over 7 million acres of California. Livestock grazing represents the predominant use on this land.

In early 1985, the University of California (UC) Division of Agriculture and Natural Resources, which includes both Cooperative Extension and the Agricultural Experiment Station, was encouraged to develop a fresh, new educational approach and a well coordinated research program in response to HTF's findings and recommendations. Also at issue was the need for new regulations directed at the owners of the hardwood rangelands. Could UC design and implement an effective educational program that would motivate landowners and developers to voluntarily comply with best management practices?

A comprehensive proposal in both education and research was designed after UC's highly regarded Integrated Pest Management Program.

It called for an interdisciplinary approach to problemsolving. UC redirected its effort by assembling current information

about oak woodland management and translating it for the benefit of users.

## New Manual

The new CES manual *Preliminary Guidelines for Managing California's Hardwood Rangelands*, was written to assist the ranchers in the multiple use management of their oak-covered rangelands. Its theme, "Preserve Your Options," suggests that resources such as wood, wildlife, and water, will gain value in time.

By setting up a management plan which retains oak trees for the enhancement of wildlife and riparian areas, the owner may be giving up short-term income prospects in favor of larger profits in the future.

The guidelines focus on those practices which make economic sense to the owner. Emphasis is placed on gaining additional income through the management of several game species: deer, turkey, wild pig, and quail for recreational hunting.

The manual is already proving useful. A rancher asked the local CES livestock farm advisor for assistance with a firewood sale. With counsel from Extension forestry and wildlife specialists, specific trees were marked for harvest, wildlife corridors were left, and trees with exceptional acorn production retained. This thinning took out about 5 cords of wood per acre. The rancher used income from the firewood sale to offset range improvement costs such as seeding and fertilization.

Within a year, Farm Advisor Bob Willoughby hosted a field meeting to highlight the work. Using the principles demonstrated on the 10-acre site, additional wood harvesting is planned for the area this year.

## RREA Impact

Dollars from the Renewable Resources Extension ACT (RREA) are also funding several educational and research projects addressing other needs

of oak woodland owners. A colorful brochure specifically targets owners of small hardwood ranges. An "expert" system, illustrating the concepts of the "Preliminary Guidelines" is being developed for microcomputer use. Several county projects demonstrating hardwood range management principles were also supported by RREA funds.

The Integrated Hardwood Range Management Program is a 10-year plan of Extension and research activities focused on management problems with high priority. The plan includes the hiring of five new Area Natural Resources Extension Specialists with a broad background in forestry, range, and wildlife management.

## Applied Field Research

An applied field research program was implemented based on the priorities set by the Policy Advisory Committee. This program was jointly funded by the State Legislature on July 1, 1986. One million dollars of new money was authorized, with \$650,000 allocated to the University's budget and \$350,000 placed in the State Department of Forestry's budget.

The program makes a strong commitment to working with nontraditional clientele groups such as the small, absentee oak-woodland owners, woodcutters, real estate developers, and groups of environmental activists interested in protecting oak-woodland resources.

## Conclusion

We know our educational job is not over when a new publication is handed to a reader. We must be able to evaluate our efforts; we have a responsibility to constantly monitor evidence of change in attitudes, behavior, and practice among our identified clientele.

Our goal is to find out if education can be an effective substitute for regulation. ▲

# USDA's Food and Fitness Program

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USDA's Food and Fitness Program was established to link USDA agency programs that emphasize to the American public the vital connection between food production; marketing; distribution; protection of the food supply; research and education; and the need for a viable agricultural economy.

The U.S. food and fiber system provides the world's most varied, abundant, and nutritious food supply. However, consumers must make wise choices from this nutritious, safe, economical food supply by eating a varied balanced diet combined with exercise to maintain a desirable body weight and enhance optimum health.

The Extension Service is designated to coordinate and implement the USDA Food and Fitness Program nationwide. The program differs in each state, all of which are participating, as they design programs for their clientele. Farmers are joining the fitness generation. Ron Jester, Extension safety specialist in Delaware, reports that Extension, Blue Cross & Blue Shield of Delaware, Inc., Delaware Department of Agriculture, Delaware Dairy Producers, and the Delaware Farm Bureau Rural Health Committee sponsored a Farm Fitness Challenge 5K Race. Special awards were given to male and female finishers, farmers and spouses, 4-Hers, FFA, GRANGE, a Farm Bureau member, and a farm family. The race, a great success, demonstrated a fit farm community. This is the fourth year for this popular event.

American consumers consider food safety their number one concern. Thus Extension staff across the country have major demands for information concerning the safety of the food supply. A recent survey reported over 3 million calls to Extension in 1986-87 concerning the safety of flesh food products. Also, 135,000 individuals were instructed in food safety by 9,000 volunteer

leaders. In addition, Extension has increased educational outreach to professionals and food handlers. These programs have targeted audiences with the greatest need, such as small businesses, government, and industry groups with known problems.

## Red Meat Project

USDA Extension Service recently funded a pilot project for an educational program on red meat. The development process includes an interdisciplinary team of Meat Science and Food and Nutrition Extension Specialists from state Extension services with leadership provided by Florida, Kansas, and Texas. In addition, an advisory group of red meat industry representatives and end-users' organizations is providing input into program planning and development. The anticipated benefits of this joint Extension-private sector approach is the development of educational materials and programs that provide consumers with a clearer understanding of red meat's role in a varied, balanced diet.

## Worksite Wellness

In 1982, the U.S. spent more than \$320 billion for health care. That is more than 10 percent of our GNP. Each year, 500 million workdays are lost due to illness or disability. Employer health care costs are rising at the rate of 25 to 100 percent a year, an estimated 25 percent of total payroll for health care. The USDA Food and Fitness Program involving 22 USDA agencies joined forces with the National Life and Health Insurance Industry to develop a manual to assist employers in implementing a worksite wellness program for employees. USDA has received over 6,000 requests for the manual. The majority of these requests have been from the medical community—a new audience for Extension programs. All USDA Agencies have received copies of the manual and Farmers Home Administration has used it nationally for

their employees' wellness program. Forest Service and Agricultural Marketing Service have reported the manual useful in conveying wellness information to their employees. Copies were also made available to all county Extension offices.

Another example of groups working together to educate consumers on food safety are the national women's farm organizations. Although these organizations represent a wide diversity of agriculture, they currently share their concerns and work together through The Farm Women's Leadership Network.

The Network participates in quarterly teleconferences sponsored by the Extension Service. Dixon Hubbard, coordinator, Competitiveness And Profitability, and Bonnie Tanner, executive director, Food And Fitness Program, both of Extension Service, USDA, are the liaisons. Through these teleconferences the groups share common concerns and are briefed on legislation, research, USDA programs, and Extension National Initiatives. Members of the Network have participated in the Agricultural Competitiveness And Profitability Forum, the National Family Community Leadership Workshop, and the development of the National Extension Red Meat Project and other educational programs.

The Farm Women's Leadership Network proved valuable in helping its participants agree to sign a consensus statement at the 1987 Farm Women's Forum in Washington, D.C., which pledged their willingness to work together on common issues. One of their common issues involves *balancing human wellness, nutrition, and environmental concerns with agricultural competitiveness and profitability.* ▲

**Bonnie O. Tanner**  
Extension Executive  
Director,  
Food and Fitness  
Program  
Extension Service,  
USDA



# Enhancing Profitability Outlook

28 Extension Review

David L. Holder  
National Program  
Leader, Marketing,  
Extension Service,  
USDA



Producers' decisions about what to grow, how much, and when to sell depend largely on the price they expect to receive in the marketplace. These decisions, and their outcome, determine the profitability and often the very survival of these producers' farms.

Farmers and ranchers use a variety of sources to obtain market information or "outlook" information necessary to complete their production/marketing plans. A recent national survey shows that the Cooperative Extension System is an important information source used by all types of producers when making important decisions.

## Extension Role

Extension helps to distribute basic data about market conditions. However, its greatest contribution is in interpreting the data and helping producers analyze the impact of worldwide market conditions on their farm/ranch decisions. Also, Extension emphasizes the longer term analyses needed to make crop and livestock production decisions. Extension helps producers understand marketing alternatives, evaluate alternative opportunities and strategies, and develop effective production/marketing plans.

Over the years, Extension analysts have gained a reputation for providing objective analyses based on the best information available. While their market forecasts cannot be guaranteed, Extension staff provide producers with an understanding of what is likely to happen and why.

In recent years, the forecasts have been broadened to include information on the range of possible market outcomes and the associated risks. Producers are being trained to survive better in an uncertain world. This Extension outlook program involves county, state, and federal Extension staff and employs a variety of methods to reach its audiences.

## Info From COIN And EDI

A primary function of the federal staff is to ensure that state specialists have quick access to all USDA data and analyses. In the early seventies, for this reason, computerized information access was developed and established as the Computerized Outlook Information Network

(COIN). Extension Service, USDA, was responsible for the daily inputting by several USDA agencies into COIN. In 1985, with help from the Extension Service, a department-wide Electronic Dissemination of Information (EDI) system was initiated. All USDA market reports are now prepared electronically by each agency and loaded directly into EDI at scheduled release times. They are made available instantaneously to any firm or organization including Extension offices having computerized communications equipment.

Most states provide outlook analyses that enable producers and agribusinesses to make better production marketing decisions. State marketing specialists receive information from EDI and other sources, then use different media to distribute the information. Timeliness is critical. Much of the information is delivered through radio, TV, and newspapers. Several states have their own computerized distribution systems or participate in a regional system. Seventeen state specialists use EDI to nationally distribute their analyses. Other statewide methods include code-a-phones, newsletters, trade magazines, and outlook meetings. County staff are also involved in delivering information to producers through the use of computer bulletin boards, telephone, and mail, and through meetings.

## Interstate Efforts

Each fall, several states in the upper midwest, and states in the northwest, cooperate on regional outlook publications. Regional Extension marketing committees plan and conduct regional outlook conferences attended by analysts from state Extension services, USDA, banks, and agribusinesses. Extension staff in Washington, D.C., plans and hosts USDA's annual national outlook conference.

The Western Livestock Marketing Information Project (WLMIP) is a joint effort of 17 western and plains states, plus Extension Service and Economic Research Service, USDA. WLMIP provides weekly updates and materials to specialists in cooperating states, and publishes for producers the monthly, *Livestock Roundup*.

In 1986, WLMIP achieved substantial savings in printing and postage costs, and dramatically increased its readership as well, by delivering its copy electronically to selected farm and ranch magazines rather than by preparing individual publications.

It is difficult to measure the full impact of these Extension education programs. However, we know that farmers are seeking our advice and incorporating it into their decisions. Better decisionmaking enhances both competitiveness and profitability. ▲

# Getting The Word To Oklahoma Producers

The 150-member task force for the National Extension Forum on Competitiveness and Profitability stated that agricultural producers needed timely, accurate information and education to compete in today's global market. Kim Anderson, an Extension grain marketing specialist at Oklahoma State University (OSU), has developed an information program to provide farmers with precisely that kind of competitive edge.

Anderson's Extension efforts range from mass media efforts and computer programs to newsletters and crop-reporting service information. "All of my work," Anderson states, "is directed toward educating farmers about what pieces of information are important to them, where they can get that information, and how they can use that information once they have it.

"Even my 2-minute TV spots are in line with these information objectives," Anderson says. "For example, when I broadcast the price outlook I try to slip in information to producers on why this information matters and what they should do about it."

Anderson primarily makes his TV appearances on "Sunup," the Extension morning farm show at OSU. Occasionally, he appears on commercial broadcast stations. He has taken part in two videoconferences produced by OSU Extension that dealt with the wheat market situation and outlook.

Anderson uses "Market Viewpoints," a weekly radio program produced at OSU, to get information across to agricul-

tural producers. The program airs on the Oklahoma Agri-Network to 45 radio stations in Oklahoma and Kansas. Some of the radio tapes are worked into wrap-around stories that are released to radio stations in the state through agricultural information's call-in service.

"I try to teach farmers there are two kinds of information they need to make decisions—long and short-term," Anderson says. Long-term information, he explains, includes worldwide stocks, production, and usage. "These are the things a farmer looks at," he says, "when he decides how many acres to plant and what price objectives to set for his crop."

Producers use short-term information to make all their marketing and selling decisions, Anderson points out. He tells farmers the most accurate short-term information is reflected by the futures market and tries to teach them ways these markets can help them make a profit.

An example of a lesson Anderson taught this spring occurred when Russia purchased 147 million bushels of wheat.

"When the sale was announced the prices jumped and nobody knew how high wheat prices would go," Anderson says. "Yet the long-term market information showed there remained a glut of wheat in the world market." Anderson employed various media outlets at the time to inform farmers they should take some advantage of the initially higher prices that occurred. Anderson suggested to farmers to forward contract or sell a futures con-

tract on at least part of their wheat. "The short-term price was high," Anderson says, "and the long-term market information said prices shouldn't stay high."

## Information Delivery

OSU Extension information gets the word out to agricultural producers through two marketing newsletters. "Market Viewpoints" is distributed monthly to 4,500 agricultural producers. "Grain Marketing News" is distributed monthly to approximately 800 readers in grain elevator agribusiness.

OSU Extension's two computer-operated market outlooks can be accessed by producers and those in agribusiness: the Agri-Data Information Network and the Cooperative Extension Service's Dialcom Network.

OSU Extension offers adult education courses, workshops, meetings, and conferences each year at local, regional, and state levels. Participants at these meetings typically include livestock producers, bankers, and grain elevator operators.

News from the agricultural information department at OSU reaches the popular press through state and regional publications or, upon request, is sent directly to state newspaper editors and regional agricultural magazines.

Extension at OSU offers home study courses for farmers which outline Anderson's basic premise of what, where, and how they can obtain the "timely and accurate" information and education they need to compete effectively. ▲

*Gerrit Cuperus  
Extension IPM  
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# INFONET—Statewide Telecommunication System

30 *Extension Review*

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**Katleen M. Carroll**  
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In the past decade, the amount of information associated with rural issues in Massachusetts, and the demand for that information, has risen dramatically. The juxtaposition of production agriculture, rural towns, and burgeoning urban economies may have created more demand for information on integrated pest management (IPM), water quality, maintenance of home grounds, land use, and pesticide use than in other areas of the country. At the same time, a reduced Extension staff could not keep pace with this rising demand.

In the spring of 1986, this situation was especially true in such program areas of Cooperative Extension at the University of Massachusetts as IPM and home horticulture, and there were similar problems in other program areas.

## **Potential Solution: Electronic Mail**

Many believed a potential solution existed in the form of a computer-based message system—the electronic bulletin board or electronic mail. For a number of years, Extension's Apple and IBM programs had been using the electronic mail facilities of the Cyber computer at the University Computing Center. This system allowed specialists to enter pest reports as soon as they were available; regional specialists could access the reports soon afterward.

At various offices, when messages were typed on terminals, they were transferred to the Cyber host computer and stored. Personnel at regional offices communicated with the host computer using conventional phone lines, and printed the message at their terminals.

During the growing season, growers received information from the system through a newsletter and recorded phone messages. A survey during this period revealed that 96 percent of the growers found the messages a useful aid in spray decisionmaking. Ninety-four percent of the growers cited the messages as a major source of pesticide information. In addition, local experiment stations, the state pesticide laboratory, and the pesticide bureau in the Massachusetts Department of Food And Agriculture were linked into the system.

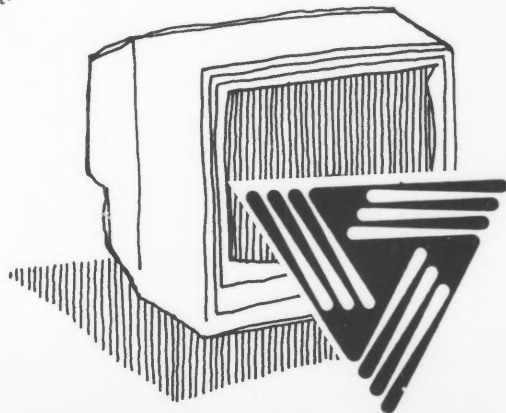
## **Some Difficulties**

This system worked fairly well except for some significant problems. To change the system's structure, even in minor ways, required that one specialist at the University Computer Center make these changes. This specialist was not always available, particularly during the heavy-use months of summer. In addition, the host computer often failed, or "crashed," because it served many other purposes besides electronic mail; during these down times the mail facility could not be accessed. The University Computer Center also charged users for the service.

## **Statewide Electronic Bulletin Board**

Several Extension specialists realized that electronic mail could be transferred to a personal computer "host" using relatively inexpensive hardware and software. When University President David Knapp announced a program for grants in the area of telecommunications pilot and demonstration projects, a proposal was written for a PC-based bulletin board in various program areas. A \$12,000 grant was awarded to develop a statewide electronic bulletin board. The proposal would link all county offices with a PC host on campus, and provide training and equipment support where necessary.

This new system would provide information for integrated pest management for apple, cranberry, potato, sweet corn, turf, and other IPM programs as they developed. It would provide commercial horticultural information on tree fruits and small fruits. Other areas covered would be agronomy, dairy, farm management, home horticulture, pesticide registration, and Master Gardener material. Also included would be the so-called "intelligent information systems"—expert systems that diagnose plant diseases.





### Hardware And Software Purchases

A standard IBM-compatible personal computer (Leading Edge, Model D) was purchased, configured with expanded memory (640K), a hard disk drive, and an external modem (Hayes). And, at this point, we obtained the bulletin board software package FIDO and shaped it to contain areas for information files of various types. FIDO is set up to permit an area of general, short messages between users—either private or public—and thereby eliminate “missed” telephone calls.

INFONET is linked to other FIDO-based boards around the country, and messages are automatically exchanged during low phone rate and low use periods. Substantial information, such as fact-sheets or pest messages, are stored in file areas, under general headings which can easily be scanned. Users can perform automatic searches for topics of interest.

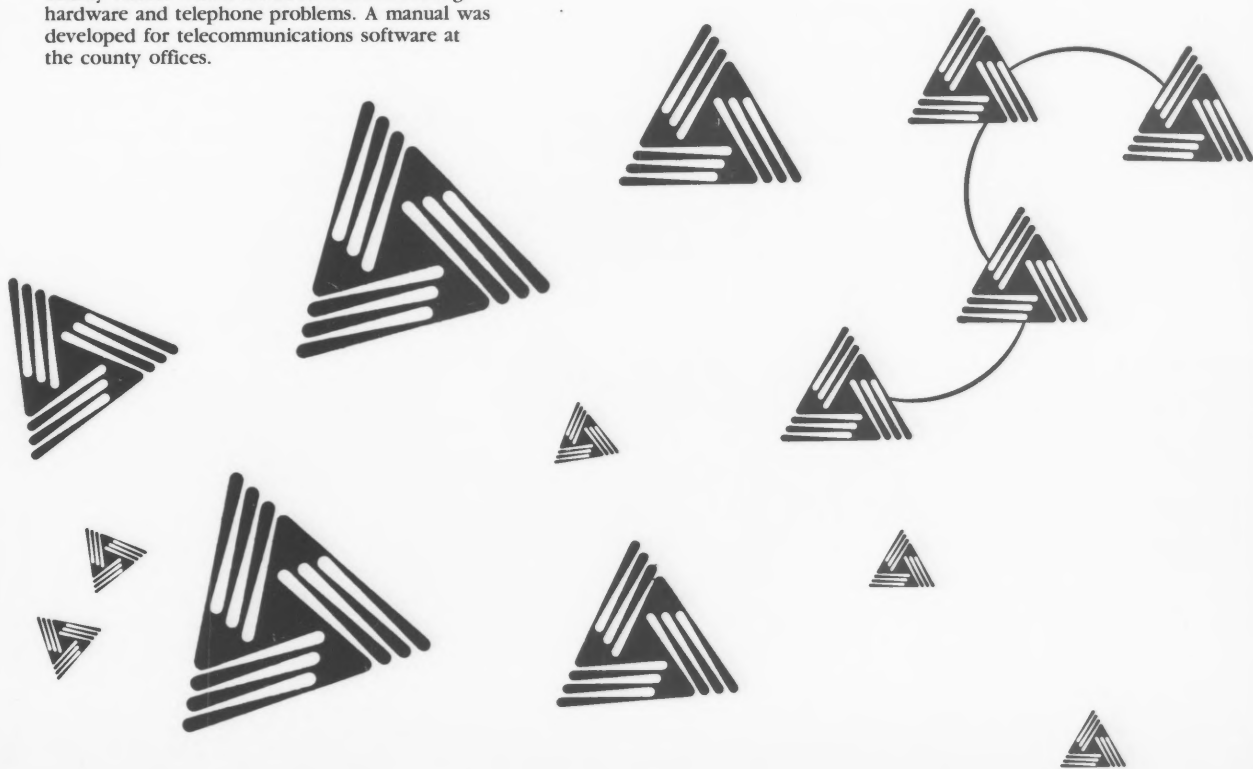
In August 1986, Wesley Autio, Extension specialist in Pomology, and Kathleen Leahy, Extension Technician, Department of Entomology, at the University, began the job of overseeing the system's actual use. In addition, Autio, Leahy, and William Coli, Extension IPM specialist, launched a training program for the county offices which included troubleshooting hardware and telephone problems. A manual was developed for telecommunications software at the county offices.

IBM-compatible users have largely settled on another shareware package, QMODEM, which has a user-friendly, menu-guided interactive format like FIDO.

### Future Plans

At present, at least one person in each county office accesses INFONET on a regular basis. To date, over 4,200 calls have been logged into the system, including a few regular grower calls. The user list already includes well over 100 names. Plans are underway to accommodate more phone lines into the system. A back-up computer has been obtained in case the original host “crashes.” There are now two new electronic boards: INFONET 2, developed by Pat Vittum and located at the Suburban Experiment Station, Waltham, and EXNET, developed by Extension administration and located at the University.

Under discussion is the idea of centralizing the Massachusetts Extension boards under a single heading to minimize costs of clientele's long-distance phone expenses. It is felt that such a linked system will allow convenient networking of all Extension-related information. ▲



# Restoring Profitability In North Carolina

32 *Extension Review*

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The "crisis" in farming, agribusiness, and rural economics is far from over. The big question is what Extension does after the "bank aids," the "farm aids," and all the "other aids" are discarded. How can competitiveness and profitability be restored to rural areas?

Extension's major challenge is to get the rural population and national and state leaders to focus on alternative solutions to the problem and to assist them in achieving these goals.

Extension needs to focus on a program of policy education dealing with the realities of the agricultural situation and viable future alternatives. These realities are agricultural surpluses; large government payments (which often help marginal farmers survive while delaying the adjustments required to establish a competitive agriculture); and constant government emphasis on price and production, rather than a focus on income maintenance.

An adjustment in resources may offer the most viable long-range solution to improving profitability and world competitiveness in agriculture. This objective requires that some resources move into other uses. Profitability of the total system will be enhanced when some resources are shifted in this fashion.

### **Viable Alternatives**

Many rural communities may be unaware or unwilling to face the problems created by this reduction of agricultural human resources. Many communities are not planning or attempting to develop nonfarm business opportunities to absorb these resources into the local workforce. When this reduction occurs, as it did after World War II, human resources will leave these communities to seek nonfarm employment elsewhere.

It is difficult to keep rural residents focused on leadership development when times are good. Success will elude Extension professionals unless they stimulate leaders in rural areas to take action.

To restore competitiveness and profitability to rural economies, Extension programming must return to the basics of earlier programs—programs which focused on the adoption of economical production practices.

### **Initial Focus**

Since the early 1960s, North Carolina State University (NCSU) and North Carolina A&T State University have focused on improving the competitiveness and profitability of rural agriculture. At that time, the 1890 component of Extension was focused almost entirely on production agriculture. Through inservice training sessions at NCSU, Extension marketing specialists sought to improve county agents' understanding of the existing market system for fruits and vegetables, quality concepts in marketing these products, and the organization of producer cooperatives to improve the net income of small producers.

Several USDA contracts to develop training materials for use with agricultural marketing firms and with the forestry industry in North Carolina provided the impetus for improving competitiveness. These educational programs improved the management skills of rural agricultural businesses and rural communities received many of the early benefits.

USDA-sponsored contracts at North Carolina State and Purdue Universities enabled Extension specialists to be trained in agribusiness management principles and concepts. These programs resulted in a cadre of trained management educators whose focus was agribusiness and rural non-farm business education. Many of the current

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agribusiness management educational materials are adaptations of this early work.

In the early 1960s, this success led to management training programs for rural employers in the textile industry. These programs, achieved with the cooperation of the School of Textiles at NCSU, evolved into today's separate Extension textile education program.

#### Early CRD Focus

The Rural Area Development Program of 1959 had as its objectives the improvement for rural citizens of income and employment opportunities, health, housing, and leadership abilities. The focus was on finding income and employment opportunities for persons released from production agriculture and the improvement of economic community services for rural residents. These objectives continue to be major thrusts of Extension Community and Rural Development programs.

#### Coping With Immediacy

By the 1970s, when the farm crisis occurred, Extension infrastructure had been diversified into other educational areas in response to client needs. The short-term response to the lack of competitiveness and profitability in North Carolina and many other states was the refocusing of personnel in a program called: "Managing For Tomorrow." This program helped distressed farm families with immediate problems caused by insolvency or inadequate cash flow.

During this period, when agribusinesses and other rural nonfarm businesses looked to Extension, they found small staffs dealing with primary farm audiences, ill equipped to help them with the business management principles and concepts they needed.

#### Programming Needs

Current programming needs the adoption of public policies which assist in resource adjustment and competitive behavior. Community and small business programs must stimulate nonfarm development.

In the 1980s, farmers are redirecting their efforts to increasing profits through controlling costs and improving marketing. Rural business owners, like the producers of agricultural products, need to run a "tight ship," maintaining the awareness that cost reductions through increased efficiency and volume may have a dramatic impact on profits.

#### Meeting The New Realities

Restoring profitability and competitiveness to agriculture and agribusiness may not require great innovations in programming, but rather an updating of materials which focuses on methods which succeed in an economic climate of adverse commodity prices and increased input costs.



Production practices may have to be examined in light of the changed relationships between output and input prices and coefficients. This is not a new initiative but a rededication to efficiency which received less emphasis during the recent expansionary period.

The need for a team approach to the adjustment problems of agriculture is critical. Because rural problems are not totally production oriented, production specialists must become involved in some new and broader areas of responsibility to meet the educational needs of rural clientele.

We have come a long way from the relatively isolated markets of 30 years ago to today's complexities. During the next decade, it will be necessary for Extension personnel to reorient and remotivate themselves so that they can help rural residents, leaders, and agribusiness persons understand the new realities. ▲

# Revitalizing The Greenhouse Industry

34 Extension Review

**Bud Gavitt**  
*Extension Agricultural*  
*Editor,*  
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*The University of*  
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In 1979, A.N. Pierson, Inc., located in Cromell, Connecticut, one of the largest greenhouse operations in the United States, reached a low point. Because of the astronomical rise of fuel oil in the 1960s, labor costs, and other factors, the company—like many others in the industry—had to drastically reduce a once prosperous business. At this point, the wholesale greenhouse florist firm donated 31 greenhouses, related furnishings and equipment, covering 181,000 square feet to the Department of Plant Science at the University of Connecticut.

Today, the business can boast of a successful comeback, thanks to new leadership under President Douglas Pierson (who represents the fourth generation of Piersons to serve as company president), and because of new technology, innovation, and the easing of fuel costs. To restore profitability to his greenhouse business, Pierson initiated a number of cost-cutting and energy conserving measures.

Many of these cost-cutting energy conservation measures were initiated by Extension specialists and horticulture agents of the University of Connecticut. These included reglazing single-layered glass houses with better insulated double-layered materials, using previously untapped exhaust heat, heating greenhouses with high pressure steam to produce electricity, and using high intensity lighting in greenhouses to improve plant yields.

The firm's success in developing new ways to save energy and its willingness to share ideas with other growers was recognized a few years ago when Connecticut Governor O'Neill presented Douglas Pierson with an Energy Conservation Award.

Currently, the outlook is bright for the Connecticut's \$58 million greenhouse industry. There are 500 greenhouse operations in the state, of which 300 have plant nurseries, largely for growing woody ornamentals such as rhododendrons and azaleas. Three of the state's greenhouse operations rank in the nation's top 100 in gross income sales. However, the backbone of the state's greenhouse industry is the family-run operation with less than 15,000 square feet under glass.

## Extension's Role

This revitalization of the state's greenhouse industry would not have been possible without the efforts of Extension specialists and horticulture agents at the University of Connecticut (UConn). This team, led by Jay S. Koths, recently retired Extension floriculture specialist, counseled greenhouse growers on plant production and marketing problems.

John Bartok, Jr., Extension nursery landscape specialist, works with Joseph Maisano Jr., Allen Botacci, and Carl Salsedo, Extension horticulture agents, to advise growers on ways to increase mechanization of their operations. All three agents worked with Koths on the "Greenhouse Newsletter," a publication for growers featuring articles on plant production techniques, methods, and practices.

## Mechanization

Materials handling is a major area of mechanization where growers are advised to use carts and conveyors to move plants from the potting area to the greenhouse and eventually to the shipping room. Movable benches are preferred over fixed benches because they increase labor efficiency and add 10 to 25 percent more growing space to an existing greenhouse. "Movable benches," Bartok points out, "adapt easiest to new greenhouse construction and the cost of this system is approximately the same as a conventional bench system."

Extension specialists have encouraged the use of a narrow belt conveyor that extends between the benches and has reduced the handling time of pot plants.

Extension specialists also advise on cultural problems, and advise growers on the selection of new varieties, adoption of new marketing methods, the control of insect pests, and business management.

The Extension team at the university conducts periodic state and county meetings and arranges tours for growers to see greenhouse operations throughout Connecticut and in Massachusetts. Each fall, a Greenhouse Conference is held at the College of Agriculture and Natural Resources at the university where speakers inform growers of the latest research results and industry trends.

Bartok recently co-authored a comprehensive book, *Greenhouse Engineering*, with Robert Aldrich, Extension engineering specialist, that covers the planning, structure, environment, equipment, remodeling, and energy conservation of greenhouses. Aldrich is currently evaluating the style of greenhouse structures.

Within the next 2 years, a regional Extension program for greenhouse growers will be instituted similar to the recently established New England program for poultry farmers.

Currently, a New England Greenhouse Conference is held every other year; in October 1986, 1,500 growers, Extension, and industry representatives attended the conference in Sturbridge, Massachusetts.

### Research Projects

Extension research projects are targeting projects that will make greenhouse operators more competitive and profitable. Researchers are testing new greenhouse coverings such as plastic, glass, or fiberglass.

"We've noted that some of the structured plastic sheets last longer," Bartok says, "and have more insulation value."

A recent research project involves the evaluation of alternative systems of environmental control and heating systems. Another study concerns the conservation of fuel oil. Growers have realized a 50-percent fuel oil savings through tips presented at Extension programs and meetings.

One study centers on a reduction in plant watering. Studies have demonstrated that 80 percent of the water doesn't get to the plants. As a result, savings have been achieved on labor. New lighting studies underway show promise of increasing the time periods of plant growth.

Most growers have not yet undertaken the computerization of their operations. Extension is gearing up to help them accomplish this efficiently.

### Future Outlook

Over the last 2 years there has been a 5- to 8- percent expansion in Connecticut greenhouse construction. Growers have enjoyed 3 consecutive profitable years. The outlook for 1987 and 1988 looks bright for increased sales. The Extension team at the university, with its 4-year plan of work for assisting the growers, stresses how to recruit and retain good workers and adopt new production practices. ▲



*Extension cost-cutting energy conservation measures initiated by specialists and horticulture agents at the University of Connecticut, Storrs, helped A.N. Pierson, Inc., Cromwell, Connecticut, one of the largest greenhouse operations in the United States, to restore its profitability and make a successful business comeback.*



# Our Mission: To Inform

36 *Extension Review*

**John Ikerd**  
*Extension Agricultural  
Economist,  
University of Georgia,  
Athens*

The speaker leaves the podium and heads for the exit of the conference room. Before reaching the door the speaker is surrounded by a group of emotional farmers. Faces redden. Voices raise in anger. Fingers point like pistol barrels.

Outside, the speaker bluntly responds to the farmers accusations before hurriedly ducking into a waiting airport limousine.

He or she is an Extension economist from another state, who has completed the assigned task and is headed back home. There, the economist will be more diplomatic, and will listen patiently before speaking. But today, the economist is an out-of-town hired gun with a mission to inform.

## **Both Sides**

This economist and many others like him or her are Extension public policy specialists. They play a vital role in the arena of U.S. agriculture. They never write a piece of legislation, they never vote for or against a bill, and, if they are good at their job, they never side on a political issue.

So why are they so maligned? They are the informers. They

see and tell both sides of the issues. They provide information about costs as well as benefits of policy alternatives. Their information is impartial and unbiased. Thus, they are not for either side. And in politics, if you are not for something you may be considered to be against it.

Why is an informer so vital to American agriculture? Because agricultural policy is important to U.S. agriculture. In a democracy, the development of acceptable and effective policy requires informed citizens. The citizens, acting through elected representatives and organizations, formulate or make policy. Ask any farmer if he or she makes farm policy. That farmer quite likely will say that he or she has nothing to do with the whole mess. But he or she does. Policymakers write and vote for policies that they think their constituents will support. Politicians like to be reelected. So, they try to make farm policy that they think farmers, and taxpayers, will support.

## **Policy Issues**

Surrounding every policy issue is a set of facts, myths, and values. Facts are indistinguishable from myths in the absence of information. In the absence of information, people take

positions based primarily on values. They support positions which are consistent with their generalized, preconceived values, regardless of the facts of a given situation.

The role of the Extension educator is to expose the myths, establish the facts, and outline alternative solutions and their probable consequences. Values will still play a role in the policy process. However, values will be tempered by the facts of a given situation.

Farmers who oppose more government in general may support a government solution to a particular problem when supplied with facts and alternative solutions. A farmer who feels that government support of agriculture is necessary may oppose a specific policy alternative when supplied with the facts and probable consequences. People need facts to reflect their values in the policy process. They need to be informed.

## **Role of Extension**

The role of the Extension educator is to educate not advocate. Pure policy education must be value neutral and objective. Is pure policy education possible? No, but highly skilled Extension educators should strive for neutrality and





objectivity. Typically, both sides of a policy issue will have some supporting facts as well as myths. The informer is seen as a natural enemy of policy advocates because he presents some facts which support the other side. Thus, criticism of a policy educator is not evidence of incompetence or bias. It may instead be an indication of relevance and effectiveness. Advocates need not oppose those who provide no relevant information.

The policymaker process is special interest driven. However, compromise among special interest groups is necessary to establish public policy. Extension, by providing objective analysis of policy options, is also in a unique position to

facilitate dialogue among participants. Extension can provide a neutral playing field for constructive debate.

Well-trained Extension educators are also in a unique position to analyze the consequences of various policy alternatives to address public issues. These analyses may be carried out at the request of various farm organizations or policymakers. The results of such analyses need not be controversial, at least not in cases where those examining policy have not yet taken an advocacy position.

An effective public policy education program cannot exist without complete understanding and unwavering support of

the educator at all levels of administration. Honorable policymakers respect the truth, even when it does not support their partisan position. They respect institutions and individuals who will stand for the truth, perhaps even more when they realize they cannot be swayed. The uniqueness of Extension in the public policy arena is its position of objectivity. If we allow partisans to affect what we do and do not report, we lose our credibility, perhaps even more quickly with those who are able to prevail against us.

Policy education is an essential element in effective policymaking. Effective agricultural policy is an essential element in a profitable and competitive American agriculture. ▲

# Public Policy Education For A Competitive Agriculture

38 Extension Review

**Michael Boehlje**  
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**Cooperative Extension**  
**Service, University of**  
**Minnesota, St. Paul**

*In Minnesota agriculture, Extension is playing a critical role in public policy education programs. Symposiums on agricultural matters such as the Luther T. Pickrel Public Policy Seminars, are encouraging among diverse participants a reasoned dialogue about differences, and an enhanced understanding of alternatives and consequences.*

*Photographs courtesy of Donald Breneman, University of Minnesota, St. Paul.*

For many industries in the United States, public policy education shapes the economic environment. Nowhere is this more true than in agriculture. The significant expansion of commodity supplies worldwide, partly a result of American farm policy of the 1970s and early 1980s, has resulted in increased competition and lower prices.

Making agriculture more responsive to internationally determined competitive forces was a major goal in the 1985 Food Security Act. In 1985, a conscious decision was made to remain internationally linked rather than continue a farm policy that ignored international supply, demand, and price conditions. The former policy, it was felt, continued to put United States agriculture at a competitive disadvantage vis-a-vis producers in other countries with specific reference to product prices.

## Responses To International Markets

The two specific responses in the 1985 legislation to international market forces were: 1.- significant reductions in the loan rate for agricultural commodities, and 2.-expanded export incentives including concessional sales (payment in-kind) and low interest credit for selected buyers.

Reductions in the loan rates were made not only to allow American grain to be priced at levels more consistent with world market prices, but also to reduce the incentives to expand production in other countries that were provided by the higher-than-world-market loan rates.

Attempts in the 1985 legislation to enhance exports through concessional and credit sales were an explicit recognition that the U.S. market share of agricultural exports had declined. The 1985 Farm Bill attempted to offset the impacts of a high valued dollar with low interest rates, export incentives, and concessional pricing.

Target prices were left unchanged for the first 2 years of the 1985 legislation and, for subsequent years, were adjusted downward modestly. The larger deficiency payments which resulted, combined with slow recovery in export sales, are the major explanations for the dramatic increase in 1986 federal budget expenditures for farm programs. In essence, the government is attempting to replace a part of the income that farmers are not receiving from the market; if such compensation did not occur, the financial stress and adjustments in agriculture would be much more severe than those currently being encountered.





### Commitment Necessary

The third response in farm legislation to the internationally competitive market, often overlooked, is the commitment to agricultural research and education. Agriculture must develop and adopt new technology to remain cost competitive. Agricultural research must continue to focus on increasing productivity. And there must be a focus in the agricultural sector on economic, environmental, social consequences and adjustments as a response to changes in the economic and political climate.

### Extension Education And Farm Programs

Because of the controversial nature of most public policy issues, policy education programs must be implemented with balance and objectivity. To maintain objectivity, the standard educational technique has been the classic public policy model. This model recommends the identification of alternative public policy options and the discussion of the consequences of each option without recommendation of a particular alternative.

This approach is being demonstrated in Minnesota by the public policy symposiums which were coordinated until recently by the late Luther T. Pickrel and continue today as the Luther T. Pickrel Public Policy Seminars.

Pickrel's style and objective with these seminars was to tackle controversial issues in a nonconfrontational fashion. Speakers obviously had different viewpoints, but the program included participants with a wide range of vested interests. The audience included producers, consumers, activists, commodity and farm representatives, agribusiness persons, university professors, and congressional and legislative policy makers.

### An Enhanced Understanding

The result was reasoned dialogue about differences (and, in some cases, similarities) in perspectives, viewpoints, and conclusions. The focus was not on obtaining a consensus around a "preferred" policy alternative, but on enhancing the understanding of the alternatives and consequences. This enabled later dialogue and discussion by participants to be more reasoned and factually based. The underlying assumption of this type of public policy education program is that a better informed citizenry will result in better public policy.

In Minnesota and many other states, similar public policy education programs are being carried out on such issues as state and federal taxes, international trade, economic development, and financial stress.

Equally important, once a state or federal policy alternative has been chosen, Extension has played a critical role in informing those impacted about the effect of the policy will have on their daily lives.

### Helping With Consequences And Impact

Recent examples of Extension activity in this area include helping farmers to participate in the food and feed grain programs, and make decisions in the dairy herd termination and conservation reserve programs.

Thus, in the public policy area, Extension education programs play a critical role in informing the public about alternative policy options and their consequences. Once the policy choice has been made, Extension programs help inform those impacted to make better management decisions—decisions that recognize the public policies in place. In both roles, Extension public policy programs contribute to a more competitive, more profitable agriculture. ▲

# Policymaking Texas Style

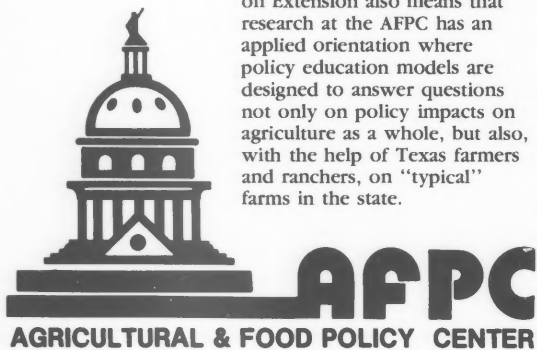
40 Extension Review

**Ronald D. Knutson**  
*Extension Policy and  
Marketing Specialist,  
and*

**Edward G. Smith**  
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During the 1980s, it has not been unusual for government programs to account for more than half of the incomes of Texas crop producers. As a result, policy education plays an important role in Extension programs in Texas. The policy education program is not limited to one or two individuals, but extends to both commodity and farm management specialists. The education program at Texas A&M University is backstopped by a robust policy research program conducted at a unique institution—the Agricultural and Food Policy Center (AFPC).

A component of the Texas A&M University System, the AFPC is a site where Extension operates as a co-equal partner with teaching and research. This emphasis on Extension sets the AFPC apart from policy centers at other universities which are primarily oriented toward research. The emphasis on Extension also means that research at the AFPC has an applied orientation where policy education models are designed to answer questions not only on policy impacts on agriculture as a whole, but also, with the help of Texas farmers and ranchers, on "typical" farms in the state.



## Education Program At The Policy Center

The cornerstone of the Texas policy education program is timely analysis of relevant issues. Relevance is determined by issues on which decisions must be made. These decisions are of two basic types. The first involves changing policy toward agriculture and rural America. The second involves adjusting the production, marketing, or development strategies to federal programs that have been enacted.

Farm programs directly impact farmers' planting decisions as well as how and when to market. Livestock and poultry producers recognize that farm programs play a major role in determining the price they pay for feed, which frequently accounts for 50 percent or more of their costs. Also, feed costs indirectly influence livestock and poultry prices.

Each year when farm programs are announced, analysts at the AFPC begin to develop their farm program participation package. Policy specialists, commodity market specialists, and farm management specialists, team up with research staff to design decision worksheets that farmers can utilize either with a pencil or a computer. In major crop producing counties Extension agents work directly with farmers to evaluate their decision options. The agents use methods that range from group meetings to individual consultation using the computer.

## Policymaking Inputs

Wise policy decisions depend on policy makers knowing the consequences of available alternatives. Policy makers of direct interest to AFPC programs include individuals who are active in farm and agribusiness organizations, as well as elected representatives.

Policy options must be analyzed for their implications for variables such as export demand, domestic use, supply, commodity prices, farm income, and government cost.

Objective analysis of the consequences of policy options is important because of the prominence of advocates in the policy process. Advocates, by nature, generally present only one side of the issue—the side that favors their position.

Policy researchers and Extension economists try to avoid talking about advantages or disadvantages of particular

options. What may be an advantage to one group or organization may often be a disadvantage to another. For example, gains by grain producers are often at the expense of livestock and poultry producers. For these reasons, those involved in policymaking are frequently embroiled in controversy.

## Measuring Success

Success in policy education is difficult to measure because choices among policies depend on values, and differences in values lead to differences in policy preferences.

Our best measure of success is the use of our products—are they used in decisions? Farmers often use our participation decision worksheets and computer software and ask for them soon after the programs are announced. Farm organizations request studies of particular issues. Some examples are the effects of soil conservation requirements under specific farm programs, and the break-even bids required for conservation reserve program participation. These issues, and many others, have been studied by the AFPC for particular farmer interest groups and the studies have been used in the policy decision process.

## The Future

In the future, there will be more emphasis on analyzing livestock and poultry producer impacts. There is an increasing concern about the impacts of Federal programs on the number and size of farms. AFPC staff are aware that farmers will have to make program participation decisions each year under somewhat different programs and different economic conditions. The decision aids of the Agricultural and Food Policy Center will be there to help. ▲



# How National Policies Affect Agricultural Competitiveness And Profitability

Extension Review 41

The Kansas Cooperative Extension Service's agricultural policy education program involves 25 seminars a year held on a multicounty basis for a cross-section of the state's agricultural leaders. Some of the topics covered have included: who will control U.S. agriculture, use-value appraisal of Kansas farmland, alternatives for 1985 farm legislation, and midcourse corrections in the 1985 farm bill.

## Governor Turns To Extension

Because of the reputation of the Kansas agricultural policy education program, Governor Carlin turned to Extension. He was concerned about the interrelationships and inconsistencies within existing agricultural policies and their potential impacts on competitiveness and profitability within agriculture. He asked Extension to assist him in setting up a program within which participants could examine the impacts of national policy on agricultural competitiveness and profitability.

While the Kansas policy specialists were helping him in program planning and development, the Governor appointed a participant work group of key agricultural leaders in the state. Extension specialists provided technical input on several policy factors. Participants then discussed impacts of these factors on competitiveness and profitability and presented their conclusions to the Governor. A partial listing of these policy factors follows.

## Policy Factors Considered

- The more unstable agricultural policies become, the more time individual farm operators must devote to farm program and credit activities.

- Legislative amendments adjusting farm bill target prices or commodity loan rates have increased uncertainty and risk of financial failure for individual agricultural producers and have resulted in inefficient use of public resources.

- Embargoes and other inconsistent short-term policies have greatly added to the instability of the policymaking process.

- The current policymaking process provides for incremental development and enactment of legislation, which results in a reluctance to respond to early market signals.

- Political ideologies of persons managing farm programs and the large number of players with vested interests often impede the development and implementation of coordinated production and stocks policies. Cases in point are the grain and dairy programs.

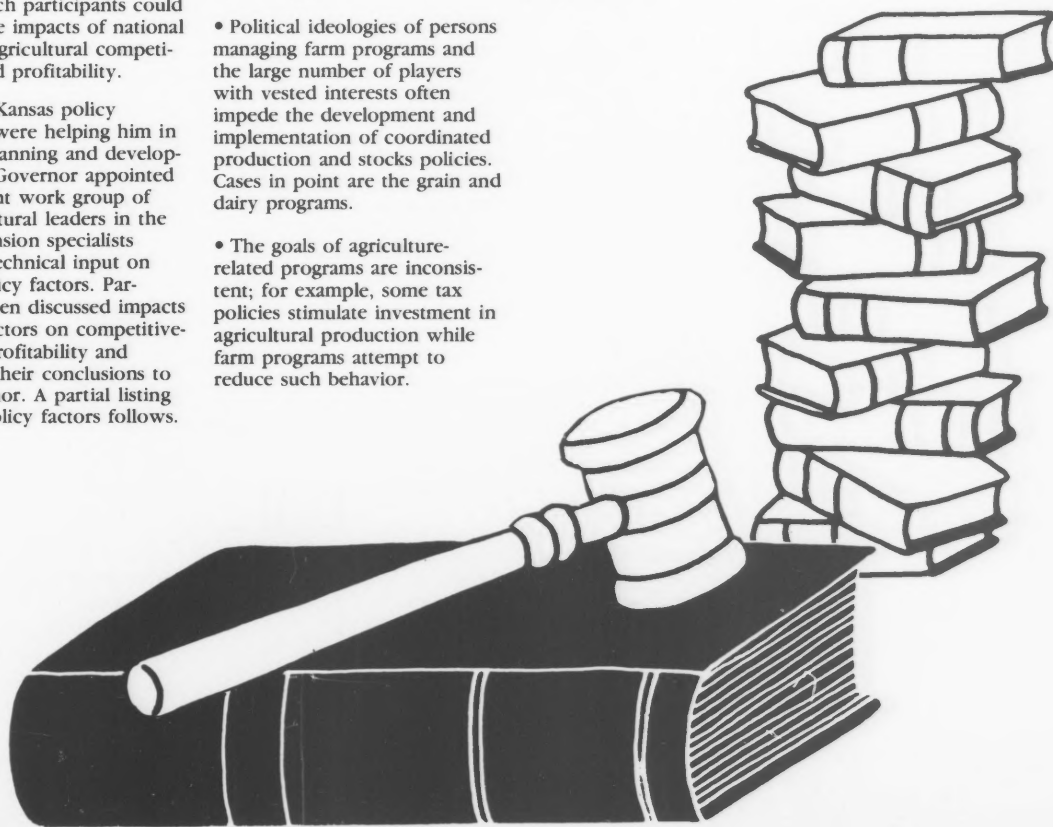
- The goals of agriculture-related programs are inconsistent; for example, some tax policies stimulate investment in agricultural production while farm programs attempt to reduce such behavior.

- Programs developed and managed solely through the current political process are—by nature of the system—made to protect short-term political interests.

## Input Into Legislation

Based on the technical input from the Extension policy specialists, the governor's work group surfaced development of long-term policy as a critical issue in achieving agricultural competitiveness. They communicated this message to their national legislators. The result was wording within the 1985 farm bill that calls for creation of a bipartisan broad-based quasi-independent agency. Its function will be to manage farm programs within broad guidelines and in conformity with the intent to bring stability and a long-term planning horizon to agricultural programs. ▲

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# International Trade— Challenge To Extension

42 *Extension Review*

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Last winter in Milledgeville, Georgia, farmers and county Extension agents hashed over trade laws, marketing techniques, and even the value of Japanese yen during the first Georgia Agricultural Congress.

No matter how far-ranging the topics, participants all came back to one question: Can the United States face a growing international market place for agriculture?

## **Extension Involvement**

Right in the thick of the discussion were Georgia Extension Service specialists. Keith Scarce, Extension economist, pulled together the 3-day program to assess the agricultural situation and find out how farmers feel about it. He brought in other Extension economists, speakers from the Georgia Department of Agriculture, Georgia Farm Bureau, the University of Georgia's Office for International Development, Clemson University, Georgia Experiment Stations, and the Library of Congress.

Speakers helped these farmers and agents wrestle with the key decision of whether American agriculture should take the risky road toward freer markets or the safe road toward more government involvement.

"One result of working with the conference is that elected officials and other agricultural leaders see how Extension can help educate people in this area," Scarce says.

Another is that Extension agents have requested training on international trade. "Extension people are intrigued," Scarce says. "They are getting questions now and they want to know how they can help people. They see it as a positive move in agriculture. They're beginning to network more and pull together the pieces of how to help."

## **Options Available**

"It's a choice between an uncertain but profitable market for the most efficient producers if we went international; or a shrinking but stable and conservatively profitable market if we went domestic," said John Ikerd, Extension agricultural economist, of the University of Georgia.

This debate paralleled a similar discussion in Washington that will determine farm export policy. "The choice will be made for you or by you, and it will be made within the next 4 or 5 years, maybe sooner," Ikerd said.

Current world trade negotiations bear out Ikerd's predictions, as the current Administration has proposed that all farm subsidies be phased out over a 10-year period.

Of this option, Ikerd told the group, "One road is toward free trade, allowing the prices of agricultural commodities to reach a level that would get rid of surpluses. That road would eventually lead to a growing and profitable agriculture, but it is a highly risky route. No one is really sure if we can travel that road or if it goes just around the bend and drops off into nothingness."

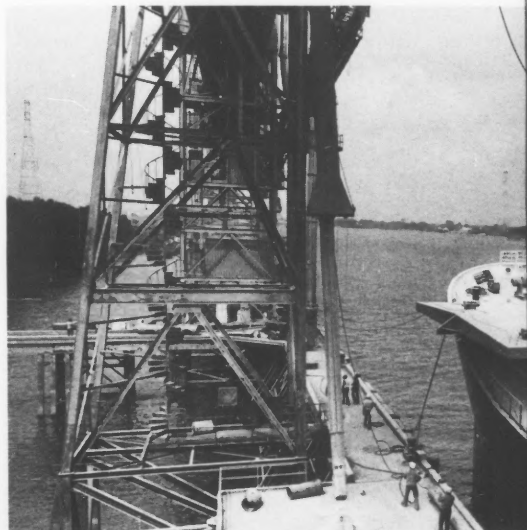
Whatever the outcome of the negotiations, these Georgia farmers have had a chance to think about the possibilities and to voice their opinions to their representatives in Congress.

Scarce sees such discussions as a viable "classroom" for the Cooperative Extension System. Is the international trade issue a new direction for Extension layered on top of an already overloaded system? Scarce doesn't think so.

"Agricultural policy has simply moved into this arena. My interest is still the same—how we can get our agricultural policy to function. A much larger portion of our production is going to the world market now, we have to recognize the field.

## **Agricultural and Trade Policy**

"I don't see this conference (or other Extension work in international trade) as anything new or different from our continuing Extension work in agricultural policy," Scarce says. "These issues are just new areas on how we pursue ag policy. In various parts of the country, it takes on different dimensions, depending on the agricultural products, markets and the Extension personnel involved. Some approach international trade from a humanitarian standpoint, others from a cultural view. My approach is ag policy."



One panel discussion at the conference dealt with the current trade policy, and the topic brought out strong reactions. James Lee Adams, a farmer from Camilla, Georgia, told the group, "Right now we have an absolutely incoherent trade policy. It's like having a foot on the brakes and the gas pedal at the same time. I don't know if we have the willingness of Congress to stick with us to buy the markets back but that's what it would take. There's a risk any way you go. You're the ones who need to make the decision. We need a coherent policy and you might be the folks to put it together."

Some spoke for continued subsidies, others argued for free markets, many claimed reality has to be somewhere in between. Scarce and his Extension colleagues didn't choose sides on the outcome, but they did fight for the right for farmers to take part in such discussions.

"Agricultural policy has changed so dramatically," Scarce says. "What future does agriculture have if not in international trade? We're exporting 60 percent of what we produce. My sense is that Extension has to get involved from the ag policy standpoint."

Ag policy is really an attitude, a state of mind voiced by an administration. Can panels and discussions and hearings really change anything? The Georgia Agricultural Congress believes it has made a difference and is continuing to do so.

One county has invited a speaker from the state department of agriculture to tell them what they have to sell and how they can sell it. This speaker has visited with them several times.

#### "Year Of The Exporter"

A group from south Georgia traveled to Atlanta to meet people who can work with them on international trade.

The Agribusiness Council and the state department of agriculture are working more closely with Scarce on what the Georgia governor has declared as "The Year of the Exporter." The panel members are considering putting on more workshops statewide, and they've also involved people from the Georgia Department of Industry and Trade and the Georgia Agribusiness Council.

The regional meetings will move beyond the policy issues and get to work on the following questions. What people can help get farmers and businessmen involved in international trade? What can agencies do about the problem? What events and people are influencing the international market now?

#### Results

Scarce has already seen Georgians translating international marketing into sales. He cites specific cases, including a south Georgian who bought an old service station, put up some sheds to package honey, and shipped it to schools. Then he put a honeycomb in the jars and sold them to outlets in Atlanta. Finally, he involved a food broker. Today he's shipping his honey to Saudi Arabia.

The story of this Georgia exporter proves it can be done. But it will take coordination, knowledge, and resources to stay on top of a highly changing field. Scarce thinks this could be handled by establishing in Georgia a proposed Center for International Agricultural Marketing and Trade.

And, Scarce would like to see the Georgia Extension Service take the lead through its traditional role as liaison between resources and counties—getting the information where it needs to go through the county agents.

"Extension can and should be doing this work. We have the network in the states, we can use that network effectively. All we can do is serve as an idea-generating factory. And we can be very good at that," Scarce says. ▲



## HAYMARKET—Buyers And Sellers Benefit

44 Extension Review



**Robert Keating**  
*Extension Managing  
Editor,  
Agricultural Press  
Services  
and  
Gerrit Cuperus*  
*IPM Specialist,  
Oklahoma State  
University, Stillwater*

Commercial alfalfa producers were frustrated for many years: they had high-protein, weed-free hay to sell, and they couldn't attract a premium price through standard market contacts in their region.

Alfalfa buyers in the dairy and horse industries also were frustrated: they often were unable to locate the high-quality alfalfa they needed. Many times they had to pay more than they wanted for low-quality forage.

That frustration has subsided for many Oklahoma alfalfa producers, plus buyers in 25 states, since the inception of HAYMARKET, a computerized marketing system for linking sellers and buyers of alfalfa hay.

For 5 years, Oklahomans listing alfalfa on HAYMARKET have been rewarded with higher prices for producing high-quality hay. HAYMARKET is sponsored by the Oklahoma Alfalfa Hay and Seed Association in cooperation with the Oklahoma State University (OSU) Cooperative Extension Service. OSU compiles and distributes the listings and furnishes a HAYMARKET coordinator, who assigns third-party graders to appraise and take samples from alfalfa lots being offered for sale.

### **Origination**

The concept of the HAYMARKET program originated with

an OSU Extension group working in the area of alfalfa integrated pest management (IPM). Planners included Gerrit Cuperus, Extension IPM coordinator; Clem Ward, Extension marketing economist; Loren Rommann, Extension forage specialist; Bob Treadwell, area Extension agronomist; and Ron Justice, county Extension director in Grady County, the top commercial alfalfa producing county in the state.

Soon, many more Extension specialists, representing the disciplines of agronomy, animal science, agricultural economics, agricultural engineering, entomology and plant pathology were involved in aspects of HAYMARKET. And many more

area specialists and county agents became involved. County Extension offices serve as contact points between producers and the HAYMARKET coordinator.

HAYMARKET proves the value of making eager buyers in the dairy and horse industries aware of the availability of highly desirable alfalfa. And it has strengthened incentives for producers to maintain management practices that result in a high-quality product.

#### Rewards

Producers have an opportunity to be rewarded for good planning and timely management. And, for offering hay that is attractive visually and nutritionally.

Listings on HAYMARKET, which is available to buyers via either mail-out or electronic access, include each producer's name, address and phone number; the number of tons in the lot; type of packaging; which cuttings are represented; maturity stage; color; type and amount of foreign matter; and test results for crude protein, moisture content and total digestible nutrients.

Ward, OSU's marketing economist working with livestock and forages, analyzes price premiums for quality characteristics such as high protein, absence of broadleaf weeds and grasses and most efficient bale type for handling by buyers.

Ward found price premiums were higher during years when available hay supplies were smaller rather than in wet years when production rose far above demand. In the 1984-85 marketing year, buyers paid \$3.11 per ton more for each 1-percent increase in protein. During the next year—a very favorable production season—the overall price structure decreased significantly and the premium for higher protein disappeared.

Although a larger price premium may not be apparent some years, a producer who manages his or her alfalfa program for production of higher-quality hay probably will be able to market hay more quickly, Ward explains.

"Producing high-quality alfalfa may mean the difference between selling it or still having it on hand at the end of a year when hay supplies are abundant," says Ward.

Comparing alfalfa with different amounts of foreign matter produced similar trends as those noted for protein.

#### Packaging

Price premiums continued through each year for alfalfa packaged in large square bales or small square bales compared to large round bales. Price premiums between large square bales and small square bales actually were reversed from one year to the next, indicating a shift in preference of buyers who utilized HAYMARKET.

Buyers' preferences indicate to producers the desirable characteristics of alfalfa they should be emphasizing to make their hay more marketable in a competitive business.

HAYMARKET exposes producers' hay to more than 800 buyers in 25 states, Ward points out. Since listings provide test results for several quality factors, buyers can select the quality of alfalfa they want to buy, and they can match price and quality.

"That selection should allow growers of higher quality alfalfa to be rewarded for making proper management decisions. Therefore, growers have an economic incentive to produce the highest quality alfalfa possible," he says. ▲

*Oklahoma alfalfa producers and buyers in 25 states are now happily linked by the ongoing computerized marketing system: HAYMARKET. The concept of the HAYMARKET program, which is sponsored by the Oklahoma Alfalfa Hay and Seed Association, originated with an Extension group at the Oklahoma State University working in the area of alfalfa integrated pest management (IPM).*





# Outlook Emphasis In Iowa

46 Extension Review

**Gene A. Futrell**  
Extension Agricultural  
Economist,  
Agricultural  
Economics and  
Business  
Iowa State University,  
Ames

Price corn now or later? Store soybeans or sell at harvest? What price and profit levels are likely next year on cattle?

These are some of the important and continuing questions of many Iowa farmers, agricultural advisors, and agribusiness persons.

As far back as the mid-1920s, the Cooperative Extension Service and Economics Department at Iowa State University has responded to this need with an ongoing program of market information and analysis. For the past 20 years, the author and Extension economist Robert Wisner have shared primary responsibility for the outlook program.

## Changes In Economic Setting

The economic setting for production, marketing, and pricing decisions has changed over this period of time. And we have adjusted our outlook program to meet the changes. Commodity prices have become much more volatile, adding to the price risk in farming. Marketing and pricing decisions are more difficult than before and more critical to the financial results of the farm business.

Our program objective is to make Iowa crop and livestock producers and related agribusinesses aware of market information sources, to increase their understanding of factors that influence commodity markets, and to enable them to develop more accurate expectations and forecasts of crop and livestock prices.

Iowa agriculture is not highly diversified. Our analyses emphasize corn, soybeans, hogs, and cattle. World economic and agricultural conditions, foreign trade developments and policies, and U.S. farm policies and programs all influence U.S. and Iowa commodity markets, and their impacts are included in our market analysis and outlook program. One focal point of the program is a twice-monthly market analysis newsletter, *Iowa Farm Outlook*. It has been a part of the program under that title since 1943, and under a different title since 1923.

Probably the broadest dissemination of outlook information is by radio. A 6-minute market analysis/outlook tape is prepared each Monday for distribution to 65 radio stations in the state. Each Friday, two 3-1/2 minute tapes are prepared that summarize the week's activity and price trends in the grain and livestock markets. The tapes, part of a 15-minute program by radio-TV Specialist, Roger Brown, go by satellite to public radio stations across the midwest.

Outlook information is disseminated in several other ways: news releases used by smaller daily papers, weekly papers, and some agricultural newspapers; special articles for agricultural newspapers and magazines; electronic information system (Agri-View) carried by Iowa Public

Television; short code-a-phone reports that can be accessed by callers that summarize and briefly analyze major crop and livestock reports from USDA's National Agricultural Statistics Service; short outlook statements published each month in Agri-News (a report of the Iowa Agricultural Statistics Service); frequent interviews with news wire services; and many phone, office, and letter contacts.

We also hold meetings to provide market analysis and outlook information to our clientele, usually as a series of meetings with professional agriculturalists who work with farmers in business and advisory roles (lenders, agribusiness persons, Extension workers, farm managers, and others). The meetings are held in the early fall for 3 to 4 hours and include information on market situation and outlook, pricing alternatives, farm programs, and management considerations. Outlook information is also presented to producers, agribusiness persons, and groups at other local, area, and statewide meetings, often with other marketing, management, or production programs. In 1985 to 1986, outlook information was presented at 100 local, area, and statewide meetings, with attendance of approximately 5,700.

A related Extension activity of long-standing at Iowa State University is a comprehensive and timely program of current market news dissemination. Under the direction of Market Editor Dallas McGinnis, commodity and financial information is broadcast statewide and beyond on the university AM radio Station, WOI.

## Program Impact

It is hard to assess total impact on clientele of the Extension program in market analysis and outlook. Because much information is distributed through media, there is little basis for estimating the total number of persons who use the information, how particular decisions were influenced by the information, or the specific economic consequences of decisions based on the information.

Limited formal evaluation of meetings and of the publication, *Iowa Farm Outlook*, has been positive. This is also true of the informal response from clientele. A research study, based on a sampling of *Iowa Farm Outlook* subscribers, reported that farmers liked its analysis of factors affecting markets because the publication "gets to the point quickly, and can be read and retained for referral." And a letter from a user of our outlook information stated, "You guys are very special people in my book. Your reports in *Iowa Farm Outlook* are outstanding. Please: keep on doing what you are doing." ▲

# Producer Marketing Clubs: The Kansas Experience

Extension Review 47

American farmers manage their "family farm" like a "small business" if they are going to survive in today's economic environment. But first they must plan and execute a marketing strategy.

To be successful, marketing must be more than just selling at harvest or when bills come due. A marketing strategy requires price forecasts, integrated financial plans, a complete production record system, an assessment of the firm's risk bearing capacity, and an evaluation of the relevant marketing alternatives.

Relatively few farmers have a marketing plan and the large majority price their commodities at delivery. In Kansas, less than 10 percent of the crops are forward priced and only 6 percent of the cattle producers have ever hedged with futures.

## Necessary Marketing Tools

Why is it that so few farmers take advantage of all the marketing tools available to them? If traditional educational techniques (seminars, home study materials, Extension marketing classes) are not effective intervention mechanisms, what are the implications for Extension marketing education programs?

In Kansas, we have retained and expanded our traditional marketing education programs but have found a new way to organize our audience. Producer Marketing Clubs have been established in over 50 counties in the state. County agents, along with area and state specialists, support the activities of these clubs by providing leadership, encouragement, market information, speakers, videotapes, teleconferences, handouts, and formal instruction.

One key feature of these producer clubs is that they are self-supporting and self-governing, and farmers learn by "test marketing" limited quantities of commodities.

## Club Activities

Club members are not required to do anything different on their own farm, but as a group, the club is expected to follow and interpret market developments, develop price forecasts, estimate production costs, track and chart futures and local basis information, evaluate the appropriate marketing alternatives, and execute a marketing plan.

Producer Marketing Clubs have been operating in Kansas since 1984. Generally, a county Extension agent organizes the club in cooperation with one or more agricultural lenders. The club's membership averages 15 to 20 persons or couples, most of which are full-time farmers/ranchers. Generally speaking, the clubs collect \$80 to \$100 per

person to finance the club's market positions in two or more commodities. Evening meetings are held about every 2 weeks and run from 2 to 3 hours. There is a definite seasonal pattern to the clubs' activities with most clubs beginning their meetings in October-November and tapering off in April or May.

Many of the clubs have subdivided their membership into commodity subcommittees. Each subcommittee is responsible for a single commodity and is charged with keeping updated futures and basis charts, reporting on developments affecting that commodity and proposing appropriate marketing strategies.

One of the organizational problems that has yet to be solved is what to do with a club once its members become sufficiently experienced and confident. Since clubs are predominantly a learning opportunity not a marketing agency, and given Extension's educational mission versus providing consulting services, it's been proposed that mature marketing clubs continue their association but with only limited participation from Extension. Because of the large numbers of nonmarketers, Extension agents and their cooperating lenders have been encouraged to start new clubs once they "graduate" their current club's members.

Learning by doing can be an efficient method of instruction. While speculation is an unavoidable temptation, the primary focus of the club's activities must be to simulate actual marketing decisions. This requires that: (1) everyone be responsible for working out their own costs of production for each of the commodities traded; (2) the club keep track of futures and basis data for each commodity (teams of two-three members should be assigned to each commodity); (3) the club develop an independent market outlook and integrate price expectations into the club's marketing objectives; and (4) the club evaluate all relevant marketing alternatives.

The market club experience seems to work best over a limited time period of 4 to 6 months scheduled from October through March. Ideally, marketing club graduates will continue to meet (perhaps with less frequency) at a specified time and place with the objective of working up and executing marketing plans for their own production. Extension personnel could continue to meet with them on an infrequent basis, but hopefully the members would have developed enough internal structure/routines that they can operate on their own without formal Extension leadership. This would, in turn, free up Extension personnel to initiate a new educational marketing club next season and start the cycle all over with another group.

Clearly, the marketing club activity enhances farmer marketing skills and in turn contributes to profitability. ▲

*William Tierney*  
Extension Agricultural  
Economist,  
Kansas State  
University, Manhattan

# Preparing Youth For The 21st Century

48 Extension Review

Allan T. Smith,  
4-H National Program  
Leader, Science and  
Technology,  
Extension Service,  
USDA  
and  
Stu Sutherland  
Public Affairs  
Specialist, Extension  
Service, USDA

The 21st century is not really so far ahead for 4-H'ers—many of them won't hold their first professional job until then.

A new emphasis is emerging in 4-H, the Nation's largest informal education program for youth. 4-H calls it "Sci/Tech"—shorthand for scientific and technological literacy education. This timely effort, an important part of the Extension "Building Human Capital" National Initiative, promises to enhance the 4-H program's ability to prepare youth for living and working in our emerging technological world.

New and developing 4-H Sci/Tech programs will produce positive attitudes toward the study of science and technology and familiarize youth with the important contributions of sci/tech career fields.

## Lead Development

Four USDA-funded cooperative agreements with land-grant universities are taking the lead in 4-H Sci/Tech development. State-funded programs will build on and round out these federally funded efforts. A network of Extension staff interested in participating in 4-H Sci/Tech development is now being formed. And, two nationwide staff development efforts are planned.

4-H programs in at least 10 states will conduct National Science Foundation Young Scholars Programs to involve

youth in residence programs on campus in summer, learning about science careers and working one-on-one with scientists.

## 4-H Sci/Tech Efforts Underway

At USDA, Science and Education, Higher Education, and Extension Service have now funded a series of four related cooperative efforts to develop important parts of this new 4-H Sci/Tech effort. All the final products of their work will be introduced to State Extension staffs in December 1989. Expected outputs include:

- **Career Preference Computer Program**—Penn State is developing materials to enable youth to identify those career clusters which most likely fit their personalities and interests.

- **Sci/Tech Instructional Strategies**—Penn State is developing training materials for staff and volunteers in strategies proven most effective for accomplishing 4-H Sci/Tech objectives.

- **Database of Non-Extension Materials And Cooperators**—Penn State will identify existing materials, approaches, and cooperators from outside Extension which can be integrated into 4-H science and technology programs.

- **Sci/Tech Curriculum Scope And Sequence**—ES 4-H Staff are completing "scope and sequence" for 4-H science and technology education to guide

curriculum developers, considering both the intellectual capabilities of youth at various developmental stages and the hierarchical nature of science education.

- **"Model" 4-H Sci/Tech Projects**—Wyoming is testing a series of innovative food and agricultural science and technology projects and working with ES 4-H to develop a how-to guide for 4-H curriculum developers for the Sci/Tech approach.

- **Self-Determined Career Education Model**—Missouri and North Carolina are testing a model including employment profiles; listing of academic specialties and various media; and focusing example materials on career opportunities in food and agricultural sciences.

## Current Projects

In fiscal year 1986, the nationwide 4-H program had youth busy in over 8.5 million projects. Of these, 88 percent were projects solidly based in the sciences. Projects based on the biological sciences accounted for 55 percent—not surprising considering the strong Extension agricultural and nutrition subject-matter base. Another 10 percent of enrollment is based on the physical sciences, particularly engineering, energy, and soil and water. And some 23 percent of enrollment stems from the social sciences, including citizenship, leadership, economics, and communications.

## Key To Success

The key to the success of the 4-H approach to science education is hands-on, practical real-world application of scientific knowledge.

4-H gardening is a good example. Taught the old way, it is a straight forward "how to produce" experience, where a 4-H'er learns to produce his or her very own garden. But taught the 4-H Sci/Tech way, 4-H gardening experiences manage to open the doors to a host of scientific subjects.



## Scientific Expertise— Vital To America's Future

Scientific and technical expertise is vital to our Nation's competitiveness. Yet agriculture's supply of scientists and professionals is declining. Between 1977 and 1984, while overall college enrollment increased, baccalaureate enrollments in agriculture at land-grant universities declined 31 percent.

The decline in enrollment in food and agricultural sciences is occurring at all degree levels. Foreign students earn 32 percent of the Ph.D.'s in agriculture and natural resources. The remaining share amounts to just 680 new Ph.D.'s annually, about 14 per state. Young minds must be attracted into agricultural science and technology careers; and the process must begin quickly.

A recent National 4-H Council survey showed that 4-H projects do impact on participants' career selections. Seventy-eight percent of respondents—state and national winners in general agriculture programs—said 4-H had influenced their career choice.

### Space Technology

4-H's newest space project "Blue Sky Below My Feet—Adventures in Space Technology" was released in the fall of 1986.

Designed for 4-H'ers ages 9 to 12, this multimedia curriculum package helps youth explore space science and technology and its relationship to life on earth.

Three 30-minute video programs, a member workbook, and volunteer leader guides focus on: Gravity and Forces; Fiber and Fabrics; and Food, Nutrition, and Fitness. The video programs feature astronauts, and other scientists and nutritionists in laboratory research.

Developed and produced by a public-private team of educators, the "Blue Sky" project is being used nationwide in 4-H clubs, 4-H camps and workshops, with other youth organizations, and as a school enrichment project.

### Focus On Science

About 2.1 million 4-H participants are involved in over 51,000 class units designed for school enrichment. While not all of these programs are food and agriculture specific, most contain subject matter that enables youth to become aware of science and technology aspects of food and agriculture careers. Some typical examples:

- The 4-H embryology project, with Extension providing egg incubators and project instruction, continues to grow nationwide with 251,000 youth participants. This project now includes growth and development, nutrition, agriculture, and careers.
- Plant science school workshops in New Jersey attracted over 47,000 youth in horticulture-related skills training.
- Sixty-nine outstanding secondary school juniors and seniors

### Youth And Science

More than half our high school students drop out of science and mathematics by the 10th grade. Insufficient preparation, and lack of information on agriculture as a science, pose problems in recruiting youth. A scientific mindpower base is critical to the well-being of our country. It is crucial that schools inculcate positive attitudes toward sciences and technology by the time youth enter junior high school. National Science Foundation studies indicate that school science experiences for 90 percent of all students are restricted to a page-by-page consideration of content found in textbooks. This approach will not attract youth who lack positive attitudes toward science and technology.

4-H programs can provide a better option. 4-H youth use science to solve their own real-world problems. 4-H programs could motivate youth to choose the food and agricultural sciences rather than competing disciplines.

each received \$100 scholarships for career program training on the University of Nebraska campus. After their training, these 4-H'ers worked with 4,800 youth on 4-H projects in veterinary science, animal science, agronomy, food science, forestry, fisheries, wildlife, and entomology.

- Florida piloted an urban forestry program for children in grades 3 to 5. Pre- and post-test scores indicated a 65 percent increase in forestry knowledge for the 400 youth taking part. The project will be offered to all Florida elementary schools.
- In a Delaware school enrichment program 1,500 youth were able to identify six examples of marine life found in the ocean and bays and 1,000 youth could identify uses for the marine life.
- In Tennessee, Nebraska, and the Virgin Islands, 4-H entomology and apiculture projects were used to interest youth in pursuing a course of study in agriculture and other biological sciences. Over 7,500 youth have participated in this school project.

4-H's future is focused on preparing today's youth for tomorrow's world. And, science and technology programs and projects will continue to be an important step into that world. ▲



# Target on Profit

50 *Extension Review*

**Don D. Pretzer**  
*Extension Farm  
Management Specialist,  
Agricultural  
Economics  
and Business  
Kansas State  
University, Manhattan*

In Kansas we "rained" on our farm clientele for years. We forced them to run from Extension meeting to Extension meeting with their educational "bucket" and attempt to catch all the information needed for effective decisionmaking.

Some good reasons led to this. Agriculture kept getting more technical, more complex; so, our pool of state faculty became more and more specialized.

The "raindrops" Extension produced got even smaller, though, when our ag specialists moved into academic departments. There, researchers and teachers—who were best impressed via subject-specific leadership, conferences, workshops, and publications—helped evaluate Extension faculty for tenure and promotions.

Gradually, leadership in program planning and development shifted to the Manhattan, Kansas, campus, where it was limited by specialist schedules.

Not surprisingly, this evolution eventually encouraged our 105 county agricultural agents to feel less qualified to maintain their roles as educational generalists—those who could provide the overview of all that specialized information and localize it.

## Clientele Issues

Those clientele who could easily synthesize our flood of information soon were bypassing their county agent. A few even circled our specialists and talked directly with researchers. Other clientele became increasingly dissatisfied.

By 1985, agent morale was low. Experienced agents were getting less self-satisfaction from their jobs; they wanted to feel as if they made a difference. New agents were having difficulty garnering county support.

About the same time, Extension's ag economists, who often appear on programs offered by other disciplines, raised a question that caught the imagination of some animal scientists, agronomists, entomologists, and ag engineers: "Despite our subject matter divisions, shouldn't and couldn't we be working interdisciplinarily, rather than (occasionally) multidisciplinarily?"

## A Need For Change

Administration was worrying, too, that some of its problems were symptomatic and inter-related; they were eager and open to suggestions for change.

Hyde Jacobs, then associate director for ag programs, began calling together selected county agents, area specialists, and state faculty to explore possibilities. All those involved supported pouring information into one stream that included the total a farmer might need to make management decisions.

This change in programming would require intensive preparation by specialists and intensive training for county agents.

## Process In Place

"The agents requested we use the 'top dogs' from our area and state staff to implement our ideas," says Don Pretzer, Jacobs' successor. "The specialists emphasized that we had to select 'true believers' for the interdisciplinary training; otherwise, the change probably wouldn't last. We all believed administration's enthusiastic, public support was necessary to make the whole thing go."

The group also decided the only way to make this indepth, integrated teaching manageable was to take a commodity-by-commodity approach. In the fall of 1986, agents in eastern Kansas would learn how to troubleshoot for grain sorghum and beef operations. Those in the west would learn about wheat and beef.

Faculty chosen to reach the planning group's goals met 19 times to plan 3 days of training, Pretzer notes. Trying to think as a "total producer" often proved difficult. Beyond that, specialists were used to parading through public meetings one by one, not finding agreement on how to blend their subjects together.

## Approach Adopted

The teaching group chose, abandoned, and then resurrected the idea of taking a case-farm approach. The case farm focused the scope of their task by examining a total operation with set financial, management, and facility limits.

Suggested computer programs included FINPACK for whole-farm analyses, Kansas Extension's CROPen and BEEFent programs for enterprise evaluations, and one module of Kansas' BEEFpro program for troubleshooting-type questions.

## Indepth Training

Strong encouragement from area and state administration persuaded 98 percent of Kansas' agricultural agents to attend the indepth training, called "Target On Profit."

The agents were polled again during 1987 spring planning conferences, to assess interest in continuing the indepth, integrated training. Selected specialists are now preparing fall workshops on soybean and swine enterprises in eastern Kansas and beef stockers and grain sorghum in the west.

"We're still working on how specialist field schedules can best support this new approach to programming," Pretzer says. "Since we're zeroing in on how to get information into the form producers need, we'll soon have to put delivery mechanisms into perspective, too. We've got a lot of enthusiasm for satellite uplinks, computer systems, TELENET and such, but we need to know how our publics want to receive our education." ▲



**Issue 5. Strengthen business and community support systems.**

*Extension Goal And Roles:*

- Provide business management education for agriculture-related businesses and industries in rural communities, including education on the benefits of integrated systems approaches to problem solving.
- Provide community economic development education and assist in needs assessment, analysis, and planning.
- Educate agribusiness on adoption and use of new technology.

**Issue 6. Develop long-term agricultural policy that integrates the economic and social needs of the Nation within the global economic system.**

*Extension Goal And Roles:*

- Provide objective education in the policymaking process.
- Facilitate dialogue among participants in the policymaking process.
- Objectively analyze impacts of alternative policies.

**Issue 7. Develop U.S. fiscal, monetary, and trade policies that are consistent with international agricultural trade goals.**

*Extension Goal And Roles:*

- Develop producers' knowledge of basic economic principles and increase understanding of effects of macroeconomic policies on agricultural trade.
- Provide producers and leaders with analyses of alternative macroeconomic policies.
- Develop leadership skills and abilities of producers, agribusinesses, and others so they can participate more effectively in the policymaking process.

**Issue 8. Integrate marketing strategies into the production management system.**

*Extension Goal And Roles:*

- Educate producers about alternative marketing strategies.
- Help producers develop and use production and marketing plans.

**Issue 9. Enhance the supply of competent human resources in the agricultural system.**

*Extension Goal And Roles:*

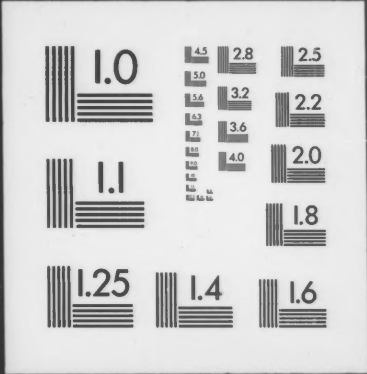
- Create a positive attitude toward careers in the food and fiber system.
- Stimulate curriculum reform in land-grant universities consistent with future agricultural demands and needs.
- Update and maintain skills and competence of Extension and other agricultural professionals.

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# *extension review*

*United States Department of Agriculture*    *Winter 1987*



**Rural  
Revitalization**



## Mary Nell Greenwood— Leader, Visionary, Friend

2 Extension Review

"We celebrate the life of a dedicated and much-loved partner"—Orville G. Bentley, Assistant Secretary of Agriculture for Science and Education.



Mary Nell Greenwood challenged us to reach out, to grow, to strive for excellence. Individually—and collectively as the Cooperative Extension System—she leaves us a legacy of loyalty, dedication, hard work, and commitment to the people of America.

Mary Nell Greenwood was one of us, an important member of our Extension family.


She began her career as an Extension agent in Missouri in 1951. She rose through the ranks to become Director of Extension Programs at the University of Missouri, responsible for coordinating Extension educational programs involving four campuses and 20 off-campus planning units. She joined Extension Service, USDA, as Associate Administrator in 1978, and was appointed Administrator in 1980.

Throughout her life, Dr. Greenwood was honored for her many contributions to her community, Extension, and American agriculture. Prior to her untimely death on November 15, the Senior Executive Association, an organization of the

Senior Executive Service headquartered in Washington, D.C., honored her with a significant award—The Distinguished Executive Service Award—the highest level of peer recognition presented to senior executives.

Mary Nell Greenwood's life of dedication and creativity lives on in the work of her Extension family across the Nation. Her influence, vision, and creativity is reflected in the national priority-setting system now moving into place.

We are better for her presence with us.

We commend her vision, mourn her passing, and celebrate and continue her legacy of devotion to the Cooperative Extension System. 

## Solving The Economic Crisis



By Senator David F. Durenberger (Republican, Minnesota) United States Senate


Of the many issues which struck me as I chaired a Senate Subcommittee last spring on the financial crisis affecting our rural communities, two stand out. One is the fact that the farm economic crisis does not operate in a vacuum. Declining farm income and plummeting farmland values are only two pieces of a complicated economic puzzle which also includes changes in the broader U.S. and world economies. Adding to this puzzle are popu-

lation shifts, structural changes in agriculture and other natural resource industries, severe adjustments in the industrial economy, and reductions in federal and state aids.

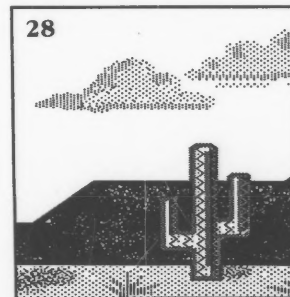
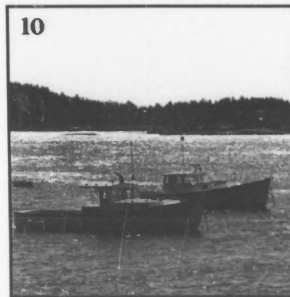
Other devastating impacts of the rural crisis are hunger, family stress and violence, retail business failures, the drop in church and civic activities, insurance cancellations, and the like. In effect, the farm crisis has helped to create an environment of economic hardship and personal stress that strains the ability of rural governments to provide essential community services and facilities. In the short run, rural Americans are suffering the brunt of this current dilemma; in the long run, all Americans will be adversely affected by the crisis.

Nevertheless, within the roots of this crisis lie the seeds of rural revitalization. Public awareness and education mark

the first stage in a collaborative effort among federal and state governments, regional and local economic development associations, chambers of commerce, businesses, commodity and trade associations, educational institutions, and individuals. The Extension Service can play an important role in revitalizing rural America, and this issue of *Extension Review* describes the kind of assistance and programs Extension can provide.

Those of us involved in government, higher education, public policy, and economic development, must join together now to revitalize rural America. Otherwise, the decline in the ability of rural communities and rural Americans to cope with the dramatic economic changes they are now facing may very well become irreversible. 





**Future Issues**

See page 17 for schedules and themes of future issues of Extension Review.

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# Rebirth In Rural Minnesota



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To assist farm families with budgeting and resource management and to provide new and existing small businesses with economic development, Minnesota Extension is exploring many avenues simultaneously.

Many Minnesota communities have been hard hit by the farm crisis and massive layoffs in the steel and taconite industries. To help revitalize them, Minnesota Extension has created 12 one-year assignments involving new positions and temporary replacements for its area Extension agents.

"These new assignments in the counties were made possible through a \$1.25 million allocation by the 1986 Minnesota legislature," says Patrick J. Borich, Minnesota Extension director. "It is just one example of Extension's response to revitalizing communities."

While most of the "new" area Extension agents remain in their home communities, their office locations have changed, and in some cases, several agents share the same office. These area agents are a response to the long-term effort of Project Support, initiated in 1984, and coordinated by Kathleen Mangum. Minnesota is the only Extension service currently engaged in both the administration and education portions of Mandatory Farm Credit Mediation. This program is designed for debtors and creditors to meet with a mediator in a neutral setting to work out solutions which may avoid farm foreclosure.

In the summer of 1986, Claudia Parliament, Extension agricultural economics specialist, and Sherri Johnson, Extension home economics specialist, both of the University of Minnesota, conducted special agent training in home-based

education opportunities. During this training, which cut across Extension program lines, Gordon Rose, Extension economist, introduced material on community economic assessments. Eventually, each of the 87 counties will have this local assessment of their economic base.

"It's a picture of the local economy that could help anyone thinking of starting a business," Rose says. For over a year, he explains, he gathered economic data through a question-and-answer format, and also drew on information from the State Bureau of Economic Development to create an analysis of a community's economy.

Rose's economic analyses play a part in a 6-week course, "Starting Your Own Business," conducted by Buddy G. Crewdson, Extension agricultural economist at the Small Business Development Center at the university. Crewdson's course, which will continue throughout 1987, is aimed at both current and prospective business people, and covers designing a business plan and obtaining financing.

### Possible Future Workshops

This year, Extension is exploring topics for workshops that may generate potential new businesses in areas where the farm economy may be lagging. A workshop on starting a bed-and-breakfast business was scheduled for rural Wright County. Workshop topics in 1987 may include such business ventures as family day care centers, blueberry production, specialty crops, firewood sales, wood products, cottage industries, and the leasing of land for hunting.

### Specialty Crops

In Koochiching County, along the Minnesota-Canadian border, farmers are working under a \$20,000 grant-loan from the Iron Range Resources and Rehabilitation Board, and concentrating on specialty crops. In 1986, cauliflower, broccoli, and cabbage were produced for the first time, with asparagus, the fourth cool-weather crop, expected to produce in three years. Seven growers have planted a total of 45 acres. Koochgrown Association, the growers organization and recipients of the grant-loan, used it to purchase cooling and icing equipment and transportation. By staggering plantings, growers expect production to run from late July to the first week in October.

Due south at Grand Rapids in Itasca County, Extension Foresters A. Scott Reed and F. Thomas Milton worked with loggers, foresters, and landowners attending an annual September weekend called North Star Expo. Participants see state-of-the-art technology in equipment displayed by 100 exhibitors. During and after this event, Extension Forester Reed conducts an economic impact study to disclose the dollar benefits of hosting such an event to the community.

*Opposite: To help the lagging farm economy Minnesota is promoting specialty crops. Here, Koochiching County Extension Agent Terrance Nennich (right) checks the maturity of a broccoli planting for new growers. Above: An ore boat passes under a bridge on Lake Superior. Minnesota is promoting tourism; shipping is always a tourist attraction.*

*Photographs courtesy of Don Breneman, Communication Resources, University of Minnesota.*

### Research On Shiitake Mushrooms

Research on shiitake mushrooms (choice Japanese mushrooms that sell for approximately \$11 a pound in gourmet food stores) is being conducted at the University of Minnesota and at Lanesboro in the southern part of the state. The first successful crops from Minnesota were reported in 1984-85 and were incubated outdoors on cut bur and red oak logs. Experiments are being conducted to discover which Minnesota hardwoods will successfully produce the mushrooms and which varieties will work in this climate. To initiate a fledgling shiitake mushroom in the state, researchers are testing the operating conditions of a controlled greenhouse to enable year-round production of this specialty crop.

### Water Quality Issues

Groundwater quality is a statewide issue being addressed in Minnesota by a team appointed by the Governor. Frederick Bergsrud, Extension head of agricultural engineering, a member of the team, and John Sem, Extension program leader for community economic development, will meet with agricultural agents in southeast Minnesota to discuss groundwater issues. John Fox, Extension southeast district program leader, sees the meeting as an opportunity for "education for action."

### Grants

Extension helped with the initial needs assessment when the McKnight Foundation (founded by the 3M company family) wished to aid the critical rural crisis with grant allocations. Roger Steinberg, southeast area agent at Rochester, was an assessment committee member. "What is different here," Steineberg says, "is that decisionmaking for allocations rests with the local counties. Multicounty task forces of rural citizens are working in six areas of the state to make grant decisions based on unique approaches to solving problems. Nonprofit organizations and local government units will be eligible for grants in areas of rural leadership, human services delivery, economic revitalization, and natural resources."

Funding is to continue five years with \$15 million allotted for the first two years. Early in 1987, most areas of the state will receive grant proposals.

### Tourism Promoted

A new Tourism Center, housed in Extension at the university, will open to expand tourism opportunities for all Minnesotans, both customers and business owners. John Sem, Extension program leader for community economic development, says that, "Extension and the

university have long track records on public forest and park use, outdoor recreation participation, and food service management. Each of the state's 87 counties has something to offer the traveler—the Center will benefit economic growth throughout Minnesota."

### Rural National Conference

In January 1987, Minnesota and Wisconsin Extension cooperated to host "A New Agenda For Rural America" national conference. Congressional delegations from both states were represented among the 300 participants and addressed the question: "Why Save Rural America?"

"We took an intense look at what is happening in rural America," says Minnesota Director Borich. "Conference topics included maintaining a healthy farm economy, rural dependence on nonfarm income sources, rural community transitions, elements of a comprehensive rural development policy, and the legislative agenda for rural development." ▲



# Displaced Farmers— Discovering New Possibilities

6 Extension Review

**Robert Furbee**  
Associate Director and  
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Opposite Top: Dave Reed, (middle), Fulton County agricultural Extension agent, reviews a RE: FIT questionnaire with former dairy farmers Sue and Doug Bebnfeldt, as part of an effort to discover marketable skills for a new non-farm occupation. Below: Ernest Winterhoff, a recently displaced Ohio farmer, walks to his new job at the Honda plant in Marysville. He was re-trained as a result of the statewide RE:FIT pilot program for farmers funded by ES-USDA and Ohio Extension. Above: Phil Grover (second from right), Extension CRD specialist, conducts a two-hour RE: FIT training session for Ohio Extension agents.



As Ohio county agents worked with the state's farmers on computerized farm management programs over the past few years, the handwriting was on the wall. Declining commodity prices, high interest rates, decreasing land value, and Mother Nature's hail and drought, combined to set many Ohio farmers in an unrecoverable tailspin. The agents found their help ended at a time when it was most needed; when farms were lost and finances depleted.

But some county agents were not content to sit back and watch friends and neighbors lose their livelihood without offering a helping hand. They contacted Community and Natural Resource Development state staff members to see if Extension could provide help in dealing with the crises farmers faced.

What resulted was a statewide program—RE:FIT (Rural Economics: Farmers In Transition). Major components of the pilot program are identifying skills transferable to off-the-farm occupations and providing an extensive referral system.

## Outplacement Program

"As we took a closer look at the situation, we gathered relevant information on outplacement programs, but none of these programs pertained to farmers," says Phil Grover, community resource development specialist and statewide RE:FIT coordinator. "The vast geographic area, the independence of each operator, and the lifelong attachment to this career choice explains why a special outplacement program was needed for farmers," he says.

To implement the pilot program, Grover requested an Extension Service-USDA special project grant. Of the \$60,000 appropriated, \$20,000 was earmarked for the RE:FIT Pro-

gram. Ohio Extension provided the remainder of the needed funds. Program developers devised a series of pencil-and-paper instruments which county agents administer to farmers and their family members to match their skills, interests, and attitudes with possible career choices. A preliminary discussion form provides a guide for the agent in the initial interview. Answers to these questions determine a particular family's stage of need.

## Overcoming Tunnel Vision

"Many of our farmers develop attitudes that they are not qualified for any position off the farm," says Dave Reed, Fulton County agricultural Extension agent.

"When you consider all the skills a farmer has honed on the farm—veterinarian, plumber, mechanic, recordkeeper, manager—it is evident that



farmers and family members are more talented than they lead themselves or others to believe," he continues. "The RE:FIT Program allows them to have a different perspective of themselves off the farm."

Once they accept the fact that they must leave the farm, many farmers practice tunnel vision, considering only those occupations they had prior to farming. When faced with the possibility of leaving his Fulton County dairy farm, Doug Behnfeldt restricted his viable options to either running a backhoe or working on an oil well, the two jobs he held before he started farming. "I thought these were my only marketable skills."

The RE:FIT instruments showed that Doug's real interests and aptitude lie in natural resource management, a career alternative neither Doug nor his wife Sue considered before answering the series of questionnaires. Doug hopes to pursue his degree once his wife is finished with her educational goals.

#### Referral Services

In the second phase of the program, Extension acts as a referral service for those needing information on community services, job skills, job placement, and training options.

"At this stage, we join with a number of other state and federal organizations to open up an array of options for our clientele," Grover says. "What's sad is the number of supportive programs farmers don't know about and, therefore, don't take advantage of." For example, the Ohio Job Training Partnership Act (JTPA) through the Ohio Bureau of Employment Services offers 2 years of free education to qualifying individuals. And our distressed farmers and their spouses qualify. Their particular program pays full tuition for qualifying families.



"I never dreamed they would pay me to go to school," Sue Behnfeldt says. She is enrolled in a 9-month certificate program in accounting. Sue will also receive funds from the Ohio Instructional Grants and other financial resources. The programs even allow her to recoup \$5 per day for travel, a baby sitter, and lunch. The JTPA also pays about half the person's wages during on-the-job training.

#### Stimulating Communication

In addition to the original intent of the instruments—identifying and matching skills and interests—agents find they serve an additional function for some couples, says Reed. They help stimulate communication.

After they completed the questionnaires, Doug and Sue Behnfeldt tried to guess how the other had responded to the questions. For the most part they were able to predict their

partner's answers. But not always. And it was these questions that stimulated comments like, "I didn't know you felt that way about that."

According to Grover, planning for the third part of RE:FIT is underway. "We are working on a way to identify the early warning signs of the development of the crisis so we will have more time to make changes and decisions on farming, alternative careers, training and education, and supplemental income," he says.

While the program is still in the pilot stage, Grover expects to have the program in full operation by 1987. Those interested in receiving the instruments should contact: Joe Heimlich, CNRD Program Assistance, Ag. Administration Building, 2120 Fyffe Road, Columbus, Ohio 43210. ▲





## FCL'ers—Meeting Rural Needs

8 Extension Review

**Carolyn Bigwood\***  
Writer-Editor  
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*Right: Jo Frisby, FCL participant and lecturer, helped improve life for her tiny community of Chickaloon, Alaska, as president of the Chickaloon Pass Improvement Association. Here, she lectures on agenda styles in a program called "Effective Meeting Techniques" to participants from small non-profit organizations at a community college in Palmer, Opposite: Ellen Takazawa, Hawaii FCL'er, uses her FCL training to help interested persons renovate a local community center in Pepekeo, a sugar plantation community outside Hilo. The group she led secured \$60,000 in county funds to renovate the center's kitchen and other facilities.*



Whether organizing a support group to help families of the mentally ill, negotiating a 40-acre land swap for community use, or initiating other needed services, Family Community Leadership (FCL) participants are making positive changes in rural and small communities throughout the West.

Using leadership and other skills acquired in the FCL program, participants actively identify and address specific needs which are close to them and important in their communities.

FCL is an educational program developed by Extension and the National Extension Homemakers Council, Inc., in cooperation with the Western Rural Development Center at Oregon State University. The pilot program began in 1981 in six western states—Alaska, Colorado, Hawaii, New Mexico, Oregon, and Washington.

FCL helps participants in these states better understand the complexities of public issues and learn how to resolve community problems through applied leadership skills.

### Hawaii FCL'ers

In Hawaii, FCL'er Ellen Takazawa used her training to help organize interested persons to renovate the Pepekeo Community Center. Pepekeo is a small rural sugar plantation community outside of Hilo on the Big Island of Hawaii.

Takazawa and neighbors began meeting once a week. Eventually a group of about 25 attended a public hearing on the matter and secured \$60,000 in county funds to help renovate the center's kitchen, screens, windows, and other facilities.



When her own son became ill, another Hilo FCL member Carolyn Oki organized a support group in her community to help families of the mentally ill.

The group, Big Island Alliance for Mentally Ill (BIAMI), are meeting with staff of the State Department of Health and other support agencies in an effort to establish a psychiatric ward at the local hospital and a group housing project for the mentally ill. Oki says her participation in FCL gave her the confidence and skills she needed to start the group.

On Maui, FCL participant Mary Monden helped organize a local community association that addresses problems and concerns of the rural farm community of Kula. Since her participation in FCL, Monden has become increasingly involved in her community.

On the tiny island of Lanai, FCL trainers are providing leadership in a variety of community organizations and activities to enrich the lives of the 2,100 residents there. FCL'ers are helping form the "Friends of the Library" group, conducting a grant search for the only preschool on the island, and helping to organize a hospital auxiliary group.

### Oregon Efforts

"How can we generate better funding for our library?"

"How can the library system better serve the unincorporated area of our rural community?"

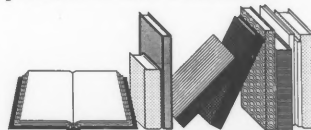
"What should we look like in 5 years, 10 years?"

These are some concerns addressed by the Library Board in Douglas County, Oregon, with the help of group facilitators trained through the FCL program.

The Douglas County library system serves a county population of over 92,000. FCL trainers Kate Lilley and Linda Foster met with the Library Board to discuss a strategy that would help planners answer some tough questions and involve the community.

The FCL'ers say they knew it would be a long process. "But group facilitating is no speedy process if done right," says Lilley.

According to state FCL Coordinator Greg Tillson, this is just one of a broad range of projects Oregon FCL trainers have undertaken to solve problems in their communities.



### Revitalizing Chickaloon

Chickaloon, Alaska, has benefited from the efforts of two FCL participants, Jo Frisby and Rita Pfauth (recently deceased).

Coal mining established Chickaloon on the Alaska map back in 1917. A hospital, school, and businesses were built. The railroad carried coal to the coastal community of Seward where it was used as fuel for ships until oil replaced coal. Then Chickaloon became a ghost town.

The town was revitalized in the 1960s when homesteads opened up. A school was established, but no town developed.

Today Chickaloon children commute by bus 18 to 30 miles to schools in other towns. The nearest volunteer fire department is 18 miles away and is not responsible for Chickaloon residents.

Frisby and Pfauth became involved in FCL in 1984. Both wanted to make life better for their community of 300.

The women began sharing their FCL training with members of the Chickaloon Pass Improvement Association. Frisby became president and promptly negotiated a 40-acre land swap with the borough. Borough land had been designated for community use, but the parcel did not include enough level, usable land. She and other community members surveyed the land, then involved borough officials in the survey so they were well informed of the problems. The next step was to negotiate the swap with the borough assembly, which was accomplished last year.

Other accomplishments of these Alaskan FCL'ers include writing a grant proposal and giving public testimony to obtain funds to build a community center, and developing a map that identifies where each resident lives so neighbors can easily locate each other if there's a house fire or other emergency.

### A Gift For Bloomfield

In New Mexico, FCL Trainer and state Board Member Julie Hunter wanted to do something with the refuse-strewn triangle of land on Highway 64 in Bloomfield that was such an eyesore.

In 2 years, Hunter and a core group of six friends plus community members and Extension turned an illegal dumping ground into a beautiful park.

Initially Hunter and her friends entered the *Family Circle* magazine contest, "Make America Beautiful." Hunter thought entering the contest would ensure commitment on the part of the people. It worked. They were the 1985 national winners.



The original triangle grew to 1 1/2 acres with six large beds of flowers. A coalition of community groups prepare, plant, and maintain the beds.

Extension provided the landscaping, plant selection, and planting instructions. The group raised \$750 for the sprinkler system, seeds, and plants.

Residents are grateful to the FCL-trained volunteers for the gift they provided and consider the park the center of beauty in Bloomfield.



### FCL Efforts Expand

In September 1986, participants from 42 states and Guam in addition to the original six states attended a national FCL dissemination workshop. Many states plan to begin FCL programs. The W.K. Kellogg Foundation provided funds for the pilot FCL project. Recently Kellogg's Chairman of the Board Russell Mawby announced that because of the program's success the Kellogg Foundation will provide up to \$50,000 to any state with an approved plan for an FCL program.



*\*The following persons contributed to this article: Jean S. M. Young, FCL Coordinator, University of Hawaii, Honolulu; Patricia E. Aune, Extension Home Economist, Palmer, Alaska; Greg Tillson, FCL Coordinator, Oregon State University, Corvallis; and Mary Ellen Payne, FCL Coordinator, New Mexico State University, Las Cruces.*

# Leaders For Libertyville, USA



**Devon Phillips**  
*Information and Publications Editor*  
**Cooperative Extension Service**  
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**Orono**

*Above: Hancock County Extension Agent Ron Beard (second from left) meets with fellow members of the New England Rural Leadership, (NERL), a regional Extension program, at the Maine state capitol in Augustus. Beard is Maine coordinator of the NERL, an organization that develops effective leaders in New England.*

Scott Vaitones had an uneasy feeling. Surveying the world beyond his lobster boat, the then 34-year-old fisherman from Tenants Harbor, Maine, saw what he considered problems in the shellfish industry. He wanted to help solve those problems, but he didn't know where to start.

Vaitones found a partial answer to his dilemma in New England Rural Leadership (NERL), a regional Extension program designed to develop effective, imaginative leaders for rural and small-town New England. If you can't fight city hall, NERL seems to suggest, why not move in?

**Pilot Program Adopted**  
NERL evolved from a pilot program established in Pennsylvania by the W.K. Kellogg Foundation and supervised by Daryl Heasley of Pennsylvania State University. Later, the Northeast Center for Rural Development at Cornell adopted the idea, designed the present 2-year course drawing on the educational resources of the Cooperative Extension Services in six northeastern states, and, with the aid of Extension staff in those states, secured a \$752,200 grant from Kellogg to initiate the program.

As Extension Community Development Specialist and Maine NERL Coordinator Conrad Griffin recalls, frustrated would-be leaders from all walks of Maine life suddenly emerged, seeking admission to NERL. In 1982 and 1984 combined, 110 Mainers applied to participate in the program.

**Shortage Of Leaders**  
The deluge of applicants may have stemmed, in part, from an often underestimated problem in rural communities: the shortage of trained leadership. Some areas, unable to pay professionals, rely on volunteers with little, if any, experience in public decisionmaking or insight into the issues facing their town, region, and state. Towns that can afford to pay for leadership may have trouble recruiting and retaining capable leaders. And the void is deepening as responsibility for managing growth and change shifts from federal and state governments to communities.

Announcement of the NERL program also seemed to touch a need felt on a personal level—a drive to help improve one's community. Certainly, Mainers selected to participate seemed unfazed by the course requirements outlined in the brochure: attendance at 10 3-day-weekend workshops over 2 years, seminars at state

capitols and in Washington, D.C., plus a summer assignment.

Through the program, participants would improve their understanding of local, regional, and national issues; of how groups and governments behave; and of themselves as catalysts for change.

**First Program Cycle**  
At the beginning of the first 2-year cycle, 83 participants from six states met at a hotel in Massachusetts where they were declared citizens of a mock community, "Libertyville, USA," and faced with a vote on whether or not to build a new school.

That exercise, like others that followed, taught participants not only about local decision-making but also about their own strengths and weaknesses. Charles Woodward, a University of Maine crop technician and Libertyville's "mayor," comments, "I was simply amazed at how I wheel and deal. I still do it, but at least I'm aware of it now."

Continuing through the program, NERL's tackled an imposing agenda. Workshops focused on topics including "Public Issues vis-a-vis Individual Concerns," "Values Clarification," "Human Resources of New England," and "Networking/Capacity Building."

**Increased Confidence**  
Surviving the challenges NERL presented brought increased confidence. And that, according to many graduates, is the program's greatest reward.

For Cathy Newell, an adult education director in Bethel, NERL became "a safe place to try out new skills." She used

the self-assuredness she gained to participate in fundraising for a nearby public television station and to help administrative teams in her school district become more effective.

According to Quentin Clark, a power dispatcher from Brownville, NERL "gave me the push I needed" to win election to the school board, speak before hostile audiences, and secure legislation for a new school building. Last spring, Clark made a bid for a seat in the state legislature.

And lobsterman Vaitones used the training to become a lobbyist for the Maine Lobsterman's Association—"something I wouldn't have done 2 or 3 years ago," he says. Recently, he left lobstering to serve as business manager for a local school district.

#### **Camaraderie Highly Valued**

For other NERL'ers, the camaraderie inspired by the program was the most valued dividend: "I've had better discussions going to and from NERL meetings with people from down east than anywhere else in the past 10 years," helicopter pilot and former Calais Mayor John Cashwell allowed.

Several Maine Extension agents also participated in the NERL training, reaping insights and skills they have since put to good use in their jobs. Hancock County Agent Ron Beard liked the program so much that he recently agreed to succeed Griffin as Maine coordinator.

#### **Leadership Curriculum Expands**

Other NERL graduates tend to share Beard's dedication. Confirmed NERL'ers Vaitones, Newell, Woodward, Margaret Russell, Karen Kingsley, and others are now plowing skills they learned through the program into LEAD, Inc. (Leadership, Education, and Development), a new, expanded leadership curriculum for Maine.



While Maine will continue to participate in New England-wide leadership training, LEAD, a nonprofit entity, will offer training for more aspiring rural and small-town leaders in Maine than the original program can accommodate.

"People were screaming to get into NERL," Griffin explains, "but the program could admit only 25 percent of Mainers who applied." Then, too, NERL graduates who wanted a refresher course or more advanced training had nowhere to turn.

To help respond to those needs, LEAD will raise funds for leadership training, define curricula, and conduct training programs through Extension and other groups.

Griffin, who is working with Extension agents Beard, Doug Babkirk, and Theresa Ferrari to develop LEAD's course content, says the new program will draw heavily on NERL traditions.



In addition, LEAD will introduce some new features—a more flexible schedule and separate curricula for emerging and existing leaders. Extension and other University of Maine faculty members, along with government and industry leaders, will serve as trainers.

Involved agents and specialists see LEAD as a way to make leadership training an integral part of Extension education in Maine. More specifically, it is a way to keep adding, as Griffin says, to "a cadre of people we're going to continue hearing about," rural Mainers with the skill, confidence, and vision to lead. ▲

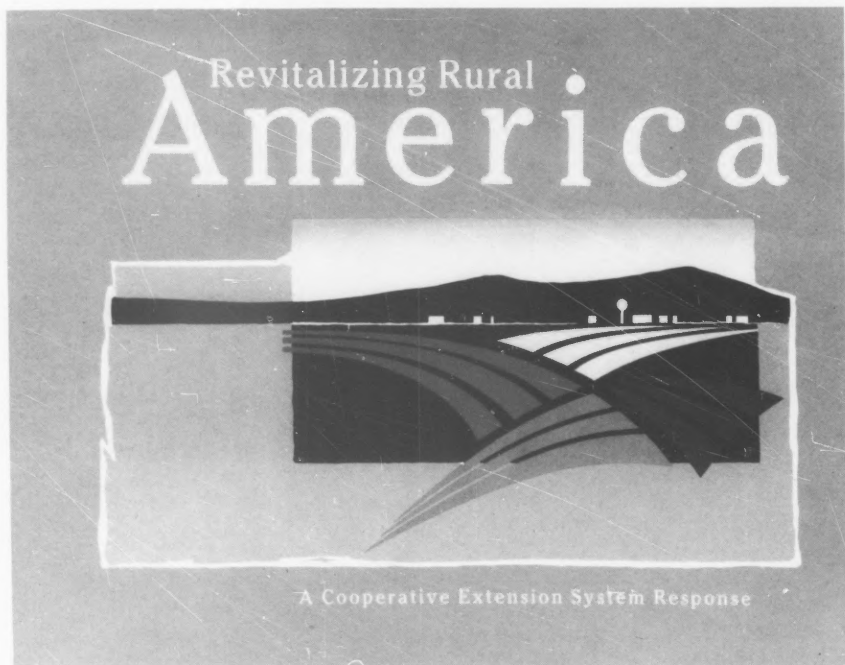
*Above and below:  
Lobster boats anchor  
off the Maine coast. Scott  
Vaitones, a lobsterman from  
Tenants Harbor, found the  
way to solve problems in the  
lobster industry was to take  
leadership training with the  
NERL. Afterward, he served  
as lobbyist for the Maine  
Lobsterman's Association.*

*Photographs courtesy of  
University of Maine  
Extension.*



# Revitalizing Rural America— ES-ECOP Task Force Report

12 Extension Review



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Diversity is the hallmark of rural America. But at the end of the decade, rural America is at a critical juncture. Its vitality is being tested. The ES-ECOP Task Force cited critical issues facing rural America: diminishing economic competitiveness of rural areas; dependence on a few sources of income for many rural communities; growing service demands on local governments as revenues diminish; difficulty many rural institutions are experiencing in adjusting to the structural changes in resource-based industries; dependence on volunteer leadership in rural areas; and need to maintain the quality of natural resources for the long-term well-being of rural areas and the Nation.

"Revitalizing Rural America," is one of eight National Priority Initiatives identified by a National Priorities Policy Task Force, jointly appointed by ECOP and ES-USDA.

#### **Extension Role**

The task force named four education and training elements

that relate to Extension's role in revitalizing rural America. These are the need to—

1. Provide a perspective on local development issues; 2. Increase the knowledge base for individual and community decisions; 3. Develop the skills necessary to achieve individual and community goals; and 4. Help to shape the decisionmaking environment.

Extension's contribution to rural revitalization applies to three major impact areas:

#### **Economic Development**


The general strategies Extension has outlined for economic development of rural communities are to improve the efficiency of existing businesses; increase new business formations; capture new dollars from both inside and outside the community; attract new basic industry/employers; and capture financial aids from broader levels of government.

#### **Institution Building**

Extension institution building efforts can include: building networks among local, state, regional, and federal organizations; improving fiscal and operational management (public and private); increasing understanding of policy alternatives and their implementation; and supporting rural leaders with information, training, and education.

#### **Cultural Change**

Extension can contribute to cultural change by helping rural families deal with economic and social changes; understanding and interpreting trends that shape strategic local decisions; assisting with problemsolving and public policy decisions; and building the leadership capacity to plan for the future.

The ES-ECOP Task Force believes that by generating the same type of commitment and energy to revitalizing rural America as Extension did to increasing agricultural efficiency, the Cooperative Extension System can help rural America realize its potential. 



# When The Bottom Line Is Community Action

Extension Review 13



Tiny Necedah, Wisconsin, population 700, and growing Portage, population 8,000, do not appear to have much in common. But both municipalities are now charting their own economic development courses because they took advantage of the Community Analysis Program offered by Extension statewide faculty and CRD agents over the past 2 years.

As a result of this educational program, Necedah has a new bakery and a developing industrial park. Portage boasts two new tenants—Dealers Manufacturing and Dawn Foods—in its industrial park. Portage can now also claim a revitalized downtown with rehabilitated store and office fronts, better traffic flow, solid waste disposal, and promotion and tourism efforts.

"The Community Economic Analysis Program was based on the conviction that most economic initiatives are generated locally," says Ayse Somersan, Extension Community, Natural Resource and Economic Development state program leader. "The program is not an end in itself, but a tool communities can use to plot action to improve their economic status."

## Programs In 36 Counties

In less than 3 years, Glen Pulver and Ron Shaffer, Extension CRD specialists, University of Wisconsin, conducted economic analysis programs in 36 Wisconsin communities. Working with Extension CRD agents integral to the endeavor's success, Extension statewide faculty helped leaders study their community's economic activity over a period of time, compare it with similar community economic profiles, and identify what the community does to create jobs and generate income.

After the county CRD agent assembles representative, interested community leaders, CES statewide faculty help the county agent present the community economic analysis program in four 2-hour sessions.

The sessions review anticipated changes in the national and state economy, and analyze community economic activity over time and compare it with similar communities in the state. Participants complete a 20-item questionnaire that helps them examine community economic development efforts. In the final session, CES faculty help local leaders set priorities and develop strategies. The community assigns and delegates tasks and the CRD agent provides the important follow-up and assistance.

## Initiatives

Community leaders identify the following initiatives in their action plan to increase jobs and income: improve the efficiency of existing firms; improve community ability to capture outside dollars; attract new employers; encourage new business formation from within the community; and increase government aid.

The CES Community Economic Analysis Program differs from assistance available through other sources. CES statewide faculty maintain large secondary databases, providing local leaders community level information and the opportunity to compare their community with similar ones across the state. Community leaders receive the Community Economic Preparedness Index to assess their economic development efforts, as well as analytical tools required to conduct similar economic analyses.

Most important, local leaders are not provided "expert" recommendations, but set their own economic development action plan based on good information and enlightened self-assessment. Developing leadership and expanding horizons of local leaders are critical program ingredients. But the bottom line is community action. The program requires local citizen commitment to translate their goals and priorities into reality.

CRD agents who have gone through the program with one or more communities in their counties have started to work with other interested communities in their counties without waiting for available specialist time. Such county CRD agent growth and response is critical if the program is to be offered to most of Wisconsin's 1,500 communities interested in economic development. ▲

Extracted from the Factsheet, **Community Economic Analysis Helps Revitalize Necedah And Portage**, a publication of Community, Natural Resource and Economic Development, at the University of Wisconsin-Extension.

**Douglas J. Bradley**  
Assistant to the  
Chancellor,  
University of  
Wisconsin-Extension,  
Madison

Portage, Wisconsin, (population 8,000), took advantage of the Community Economic Analysis program offered by Extension faculty and CRD agents. Then, with help from tax incremental financing, Portage's Downtown Revitalization Committee added trees, grates, and antique streetlights to give downtown a new look. Ellen Swan, Portage Area Chamber of Commerce executive director, and Ray Lenzi, Columbia County CRD agent, instrumental in this refurbishment, view this example of community pride in action.

Photograph courtesy of Michael A. Smith, University of Wisconsin-Extension.

# Cooperatives—Tool For Rural Revitalization

14 Extension Review

**Ann Hoyt**  
*Extension Consumer  
Cooperative Specialist*  
*University Center for  
Cooperatives*  
*University of  
Wisconsin, Madison*

Wisconsin is fostering and assisting diverse cooperative businesses as one way to strengthen the state's rural agricultural and nonfarm economies.

Cooperatives can provide a needed economic service not presently available in rural areas or a service that can increase net returns to members.

Cooperatives differ from other types of businesses in that users own and control the business; control of the business is democratic and based on one member, one vote; membership in cooperatives is open and voluntary; net earnings are reinvested in the cooperative to improve services or are distributed to members; and emphasis is on continuing education for directors, staff, and members.

## Wisconsin Tradition

Wisconsin has a long tradition of cooperative activity, particularly in agricultural and rural areas. In the 1920s and 1930s agricultural colleges and Extension actively educated farmers on cooperative principles and assisted in forming agricultural cooperatives.

In 1962 cooperatives and the University of Wisconsin joined forces to form the International Cooperative Training Center on the Madison campus. The Center provided training and technical assistance to cooperative personnel from developing countries. In 1970 all cooperative training programs combined into one unit—the University Center for Cooperatives. During the 1970s agricultural cooperatives were the focus of the Center's domestic programs.

## Services Expand

Recently the Center expanded services to include consumer and worker-owned cooperatives. Emphasis is on new uses of the cooperative business model that hold promise of major economic impact. Programming includes training for members, boards, and managers; developing educational materials; conducting feasibility studies; and assisting with organizing, consolidations, and mergers.

"The demand for innovative cooperative programming is even greater than we expected," says Frank Groves, chair of the Center. "We have found a variety of needs in rural areas can be met with the cooperative business model."

To respond to those needs, Center staff published a manual, *Building Consumer Cooperatives*, for Extension agents. The handbook explains how to determine the need for and organize a cooperative business.

"Cooperatives are attractive because they are owned and controlled locally," says Cooperative Specialist Tom Schomisch. "They are an effective way to keep profits at home and local investor capital in rural areas."

## Extension Assistance

Rural groups and organizations have formed cooperatives in a wide variety of industries. Extension staff are assisting these new and potential cooperative owners.

Dick Vilstrup, Extension professor of meat and animal science, provided a preliminary feasibility analysis and advice on organization and structure to a farmer-owned infrared tested hay marketing cooperative.

"Since the cooperative has been in operation, we've seen the price of Wisconsin hay move from among the lowest in the country to among the highest," says Vilstrup.

## Cooperative Housing

Seventy-nine percent of Wisconsin's rural elderly households own their own homes. High financial and physical maintenance costs, however, often leave little alternative to the elderly but to allow their homes to fall into disrepair.

"Cooperative housing offers a good opportunity to meet housing needs of the elderly in non-metropolitan areas," says Extension Housing Specialist John Merrill.

"Cooperatives can combine the equity of rural elderly homeowners and a number of sources of loans available to cooperatives to provide sheltered housing options," he adds.

Merrill worked with the Center for Cooperatives to sponsor a statewide conference, "Affordable Housing, The Cooperative Solution," which identified opportunities and difficulties in developing cooperative housing for the rural elderly. He developed a slide show on cooperative housing for use by county Extension agents and community groups.

## Key To Success

Cooperatives in rural Wisconsin have proved successful when a community with a strong core of leaders identifies a mutually shared objective; potential members work together for mutual benefit; and members support the new cooperative with their investment, patronage, and participation. ▲



Top: A cooperative grain elevator in the Midwest.

Below: A typical branch cooperative display room offering farm supplies.

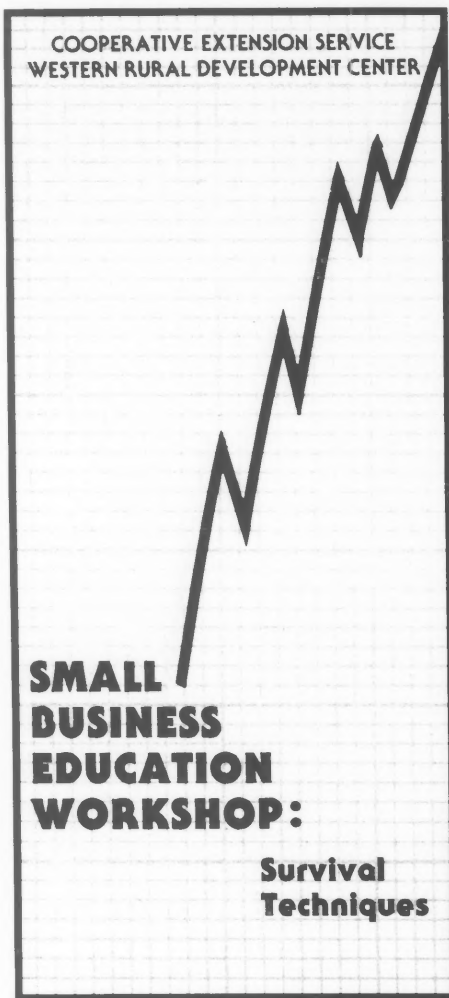
Wisconsin is fostering cooperative organizations to strengthen both the state's rural agricultural and non-farm economies.

Photographs courtesy of Agricultural Cooperative Service.

# Surviving In The Rural West

16 *Extension Review*

**Barbara Baldwin**  
Editor  
*Western Rural*  
Development Center  
Oregon State  
University, Corvallis



In today's economic climate, small rural business people desperately need strong business education and survival techniques. Recent Small Business Education Workshops in the West provided this much-needed strategy and expertise.

Sponsored by the Western Rural Development Center at Oregon State University and Extension Services in the 13 western states, the series of four workshops in rural communities are part of a nationwide Extension effort to revitalize rural America.

"We really appreciate Extension bringing business education to our community" is the phrase repeated as Extension business specialists work with local resource people and citizens in New Mexico, Nevada, Utah, and California.

### Responding To Change

Each of the four rural development centers (Western, North Central, Northeastern, and Southern) has mounted a strong effort in business education as Extension responds to changes in rural economies. The farm crisis, mining shutdowns, and loss of industries have made it necessary for people to seek other employment. Their communities also lose the businesses that provide support and services, so unless people simply migrate away, they must establish businesses of their own.

Extension agents and specialists have redefined their roles and developed information to help rural communities meet these new challenges. The farm crisis precipitated much of the latest effort.

"A survey of farmers in Montana shows that 45 percent of those interviewed did not expect to be in agriculture by 1990," reports Allen Bjergo, Montana Extension community development specialist.

### Workshops Initiated

During 1983, the Western Rural Development Center sponsored a series of workshops for communities in transition. These "Hard Times" sessions revealed many opportunities for development in rural communities and motivated Robert Coppedge, business development specialist at New Mexico State University and one of the Hard Times group leaders, to formulate the Small Business Education Workshops along with Marion Bentley, associate director of Business and Economic Development Services at Utah State University, and Tom Harris, associate professor, Department of Agricultural Economics, at the University of Nevada.

Faculty for the workshops first met at Reno, Nevada, and later joined personnel from the other three rural development centers for a training conference at Memphis, Tennessee. The small mining and tourism town of Raton, New Mexico, was the site of the first workshop.

#### **Finding Alternative Income**

Communities once dependent on agriculture or other basic industries are often ill-prepared to face change, and they may be far from universities, schools of business, or other agencies that can offer assistance. People tend to want to stay in their communities even when farmland is consolidated and their farmhouse is surrounded by land now owned by others. Some people will open and operate businesses with the resources they have left. Others may begin to process and market alternative products to supplement farm income.

According to Bjergo, some Montana farmers have added value to farm products by making specialty cheese with farm-produced milk or by drying flowers and packaging them for retail sale. A wheat farmer established a custom slaughter plant that employs him and some of his neighbors during the off-season. Other farmers weld and sell cattle chutes and stock racks in the winter. Farmers who have been forced off their operations stay in their home communities by manufacturing and selling posts, poles, and house logs. Another kept his private plane and uses it to sell log homes nationwide. Extension helped each of these entrepreneurs to plan, borrow money, and market their products.

#### **Overcoming Obstacles**

Rural people who have traditionally relied on income from farming operations or from employment in mining or another resource-based industry, usually face several obstacles when they endeavor to establish a business enterprise, either as a supplementary or primary source of funds.

They tend to lack the skills and understanding to develop an effective business plan or to prepare sufficient documentation and financial statements when they approach investors or lenders. People starting or expanding a business also need skills in employee and customer relations and should understand how to obtain market information and plan marketing strategies.

#### **Needs Addressed**

The Small Business Education Workshops addressed these needs. Few of the attendees, for example, had ever seen a business plan. Some of the first plans Bjergo prepared were copied and

circulated among bankers who had formerly relied upon statements of net worth but found they needed much more information in the current economy. Nonprofit groups were urged to fill out business plans since they must also balance their books and repay loans.

Bentley conducted sessions in consumer and employee relations. Harris and Mike Mooney, Extension specialist at the University of Nevada, helped local agents work with chambers of commerce to develop and evaluate surveys of merchants and customers. George Goldman, Extension specialist at the University of California, along with Coppedge secured specialists in marketing, law, cash flow, and other subjects requested by participants.

The closing workshop session featured training in stress management, developed by Washington State University Extension Specialist Martha Lamberts.

#### **Positive Evaluation**

Evaluations of the workshops were favorable but, as Mooney says, most important is that "people who missed the first workshop keep calling us back for more instruction."

The Western Rural Development Center and Extension Services in the 13 western states will continue to bring rural business people timely educational and other forms of assistance that can help them survive and thrive in their communities. ▲

### **Future Issues**

**Production schedules and focus of future issues of Extension Review are listed below:**

- Summer 1987.  
"Financial Strategies: Farm, Home, Community," article deadline April 10, 1987.
- Fall 1987.  
"Competitiveness and Profitability of American Agriculture," article deadline June 1, 1987.
- Winter 1988  
"Economic Development," article deadline August 15, 1987
- Spring 1988  
"Conservation And Management of Natural Resources," article deadline November 15, 1987.



# Creating A Community From A Crossroads

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**Darcy Meeker**  
Extension  
Communications  
Specialist, IFAS  
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Immokalee (population 15,000) is situated at a crossroads in the vastness of the Everglades. This town in Collier County at the agricultural heart of southwest Florida is heavily populated by new immigrants and a winter influx of migrant pickers who work at the vegetable packing plants. Until recently, Immokalee was a make-shift place, too temporary to clean up or brighten again.

Currently, Immokalee's image is changing rapidly. "We had a long way to go," says Denise Coleman, Extension agent from the University of Florida's Institute of Food and Agricultural Sciences (IFAS). "Immokalee was for many just a worksite at an intersection, a crossroads. Now it is becoming a community and the community is finding its voice."

Many believe the mechanism for developing this community spirit followed the Learn To Lead Program which Denise Coleman began pilot testing from her IFAS office.

"Before the program," Coleman points out, "there was no means to develop community spirit and no recognized leaders for the segments of the community."

Immokalee's population is nearly half Hispanic. Many Haitian immigrants who are not yet citizens and who do not speak English have settled in the town. During the winter nearly half of Immokalee's population merely come to town for a little while—to teach, to pick vegetables, or to provide the services of county government. Approximately 75 percent of the school teachers commute. When the migrant pickers arrive during the winter the population of the town nearly doubles.

"There was no forum to bring the groups together," Coleman says. "There was no government except that provided by the county from Naples, a well-to-do community 40 miles away on the Gulf of Mexico. Immokalee had no lines of communication for citizens to express their views and hold their leaders accountable. Many county officials felt the same way. The officials wanted to connect with the citizens of Immokalee as badly as the citizens wanted to connect with them."

## Forums

In 1982, Denise Coleman, with other IFAS Extension specialists, began the first Learn To Lead Program for the citizens of Immokalee. "These forums more resembled a town meeting than a classroom," she says.

Approximately 200 citizens attended these forums which focused on leadership theory, crime prevention, growth management, and barriers to leadership. From these forums par-

ticipants learned to assess community needs and how to communicate and coordinate with leading officials about their priorities.

This first phase led to the creation of a crime watch group and united citizens so that they established a community center.

Leaders were identified and approximately 40 participants attended the second phase courses in Public Problem Analysis, Group Communication and Managing Conflict, Community Organization And Structure, and The Social Action Process for themselves.

"Coleman's program in Collier County was a very successful pilot test," says Beau Beaulieu, the IFAS rural sociologist who developed the course materials. "The Learn To Lead Program helped people climb over the walls of cultural differences to meet each other as fellow human beings with common goals and feelings. The people conducted a needs assessment for their community and developed a plan of work to address these needs."

## Leadership Achievements

Ophelia Allen, a one-time teacher's aide, is now a candidate for the school board. Allen is the first black to run for office in Collier County. Gilberto Gomez, former vegetable picker, is canvassing the Hispanic community to register voters and encourage them to vote for Allen.

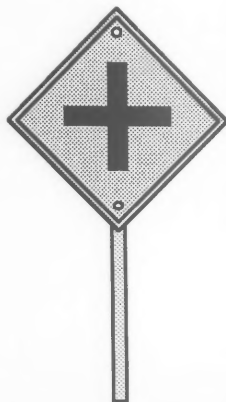
As a result of the program, Immokalee now has a new park near its school. Leaders are working to attract a new industry—citrus—to the area. A community program is active in combatting drug use in school. Public housing residents are learning to form associations that will serve their needs.

Anne Goodnight, county commissioner, says, "These achievements are forming the basis for a master plan for Immokalee."

Assistant Collier County Manager Neil Dorrill, former corporate chair who lives in Naples, says the program helped him as much as the citizens of Immokalee. "Before the Learn To Lead Program and my visits to Immokalee I did not know the people or their concerns. That's all changed now."

"Immokalee," Denise Coleman says proudly, "is now a community where people are taking responsibility for their lives and surroundings. They have learned to speak up."

In September 1986, Denise Coleman was awarded the State Leadership Development Award by the Florida Association of Extension Home Economics Agents.



# Alternative Crops—More To It Than Planting Seed

Alternative crops and marketing methods can help some farmers stay in business but they should not be viewed as a complete solution to farm problems. The idea that alternative crops pose limits as well as opportunities dominated a recent 3-day conference on Alternative Farming Opportunities In The South held at Mississippi State University. Over 200 persons from across the South attended the conference which was sponsored by the Southern Rural Development Center at Mississippi State University, the Farm Foundation, the Tennessee Valley Authority, and the Southern Legislative Conference.

"Adversity in agriculture presents a great challenge to those who work with farmers," Lee Polopolus, professor of food and resource economics at the University of Florida, told agricultural researchers and officials. "Alternative crops do have a niche in agriculture," he said. "They are not the solution for every farmer, but there is a place for many of these enterprises."

Farmers in Mississippi and the mid-south have expressed interest in recent years in alternative crops ranging from blueberries and muscadines and alfalfa sprouts to gourds, catfish, Christmas trees, and others.

## Difficulties Should Be Stressed

While some crops may hold more promise than others, officials at the conference agreed the time is ripe to address the needs of farmers faced with unparalleled adversity in traditional crops. Speakers at the conference also agreed that states should become more involved in encouraging alternative crop production among farmers.

"Those helping farmers should emphasize the difficulty in starting an alternative crop operation," P. James Rathwell, Extension economist from Clemson University, South Carolina, told the audience. "Critical elements of success are understanding the limits of one's resources, such as labor, proper soil and irrigation, and the need to work constantly the first year." Rathwell pointed out that alternatives do exist but each one must be critically evaluated on the basis of an individual farmer's operation.

## Aid Needed To Find Markets

Larry Bauer, professor of agricultural economics, Clemson University, stated that an important function of the states is to find ways to help farmers sell alternative crops. "We know we can't solve all the problems of farmers in the South, but in this way we can have a positive influence," he said.

R. J. Hildreth, managing director of the Farm Foundation, a Chicago-based nonprofit organization to improve rural life, reminded the group not to overlook the mixing of off-farm income with traditional and alternative crops. "Perhaps we need to focus more on improving the well-being of farm families rather than trying to preserve the traditional family farm," he said. "Alternative crops will increase farmers' income but farmers cannot depend on them totally."

Bob Coffey, a blueberry producer from Rogers, Arkansas, told the conference audience that crops such as blueberries looked promising as an alternative source of income. "If a grower does his homework there is a place for this market," he said.

Other speakers stressed the need for farmers to develop goals, realistically assess their resources, define risks, and identify markets before investing large sums in alternative ventures.



**Jimmy Bonner**  
Extension Writer-  
Editor  
and  
**Karen L. Moore**  
Extension News Editor  
Mississippi State  
University

## Boom Crops Promise Economic Boost

20 Extension Review

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Extension Assistant  
Specialist,  
Communications  
Louisiana State  
University, Baton  
Rouge



Extension in Louisiana is emphasizing better use of the state's natural resources with programs aimed at regaining profitability.

Opposite: Cucumbers, one of the potentially successful commercial vegetable crops, are harvested from the McKoin farm in Morehouse Parish. Below: Squash from the McCarty farm in the Morehouse area which is at the core of commercial vegetable operations. Above: Extension is participating in a pilot project to determine the feasibility of harvesting and marketing "Cajun Clams." Estimates hold that 24 to 48 billion clams may lie between the Sabine River and the Atchafalaya Basin in Louisiana.

"We wouldn't have made it this far in our commercial vegetable operation if we hadn't had the help of Extension," says Kelsie McKoin, a northeastern Louisiana farmer who is diversifying his operation to include more than the traditional cotton crop.

Likewise, a southern Louisiana fisherman, Malcolm Assevado, says he never would have attempted to begin a pilot project to study the feasibility of harvesting and marketing Louisiana "Cajun Clams" without the aid of Louisiana Cooperative Extension Service agents and specialists.

The efforts of McKoin and Assevado are just part of increased emphasis by Louisiana Extension on diversifying farm operations and better use of the state's natural resources. And that emphasis has led to

increases in commercial vegetable operations, aquaculture acreage, and projects designed to increase use of seafood products native to Louisiana.

### Regaining Profitability

"We have to gear our programs so that we help in regaining profitability in agriculture and natural resources," explains Denver T. Loupe, vicechancellor of the Louisiana State University (LSU) Agricultural Center and director of the Louisiana Cooperative Extension Service.

Loupe lists that as the major priority of Louisiana Extension during the coming years, and he says that goal is closely related to other priorities such as revitalization of rural Louisiana, increased production and utilization of aquatic foods, and the development and additional use of products of agriculture and natural resources.

Other officials in the state share the view that increased activity in the agricultural and seafood industries is the solution to Louisiana's economic woes.

State Budget Director Ralph Pearlman last summer congratulated those attending a Seafood Technology and Marketing Conference sponsored by Extension and the Louisiana Sea Grant College Program "on being part of an industry that can be the salvation of the state's economy."

### Economic Force

LSU Agricultural Center Chancellor H. Rouse Caffey points out that Louisiana already is well on the way to making seafood a major economic force. The university is placing more emphasis on "value-added processing of renewable resources in aquaculture and fisheries," he

adds. "Louisiana already is first in seafood production...and Louisiana is first in aquaculture acres," says Caffey. "What we need to do now is increase the number of processing operations we have in Louisiana so we can ensure that the money generated by our aquaculture and marine development programs stays in the state."

The same principles apply to the benefits of commercial vegetable operations, according to Gerald Gesler, an agricultural economist who has taken leave from his Extension post to help organize a cooperative to process and market vegetables produced in northeastern Louisiana.

"This is an excellent idea for Louisiana; it's an idea whose time has come," Gesler says of increasing vegetable production. "And I think once we get these operations running more smoothly, people are going to stay with commercial vegetables because they can make \$300 to \$500 more an acre than they do with cotton.

"We're talking about an industry that could mean \$12 to \$15 million for this part of the state," he says, explaining that crops with the potential for great success include cucumbers, squash, cantalopes, and sweet corn.

#### Increased Acreage

Such attitudes have meant hundreds more acres—primarily in northeastern Louisiana—are devoted to commercial vegetables rather than cotton or soybeans, according to Extension specialists, who point out that farmers can produce several crops of vegetables on a piece of land during the year. Likewise, Extension personnel also say increased aquaculture acreage for crawfish and catfish serves dual purposes.

"Crawfish production is not just a matter of developing a new industry for the state," says Extension aquaculture specialist Larry de la Bretonne, adding that crawfish acreage in the state has increased from 2,000 in 1960 to 120,000 in 1986.

"Since crawfish can be included in an ongoing agricultural operation and handled just like any other crop, it means you are making better use of your resources because your operation is not sitting idle during the winter months."

Similarly, Louisiana's acreage devoted to catfish operations is increasing rapidly—with more than 4,700 acres in catfish ponds in 1986 and a "promising outlook" for further development.

#### Skilled Professionals Added

Increased efforts in vegetable and seafood production have led to the recent addition of more specialists and agents skilled in commercial vegetable and aquaculture operations to join the growing ranks of Louisiana personnel trained in those areas and others including seafood technology, marine resource economics, and vegetable marketing. And those efforts have caused a variety of Extension personnel to team up on projects aimed at increased utilization of such Louisiana products as alligator meat, crawfish, blue crabs, and "Cajun Clams."

What does that mean for the state? "It means we can move Louisiana into a position where it is the seafood basket of America, as well as remaining or becoming an important force in several other agricultural areas," according to Louisiana Director Loupe. ▲





# Computer READI

22 *Extension Review*



**Mary Emery**  
*Director, Rural  
Education/Adult  
Development In Idaho  
Cooperative Extension  
Service  
University of Idaho,  
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Today's rapid growth in computer technology brings an increased demand for computer literacy courses. But rural people often lack access to the kinds of continuing education and vocational programs that provide such training.

Now adults living in rural Idaho have the opportunity to learn more about computers through Extension's READI (Rural Education/Adult Development in Idaho) Project. During the last 2 years, over 600 people have signed up for READI computer classes in 14 locations statewide.

**Learning Opportunities**  
Idaho developed the READI Project not only because of the demand for computer education in rural areas, but also because of the concern

that rural areas with no access to computer training would continue to be left behind in this age of new technology. The Fund for the Improvement of Postsecondary Education provided funding to pilot the program.

Opportunities to learn about computers are important to both individuals and communities. Such opportunities are particularly important for those areas where traditional rural industries are no longer able to support large portions of the population.

Programs that foster development of computer-related skills among rural adults can be vital resources in these communities.

Economic development in these areas and the jobs they create are likely to encompass new technologies.

In addition, the computer-literate consumer is increasingly important to the smooth flow of business as more and more establishments add computerized customer services. For parents, the increased role of computers in their children's education encourages many adults to become computer-literate.

Finally, many rural adults seek educational opportunities in computers simply because of the fascination they have for new technology.

## **READI Courses**

READI offers two classes for rural residents. Unit I of the



curriculum is a computer awareness class. Students learn the basics of using a computer including booting programs, using disk operating systems, and evaluating software. They also learn a little about programming and experimenting with a word processor.

In the Unit II course on computer applications, students learn to use a spreadsheet and data base, and how to improve their word processing skills. Classes may include a telecommunications demonstration.

Students learn to use the computer as a problemsolving tool while working on such tasks as developing a family budget, keeping a check register, or designing a mailing list.

Working in small groups, students apply computer applications to a specific problem scenario such as developing a community center, organizing a users' group, doing their book-keeping with a computer, or planning a family reunion.

Teachers for the classes are local instructors who have received training in teaching rural adults about computers at the annual READI Summer Institute. Each class is organized by a county advisory committee who takes the generic state program and translates it into an effective local offering.

#### Benefits To Participants

People participate in READI for a variety of reasons. About one-third of participants take the course to improve their job skills. Another one-third participate in READI because they want to computerize their small business, ranch, or farm. A final third are interested in learning to understand computer jargon so they can communicate more effectively with their children. The majority of participants are women.



One assumption made early in the project is that a successful experience with READI encourages learners to go on to other educational activities.

READI graduates use their new skills in a variety of ways. In a survey taken 8 weeks after the initial classes finished, 57 percent of participants reported they were currently using their computer skills to evaluate and purchase hardware and software, apply new skills to the workplace, or more efficiently manage a farm or ranch. One year later the original group of READI graduates reported that, as a result of the course, they had:

	<i>Percent</i>
Changed jobs	9
Entered the labor market	9
Taken another class	22
Bought a computer	9
Other (got a raise, etc.)	19
No response	31

(Percents may not add up to 100 due to rounding)

#### Benefits To Communities

When Extension staff started the computer project, they assumed communities with no postsecondary educational programs would be interested in expanding their offerings beyond READI. Several of the counties where READI operated now offer continuing education courses. Several others have expanded their community education programs. In two counties, the READI program sponsored a community computer expo with large turnouts of local residents. Involvement in READI has also spurred community efforts in economic development in several locations.

To learn more about the READI Project, write to the District 1 Cooperative Extension Office, Ag Science III, University of Idaho, Moscow, ID 83843. Manuals for instructors, participant guides, and a starter kit for Extension agents interested in developing a READI Project are available. ▲

*Opposite and Above:*

*Approximately 600 rural residents of Idaho have attended Extension's READI (Rural Education/Adult Development in Idaho)*

*Project in 14 locations in the state in the last 2 years. This course in computer literacy ensures that rural residents who lack access to such training will not be left behind in this high-tech age. Computer-related skills can be vital resources in these communities.*

# Rural Teens Accentuate The Postive

24 Extension Review

**Karen Pace**  
4-H Information  
Coordinator  
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Friends, school work, sports, skin problems—these are the issues of highest concern to rural teenagers nowadays, right?

Wrong.

Try bankruptcy, loans, careers, making money, and death.

Surprised? So was the 4-H staff in Gratiot County, Michigan, who surveyed local teenagers to find out what causes stress in their lives.

"Their responses showed us that these teens were dealing with adult problems and issues along with those normally associated with kids their age," says Nicholie Hoffman, Michigan State University Extension specialist and former Gratiot County 4-H youth agent. "We were concerned that they might not be equipped to handle their feelings."

## Staying Positive

The teenagers are 4-H and Future Farmers of America members who belong to a Cooperative Extension Service-sponsored group called "Positive Teens for Gratiot County." And though the name sounds out of sync with their current frame of mind, these teens are trying to stay positive as they and their families face the most severe farm crisis in the history of their community.

Gratiot County farmers have been beset with the same challenges as farmers all over the country—dropping land values, high interest rates, and falling prices for crops.

But no one could have been prepared to deal with what happened in Gratiot and many other Michigan counties this fall.

For 26 consecutive days in September the sun did not shine. For 26 days rain fell on ripening fields, devastating what could have been bumper crops for many farmers—washing away hopes that this harvest could help bail them out of already tight financial binds.

"This is the worst the farm situation has ever been, and no one will argue that," says Corey Roslund, Gratiot County 4-H youth agent. "CES, in cooperation with other agencies, has been providing excellent support and information to farmers to help deal with the crisis. But we wanted to make sure that the young people's feelings and fears were not overlooked."

## Support Group Helps

"Positive Teens for Gratiot County" brings together students from all the area high schools, to share feelings and provide support for one another. "It's very scary not knowing how the farm year's going to turn out," says 15-year-old Carrie Stoneman of Breckenridge. "It's scary not knowing if we're going to be able to continue farming or if we'll lose our land. It's awfully risky."

The teen years are difficult enough with the pressures of peers, homework, and body changes. But teenagers in farming communities have the added pressures of hard work, long hours, and worry over the viability of their family businesses.

"These kids care very deeply about their parents and about their family farms," says Hoffman. "They have a strong need to feel like they're doing something—helping in some way—and that's what 'Positive Teens' is all about."

"The group started about 2 years ago as an activist group that wanted to make a difference," says 4-H agent Roslund. "But their focus has changed a bit lately."

What started as a group of about 70 teenagers involved in a variety of community service and social activities evolved into a close-knit support group of teens who draw on each other's strengths to get them through the toughest of times.

After only a couple of support group meetings, which included sessions on stress management and coping skills, it was clear that the teens shared similar concerns and feelings. They were scared. They were angry. They felt guilty, helpless, and hopeless.

"But just talking about it with people who understand really helps," says 17-year-old Scott DeVuyst. He is a senior at Ithaca High School, works part time at a farm equipment store, and helps his father farm 500 acres of cash crops. "It helps to know that you're not alone—that some of your friends also feel guilty and somehow responsible that their dads aren't doing so good," DeVuyst says.

## Communicating Via Video

The guilt issue is intensified for many of the teenagers because they are so concerned about their parents and the pressures on them that they don't want to burden them with their own concerns. But "Positive Teens for Gratiot County" came up with a positive solution to that problem.



*"Positive Teens for Gratiot County," an Extension Service-sponsored group in Michigan, whose members are 4-H'ers and Future Farmers of America, share feelings and provide support for one another during a period of severe farm crisis in their community. 4-H'ers Carrie Stoneman and Scott DeVuyst attend a videotaping of one of their support sessions that will be shown to their parents to encourage better communication between them.*

"The kids asked if we could arrange to videotape one of our support sessions," Hoffman says. "They wanted to show the videotape to their parents in hopes that it would help ease open the doors of communication."

A local cable company was hired to videotape an hour-long session of the group; the teens had the option of showing the tape to their parents.

"I'd like Dad to see how this group operates," says Scott DeVuyst. "I'd like him to know how much it has helped me and maybe encourage him to attend adult support groups similar to this."

"Don't give up," is the message Carrie Stoneman wants to convey to her parents. "Sure, this is a bad time right now and it may get worse," she says into the camera. "But I'd rather see you hang onto something that you both love doing."

Communicating their feelings won't solve the serious problems and issues facing farmers and their families. For some, the flood of 1986 will be remembered as the last straw—the final blow that forced them to concede to economic strains, ending generations of tradition, forcing radical changes in lifestyles, and dousing dreams of the future.

But these teenagers believe that isolating oneself and holding in all those feelings can intensify a bad situation, making the problem seem worse and increasing the chance of serious physical and mental health problems.

#### **Positive Changes**

"I've seen so many positive changes in these teenagers since we started the support group," says Sharon Fenton, Gratiot County program assistant in charge of teen programming. "Their confidence has increased, they feel better about the whole situation, they seem to have a much better attitude about school, they're exploring all their options, and, overall, they are approaching the future in a very positive way." ▲

## Home Is Where The Business Is

26 Extension Review



**Vicky Potter**  
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Three Alabama Extension programs for home-based businesses—Food For Profit, Sew For Pay, and CASH Creative Artisans Succeeding At Home—are as effective today helping people find alternative income sources as when they were begun.

"The Food For Profit Program was initiated in 1982 with nine area meetings," says Oleane Carden Zenoble, Extension foods specialist at Auburn University, who developed the series for people interested in starting small food businesses. "About 750 people attended the area meetings, but requests for information came in long after they were ended. We've sent out more than 1,500 information packets.

The Food For Profit series covered how to decide whether to start a business, how to price and related topics, health department regulations, state business license laws, and food safety. "A number of those who attended have successfully started small food businesses," Zenoble says.

"But those who received our information and decided not to start a business were also helped. They did not waste money in an unsuccessful attempt."

### Crafts For CASH

In 1983, Georgia Aycock, Extension home furnishings specialist, and Evelyn Brannon, Extension clothing specialist, both of Auburn University, developed the CASH Program. CASH was aimed at people who made crafts and handmade items or who offered a service.

"On my travels around the state, I saw many people who had handmade items, but who didn't know how to market them," Aycock explains.

Aycock and Brannon conducted a pilot program in three counties, developed a set of materials, and held 10 area meetings attended by 1,500 people. Topics included: types of business, whether to start a business, insurance, zoning laws, advertising, copyright laws, resources, taxes, pricing, and marketing.

### New York Study Tour

In 1985, Aycock and Lenda Jo Anderson, an Extension clothing specialist at Auburn, took 15 home-based business people to New York City on a study tour. The group met with professionals in various specialties such as marketing. The Alabamians showed samples of their products which were evaluated by the professionals.

The CASH II Program was developed for those who needed additional information for their home-based businesses. CASH II, a joint effort involving both the home economics and community resource development groups, covered such subjects as financing, cash flow plans, insurance, pricing, and marketing.

In the spring of 1987, Aycock and Zenoble plan a third home-based business program for people who wish to establish bed-and-breakfast businesses. "We found a need in many areas of the state for overnight accommodations," Aycock points out. "This type of home business could offer an alternative income for a number of people...farmers, retirees, or the unemployed."

### Sew For Pay

Extension's Sew For Pay Program stressed such areas as pricing, skill development, resources, and organization of time, space, and sewing processes. In 1983 and 1984 nearly 1,000 Alabamians attended five county and 16 Sew For Pay

area meetings. Extension has filled over 500 out-of-state requests for information about the program. Today, more than 1,500 people receive the monthly Extension newsletter "Sew For Pay."

Joanna Johnson of Wilcox County is grateful she attended Sew For Pay meetings. "I started out with a sewing hobby that grew into a business," Johnson says. "After a Sew For Pay meeting, I discussed my business questions with Evelyn Brannon and Lenda Jo Anderson. They suggested I hire a sales representative for my growing business and I'm glad I took their advice. Now, I have four sales representatives, three full-time employees, and two smocking crews."

Johnson no longer works out of her home. She designs and produces children's clothes that are sold throughout the Southeast and in parts of the Southwest.

#### Mall Jubilee

There have been other successful local efforts that have helped Alabamians find alternative incomes. Myra Barton, Extension agent in Mobile County, started a "Homecrafters Jubilee" at a local shopping mall that is now a twice-yearly event.

"In 1984, crafters at the Jubilee sold \$30,000 worth of goods in 2 days," says Barton. "As a result of the Jubilee, about 25 people have opened commercial shops."

Volunteer leaders, under Barton's leadership, formed a group called Homecrafters. With their help, the crafters are now staging the mall Jubilee themselves twice a year.

#### Apparel Sourcing Fair

In February 1986, Alabama Extension, Auburn University, and cooperating state agencies held the Nation's first Apparel Sourcing Fair which brought together state manufacturers and retailers. The textile and apparel industries in the state have suffered economically; since 1979, 20 textile and apparel plants in the state have closed, idling more than 10,000 workers.

"More than 75 apparel manufacturers and contractors from Alabama and surrounding states met with major retailers and buying companies such as Sears Roebuck & Company and Mast Industries," Anderson comments. "The fair was a great success—it led to contracts for some Alabama manufacturers. The apparel industry is the state's largest industry with more than 50,000 persons employed. But the small apparel



contractors, located primarily in rural areas, cannot compete with the imports. That's why we are so concerned with trying to increase jobs in this industry."

Extension, in cooperation with state agencies, is planning a series of Job Sourcing Fairs later this year. Warren McCord, state leader for community resource development at Auburn University, explains that the fairs will be targeted for farm family members and held in locations where the farm crisis is hitting hardest.

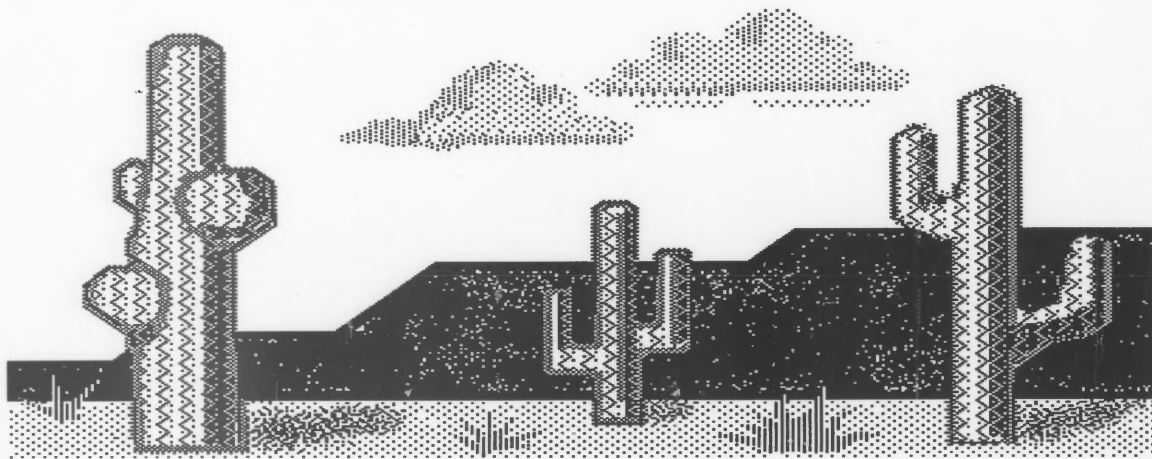
"The job fairs will bring together agencies and organizations to help farmers and their families discuss career decisions and receive aptitude counseling, testing, placement, and assessment of business opportunities in one central location," McCord points out. ▲

*Opposite: This spring Alabama Extension will offer home-based business programs for people interested in establishing bed-and-breakfast inns. Debbie Whitley (left) discusses business problems she's encountered while running her successful bed-and-breakfast inn with Oleana Zenobie, Extension foods specialist at Auburn University. Above: Crafts are popular home-based businesses in Alabama. Jan Jones (right) of Auburn displays sculptures she's made (from paper towels in a process similar to paper mache) to Georgia Aycock, Extension home furnishings specialist, Auburn University.*



# Building On Resources In Arizona

28 Extension Review



**Douglas T. Dunn**  
Cochise County  
Director and  
Extension Area Agent,  
Rural Development  
Willcox, Arizona

Because of rising irrigation costs, two-thirds of irrigated farmland planted with corn and cotton in Cochise County, Arizona, has been abandoned.

The economy of Willcox, Arizona, was severely affected by this development. How does a community counter such a loss to the local economy?

With the help of Extension, business leaders met to assess the community's resources and opportunities for job development. The leaders were aware that new businesses would be attracted to the area only if it could be demonstrated there would be economic advantages.

After expressing interest in attracting a small industrial firm, business leaders realized that the community's "comparative advantage" was not in manufacturing but rather in its agricultural resources and climate. Willcox had locational advantages as well for tourism and highway (Interstate 10) service.

### Target: New Enterprises

The business leaders targeted several enterprises for further exploration: fruit and nut production, dairy, ethanol production, trade area, and highway service. As a basis for promotional efforts, they undertook a feasibility study to

document the economic advantages of targeted enterprises.

When they reviewed the dairy industry they noted that most of the state's dairies are presently clustered in the metropolitan Phoenix area. The dairies there are under increasing land pressures.

Otis Lough, Extension dairy specialist, University of Arizona (retired), made an economic assessment of the dairy situation which revealed that Willcox's cooler climate would substantially reduce summer heat stress on cattle. These reduced cooling costs could increase both milk yield and reproductive efficiency \$500 to \$550 per cow. The assessment noted other advantages for dairy owners in Cochise County: lower land prices, abundant dairy feedstuffs (including the state's highest quality alfalfa), availability of local farm labor, location of the largest livestock auction in the state, and surfaced farm-to-town roads.

### Profile For Dairies

Recently, business leaders distributed a community profile to all dairies and related businesses in the state.

As a result, the Willcox Chamber of Commerce And Agriculture has organized a "sales team" to work with prospective dairy firms. Currently, several dairies are now contemplating a move to the area.

### Analysis—Not Wishful Thinking

When it comes to targeting of prospects Willcox has replaced wishful thinking with economic analysis. This was accomplished by researching specific opportunities and developing community profiles aimed at targeted enterprises.

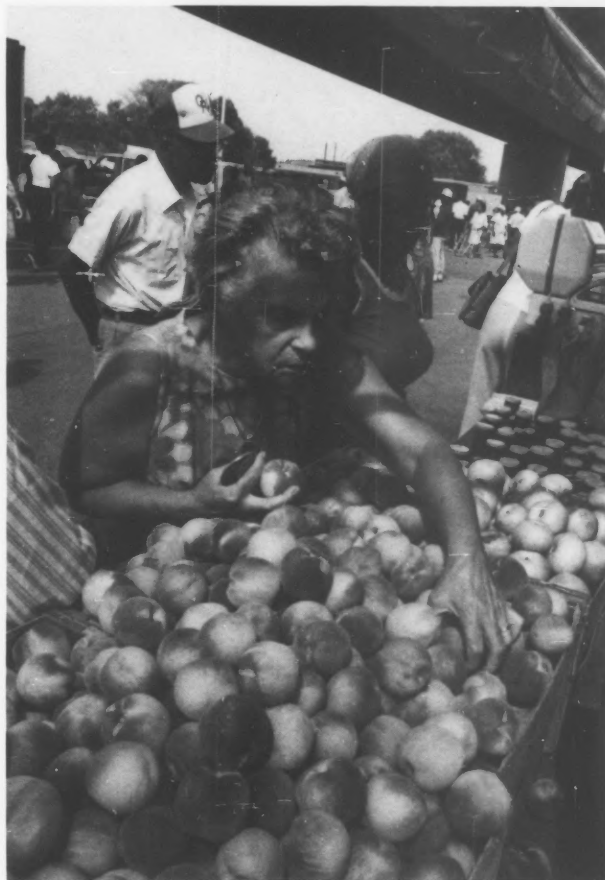
The results have been encouraging. Willcox is showing signs of being a state leader in apple production; over 5,000 acres of apples have been planted. Two packing plants are currently operating with a large cold storage plant under construction.

Because of the area's unique climate, the Willcox apple has a 4 to 6 percent higher sugar content than apples produced in other U.S. locations, a real "comparative advantage."

To meet trade area and highway and service needs, a new shopping complex is being constructed. In many ways, Willcox is using the tools of economic analysis to build on its agricultural resources. ▲

## Missouri Finds Alternatives

Extension Review 29



For the past year, a small group of Extension and research faculty, and administrators in several colleges at the University of Missouri, have been exploring innovative ideas that can be developed and applied to help the economic conditions of people living in rural areas. To date, the Alternatives Program, whose approach has been broad-based and multidisciplinary, has resulted in the distribution of two different types of "catalogs" while three other projects have made considerable progress.

Extension at the University of Missouri provided "seed money" for a craft catalog, *Best of Missouri's Hands*, that has attracted widespread interest and support for other parts of

the program. Extension personnel at both the state and local levels took active leadership roles in developing this publication.

*The Catalog of Ideas* is a software collection of innovative ideas dealing with the "internal" development of communities that is being distributed through county Extension offices on two IBM-PC floppy diskettes. Community development specialists are making considerable use of the processes and programs developed as part of the catalog.

**Agricultural Alternatives**  
The Agricultural Alternatives Project now underway has

three sub-projects: the search for new crops for Missouri farmers; the development of methods of reducing the length of grain feeding of forage-based beef; and the establishment of new ways of conducting research on alfalfa.

Commercial horticultural crops have not been extensive in Missouri. The project dealing with fresh fruits and vegetables emphasizes both their production and marketing. New and innovative methods must be developed for this entire process.

*The Missouri Product Finder*, last of the three projects currently underway, is a computer-based easy-to-update data collection of all the sources, products, processes, and by-products of industrial firms in the state.

Current industrial registers are often out of date, incomplete, and difficult to use. It is hoped that by enhancing the use of Missouri industrial products jobs will be created. Extension specialists have been cooperating with local participants to foster this project: bankers, industrialists, members of Chambers of Commerce, and business leaders.

The Alternatives Program is adding new projects and transforming old ones. For example, a project has been initiated to help "lease" hunting in the state. Another project being considered is the development and distribution of a direct marketing catalog of Missouri processed farm products, *The Best of Missouri Farms*. A proposed horticultural project aims at establishing producer cooperatives that will direct market to local bulk food buyers such as hospitals and schools.

Missouri Extension has already adopted many of the conceptual elements of these Alternatives Programs while they move toward institutionalization and permanent funding. ▲

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Professor and Chair  
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## Recreating History In West Virginia

30 Extension Review



**Stirley C. Eagan**  
Extension Program  
Development  
Specialist  
and

**Florita S. Montgomery**  
Extension Press  
Specialist  
West Virginia  
University,  
Morgantown

Top Right: Blaker's Mill, donated by a former 4-H'er, as it appeared before volunteers disassembled and moved it 150 miles to the nationally famous Jackson's Mill State 4-H Camp. Top Left: A volunteer matches prepared lumber while reconstructing the mill. Above: Blaker's Mill after being reassembled, roofed, shingled, and relocated.

For more than 60 years, one dream of West Virginia devotees of Civil War General Thomas (Stonewall) Jackson eluded them: to rebuild the homestead and mill that nurtured Jackson. Now, because of a statewide volunteer effort involving the West Virginia Extension Homemakers Council, 4-H members, and faculty at West Virginia University, the dream of rebuilding "Historic Jackson's Mill" is becoming a reality.

The mill is a part of the nationally famous 523-acre Jackson's Mill State 4-H Camp. Many Extension events are held at the site and more than 100,000 visitors use the camping and conference facilities annually.

A former West Virginia 4-H'er and his wife donated a 200-year-old working gristmill—Blaker's Mill—to the Jackson's Mill project. Despite this generosity, there were major problems to be solved: Blaker's Mill was three stories tall and 150 miles from the Jackson's Mill site.

### Relocation Plan

Determined volunteers and Extension West Virginia University faculty worked with architects and state officials and received approval for a plan to relocate Blaker's Mill. The plan's first steps called for disassembling Blaker's Mill, moving it to the Jackson's Mill State 4-H Camp, then rebuilding the structure, digging a mill pond, and constructing a sawmill.

"The original camp was constructed through the efforts and dollars of volunteers," Dan Tabler, director of Jackson's Mill says. "So we knew if enough volunteer labor could be recruited, we could reduce an estimated three-fourths of the reconstruction costs. Our reconstruction committee began organizing a voluntary recruitment plan and began looking for monetary donations."

In 1984, Tabler asked the West Virginia Extension Homemakers Council, Inc., for fund-raising ideas to get the gristmill project underway.

### Cookbook Fundraiser

The Council suggested a cookbook that would contain the favorite recipes of West Virginia Extension homemakers, 4-H'ers, and friends. A committee collected more than 1,500 recipes and selected nearly 400 recipes for print.

The cookbook, *The Flavors of Jackson's Mill*, attracted the interest of Extension supporters throughout the state. To date, the homemakers council has contributed more than \$50,000 to the gristmill project, with \$40,000 of that total derived from cookbook sales.



In April 1985, during the annual Self-Enrichment Conference cosponsored by West Virginia University Extension and the West Virginia Extension Homemakers Council, groundbreaking ceremonies signaled site preparation for the relocation of Blaker's Mill. The conference ceremonies honored Extension homemaker's contributions to the project.

A few weeks after this conference volunteers began dismantling Blaker's Mill for shipment via donated vehicles to Jackson's Mill.

On August 30, 1985, Historic Jackson's Mill was dedicated. Homemakers marched in their traditional "Parade of Banners" and each of West Virginia's 55 counties was represented in the dedication ceremonies. The homemaker's role in the historic project was explained by the Extension Homemaker's state president.

Governor Arch A. Moore delivered the dedication speech and praised the West Virginia volunteer spirit and thanked the volunteers for "this priceless gift."

The restoration project is now 90 percent complete. Tabler estimates that more than 50 volunteers have donated in excess of 2,500 hours in labor.

"By spring 1987," Tabler says, "this mill should be fully operative. Volunteers will be able to use stone-ground cornmeal prepared at a mill they helped reconstruct." ▲

# Rural Resurgence: Mandate For Community Leadership

Extension Community Leadership Development (CLD) programs are categorized into three phases of CLD programming: 1. Past (skills and procedures); 2. Present (intensive training); and 3. Future (functional issues management). The acknowledged strengths of CLD programs are the descriptive terminologies used to understand leadership capacity and explain group maintenance functions. There is a good knowledge base and a sound record for gleaning information about basic leadership and organizational "skills and procedures."

Without this knowledge, there would not be the necessary base to serve the needs of a rural resurgence. As beneficial as it is to share leadership and organizational information, CLD programming must move to apply this knowledge.

## CLD Intensive Training

Examples of current intensive CLD training are the popular Agriculture And Rural Leaders, and the Family Community Leadership (FCL) "Kellogg-type" programs. These intensive CLD programs vary, but are characterized by an approach that integrates knowledge about leadership and organizations (Skills And Procedures) with applied and extended experiential learning applications.

These intensive and extended training programs for selected community leaders frequently include heavy emphasis on—

- Public decisionmaking within the broader context of public policy determination;
- Interorganizational resource sharing, both public and private, and intergovernmental applications;
- Community awareness, ranging from local to international, with a strong focus on cross-cultural experiences and awareness of the needs of the economically disadvantaged;
- Local economic conditions and their relation to a global economy;
- Extended and applied learning experiences outside the immediate instructional environment; and
- Expectation that a substantial community project or experience will be conducted—sometimes as part of a learning contract.

Some have characterized this type of CLD training of community leaders as "elitism." However, by carefully selecting representative audiences and engaging in training that broadens the leaders socioeconomic perspectives, CLD training can be an important resource in a rural resurgence.

## Functional Role

In the future, community leaders will be faced with the task of managing public involvement in complex and fast-moving community issues. The success factor of the eight priorities identified by the Extension System is dependent upon the public decisionmaking process, and on CLD programming for "Functional Issue(s) Management," not leadership development purely for the sake of leadership development. CLD must program for more than leadership skills and organizational maintenance. CLD has a functional role to play in all the Extension priorities.

## Challenges

When thinking in a futuristic context it is necessary to envision a different tomorrow where one meets challenges and opportunities with innovation, creativity, and entrepreneurial skills. For rural

resurgence, the challenge is to assist community leaders to deal with turbulent local conditions. Command over local conditions no longer guarantees success. The locus of decisionmaking has shifted outside the community and external forces have dramatically reduced local control. Institutions are being restructured—especially the agricultural and rural economic base.

Contemporary historians suggest that western democracies (especially local governments) are experiencing a dramatic historical transition comparable to two other traumatic periods. One period was the creation of the first unitary nation-state in seventeenth century France. The other period was the creation of the first federal nation-state by the American Revolution of 1776.

A technical, complex, and fast-moving society will call upon the best use of information for community decisionmaking. This development raises critical questions. Will local leaders be able to integrate information, understand issues and decisions external to their immediate setting? Will community leaders be effective in dealing with the demands of a rural resurgence?

The future requires an emphasis on thoughtful public decision-making procedures, rather than "quick fix" technical solutions. CLD, in cooperation with other interested partners, can provide an important resource. It must be involved in all Extension programming: agriculture, natural resources, family nutrition and health, and youth. There is a need for each to reach out and interface with a larger community through its own internal leadership.

Adapted from a presentation to the ES/USDA and ECOP/CRD-PA, at the Community Leadership Development Conference at Fort Mitchell, Kentucky, on September 9, 1986. ▲

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# The Georgia Experience: Public Policy Education

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During the period 1980-85 Georgia's population increased by 9.4 percent, a rate that made Georgia the 10th fastest growing state in the Nation. However, during that same time frame, 33 of the 159 counties in the state lost population. The counties that suffered this out-migration have remarkably similar characteristics: their economic structures tend to be dependent upon either timber, agriculture, or mining.

Population loss has been occurring in these counties since the mechanization of agriculture in the late 1930s. Five decades of out-migration and limited economic opportunities pose significant problems for Georgia's rural revitalization efforts.

## **Georgia: 2000**

To change the long-term social and economic conditions that affect these communities, Georgia Extension implemented a program that focused on identifying issues and creating solutions to solve local problems. This approach was based upon several previously developed program thrusts that have broad applications on a statewide-basis and have been specifically targeted to rural areas.

The "Georgia: 2000" project, developed to educate citizens about public policy issues, and coordinated by Extension professionals, focused on long-range issues facing the state and was highlighted by a public debate.

Over an 18-month period, leaders from state and local government, agriculture and agribusiness, industry and education met, developed an agenda, and analyzed the major challenges facing the state. Their recommendations were presented to the governor, the state legislature, and, through numerous media presentations, shared with the people of Georgia.

## **County: 2000**

Georgia Extension professionals, recognizing that meaningful problem-solving occurs at the local level, have initiated the "Georgia: 2000" project on a county level. The new project, "County: 2000," brings local decisionmakers together for public policy discussions sponsored by the local Extension office. All county Extension offices and selected state specialists are currently involved in some manner with "County: 2000" projects.

## **Identifying Community Issues**

The Socioeconomic Perspectives Program, a key program developed by Georgia Extension, is helping decisionmakers identify community issues. Before any discussions can take place on public policy, Extension specialists believe that leaders must have access to current data and information in a usable form. Using various computer technologies, Extension specialists

compile pertinent census information and other county level data into a format designed for local public policy discussion.

A three-member team of Extension specialists uses a panel discussion format to highlight such topics as agriculture, health, local industry trends, education issues, and chamber of commerce concerns. The panel relates these topics to information on population growth and change, income distribution, transfer payments, farm income and expenses, employment, retail sales, and housing.

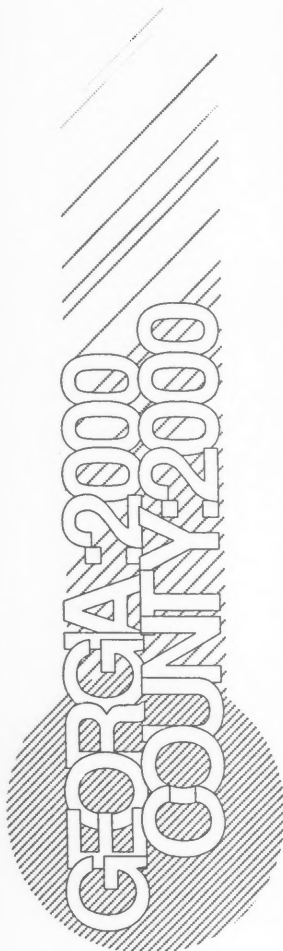
Extension specialists, in three-member teams, represent areas of particular concern in their various target counties. For example, a forestry specialist may be involved in a county dependent on the wood products industry, or a home economist whose expertise is human development or family issues may be included on another team. Resource development specialists coordinate the program and serve on all county teams to cover such issues as population growth, income distribution, and community development. The team, working with the local Extension agent, prepares the report, discusses the data with local leaders, and presents the recommendations in a public meeting. The Extension agent publicizes the presentation, invites key community leaders, and initiates plans to develop the recommendations into concrete decisions.

## **Emphasis: Local Implications**

After the data has been presented at the public meeting, the local Extension agent and Extension specialists assigned to the "County: 2000" program meet with community leaders. Together, they develop strategies based on the data and the community's needs. Extension staff members incorporate new issues related to their program planning into their plans of work.

For many counties, this follow-up meeting provides the basis for the formation of a "County: 2000" committee that will, with Extension's assistance, formulate plans and carry through with the recommendations.

Many believe that rural revitalization in Georgia can take place through efforts similar to the ones Georgia Extension is developing. Real advantages are offered by combining a "Georgia: 2000" concept with county Socioeconomic Perspectives. There are also some risks—all individuals and agencies are not always ready to confront the "hard facts" after issues and concerns in a community have been identified. But there are risks worth taking. Georgia Extension, through its involvement in public policy education, is aiming at development of innovative and usable programs for economic development successes in the state's rural and urban counties. ▲





# New Mexico Community Shapes Its Future

Raton, New Mexico, lies in the northeast corner of the state. Tourists and miners form the economic base of this historic frontier town of 8,000, previously a major stop on the Santa Fe Trail.

Several years ago, Raton's largest employer, a coal mine, began a period of shutdowns and reopenings which raised concerns of local leaders.

The Chamber of Commerce contacted New Mexico Extension. Since then, with Extension's assistance, the town has taken positive steps to improve its economic future.

## Educational Workshops

First, Raton business leaders, community officials, and residents participated in Extension economic development workshops aimed at finding ways to increase job opportunities in the community. Extension Business and Economic Development Specialist Robert Coppedge conducted the sessions.

In February 1984, a community team from Raton participated in the first of three "Hard Times: Communities in Transition" workshops in Farmington, New Mexico. The team included county Extension Home Economist Mary Ellen Martinez, headquartered in Raton.

Western community development specialists designed the regional workshops as an educational approach to help communities deal with economic stress. The Western Rural Development Center provided the necessary funds.

## Main Street Designation

Shortly after the workshops, Raton businesswoman and Chamber of Commerce President Sue Fleming heard of the September 1984 national video conference on the National Main Street Network, a program of the National Trust for Historic Preservation.

The Network serves towns and cities with populations under 50,000. Designed to encourage economic development within the context of historic preservation, the program helps members plan for the downtown's future by building on its past.

Extension Specialist Coppedge arranged for a local viewing of the conference and later conducted several seminars in Raton on features of the program. He then assisted the community in preparing its application to become a Main Street community. Fleming, who was instrumental in getting the community involved in Extension educational programs, now serves as the Raton Main Street director.



## Small Business Workshops

While Raton pursued Main Street designation, a western group of Extension specialists and researchers focused attention on the needs of small businesses. Raton became the site of the first of four pilot workshops. A steering committee of Raton business and community leaders and Extension specialists and researchers throughout the West cooperated in developing the "Small Business Education Workshop: Survival Techniques." A Western Rural Development Center grant provided funds.

Along with Extension and research faculty at land-grant universities in the West, representatives from the private sector, Small Business Administration, and the Service Core of Retired Executives (SCORE) conducted the workshop sessions.

## Positive Evaluation

"From the turnout," reports the *Raton Range* newspaper the day after the last session there, "the workshop has truly been a success...Raton received a challenge to excel in small business, the backbone of any rural economy."

A follow-up evaluation completed by 88 percent of Raton workshop participants a year later shows that about 70 percent thinks the workshop contributed to the improvement of their business skills to a fair or great extent. All 11 business practices recommended in the sessions were implemented to some degree by some of the participants.

Recently Raton community and business leaders met for a 3-day strategic planning workshop. Their top concern—economic development. One objective adopted by the group is to request additional workshops and assistance from Extension in the areas of small business education and economic development.

Through the persistent nature and hard work of its community members, Raton is shaping a positive future. Extension is proud to be a part of the action. ▲

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Extension Business  
and Economic  
Development  
Specialist  
New Mexico State  
University,  
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Main street of Raton, New Mexico. After the town's largest employer, a coal mine, suffered closings, community leaders, with Extension assistance, began a series of workshops focusing on helping small businesses. Positive steps are now underway to improve Raton's economic future.

# Rural Community Development In The 1990s

34 *Extension Review*

**Paul Lasley**  
*Extension Sociologist and*  
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*Extension Associate*  
**Director and**  
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The rapid changes in American society make it difficult to discern the specific issues facing rural communities in the nineties. However, several emerging forces and trends are suggestive of the environment communities will face. This article focuses on some of the major societal forces and some specific issues that rural leaders and policymakers will need to act on in the next several years.

## **Increased Diversity**

Projections about the future of rural communities are difficult because of the heterogeneity among them. This diversity is likely to increase as communities attempt to become more specialized. Many communities are seeking development strategies that will make them unique within their state or region.

For example, the "all-purpose" community is giving way to communities that focus on retirement, recreation, retail trade centers, and health care. Other communities, because of historical factors or special geographic or cultural characteristics are attempting to achieve a more diverse economic base. In the Midwest, for example, many agriculturally dependent communities hard hit by the farm crisis are trying to attract non-agricultural industries. Thus, while some communities are trying to establish a unique niche by providing specialized services or industries, other communities are attempting to diversify their economic base.

Specialization and diversification will bring further heterogeneity among rural communities. Increasingly, it will be necessary to identify the specific needs of different types of communities.

## **Less Federal Assistance**

The federal outlay for rural community development has been reduced. More reductions proposed in community block grants, revenue sharing, and other development programs suggest that local development officials will have to rely upon sources other than federal dollars. Communities that rely heavily upon agriculture will not be able to absorb the reduced federal funding for infrastructure and business development. This problem will likely become acute in agriculturally based state economies. Local developers will increasingly rely upon locally generated resources. In addition, there will be more competition for the limited federal monies.

## **International-Global Economy**

Just as agriculture has had to adjust to international forces in the market place, rural communities must also become attuned to these global forces. Increasingly, monetary and fiscal policy as reflected in international exchange rates will determine employment opportunities in rural industries. One only need note in the

textile industry, the relationship between international trade policy and employment in the U.S. textile mills.

Similarly, the current world glut of feed grains has negatively affected farming-dependent communities. Rural community leaders need to understand how global-international issues and policy decisions influence the economy of their community.

## **Rural Industrialization**

Historically, attracting new industry to rural areas was the major development strategy for many communities. Now it will often be multinational conglomerates that will be building new plants. The increase in corporate mergers suggests that rural communities will have to become much more sophisticated in attracting these kinds of firms. The competition for attracting new business and industries is increasing. Often, adjoining states or communities have competed against each other to attract new industry.

Multinational conglomerates may have little regard for political boundaries nor express much community or national loyalty in selecting where they will build their plants. Often, small, relatively poor and disadvantaged rural communities grant major concessions to prospective new businesses and industries that are among the wealthiest corporations. Some of the fastest-growing rural communities are experiencing such growth because foreign-owned industries are locating in this country to avoid trade restrictions. If trade policies shift, these communities might find themselves in quite different circumstances.

The imbalance of power between large corporations and small communities suggests that local development efforts should emphasize retention and expansion of existing businesses. Fostering a supportive environment for home-grown businesses may provide more long-term benefits to the local communities. The bottom line of rural industrialization should be the net increase in the number of jobs, not the changes in job numbers that result when employment shifts from one community to another.

## **Population Dynamics**

Rural communities must account for population changes in planning. The composition of local residents by age, income level, education, and skills must be determined for a community to assess the needs of local residents as well as promote that community in development activities. The mix of services needed by the community is dependent on characteristics of the population. A significant problem for communities is how to adjust long-term capital investments in infrastructure (public utilities, schools, housing) to rapid population changes—



particularly with population decline. Predicting future demand for services precisely may prevent communities from investing in costly facilities which will not be needed in a few years.

#### Impacts of Social Change

- Community leadership is a critical dimension of rural community viability. Leaders must become adept at obtaining development assistance. In addition, they must be attuned to national and international forces that infringe upon their communities. The internationalization of the U.S. economy has linked community viability to world events. Just as farmers must adjust to world agricultural production, rural communities, as they become more dependent on national and international industrial, financial, and commercial markets, will likely find that events beyond the city limits hold major consequences for their well-being. Several leadership education programs can help local people assume leadership roles that can make a difference in community development efforts. These programs will become more important as local leaders attempt to deal with the uncertainties of the global economy.

- The declining amount of federal aid for rural community development will require local leaders to become more efficient than before at generating local resources. The success at raising local dollars will depend on residents having a vision of their community and a commitment to its future. Some communities have become complacent and dependent upon federal dollars to develop their community. Developing a vision requires that communities establish goals and priorities and build a sense of esprit de corps to achieve them.

- Future community development efforts will likely require intercommunity cooperation. In providing such services as health care, education, and public utilities, local communities may find cooperation is beneficial, if not essential. A group of communities may be more effective than a single town in recruiting new industry, by forming an area or regional economic development commission. Inter-community as well as intra-community cooperation is expected to become more important. Networks within as well as between communities need to be fostered

- Population retention and growth are a function of the availability of jobs and the community's quality of life offered. Rural communities will have to address how to provide meaningful employment opportunities as well as maintain a desirable quality of life. Obviously, difficult decisions exist when new industry may bring new problems along with jobs (for example, need for public services and utilities, environmental costs, traffic congestion, and so on). Communities must recognize the problems of growth versus maintaining the quality of life.

- It is important to integrate development activities into a comprehensive approach. One is struck by the number of development activities in which many local communities and agencies are involved. For example, community, rural, agriculture, human, small business, economic, family, and mainstreet development are all part of what might be called integrated rural development. Questions can be raised as to how these programs are linked together. With resources scarce, it is likely that these diverse activities need to be integrated and coordinated.

- Communities need to remember that their strength is only as great as the sense of community spirit that is shared among residents. Creating civic pride and community spirit are essential to community viability. Three key ingredients are: (a) open communication to foster a sense of community, (b) cooperation in local development activities, and (c) commitment to community-established goals and priorities.

- Rural communities must address the need for economic diversification, in light of the roller coaster of economic booms and busts that have threatened the viability of many communities. While some communities are becoming more specialized than before, they need to recognize the vulnerabilities of specialization. Development strategies should consider the trade offs between economic specialization and diversification.

- New telecommunication technologies make possible new ways the community can develop. Communities will need to incorporate the new technologies in forecasting and planning.

#### Building On Strengths

Many of the problems of rural communities should be viewed as chronic and long-term, requiring a sustained effort rather than quick fixes.

Many futurists predicted the disappearance of rural communities; however, the number of rural communities has remained fairly constant. Rural revitalization is an emerging priority within the Cooperation Extension System. For this effort to succeed, it must be a long-term commitment. Rural communities display many skills in self-help activities, such as resourcefulness and ingenuity. Rural revitalization efforts must build upon the existing economic base and strengths of rural communities. In agriculturally dependent communities this implies turning attention to the agriculture-community linkages. In other rural communities, the important linkages to the existing economic and natural resource base must be recognized. ▲

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