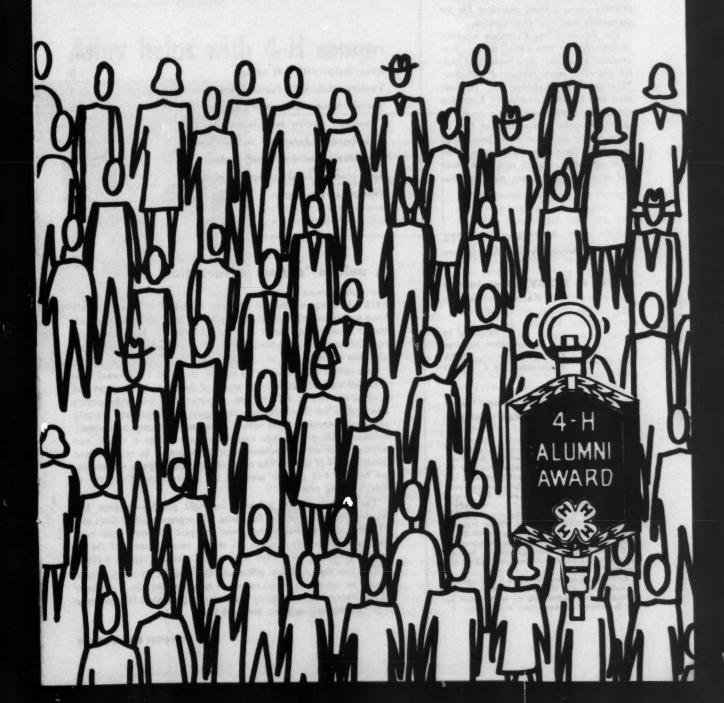
REVIEW

U.S. DEPARTMENT OF AGRICULTURE * JANUARY 1973



The Extension Service Review is for Extension educators—in County, State, and Federal Extension agencies—who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers Extension workers, in their roles as educational leaders, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

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A unique 'alumni association'

The eight persons honored as national 4-H alumni winners at the 1972 4-H Congress brought the total number of people who have been so recognized in the past 20 years to 160. They include such people as astronaut Alan B. Shepard; U.S. Senator John Sparkman; opera singer Miss Jane Marsh; and other outstanding citizens from all walks of life.

Not only is 4-H proud of its alumni; the eight 1972 award winners indicated that alumni are proud of their 4-H background and grateful for what it did for them. They credited 4-H with opening new worlds for them, helping them gain confidence and develop character, providing them with a disciplined approach to competitiveness, guiding them into careers, making college a reality, and helping them set and achieve their life's goals. In return, these outstanding 4-H alumni, like many of their counterparts nationwide, are helping 4-H provide some of the same kinds of benefits to today's young people.

The impact of 4-H influence on eight people—o, even 160 people—may seem small. But those 160 represent 2,650 State and 33,400 county alumni winners over the past 20 years. And even the State and county winners are only a small segment of the 31 million people in the United States today who are former 4-H'ers.

The fact that 4-H has influenced the lives of so many people should be not only a proud record to stand on, but also a reminder of the importance of making every young person's 4-H experience a memorable and valuable one.—MAW

by
Jimmy Tart
4-H Youth Editor
North Carolina State University

Army helps with 4-H camp



Sgt. Lajos Noszek teaches a class on wildlife to a group of the underprivileged youngsters attending a nutrition camp at Fort Bragg.

The Defense Department, at the suggestion of the Department of Agriculture, last July authorized the establishment of 4-H Clubs on military installations in the United States. This article tells how the Army, in turn, is making its resources available to Extension.

The Cumberland County, North Carolina, Extension Service staff and the Army have joined hands to conduct a program that will not be forgotten by 100 underprivileged youngsters.

The youngsters, ages 8 to 14, attended an Expanded Nutrition Day Camp for 3 days in August at the huge Fort Bragg Military Reservation.

Classes were taught under tents. The youngsters ate food prepared in Army mess halls and served by servicemen. They watched a paratroop jump and toured the post museum.

The youngsters attended classes on nutrition and crafts taught by Extension personnel and sessions on first aid, wildlife, and recreation taught by Army instructors.

Children were selected to attend the camp by Extension nutrition aides who serve their homes. They met at the county office building and were carried to Fort Bragg on Army buses.

According to Mrs. Era K. Robinson, home economics Extension agent, the jointly sponsored program was dreamed up about a year ago in a county Extension Service staff conference when the agents were discussing how to use the Army's resources. Contact was first made in April by letter to Lt. Gen. John H. Hay, commanding general of Fort Bragg.

Meetings were held; more letters were written; and phone calls were made to work out final details. The program was held in cooperation with the 82nd Airborne Division under the command of Maj. Gen. Frederick Kroesen.

About 150 soldiers from Company A of the 2nd Battalion Airborne, 505th Infantry, responded, setting up tents in advance. Each day about 20 soldiers assisted with classes and served meals and refreshments.

The youngsters were not the only ones who enjoyed the program. 2d Lt. Ned Longsworth said his men received satisfaction from working with the boys and girls. This gave them an opportunity to develop lesson plans and training aids and to teach classes.

The Army can cooperate in such domestic-action, socially-related projects if they do not interfere with military duties. Projects must be undertaken with resources that are not immediately involved in military missions, and the programs should be incorporated with military training.

The day camp gave a platoon leader an opportunity to organize resources, feed the youngsters, and schedule classes. This training and experience are just as important as other types of military training, says Fort Bragg's Maj. James White.

Mrs. Robinson reported that the Army will be reimbursed for lunches and refreshments by the School Food Service.

The Cumberland County Extension staff and the Army are evaluating this year's program and taking a look in the crystal ball to see what joint ventures can be worked out for the future.

Variety trials help farmers increase income



Thayne Cozart

Extension Information Specialist

Washington State University

County Extension Agent Felix Entenmann has maintained five localized crops nurseries in Whitman County since 1955. He uses the results of the nursery program to impress upon farmers the advantages of selecting proper varieties and using high quality seed.

Convenience is a big selling point for everything from TV dinners to drivein banks, so it's predictable that a conveniently packaged educational activity like the Cooperative Extension Service's cereal crops variety demonstration program in Washington State also meets with high acceptance.

Dr. Kenneth Morrison, Washington State University Extension agronomist, figures that the prime small grains production area in his State is too large and too diverse to expect farmers to attend educational tours at one central location.

"Our annual rainfall varies from less than 10 inches in some areas to more than 20 in others. The elevation and soil types vary, too. These factors, plus the sheer travel distance involved, indicated to me long ago that only localized crop variety demonstrations would be effective educational tools," Morrison explains.

He began the localized crops nursery program in the mid-1950's. With close cooperation from county Extension agents and personnel from the USDA Agricultural Research Service Crops Division, nurseries were established on private farms in nine eastern Washington counties—Whitman, Lincoln, Walla Walla, Columbia, Garfield, Klickitat, Spokane, Asotin, and Stevens. Farmers donated use of the land.

County Extension agents are the keys to the success of the program. They arrange with local farmers for locating the nurseries; help with planting, maintaining, and harvesting the plots; publicize and help conduct tours; and conduct followup educational programs.

County agents cooperating in the program in 1972 were Felix Entenmann, Whitman County; Larry Brown and Duane Erickson, Lincoln; Robert Williams, Walla Walla; Art Sunderland, Columbia; Dick Brown, Garfield; Howard Willson, Klickitat; Clayton Kelsey, Spokane; Joe Maxwell, Stevens; and Cecil Bond, Asotin (now retired).

"We established from one to five nurseries in each county, depending upon its size and diversity of crop growing conditions," Morrison notes.

In the fall the nurseries are seeded with winter wheats and barleys. In the spring, they are seeded with spring wheats, barleys, and oats.

In the summer, just prior to harvest, Morrison and the county agents conduct twilight tours to show farmers the results of the nursery demonstrations.

"We schedule the tours in the evenings to make it easier for farmers to attend. After each tour, we have re-

freshments and a question-answer session. These are the things we think boost interest and attendance," Morrison says.

Attendance at the twilight tours is excellent with more than 300 persons turning out in some counties.

"During the 17 years we've had the program, we've established our credibility by showing meaningful differences in varieties under growing conditions similar to the farmer's.

"I think we can attribute the rapid adoption of new varieties by eastern Washington farmers back to the crops nursery demonstrations. If a farmer has seen a new crop growing during its screening and testing stages, he's likely to switch to that variety when it becomes commercially available.

"Rapid acceptance of an improved variety can mean literally millions of dollars to an economy based on small grains like eastern Washington. This pays dividends up and down main street in every community," Morrison emphasizes.

The specialist cites one other important benefit of the crops nursery program—helping farmers appreciate the cereal grains breeding programs being conducted by WSU, other universities, and the USDA.

Morrison and the county agents make every effort to maximize the educational value of the demonstrations and to assure the validity of the information presented.

Each variety in a nursery is replicated four times. Each 20-foot by 4-foot plot is posted with a sign that names the variety and lists the last year's average yield and the average yield for all the years the variety has been in the nursery.

Each tour visitor signs a register and after harvest receives a detailed report of the current year's results.

At each nursery, the county agent describes the nursery program and the land preparation, fertilization, weed control, and planting and harvest dates.

During the tour of the plots—which is limited to less than an hour—Morrison and the county agent describe each variety, the purposes it was bred for, its adaptability, and the history of its yields, test weights, and lodging problems.

The 1972 nursery demonstrations involved 11 varieties of winter wheat, six winter barleys, six spring wheats, eight spring barleys, and four spring oats.

In Whitman and Columbia Counties for the past 3 years, Morrison has included a demonstration in the nurseries to show the effect of seed size upon wheat yields. Using Nugaines wheat seed, Morrison screened the seed into three sizes—small, medium and large—and planted at a uniform rate of 60 pounds per acre.

The results have been startling. The large seed size has averaged yielding 10.9 bushels per acre more than the small seed and 3.6 bushels more than the medium seed.

"This indicates to me that a farmer can gain a lot by using high quality seed with large plump kernels. It will pay him, not cost him, to buy the best seed he can find," Morrison confirms.

With Morrison's small grains nursery program bridging the gap between the research farm and the commercial farm, Washington seems assured of maintaining its status as a leading small-grains-producing State.

C. Edward Bible
Extension News Editor
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Special classes aid small farmers

Special-interest classes proved to be the key to teaching Shelby County, Tennessee, farmers with limited acreage how to make more money.

Census figures showed that 808 farmers in Shelby County had incomes of less than \$5,000, according to Ernest Brazzle, Extension agent in that county.

"We held special-interest classes for vegetable and hog producers during the winter in an effort to help these farmers organize their resources and apply research information to increase their production," he said. "We used circular letters, radio programs, telephone calls, and personal contacts to build attendance."

Brazzle added that door prizes of seed, fertilizer, and insecticides were given as attendance awards.

After each meeting, a question and answer session was held and one member of the county staff interviewed a few farmers for evaluation.

"We knew that to hold classes for farmers and not follow with farm visits would be a waste of time," Brazzle said. "So to keep the program alive, we chose 10 demonstrators, or leaders, from each enterprise group to show their neighbors the recommended production practices."

These leaders were chosen from different areas of the county. They attended classes regularly, and each worked with 10 other farmers. Thus, 200 other producers were reached.

County staff members worked closely with each of the leaders to keep them informed and motivated. For the vegetable growers, the staff stressed such practices as construction of hotbeds, calibrating sprayers, collecting soil samples, applying recommended herbicides, and land selection.

"Our objective with the vegetable growers was to increase returns per acre from \$657 to \$707—a \$50 per acre increase," Brazzle explained.

Extension agents also worked with the farmers to teach the use of recommended varieties, insect and disease control, and harvesting and marketing practices.

"These production and marketing tools will increase net returns and provide income to accomplish the long-time goals we have established," Brazzle said.

He said that of the several markets available to these farmers, urban stores, roadside stands, and pick-yourown operations are the most popular.

A survey of several grocery markets and food store managers showed that there was a great demand for high-quality, locally grown vegetables. Also, many of the farmers sell at the Farmer's Grower's Association in Memphis.

Concerning the work with the swine producers, Brazzle explained that data from the census, the Tennessee Crop Reporting Service, and Extension surveys showed the Shelby County workers where emphasis needed to be placed.

"We decided to concentrate on disease and parasite control, selection of breeding stock, use of homegrown feed, production of two litters per



year, and swine management and marketing," he said.

"Our 5-year objective was to have these swine growers to increase their income from each unit of production."

The methods and procedures used were very similar to those used with the vegetable growers. Special-interest classes, using slides, bulletins, and other Extension materials, were taught by local, State, and district Extension workers.

"As with the vegetable growers, we worked with 10 swine producers who in turn worked with 10 others," Brazzle said. "Again, 100 or more people were reached and helped in planning to reach their goals."

The Extension staff made farm visits to help these small-acreage farmers in budgeting and planning.

The staff also helped with the construction of farrowing units, feeding and watering units, and summer and winter shelter.

Brazzle added, "Four old barns and sheds have been converted to farrow-

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The farmer at left shows the county Extension agent (right) some of the sweet potatoes he grew, following recommended practices. This field yielded 310 bushels per acre. The demonstrator below (center) has improved the quality of his pigs from grade 4 and below to grade 2 by following Extension-recommended production practices.



ing units. Farmers reported this practice increased the number of pigs raised by more than 20 percent."

Special efforts have been made to obtain boars of different breeds that would improve the quality of pigs. These boars were placed in different sections of the county and were made available to the small farm herds.

"In 1966 the staff surveyed six farms and found that 80 percent of the pigs graded below average," Brazzle said. "We emphasized better feeding and breeding, and 4 years later 70 percent of the pigs from these same farms graded average and above average."

He said that five farmers who had previously produced No. 4 and utility pigs changed their breeding, feeding, and other management practices. Three years later, one farmer marketed five litters that averaged 9.6 pigs per litter, and all pigs graded No. 3.

The latest sale of feeder pigs from

these farms showed that 90 percent graded No. 2 and 10 percent graded No. 3.

Extension personnel also helped get 10 high-quality Yorkshire gilts that were placed with demonstrators and farmers. Three of the gilts were bred to a Hampshire boar.

"The first litters graded 96 percent No. 2's!" Brazzle said.

Another example that was given by Brazzle concerned a farmer who sold an old sow and bought a high-quality gilt to improve his herd. After he followed Extension's recommended practices for breeding and feeding, the sow farrowed 30 pigs in two successive litters and weaned 26 pigs.

Both litters were fed to market weight and graded No.'s 2 and 3. The gross receipts from the sale of the two litters were nearly \$1,400.

"We believe that the right kind of 'boar power' with the right kind of females will help our farmers make money," Brazzle said. "Today there are eight selected boars in the county on small farms."

The small-acreage farmers have learned that feeding corn to hogs is a profitable way to market their grain. Corn demonstrations have been set up with yields of up to 92 bushels per acre being reported.

"The Extension staff in Shelby County has seen many changes take place as a result of our work with these swine and vegetable producers," Brazzle said.

"We have seen some needs met and some goals reached. Some of the people have resisted changes, but most have accepted them.

"We believe much good has been done, because we can point to many families whose farm incomes have improved. Five of these families now have gross farm incomes of more than \$10,000 per year.

"Still, there is much to be accomplished. Overall, however, considering the supporting facts from demonstrations and the favorable comments from the farm families, we are well assured that our efforts have not been in vain."

Consumer survey reveals needs

Why do Florida consumers choose to shop at a particular food store? What do they consider to be their greatest problems when shopping? How many of them understand unit pricing and open code dating?

Extension home economics agents wanted to know the answers to these and similar questions. Ideally, the way to get such information is to ask the food shoppers themselves. But Extension had no additional funds with which to conduct a statewide survey.

The committee charged with planning the 1971 Consumer Education Month activities felt, however, that a statewide survey could be done with the help of Extension homemaker club members, who could be trained to serve as interviewers.

The executive board of the State Homemaker Council offered its support and agreed to encourage county councils and homemaker clubs to assist with the survey.

Determining where the interviews should be conducted was the next

Mary N. Harrison
and
Lizette Murphy
Consumer Education Specialists
Florida Cooperative Extension Service

concern. What place could be better than at the food stores? The State consumer education specialists visited administrators of several food chains to explain the proposed survey and enlist their assistance.

These administrators expressed a sincere interest in Extension's desire to obtain information about the consumer and indicated that having information about their customers would help them improve their services.

It was agreed that the interviews would be conducted near the entrances of food stores.

With the support of the homemaker clubs and the food industry, the Extension home economists were ready to develop the instrument to be used in the survey. A one-page questionnaire prepared by the consumer education specialists was reviewed by the food industry and Extension administrators.

To give appropriate emphasis to Consumer Education Month, the survey was planned for September. Friday, September 10, was chosen as the date, since schools would be open and most Floridians would be "back to their normal routines."

This date proved to be less than ideal for a few Florida counties, which have a high percentage of retirees, many of whom were vacationing.

The survey hours were from 10 a.m. to noon and from 5-7 p.m., to give a representative sampling of both employed and unemployed shoppers.

Next came the selection of the stores where the interviews would be

carried out. Within each county the home economics agent organized a committee to select a cross-section of all kinds of stores located in various types of neighborhoods.

They tried to choose those which would give a representative sampling of the counties' residents. The names and addresses of the stores chosen were sent to the consumer education specialists.

The specialists made a list of the stores belonging to each chain and sent these to the appropriate State and regional administrators of those chains.

They, in turn, granted local store managers permission to participate. Independently-owned stores were contacted directly by the county home economics agents.

When compiling the lists of stores from which to make their selections, agents found there were no complete lists of all food stores within a county. Many committees learned about stores which they did not know existed.

When contacting the stores about the survey, agents had new opportunities to tell about Extension's educational programs.

Home economics agents, council presidents, and delegates received training on survey methods and procedures at the State Extension Homemaker Council meeting in July. Upon returning to their counties, the agents, assisted by council presidents and delegates, trained the volunteer interviewers.

To inform the general public about the upcoming survey, Extension's editorial department blanketed the State with TV and radio spot announcements and newspaper articles. All forms of media cooperated in telling consumers about the survey's purposes and when and where it would be conducted.

On the appointed day, 2,191 volunteers shed their role as homemakers and became interviewers for a day. Interviewing each 10th person entering 882 food stores in 51 Florida

counties, they completed 20,288 questionnaires. These were sent to the State Extension office for processing.

The questionnaire had been designed to obtain information about the shopping behavior of Florida consumers, their opinions about food shopping, their shopping problems, and the background information necessary to identify the types of shoppers.

This information has real significance when planning Extension programs. For example, one of each five persons interviewed was over 60 years of age, and more than 21 percent were retired. This points up the need for increased emphasis on programs designed to meet the needs of the elderly.

One of each four food shoppers was male. This identifies an audience which has been somewhat neglected.

Questions pertaining to shopping practices provided information about such things as how often Florida consumers shop for food, whether or not they use a shopping list, where they learn about advertised "specials," whether they save trading stamps, and their understanding of unit pricing and open code dating.

The need for Extension to continue to emphasize programs in time and money management was substantiated. For example, three of each five shoppers was not using a list. More than one-fifth said they shop for food four or more times a week.

Money was the problem most often listed, but a high percentage also listed time. Many shoppers said they do not understand unit pricing and open code dating. As a result, Extension is expanding its program in these areas.

Some of the questions were of special significance to the food stores. For example, fast checkout was the service preferred by most shoppers, and slow checkout lines was a frequent complaint.

A high percentage of the shoppers said they save trading stamps and like them. A majority of the shoppers indicated an interest in having unit pricing and open code dating provided by the stores.

The survey has been useful in many ways:

—the information obtained is of value to Extension home economists in program planning, and to the food industry in meeting consumer concerns.

—it has strengthened the cooperative efforts and working relations of State and county staff with the people in the county and with the food industry, and

—a State legislative committee requested the survey information and used it to help guide them in preparing legislation pertaining to consumer issues.

This statewide coordinated effort brought much publicity to Extension and created an awareness of Extension's role in educating consumers in a way that could never have been done by each county doing something differently or individually.

A major project such as this, with good publicity and cooperation, can both strengthen Extension programs and increase the public's knowledge of them.





Above, Mrs. Ruth Ann Miller (left), Extension home economics agent in Sarasota County, discusses the progress of the survey with two volunteer interviewers. At left, a food shopper voices her opinions to an Extension interviewer during the consumer survey.

JANUARY 1973

Kids become farm-city ambassadors

"City kids soak up the glories of the farm"—that's an old story. Reports filter in from Extension offices everywhere about city youngsters visiting farms for a day or a week. The new story is about those farm kids staying in homes of inner-city boys and girls.

The story happened around Waterloo, Iowa—the scene of racial strife earlier in the summer. The children did the two-way visiting for a good reason.

"This is one way to dissolve fears and prejudices people have about each other," said Jane Cornelius, summer aide for the Expanded Nutrition Program (ENP).

Ethnic and economic differences, fear of the unknown, and pickets made organizing the exchange a challenge, said Reggie Byrd, another aide. The aides were trying hardest to find families to participate in the exchange during the time of racially oriented, emotionally charged picketing at a Waterloo shopping center.

Fears, mostly unfounded, were common on both sides, Reggie said. Farm families hesitated to send their children into the inner city, some because they were afraid they would get "mugged." City parents had similar fears about the possibility of farm accidents.

In spite of the fears and the push of summer farm work, the aides were able to set up eight exchanges. The success of this year's program should mean greater participation next year, Reggie speculated.

The exchange involved matching an urban family with a rural one. The city kids had been selected with the help of the ENP family food aides.

From their long-term work with families, the aides could suggest children who would benefit from the experience and help them get ready for their farm guests.

Jane contacted the rural families by phone using the membership lists of agricultural groups. Of the nearly 100 families she talked with, only about 10 agreed to participate in the two-way exchange.

"About. 75 families would have been willing to have a 'disadvantaged' city child to stay on the farm, but not to send their youngster to town," said Jane.

In addition to being hesitant to send their children into a different lifestyle, many rural families found the project impossible because of demands of summer farm work, fairs, and family vacations.

Likewise, some city parents were eager for their children to take part, but couldn't handle the pressure of an additional mouth to feed. "One family had three children sleeping on the floor already. Where could they put an extra?" Reggie asked.

Children of families who could participate were matched according to age and sex. "As much as possible, we tried to match interests, too," said Jane. Most of the families first met each other at a picnic planned so they could get together to decide the best time for the exchanges.

"It worked out best to let the families plan their own times instead of us designating one week or something. That way they could plan around conflicts—like vacations," she added.

The county Extension office carried short-term insurance on all the chil-

dren while they were away from home.

After the exchanges, the parents had fewer fears about the other's place of residence and were happy that their youngsters got along so well with different kinds of people. Most of the rural boys and girls had never known a black child before.

The youngsters? Well, it seems kids would make the best ambassadors. "They just don't seem to pay any mind to differences in people; they just have a good time," said an innercity mother as her son wrestled around with his new friend from the country.



Garth, a country boy, third from right above, watches with his city host brother, Kelvin, left, and the rest of the family as their mother repairs a torn jacket. At right, Garth introduces Kelvin to one of his horses. The exchange taught the boys a lot about each other's daily lives.

At ages 9 and 8, city boy Kelvin and farm boy Garth weren't too concerned with the cultural values of the exchange; they were intent on just having fun.

Kelvin fell in love with the horses immediately, but fell off during his first attempt at bareback riding. After only 1½ days in the country, though, he could take a running leap and scramble onto the patient horse's back.

Garth was excited about his guest, too; he has four older sisters, none of whom play much football with him.

There were a few adjustments to be made with a new child in the home, some parents found. Kelvin, for example, accustomed to the independence of riding his bike around his city neighborhood, at first would wander off without telling anyone. One morning, after a search, Garth's mother found Kelvin chatting with a man in the neighbor's hog house.

Generally, though, kids were kids. "Both boys eat a lot, sleep well, and run in and out of the house letting the flies in," said Garth's mom.

"There's more to do in town," Daryl, a 13-year-old farm boy, said of his stay in Waterloo with Marc. Daryl especially liked bowling, swimming, and sleeping late. Baseball proved to be a common denominator for the boys and they played a lot of it both in town and out on the farm.

Like other youngsters in the exchanges, Marc helped his host brother with chores Daryl usually helped with. He wasn't really crazy about walking up and down soybean rows looking for weeds, but who is?

"Farm chores for 9-year-olds are usually more fun than work," said another rural mother whose son took part in the exchanges.

"Faron (from the city) was up at 6 a.m. the first day, and the second morning he was awake at 5:15, before anybody else, to be sure he would be ready to help with milking."

Sometimes things didn't go quite as planned. One girl ended up in the hospital for a tonsillectomy shortly before her scheduled trip to the farm.

The farm family visited her in the hospital and made new arrangements for the trip.

Another time, a farm family came to pick up their guest and an extra child climbed into the car. So they took her along, too.

Jane added, "Full-family participation makes the exchanges go well. It doesn't work if anybody feels pushed into taking part. We tried to match kids' interests and ages. When you tell people they're part of an experiment, they feel adventurous and try even harder to understand each other."

There's a lot happening, Reggie concluded. The children are making friends with youngsters of different backgrounds, and the parents are becoming less fearful. The families are looking forward to getting to know each other better even after the exchanges are over.

"Children are more flexible than grownups, and a child exposed to a different environment doesn't grow up with misconceptions," he added.



Linda Morningstar
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about \$75 per year to cover the rest. Travel seminars are an additional expense.

New Horizons-for rural leaders

Drug traffic, zoning disputes, abuse of natural resources, racial tensions—dilemmas once peculiar to the city—are now problems shared by rural communities.

To train rural leaders to meet these problems, Michigan State University's Cooperative Extension Service has created a 3-year study and travel program called New Horizons.

It grew out of an MSU Farmers' Study Program sponsored by the Kellogg Foundation, and is now part of the University's Center for Rural Manpower and Public Affairs.

About 35 people between 25 and 35 years of age are selected in three-or four-county groups. The program consists of about 150 discussion hours and several travel seminars over a 3-year period. Two pilot groups are now in the third year of the program, two are in the second, and two are in the first.

Chosen for their potential as community leaders, the participants are from diverse social and economic backgrounds. In one group, for example, there is an auditor for the U.S. Department of Agriculture, a dairy farmer, an attorney, a county treasurer, a homemaker, a restaurant operator, the manager of an automobile salvage business, a township supervisor, and a clergyman.

"We already have a fair amount of autonomy and responsibility. What we're getting from New Horizons is a broad exposure to the human resources in our communities," one participant explained.

"Without this communication between various occupations and income levels, people tend to develop tunnel vision," said another.

This tunnel vision can afflict ad-

joining counties, too. Counties that are physically connected often are economically and socially isolated, a New Horizons county coordinator said. "But problems and opportunities just don't limit themselves to county boundaries."

For that reason, the program is conducted in multi-county areas. Participants thus can both look objectively at their local areas and work cooperatively with their neighboring counties.

Extension funds the New Horizons program with \$10,000 to allow counties to secure resource people. Each participant is asked to contribute "We try to see to it that eligible participants aren't excluded because of inability to pay," explained Dr. David Cole, program director. "At least 30 percent of the participants receive partial fellowships, usually from local businesses."

Nominations are solicited from local businessmen, educators, leaders of labor organizations, civic groups, and agricultural organizations. Eligible nominees are then contacted and encouraged to apply.

The one-day-a-week sessions are held during the late fall and midwinter, a period of lull for people in agriculture. The only shortcoming is in recruiting housewives and hourly workers who have difficulty getting time off, a county coordinator said.

First-year emphasis is on personal communications and group dynamics. Participants analyze their value systems and their roles in public decision-



Above, New Horizons students talk a moment before class. From left to right are a farmer's wife who is a township board member; a tool and die maker and union officer; and a dairy farmer who is a Farm Bureau officer. At right, Director David Cole (foreground) and a New Horizons participant listen to a lobbyist describe his job.

making. They also work on speech-making and conducting meetings.

"I can now tell when someone at a meeting is bluffing and when he is sincere," a school administrator said, "and I've learned ways of persuading the opposition in a group without causing resentment."

A clergyman said, "I had been in self-evaluation programs during my clerical training, but seeing the others in the group struggle to understand their values was enlightening. It gives me some idea of what kinds of things we can or can't jump into in this community."

Another participant recalled a session when a group of students came to talk about drug education. "A lot of us were turned off by their long hair and informality—especially when they sat cross-legged on the desks. But I think we're beginning to sense a meeting of the minds rather than being conscious of physical features."

A second facet of the first year's training is becoming acquainted with

local and State government. An assistant to the Governor spoke to the group about the problems of planning priorities in Congress, assessing property tax, and zoning. He also pointed out that letters and other expressed opinions from the electorate really are a barometer for elected officials.

In other sessions, a lobbyist discussed his functions and a Michigan senator let the New Horizons participants play "legislator for a day."

Speakers are selected from both the Extension Service and six Michigan universities. Each speaker is critiqued by the group.

"I can draw from a wide staff of Extension leaders who in turn have contacts," Cole explained. "Sometimes we simply use people from the local community."

In one group, for example, high school seniors, administrators, and board members from a four-county area discussed the advantages and inadequacies of their school systems.

The participants themselves design the second- and third-year programs. Along with the county coordinators, they assess their counties' situations and suit the program accordingly. Topics in the second-year program have ranged from rejuvenation of welfare programs to preservation of farm lands and improvement of vocational education programs.

One of the third-year groups is critically studying local community problems. The other has chosen three main areas of study: attitudes of American youth, criminal justice, and community land-use planning.

A particular merit of New Horizons is its flexibility, Cole said. The participants are free to challenge and change parts of the program that seem weak or irrelevant. One group, for example, wanted more small group interaction, so their schedule was altered to allow it.

Other suggestions are under consideration. One participant wants a time period set apart at the end of the day for summary evaluation. Another feels the travel seminars are superficial and wants in depth coverage

instead. Another wants more local participant planning.

What do the participants especially like about the program? "I really enjoy the personal communication with the resource people," one participant said.

"It's also nice having the speakers available for followup information," said another. "I can reach people in facets of government and education I wasn't previously acquainted with."

Participants are urged to read a large number of books, all of which can be borrowed from the university's New Horizons library.

During the 10 months between sessions, independent study programs are available, including "The Cost of Clean Water," "Migratory Farm Labor Dilemmas," "Speechmaking," and "Drug Abuse."

The New Horizons program offers Extension educators the opportunity to work together toward a common goal. In the four-county program in Tuscola, Huron, Sanilac, and Lapeer Counties, for example, agents cooperated across county lines. And within county staffs, agents combined their efforts, too.

In Lapeer County, County Extension Director Leo Dorr worked closely with Virginia Ortiz, Extension home economist; Tom Thorburn, agricultural agent; and Phillip Tigges, 4-H agent. All participated in New Horizons planning.

Achievements of the New Horizons program can be seen, for example, in the 4-H Council member who is more confident and poised, the farmer who decided to join the Lions Club to meet with fellow "businessmen", and the man who decided to run for county commissioner—and won.

"The program has been so successful," says Leo Dorr, "that we plan to conduct our own program in Lapeer County."

Program Director David Cole said that New Horizons is not a set of principles to be learned and forgotten. As the distinctions between rural and urban lifestyles merge, New Horizons members will be prepared for fruitful decisionmaking.



JANUARY 1973

Being at the right place at the right time appears to be the secret to how a Jefferson County, Alabama, program assistant reaches a target audience of an average of 278 per month.

The right place is one of the regular places throughout the county at which the county's bright yellow food stamp bus stops to recertify food stamp recipients.

The right time is after the people have gathered and just before the mobile unit arrives. At this time Mrs. Katie Halfacre, a program assistant, presents a nutrition lesson to the food stamp recipients who are waiting for the bus.

The idea for the mobile food stamp unit originated with the Jefferson County Commission as a way to overcome the problem of having only a limited number of distribution centers.

Auburn University Extension Service's Expanded Food and Nutrition Education Program (EFNEP) had been in Jefferson County for about 18 months when this project began. A member of the Jefferson County Commission contacted C. H. Johns, county Extension chairman, explained the mobile unit idea, and asked Extension to cooperate by teaching the families how to best use their food stamps.

Since then, the program has progressed from an idea to a successful operation.

Food stamp recipients look forward to Mrs. Halfacre's presentations at all of the 10 regularly scheduled monthly stops she makes with the bus. One woman says, "What I learn at the food stamp bus has helped my family wonderfully."

Another said, "I tried the corn meal mix you told me about. . . . It was the best coin bread I ever made."

"I have been able to save at the grocery store since you taught me how to make a grocery list before going shopping," said another.

The mobile unit idea fit well into the regular Expanded Food and Nutrition Education Program in Jefferson County. It provided an oppor-

tunity to reach large numbers of a target audience.

In early 1969 when the work on the project began, 10 part-time program assistants were teaching foods and nutrition to low-income homemakers throughout metropolitan Birmingham.

Mrs. Halfacre, one of the program assistants, was selected to assume the new duties associated with the food stamp mobile. She had been with the program since its beginning and had shown a great deal of potential. She still works with some individually enrolled families in addition to her food stamp bus audiences.

This new program venture required some revised techniques. Mrs. Halfacre had to learn to adapt her teaching methods and materials to a new and different audience. Some new equipment and supplies were needed, such as a portable table, insulated chest for hot and cold foods, display easel, flannel board, and other visual aids for large groups.

Mrs. Halfacre travels in her own car to the regular stops, arriving about 20 minutes before the bus comes. The crowd already has begun to gather by the time she gets there.

She sets up her table near where the bus will stop, begins to prepare for the lesson, and the waiting crowd moves toward her.

If the lesson is on preparation, she may already have the dish prepared, depending on the recipe. Whenever possible, she does some preparation for audience viewing.

As the crowd's interest grows, she begins her lesson; always including some pertinent nutrition facts and money-saving ideas. She brings related handout material for everyone. If a dish has been prepared, each gets a sample along with the recipe.

By the time the audience has finished sampling, the big yellow bus is usually arriving. Mrs. Halfacre remains a short while to answer individual questions, then packs up to move on to the next stop.

Mrs. Margaret Whatley, associate county Extension chairman, and I

Aide teaches food stamp recipients

by Jo Scott Extension Home Agent Jefferson County, Alabama

conduct weekly training conferences for the 20 program assistants. In a followup conference, we help Mrs. Halfacre select the nutrition lessons and prepare the visuals she will use at the bus stops.

No individual family records are kept on families who receive information at the food stamp bus. Mrs. Halfacre keeps a record of the number of people who attend, and they are reported as families worked with who are not officially enrolled in the EFNEP. This number ranges from 200 to 300 each month, for an average of 278 per month in 1971.

If someone in the audience requests individual assistance, she is contacted by the program assistant assigned to her geographical area. If the homemaker desires, she enrolls in the program and receives regular visits or joins a group.

An annual evaluation helps determine the program's success. The evaluation tool is a simple questionnaire which is completed by each person in attendance at all the bus stops during a single month.

Frequency of attendance at the lessons seemed to exhibit some level of the audience's interest. The 1971 evaluation revealed that 22.2 percent of the evaluation audience had seen Mrs. Halfacre give more than five



Mrs. Jo Scott, Extension home economist (foreground) and Mrs. Katie Halfacre, EFNEP program assistant, serve samples of salad which had been prepared for the lesson at this food stamp bus stop.

lessons at the food stamp bus during the year.

The number of recipes used by the audience appears to be some indication of audience comprehension and actual use of information. According to the 1971 evaluation, 17.4 percent of the evaluated audience had used more than five of the recipes they had been given at the food stamp bus.

The evaluation tool has questions directed at determining changes in the food-related habits of the audience. Results such as these were reported:

—49.3 percent had planned their families' meals to include the four basic food groups,

-50.2 percent had learned to spend their food stamps for healthful foods rather than snacks,

—17.1 percent had learned to cook more foods that taste good and are also reasonable in cost, and

-47.5 percent had begun using dry milk in meal preparation.

This venture has not been without problems. The food stamp bus project

has traveled a few rocky roads. Record-keeping is possibly the most ambiguous aspect of the program. Accurate and meaningful records are difficult to gather and maintain on an audience which varies in composition from month to month. The only records kept at present are the monthly attendance and the results of the yearly evaluation.

Recipes for demonstration require careful selection. On-site preparation of food is difficult because of the absence of facilities, so some dishes are prepared in advance. A few of the mobile unit stops have an indoor or covered area for use in food lessons. Most of the time, however, the lessons are presented outside. In unfavorable weather, Mrs. Halfacre improvises by shortening the lesson, but occasionally must cancel one.

Audiences generally are rather attentive, but distractions are everpresent in such an informal setting. Mrs. Halfacre strives to overcome these through worthwhile, informative lessons presented in an interesting

Cooperation and concerted efforts on the part of many have contributed to the project's success. It would not have been possible without the excellent cooperation of the Jefferson County Commission, who initiated the entire program.

In addition, the local food stamp office has accepted the project and cooperated completely with it. They provide Mrs. Halfacre and the county Extension office a copy of the scheduled bus stops each month.

The 1971 evaluation data seem to indicate a general acceptance of the program by the audience and some significant progress with them.

Mrs. Halfacre recognizes the project's value and reaps much satisfaction from the favorable comments she gets from her audience.

The program is progressing as planned, and we hope it will continue in this direction, constantly carrying the message of "good food for better living" to more and more people.

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Vinegar in the jug

"New" is one of the most appealing words in our language. Whether it applies to cars, clothing, or Extension programs—offering something new attracts special attention. Each new day or new year gives us a fresh start.

And that is fine, but—having something new doesn't mean that we must discard something old. Although we do give up periods of time—day, month, year—we retain knowledge of our experience in those periods of the past. And in our programs, we learn how to put the old and new together.

During my boyhood days on the farm, my family kept a jug of vinegar in the cellar. As we needed it, we would pour some from the jug; and about as frequently we would add some fresh cider. There was a gelatinous mass at the bottom of the jug which we called "vinegar mother." We were always careful not to pour that from the jug, because it was the catalyst to activate the fresh supply.

And so it is in conducting Extension work. We have had some excellent new programs and new approaches. But we learned that our success with them depended on proper blending of the new with the old.

For example, the States have had phenomenal success in recent years with the new idea of using paraprofessionals (program aides) for educational services. This has been especially true in the Expanded Food and Nutrition Education Program. At the same time, we continue to depend on well-trained professionals to conduct training and to carry our home economics programs to the more advanced homemakers.

Emphasis in agricultural programs continues on having county agents provide counseling to farmers generally, and recently to more operators of small farms. But we also have a system of providing advanced assistance, through area agents and specialists, to the more specialized farmers, ranchers, and agribusinessmen.

The same situation applies in our programs for youth. These programs have been advancing rapidly into urban areas, but we are not neglecting the youth on farms and in rural areas. Even though we have been playing down the "boy and calf" image of 4-H, it doesn't mean that we want to eliminate that kind of project. We are merely trying to attract young people in cities and towns with types of activities that appeal to them.

A similar philosophy applies in building an Extension staff. We welcome young people on our rolls because of the freshness of their ideas and the new vigor they bring to our programs. And we also need the experience and stability of older members of our staff. Together they provide the blend that gives us "vinegar."

One problem with Government agricultural programs in the last decade, and also back in the thirties, was the frequency of their "hatching." Before a staff could get started well on one new program, another would come along and dilute the efforts of the first. As a result, some programs were not fully activated. Over-dilution was avoided somewhat by dividing up the "mother" into new "jugs" (agencies).

In the field of Extension communications, we are constantly blending the new with the old, tested methods. When radio came along, and then television, we put great emphasis on them for educational services. But we didn't stop using newspapers, magazines, and publications. Today we adopt new approaches such as telelecture, but we still depend on meetings, demonstrations, and other types of group teaching. And we still use the one-to-one approach in much of our work.

The idea of all this is to say that we need to fit our services to the people we are to serve. And we should carefully blend the new with the old. It makes for better "vinegar."—Walter · John

RFVIEW

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The Extension Service Review is for Extension educators—in County, State, and Federal Extension agencies—who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers Extension workers, in their roles as educational leaders, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

EARL L. BUTZ
Secretary of Agriculture

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It helps to have a goal

Several State Extension Services in recent years have worked with leaders in agriculture and related industry to set specific agricultural income goals, and then to carry out concentrated educational efforts to reach them. Announcements by four States in the past few weeks indicate that this method is a good one.

Texas' goal, set in 1968, was \$3.76 billion in agricultural income by 1976. They exceeded that in 1972. Director Hutchison credits the goal, and the educational efforts designed to reach it, as being a key factor in the achievement. Florida's DARE (Developing Agricultural Resources Effectively) program has helped increase agricultural income by 115 percent since it began in 1964. That State just passed its 1975 goal of \$1.5 billion in cash farm income.

In Louisiana, the 5-year "Giant Step" program, which ended in 1972, exceeded its goal by \$35 million. Cash farm income plus value added by processing and marketing brought agriculture's contribution to the State's economy to \$2.6 billion last year. And Mississippi's 10-year goal of \$1.5 billion by 1975 was reached in 1972—3 years early.

These are examples of the value of setting a definite goal and then focusing all appropriate Extension educational efforts sharply on that goal. It means making a public promise—maybe even sticking your neck out—but it provides a unity of purpose which can lead to significant accomplishment, as these four States have shown. And because people can relate these accomplishments back to a publicly stated goal, Extension's image benefits.—MAW

Why do 4-H'ers drop out?

by
Karen Stamm
Milwaukee County Youth Agent
Alice Blechl
Milwaukee County Staff Assistant
and
Mary Dahlman
District Programing Specialist
Wisconsin Extension Service

For several years the youth development faculty in Milwaukee County, Wisconsin, made "educated guesses" about why some 4-H members left the program after their first year.

To discover the real reasons, they decided to survey a sample of members from 1971 who did not return.

Working together, the staff assistant, district program specialist, and youth agent developed a plan for conducting the survey.

The staff assistant compared the 1972 enrollment with that of 1971 and made a list, including name, address, and telephone number, of members who did not return. In addition, information on age at enrollment, club size, and club tenure was recorded.

The youth agent and district programing specialist developed a simple 1-page, five-question telephone interview format for questioning parents of the members.

The interview guide included an introduction explaining the purpose of the call, and the following questions:

—Could you tell me why (name) did not return to 4-H this year?

—Do you think (name) learned anything from 4-H? What do you think (he) (she) learned?



Staff Assistant Alice Blechl, above, surveys the mother of a former 4-H'er to find out why he did not continue.

—Do you remember how many meetings (name) attended? How many?

—Were any of the meetings project meetings?

-Do you have any additional comments you would like to make?

Fifty percent of the 486 members enrolled in the program for the first time in 1971 did not enroll again in 1972. Sixty of the 241 dropouts were chosen for the survey, and 46 contacts were made. In nearly all cases the mother of the former member was interviewed by the staff assistant.

The analysis of the data gathered provided the following information:

—Although a slightly higher percentage of dropouts came from clubs with memberships of 75 to 100 youth and from new clubs, the differences were slight.

-Younger first-year members drop-

ped out less frequently than older members.

—The reasons for not returning to the program were varied, but seemed to fall into three categories: unavoidable circumstances (illness, moving); dissatisfaction with the program (bored, leader never had meetings); and the need to limit activities (taking organ lessons, transportation.)

—Half of the mothers felt that 4-H had been a learning experience even though the member was not returning. Most of these members had project learning experiences. Nineteen of the people interviewed mentioned specific project areas in which the members gained knowledge.

—The amount of participation in the program ranged from none to attendance every week. About half of the responses indicated average or above average involvement for a firstyear member, and about half indicated very little participation.

It is unrealistic to expect every young person who joins 4-H to remain involved for a second year. In Milwaukee County, however, the conclusions we were able to draw from our survey have convinced us of the need to minimize the turnover related to unsatisfactory 4-H experiences.

We are encouraging leaders to:

—Find out why members drop out. Suggestions for program improvement can come from them as well as from those who remain in the program.

—Contact the 4-H Youth agent if distance is a factor in members' dropping out. Perhaps another club can be started in a more appropriate area.

—Involve members as soon as possible after enrolling. Younger members in particular are anxious to start and can easily lose interest.

—Consider giving older first-year members more responsibility and allowing more involvement. Although they are first-year members, they probably want to be doing the same kintis of things as their peers.

—Allow members to set their own pace and make their own decisions. This should help maintain interest, especially for older members.

Aides assist low-income farmers

An agricultural aide (left) and Taylor County Extension director (center) show a limited-resource farmer how to select sheep by inspecting condition of ewe's mouth.

Are there limited-resource, low-income farmers in one of the Nation's richest farm States? Does Extension have a responsibility to seek out and serve such farmers?

Iowa Extension workers say "yes" to both questions. And they have developed a system to reach this often-overlooked audience.

Key to the Iowa system of reaching limited-resource farmers is the paraprofessional agricultural aide. "A farmer who works with farmers," is Clarke County Extension Director William Sirowy's description of the agricultural aide program in that county.

The paraprofessional Extension workers serve limited-resource farmers in four counties of Iowa's Midcrest Extension Area in the southern part of the State. "Helping the county Extension director do his job," is the way one agricultural aide views his task.

James Almquist, Midcrest Area Extension Director, believes that all people—not just the "elite" farmers—are entitled to Extension's services.

He has a deep conviction that "not only are small farmers entitled to our help and assistance, we are interested



in improving their well-being so they can find a satisfactory life for themselves and their families as they work on their farm—whether the farm is 40 acres, 120 acres, or 1,000 acres."

With that philosophy as a guideline, Almquist and his staff decided that since a county Extension director did not have time for the needed one-to-one counsel and assistance to limited-resource farmers, he needed help. The kind of help needed was another farmer who had rapport with the limited-resource farmers, they reasoned.

Almquist presented to the ISU Extension administration a proposal to hire four paraprofessional agricultural aides in two counties as a pilot project. The administration approved the project for a 6-month trial from January through June 1972.

The 6-month program impressed enough people that the project was extended indefinitely. The program also expanded into two additional counties at the requests of county Extension directors. Now five agricultural aides operate in four counties.

Almquist also believes in helping small farmers use the services of existing agencies. The aide explains to his limited-resource clients the programs and resources of agencies such as ASCS, FHA, Social Welfare, employment service, and banks. When necessary, he even helps his client get appointments.

An important concept the Midcrest staff drives home is that an aide's role is more than that of a visitor or pamphlet distributor. "We feel it is important that an aide work hand-in-hand with a client," Almquist explained. "When there is a task to be done, the aide must be able and willing to roll up his sleeves and assist the client in accomplishing the task."

Such a working relationship acts as a demonstration that use of a specific method will enhance the farmer's operation. The aide may have to repeat the demonstration two or three times before the farmer adopts the method.

By working intensively with 30 to 35 clients, an agricultural aide maintains a close relationship with them. He calls on each client at least once every 2 weeks. Calls vary with the season of the year, the aide's client workload, and client needs.

Competency of the agricultural aides is important to the program's success. Midcrest Extension professionals—both county and area staffs—enhance the aides' work by providing meaningful inservice training. This is accomplished by monthly staff conferences and inservice training sessions for the aides conducted by the county and area staffs.

In addition, the county Extension director meets with his aides for a counseling session once every 2 weeks. At these sessions, the director and aide discuss the problems and progress of each client.

The aide keeps a written log of all calls and maintains a reference card for each client. He makes notes after each visit so he can recall points he needs to discuss with his county Extension director.

The county Extension director is the aide's direct supervisor. If an aide

needs further resource help, he can directly contact an area Extension specialist.

Almquist emphasizes that no additional professional staff has been hired for the agricultural aide program. The aide program does take priority over some traditional programs carried out in the past, he admits.

But nothing has been cut from schedules—the agricultural aide program is inserted into an already busy Extension educational program.

Almquist feels that the program can be accomplished without a lot of administrative overhead. "The primary ingredient is that the total staff must have the conviction that working with the small or low-resource farmer is important," he says.

The aides were hired through ads placed in local newspapers by the Midcrest Area Extension Office. Applicants were screened by the county and area staffs.

All agricultural aides are farmers or recent farmers. They live in the area they serve. Their employment is arranged so they can continue their farm operations while working for Extension.

Aides can work a maximum of 40 hours per week, but their budget is based on a 10-month year. The current average wage is \$2.50 an hour. Travel is reimbursed at 10 cents a mile and other out-of-pocket expenses are reimbursed just as they are with the professional Extension staffs.

It's difficult to put a dollars and cents evaluation on any educational program, but many accomplishments can be cited as a result of the aides' work. County Extension directors report new faces showing at Extension meetings as a result of the aides' invitations to limited-resource farmers.

FHA and bank representatives praise the program because the aides are reaching some of their clients in a way that they are unable to do.

The aides encourage some limitedresource farmers to seek other employment, or at least part-time employment, when their farm resources are inadequate to support their families.

Local employment offices and businesses cooperate in placing the referrals into jobs when they become available.

Agricultural aides and nutrition aides have a close working relationship. They may have the same client. And sometimes an agricultural aide determines that a nutrition aide can do more for a client than he can, and vice versa.

Money management seems to be a universal problem of limited-resource farmers. Often, adequate credit is not available because of the client's low equity, risky repayment capacity, and previous management track record.

Therefore, an aide has a big job in counseling his clients on the wise investment of their limited resources. The aide's efforts must be closely coordinated with the credit supplier.

Some clients simply need to be made aware of current assistance programs. One aide reported a client who had bought seed to renovate a rundown pasture, but did not realize that it could be cost-shared by the Soil Conservation Service. The aide helped him sign up for pasture improvement assistance, and he collected nearly \$900 that he would not otherwise have received.

Aides help in other ways, too. A limited-resource farm widow, for example, had rented her farm to an area farmer, but he later decided not to operate the farm. The aide helped her contact an attorney, who notified the farmer that he would have to operate the farm as contracted or permit another farmer to operate it.

As a result, the farm was operated and a bumper crop was harvested. The widow shared the proceeds which otherwise would have been lost.

Numerous other examples could be cited, many involving substantial financial gain for the limited-resource farmers.

But less easily measured traits, such as increased confidence, improved managerial ability, proven credit worthiness, and elevated living standards, may far exceed the dollar benefits that can be counted.

□

Mosquito control enhances community life

For the first time in their memory, many residents of Vienna, in Dooly County, Georgia, are enjoying their summer nights.

Why? Because each week 19-yearold David Musselwhite, a college student, climbs into a city truck with an ultra-low-volume spray gun mounted on its bed and sprays the city street by street for mosquitoes.

David's efforts are part of an ambitious pilot research project on mosquito control being conducted in Vienna by the Georgia Cooperative Extension Service under a grant from the Rural Development Center (RDC) in Tifton.

"Before the project, you couldn't get outside after sundown," said Allen Fulford, Dooly County Extension agent. "If you got out there and stood still, you just couldn't stand it because of the mosquitoes."

"We have a little league baseball program here," said Vienna's Mayor Hobby Stripling, "and it was just unbelievable how miserable people were at something like that."

And now all that is changed because of the mosquito control program. "Now people are cooking out, sitting out on porches, and going to little league ball games unmolested, and they are really enjoying it," Fulford said.

Not only are the people of Vienna happy about the research project in their town, but many of them have been voicing their pleasure to city officials.

Vienna City Manager Stanley Gambrell remembers one day not long ago

when a woman resident of his town called with praise for the project.

"I don't know who this fellow is who comes around spraying for these mosquitoes," she said, "but if you have to, I want you to raise his salary.

"That truck came by my house last night and I was able to get out there and hoe my garden for the first time like it ought to be hoed. If you have to, you can add a little bit onto my taxes to help pay that man's salary."

Mayor Stripling also hears his share of good remarks about the program. "We have comments every day about the success of the program," he said. "People tell us it is working and that mosquitoes are just not a problem since the program began."

The three men most responsible for this popular program are Fulford, Musselwhite, and Maxey Nolan, an entomologist with the Extension Service.

Nolan and Fulford designed the pilot project and also wrote the proposal for the \$8,850 it took to finance the program last summer.

"We had been trying to find some funds available for this kind of research for some time, and it just so happened that Allen Fulford indicated an interest in it," Nolan said.

"We have a lot of information about mosquito control along our coasts. For people living there, it is a standard thing to pay for mosquito control."

"The problem is that we don't have any information about the cost of control of mosquitoes in landlocked rural areas," Nolan continued.

"We have often had requests from

mayors and other leaders about what it would cost their towns to run a mosquito control program, but we do not have the information available anywhere."

The desire to provide this type of information to Georgia's rural areas led Nolan to pursue the extent of Fulford's interest in the project.

When Fulford indicated that he had the cooperation of the city and county people, Nolan chose Vienna as the pilot town in the proposal he submitted to the RDC.

He also had another good reason for the site. "Dooly County is an overlap area for the different species of mosquitoes," Nolan said. "We have almost every kind of Georgia mosquito right here."

In his proposal, Nolan had two farreaching goals. "First of all, we want people living in ultra-urban areas to spread out a little bit and come down to places like Dooly County to live."

Nolan considers the mosquito problems in Georgia's rural areas a deterrent to such relocation. He thinks the information he is gaining on mosquito control will help in this overall effort to ease the overcrowded urban areas.

A second objective Nolan thinks his research can contribute to is increased tourism. "If any county up or down I-75 or I-85 sets up a campground or a trailer park or something for tourists, the developers would have to control the mosquitoes. If they didn't control them, the word would get out and there wouldn't be any business."

To gather his mosquito control data, Nolan has utilized Musselwhite's ef-



Checking one of many light traps stationed around Vienna to monitor mosquito populations are (left to right) County Agent Allen Fulford, spray operator David Musselwhite, Extension Entomologist Maxey Nolan, and City Manager Stanley Gambrell.

forts to try to manage the mosquito populations in Vienna.

In addition to his spraying tasks, Musselwhite has been working all summer to monitor the adult mosquito population, using light traps, biting counts, and complaints.

When Musselwhite tabulates his results from this monitoring work, he can better determine where and with what frequency to spray. His results also are sent on to Nolan in Athens for compilation into the total research project report.

From results tabulated so far, Nolan feels he has just barely scratched the surface in gathering the mosquito control information needed to realize his goals.

For a control program to be completely successful, he says, the effort must be carried beyond just one town to other towns and rural areas in a given area.

"If we can locate a program in a county seat and do a good job there, then we can move into the surrounding smaller towns and rural areas in the

county and tell them the story," Nolan said.

"It is better for everyone if the whole county gets involved in a program like this. You can control mosquitoes for a while in a town like Vienna, but if you don't expand the control program out into the county, mosquitoes eventually will migrate back into town."

According to Nolan, good mosquito control will not mean spraying the entire county. This obviously would not be economically feasible. Instead, he sees a 100 percent countywide effort involving economics, drainage, and clearing, with insecticide spraying being only a small part of the program.

"It will cut down the cost of a mosquito control program in a densely populated area if the pests are controlled in outlying areas," Nolan said.

"I think this is really the kind of information we are trying to find at the RDC. It is something that benefits all the people."

According to Mayor Stripling, it is one of the most universally beneficial programs he has ever been involved with as a public official. It has added to the comfort of all Vienna's citizens, whether rich or poor.

In fact, he thinks the poor people of his town have been helped more than anyone else, because they are the least equipped to escape the pests.

To paraphrase County Agent Fulford: Because of this project, people are comfortable. When they're comfortable they're happy, and when people are happy, everybody's better off.

Helen T. Puskar
Home Furnishings Specialist
and
Stanford M. Lembeck
Community Housing and Planning
Specialist
The Pennsylvania State University

Making low-cost home furnishings

Whether a limited-income family "makes it" in today's complex society often depends upon their use of all available resources. Helping families recognize resources is a challenge to anyone who wants to help improve quality of life both in the home and in the community.

This was the theory behind a home furnishings program for limited-income families which has been planned, piloted, and presented in 44 Pennsylvania counties during the past 3 years.

A wide variety of home furnishing items—related to such things as lighting, space use, beauty, and storage—can be made in a short time from resources found in most homes.

The program was aimed not only at the limited-income families, but also at personnel of other agencies who work with them.

Represented were the Department of Public Assistance, Head Start, Homemaker Services, the Salvation Army, Welcome Wagon, YWCA, and many others. Extension nutrition aides participated, too.

In cooperation with Elizabeth Langsdale, home furnishings specialist from Maryland, we sought help from several commercial sources and made surveys of related activities of other State Extension Services.

Questionnaires were sent to families with limited incomes to find out what they wanted or needed for their homes, what resources were available to them besides money, and what items might be acceptable to them.

Some sample items were made and tested for low cost, practicality in terms of time and skills available, and acceptability to the audience.

Later, funds received under Title I of the Higher Education Act gave impetus to further development of ideas, methods of teaching, and actual items for use.

The Title I educational program was piloted during the 1970 fall term at The Pennsylvania State University. Thirteen students, two resident staff members from the College of Human Development, and the Extension home furnishings specialist cooperated with the Blair County home economist, Marilyn Hartman, and the community development coordinator and staff from Blair County to develop and carry out the program.

The in-field part of the program was carried out by the 13 students—12 women and one man—who received credit toward their majors in housing, home art, or home economics education. All were juniors or seniors.

Interest in this type of project was high. The students were included in planning sessions with the local people. They then worked on items that would meet the needs of the people who had attended

The students quickly established good rapport with their audience, and did an excellent job in this mutual teaching-learning situation. OEO personnel recruited the audiences and arranged for meeting places. Resident



and Extension staff coordinated the program.

Objectives of the program were to help participants recognize and utilize individual and community resources related to home furnishings and to construct some basic home furnishings items using these resources.

Repeated comments by women indicated that they learned many things—sometimes things we assumed they already knew. Getting ideas and creating items in a group situation was



Above, workshop participants learn to make inexpensive wastebaskets from discarded food cartons. At left, a homemaker prepares to put used milk cartons to a new use.

personally rewarding and often was the highlight of a day.

Women were interested in improving the environment of their home and appreciated efforts to help them to do this. Expressions of creativity brought much satisfaction and increased self-esteem. The women were proud of the items they made and hurried home to show them to their families.

According to Kay Maloney, OEO Coordinator, "There was also a lot of pride and self-esteem in the fact that Penn State related directly to the people. Real upgrading of people mostly comes about when self-worth is increased."

Using the responses from women who attended the workshops, we determined which items were acceptable to the majority of people.

During class discussion, often the most expressed needs were in the physical aspects of family life, such as the building, storage, and privacy. Yet projects undertaken with the most enthusiasm related more to decorative values.

The items the women made were important for several reasons. First, they met a need. Second, they were made from resources found in most homes or easily available at little or no cost. And finally, they met criteria for comfort, convenience, beauty, safety, and low cost.

After the pilot program was finished, directions for making some of the home furnishings items were written and duplicated for use with groups who participated in the followup workshops.

These directions were written in simple, easy-to-follow steps and included enough drawings so a minimum of reading skill would be needed to make them.

Items for which directions are available include a pillow stuffed with plastic bread bags; a stool made from cans; a multiple clothes hanger; a kaleidoscroll—a simple wall decoration; a chair made from tires; covered coffee cans; and a meat-tray lamp.

In the counties where the program was presented, a learning situation was planned using the low-cost items as motivators. The home furnishings specialist conducted 2-day sessions in single counties or groups of two or three counties.

Home economists from the participating counties invited other agencies working with low-income families to send representatives to these sessions.

Some items were more popular than others, and preferences varied among counties. But response to the workshops was favorable everywhere, and audiences indicated that they would teach others what they had learned.

The participants identified money as an important resource, but also learned that it is not the only resource. For example, almost everything we buy comes in a package, and these packaging materials may be used to make the home environment more pleasing.

When recognized as a resource rather than an "ecological problem," these materials can be used in many ways to meet family needs and to express creativity.

Plastic bags are used to package bread, oranges, and other food products. Eggs and meat are sold in a different form of container. Both are illustrations of a "found" or free resource which enters most homes.

When packages are empty, the homemaker either discards them or uses them in different ways. If used, they serve a dual purpose—ecological, and meeting a need.

One way to use plastic bread bags is in a pillow or decorative cushion. The cover can be made in a short time from a scrap of fabric or part of a worn garment. After the bread bags are washed and dried, they are stuffed into a cover to the desired fluffiness.

Visual stimulation, such as a small, easily carried cushion, attracts attention and interests a homemaker. Once her attention is gained, a teachable moment is created. As ease of construction is demonstrated, other related questions can be discussed.

Nutrition aides and others working with disadvantaged families are quick to recognize the practicality of this idea. They also see the relationship between a home furnishing item and a food product.

Valuable lessons can be learned using these resources as tools to teach many things including nutrition, sanitation, comfort, convenience, and appreciation of beauty.

Other topics which have been discussed as background information include good and poor environment; problems related to environment; and resources other than money which can be used to enrich homes.

William R. Beasley
Extension Information Specialist
Montana State University

Montana 4-H'ers discover drama

"All the world's a stage" is never more apparent than each spring when hundreds of 4-H members in Missoula County, Montana, take bows at the annual Drama Festival.

"The play is the thing," and has been for a quarter of a century in the western Montana community as the 4-H/Kiwanis Club Drama Festival takes shape and curtains go up and down. Since 1947 the festival has been a highlight of each year's 4-H activities.

The 25th annual Missoula County 4-H Drama Festival, in April 1972, involved about 350 members and leaders. Eighteen clubs participated.

It took a lot of man-, woman-, and youth-power before blue ribbon plays from district playoffs were presented the final night.

That night was dedicated to Anthony R. Rollin, the man who started the festival and put a lot of effort into it for the next 16 years. He retired as Missoula County Extension agent in 1963.

His favorite play, "The Blue Teapot," won the first competition and was repeated in his honor this year. He also was presented a blue teapot inscribed "25th Anniversary" at a reception following the finals.

"The Belles of Horse Fly Gulch" won the 1972 grand award for the Orchard Homers 4-H Club. It was selected by the finalist judges, Ed Blackler of the Missoula Children's Theater, and Roscoe Drown, former Hollywood stuntman.

The district judges were a high school drama instructor and another Children's Theater representative.

David L. Bertelsen, present county

Extension agent, credits Rollin and others for making it easy on the Extension Service staff.

The Missoula Kiwanis Club is sponsor of the festival, and the Missoula County 4-H Council is its director—on a permanent basis. The council names a committee which picks a festival chairman, district chairmen and judges, and helps find directors and assistants.

A Kiwanis member serves as master of ceremonies and provides club and individual awards. It is traditional for the winning cast to present its play at a Kiwanis meeting.

Awards are given for the outstanding actor, actress, character actor and actress, supporting actor and actress, and bit actor and actress, on both the district and finals level.

The 4-H members gain appreciation for drama as they present a variety of plays. Comedies are most popular, but plays range from fairy tales to science fiction and from children's theater to satire.

The winning play usually is performed for other audiences, too, such as at school or community functions.

Second-generation participation has helped make the Drama Festival a real tradition. A participant in the first festival was leader of the club which won in 1969, and had a son and daughter in the cast.

The festival committee (five 4-H leaders and a Kiwanis agriculture committee member) organizes a prefestival workshop for directors in addition to scheduling contests and supervising.

One committee member works with the press. A picture session at rehearsals the day of the finals helps the local daily newspaper provide timely coverage, announce winners, and do a picture feature. The Kiwanis awards are presented on KGVO-TV.

The role of judges is critical. They see all district contests to rate plays and individuals. They ignore applause in applying rules. They explain what is good or bad, and what could improve the play. Judges have disqualified a crowd favorite for missing the 15- to 30-minute time limit.

The 4-H'ers handle details, from picking a play and finding a director to casting and conducting rehearsals, with little adult help. Some members perform up to 6 years, and may advance to director. One is now a drama teacher.

Missoula high school drama teachers say they could almost pick candidates for Thespian drama honorary on the basis of 4-H Drama Festival training.

For many the festival is their only chance to act on stage—to "make believe realistically." A drama teacher who served as judge said participants "really come out of themselves."



Above, villainous Cyrus Smellworthy intimidates Farmer Tolliver and Marigold in the Orchard Homers' production of "Belles of Horsefty Gulch."

He added that the festival provided a start for some of the most polished performers at his school. A boy who accepted a role despite a severe speech impediment now is headed for a career as a drama teacher.

The festival makes a small profit from 25-cent admission fees (50 cents at the finals), after token payment to judges and other expenses.

There is little subsidy from the Extension staff, which prints programs, helps with news releases, and handles some details in about 6 man-days.

Those involved in the festival agree that it helps the participants:

—learn to work effectively as a team,

-gain poise and confidence,

-develop speech projection,

—develop appreciation of drama, and

—accept sportsmanship as a way of life.

After 25 years, Missoula County 4-H members know the play is the thing, and they have a good thing going.



The witch from "Hansel and Gretel," left, was portrayed convincingly by a member of the Horse and a Half 4-H Club. Below, she terrorizes her victims.





At left, Dorothy and Toto the dog are shocked as the dancing Scarecrow collapses in the Missoula Sparklers' version of "The Wizard of Oz."

by R. L. Hurst Coordinator 1890 Extension Program South Carolina State College

1890 program aids communities

South Carolina State College—an 1890 land-grant institution—and Clemson University have launched an Extension program to strengthen rural community structure in the State.

Here is an explanation of the approaches used to get the project going.

First, a committee from State College and one from Clemson University met to discuss how State College could best use its talents in rural outreach work, as well as bridge any gaps existing in present research and Extension programs conducted by Clemson.

After reviewing existing rural needs, a decision was made to work with low-income families in three pilot counties: Chesterfield, Georgetown, and Hampton.

Now designated the 1890 Extension program, it is an integral part of the total Cooperative Extension effort of Clemson University.

Duplication of effort is being kept to a minimum, and the program is attempting to give social exposure and learning experiences to youth, upgrade the quality of rural home life, and strengthen the rural community structure.

Clemson University's Cooperative Extension Service is making all possible resources available to State College. For instance, C. A. Brown, associate county agent in Marion County, and Mrs. L. J. Limehouse, associate Extension home economist in Bamberg County, were selected by the 1890 coordinator and approved

by the State director to serve as camp directors and regional coordinators of the 1890 program.

Nine Extension aides from each pilot county are employed by the program and work with at least 20 families each throughout the year. They also attended and participated in the camping program.

As soon as they can be found, a professional rural youth program leader will be placed with each county staff

The goal of the youth program is to raise the aspirations of low-income rural youth and help them prepare for a better life within the existing socio-economic system.

The principal focus is on 9- to 16-year-olds. Many youth in this group desire more than their meager means can support, and they despair of improving the situation. Their confidence must be challenged in a real and overt manner by the existing institutions to help them achieve better living.

Learning experiences are provided in organized youth clubs in each community. The objective is to direct their interest into creative, constructive, and supervised activities. Local youth councils are organized as a coordinating group.

Teen and subteen clubs seek to:

—generate programs in recreation, arts and crafts, and youth outreach activities, such as community beautification, voter registration, and home gardening, —form musical groups and baseball teams, and

—provide general buzz sessions on drugs, sex education, economic systems, or other selected topics.

Most rural youth from low-income families have never been financially able to attend a summer camp. Job opportunities for this group are limited and most young people spend their summer months in nonproductive pursuits.

It was decided that a free camping experience would be highly beneficial for these youth, and with the approval of ES-USDA, funds were allocated for camping.

About 600 underprivileged youths from the three pilot counties enjoyed a 2-week, cost-free camping experience at Camp Daniels near Elloree during June and July.

The daily camp program included such activities as swimming, fishing, sports, group singing, and vespers.

The schedule also included classes in personal hygiene and sanitation, food and nutrition, arts and crafts, dancing and singing, industrial arts, and personal grooming. Special activities included a talent show, a dance, a camping trip, and a boat ride.

Twelve counselors—college and high school students—were part of the camping staff. They kept activities rolling by providing instruction in the classes. They also provided a big bundle of much-needed empathy and love.

The camp program concentrated on young people from families with limited income, both black and white. These youngsters have many potential problems, related to such things as drugs, sex, and the belief that they can get something for nothing. Where these have taken hold, we try to reorient their thinking into more constructive channels.

Brown says, "I had a little group that would not become involved. So I took them on a boating trip and talked with them about job opportunities, their personal conduct, and getting 'hung up' on the wrong things. I appealed to them to make something of themselves. Afterwards, they began to take part in group activities."

If young people are going to succeed in life, they must believe that they will be rewarded in proportion to what they can do. So we tell them, "If you can create a salable product, you will be rewarded for it."

A Wednesday night program encouraged the youth to do well whatever they undertake, and to stay in school until they learn a salable skill.

Mrs. Limehouse says, "It was heartening to see these children find something within themselves they didn't know they had, especially a talent. Then they began to blossom, to take part in games and help in the dining room."

Camp directors noted a definite improvement in grooming and personal habits after 3 days. By the end of the 12-day camping period, dramatic changes could be seen.

Camp counselors encouraged the young people to take the information they had learned back home and to take part in the new community structure in their counties.

Upgrading the quality of home living—State College's second Extension goal—involves the total family in projects. Specialists from Clemson University and State College are training program assistants to work with rural families.

The assistants help families with such things as gardening, food preservation, sanitation, beautification, and clothing.

The specialists also are teaching the program assistants how to encourage better family relationships.

Program assistants advise families about services available from other agencies. If the family does not have transportation, the aides take them to the county and State offices to get available assistance.

Community revitalization—the third objective of the 1890 program—encourages interaction between common interest groups by finding the strongest bond of interest within the community that will draw families closer together through intergroup action.

A county advisory committee offers suggestions on the most pressing problems and schedules priorities for meeting community needs.

The 1890 program workers in each of the pilot counties, in cooperation with the county Extension staff, obtained a community house from local officials. These facilities are large enough for adult group meetings and youth activities.

Adjacent land is used for demonstration garden plots and recreation. Presently the buildings are being equipped with sewing machines, a gas range, deep freeze, refrigerator, and record player.

The total program on community restructuring seems to be on the right track toward getting rural families to talk, sing, sew, visit, and pray together again.





Above, a group of girl campers try their hand at learning a new craft. The boys at left are developing some new skills which will help them make simple repairs around their homes. Do you take your secretary for granted? Do you consider her a combined office manager, artist, audiovisual expert, public relations specialist, and authority on Extension programs and policy?

When these questions were posed to Cooperative Extension agents in New York State last summer, the answer was nearly a unanimous "yes, but we think they should be helped to do an even better job."

The outcome? Agents from 47 coun-

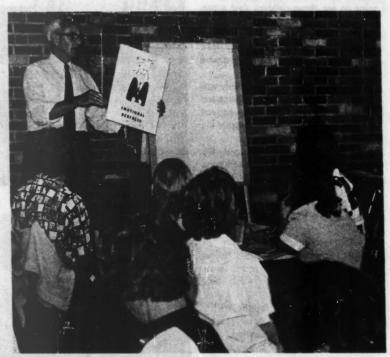
ties, as well as specialists involved with eight related programs, sent 180 secretaries to the Cornell campus for a 2-day training program early in September.

So enthusiastic were the agents with the idea that they agreed to defray, from county association funds, all traveling and lodging expenses for their secretaries. College funds were used to cover their meals and other miscellaneous expenses.

So that the group could remain to-

Secretaries deserve training too

Russell D. Martin
Coordinator
Communication and Inservice Training
New York Extension Service





Above, a group of New York Extension secretaries participate in a workshop on effective listening. At left, they learn how to improve the design of their direct mail pieces.

gether, a motel on the edge of campus was chosen as the headquarters for the entire program, although a few had to be housed in another motel nearby because of the large number who came.

From the time they registered on Wednesday afternoon, until they left at 3 p.m. Friday, they were one of the most appreciative groups ever involved in a staff development program.

To provide the women with the type of training they thought would be most helpful, we asked them to rank a number of topics related to their interests and area of responsibility. Then we set about trying to see how it all could be crammed into 2 short days.

The program was divided into two parts. First, there were those topics of general interest to all, and second, there were five separate workshops from which the secretaries were able to choose any two.

The planning committee agreed unanimously that the women should have an opportunity to tour the campus to see buildings and meet people that previously had been only an address or a telephone number.

The fact that only a few had ever been to Ithaca was the main reason why the program took place there rather than on a regional basis.

After an early dinner the first evening, the secretaries departed on a half-hour bus tour of the campus, followed by brief conducted tours of facilities used most frequently by the county offices.

These included the soil testing laboratory, duplicating services in the College of Human Ecology, and the distribution center for all Extension publications.

Thursday morning brought on the formal part of the program, handled in part by staff members in the Department of Communication Arts.

Among topics for the entire group was a session on "Improving Your Direct Mail," which dealt with the broad principles of where and when to use it, developing the right message, and ideas on layout and art.

The presentation on "Using the

Penalty Privilege" served as a refresher and also brought out many questions on interpretation of rules and regulations.

The same was true of the program on "Extension Fringe Benefits." In this panel presentation, conducted by representatives from the Finance and Business Office and University Personnel Services, the participants were brought up to date on the retirement plan and the health and life insurance programs.

"Your Telephone Personality," presented by a service adviser from the New York Telephone Company, included a film which served as an excellent basis for questions and discussion on proper use of the phone.

Humor, empathy, and common sense were effectively combined in the session on "Improving Your Letters," presented by an instructor in the School of Hotel Administration.

One of the highlights of the 2 days was "Your Public Image," conducted by a private consultant with years of experience, including that of operating her own finishing school. Discussion and demonstrations of diet, exercise, posture, wardrobe, and personal habits were effectively used to develop the theme of "letting your personality show through."

Three of the workshops—"Direct Mail," "Overhead Transparencies," and "Posters, Signs and Charts"—provided an opportunity to gain first-hand experience in some of the tasks the secretaries are called upon to handle back in their county offices.

The one on "Office Management," conducted by a staff member from University Personnel Services, explored new techniques in office procedures.

"Effective Listening" looked at the importance of good listening as part of the communication process, examined some of our bad listening habits, and provided an opportunity for each secretary to evaluate her own listening capabilities.

From the beginning, these 2 days were looked upon as an opportunity for secretaries from all parts of the

State to share ideas with one another. Many brought examples of internal communication forms and direct mail pieces, which were prominently displayed.

Other ideas were shared during "Eyeopener" sessions where participants were able to tell about a short cut, a trick of the trade, or other helpful techniques that might save other offices both time and money.

Extension Administration, too, had an important role in the program. The Vice Director presented a stimulating talk at the final banquet, and many of the other staff members were present to serve as hosts and hostesses. Several of them served as guides on the campus tour.

What was the reaction to the program? Both from the evaluations turned in by the secretaries and from the many letters received from them and their agents, perhaps the following comments best sum it up:

-"A most stimulating and educational experience,"

-"A great morale booster,"

—"Especially rewarding to meet and exchange ideas with secretaries from all over the State,"

—"We have a new attitude toward our role," and

—"Makes me proud to be a member of Cooperative Extension."

We are certain of one thing—the program was worthwhile, not only because of the knowledge and skills gained, but also because these members of the Extension family were made to realize how important they are to the success of Cooperative Extension in New York State. Plans are already underway to make this type of training an integral part of our staff development program.

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What is rural development?

The Cooperative Extension Service has been engaged in rural development constantly since it was established in 1914. Every effort to help a farmer or his family in those early years was a contribution toward building rural America.

Today, rural development has a broader meaning. But it still includes helping to improve agriculture and rural people, plus other services that have been added to its scope.

It recently was defined by the U.S. Department of Agriculture's Rural Development Committee as "making rural America a better place to live and work."

The Committee breaks the rural development functions down into four categories—community facilities, economic development, environmental improvement, and people building.

A symbol developed by the Department to identify these four components appears on the front cover of this issue of Extension Service Review. Let's look at the components in more detail.

Community Facilities include housing, transportation, utilities, waste disposal, and water supply. These are the basic material services which help people carry on their work more effectively in a rural community. Extension works closely with the Farmers Home Administration and other agencies in obtaining loans, grants, and other assistance for these facilities. This is where Extension's educational function and knowledge of community needs and public programs come into full play.

Administrator Kirby has emphasized that Extension education programs are having an impact in "helping people know better how to live as well as how to make a living." Extension workers seek to help in this "how to live" aspect by working with local people on problems calling for community consideration and group decisionmaking. It includes helping them get credit and utilize their full resources. And in the case of housing, we have a followup role in helping people to make better use of better homes.

Economic Development is self-explaining. It includes, first of all, the agricultural pursuits in a community. A prosperous agriculture is basic to a sound economy in rural areas. Extension has been unusually successful in its agriculture-building capacity.

This phase of rural development also encompasses business and industry, which now more than ever before, are

essential in providing supplementary employment and a broad tax base in many rural communities.

Environmental Improvement is one of the newer terms in rural development, but we have been at it a long time. It includes such things as conservation, land use planning, recreation, and the esthetics. The work of the Soil Conservation Service and local conservation districts in getting erosion under control has been of valuable import in improving environment. Extension had a hand in organizing these districts, and continues its cooperative action with local people in decisionmaking on land use in rural communities.

The Forest Service has done a tremendous job of providing recreational opportunities in national forests and other public rural areas. Extension has helped many farmers and communities develop the recreational aspects of farm ponds, lakes, streams, and woodlands for swimming, boating, skiing, hiking, hunting, and fishing. Youth in 4-H have taken the lead in beautification activities, in addition to their main programs of achievement and self-improvement.

People Building is the ultimate goal of nearly all government programs. And so it is with rural development. Included in this category are education, health services, job training, good food and nutrition, cultural amenities, youth programs, income security, leadership, and those programs that reach out specifically to the disadvantaged.

Assistant Secretary of Agriculture William Erwin says, "I cannot overstress that the whole area of people-building is extremely important in rural development." We would add that it serves well, too, in the city and the suburb. This "soft" category, as contrasted to the other "hard" categories, is primarily Extension's forte!

Almost any definition one can give to rural development would find Extension in the middle of it. All of our programs are aimed at development of human and natural resources. Nearly all Extension employees spend part of their time on it, and more than 600 of them devote virtually full time to community development work.

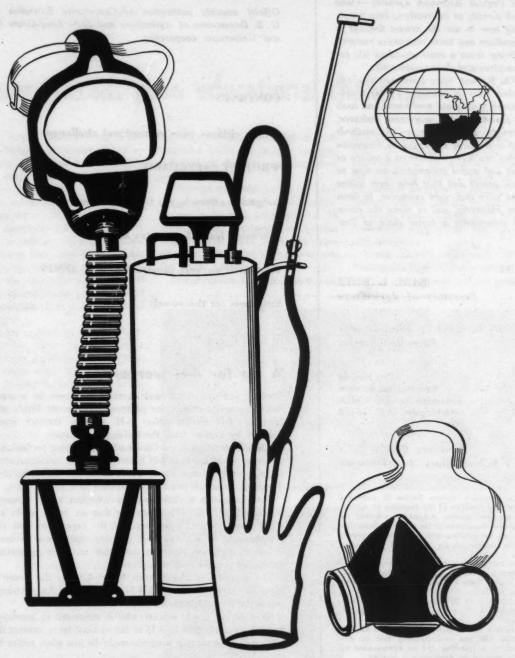
And this work is likely to grow in the next few years. Provisions of the Rural Development Act of 1972 assure some expansion of the total program. The 1974 fiscal year budget calls for a substantial appropriation under Title V to extend rural development educational programs.

—Walter John and Donald L. Nelson

EXTENSION SERVICE

REVIEW

U.S. DEPARTMENT OF AGRICULTURE * MARCH 1973



PROJECT SAFEGUARD Page 8 The Extension Service Review is for Extension educators — in County, State, and Federal Extension agencies — who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers Extension workers, in their roles as educational leaders, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

EARL L. BUTZ
Secretary of Agriculture

EDWIN L. KIRBY, Administrator Extension Service

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EXTENSION SERVICE

REVIEW

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A tip for 4-H workers

Looking for an educational experience, access to a wealth of resources, and a chance for personal enrichment? That's what the National 4-H Center offers 4-H workers through internships financed by a grant from the Kellogg Foundation.

These internships at the Center allow Extension professionals and volunteer adult and teen 4-H leaders to pursue individual study and to gain practical experience. Professional internships are for 3 or 4 months; volunteer internships are for 1 to 4 weeks.

Four Extension workers and one volunteer leader pioneered the intern program in 1972. They say that an intern needs a lot of self-direction to make the most of the experience, but that the combination of learning and working opens new avenues for improving program planning, recruiting and training leaders, and improving general club organization.

The program is administered by ES-USDA, the intern's local university, and the National 4-H Foundation. An advisory committee directs internship activities.

So if you're a 4-H worker who is interested in learning while making a contribution to 4-H at the national level, contact the 4-H Center. The internship program might be just what you're looking for.—MAW

Senior citizens pose educational challenge

One of every 10 persons living in the United States is a "senior citizen"—nearly one of every nine in nonmetropolitan areas. The total number is more than 20 million.

Many senior citizens must struggle for social status. Most have to struggle for economic survival. In 1970, almost 5 million older Americans, about one in four, lived in households with income below the poverty level.

Even the financially secure have to struggle against being pushed out of the mainstream into a subculture of uselessness.

How can a State or county Extension Service meet the needs of a group whose problems are so diverse?

It's being done in county after county all over the country, as Extension workers adapt old methods and devise new ones to serve this special audience.

It would be helpful if each one working with senior citizens could know what all the others are doing. Considering the thousands of programs underway, that is impossible.

But here are some examples of how Extension staffs are serving the special needs of this large and important audience.

Older people often are lonely. They may no longer have regular opportunities to be with other people. In some places, Extension is helping senior citizens form their own organizations, where they can make friends and enjoy activities.

The Franklin County Senior Citi-

zens Group, in Franklin County, Virginia, for example, has grown to a membership of 84 with the help of the Extension Service. Some of the educational programs provided by Extension include gardening safely in the home; food for older folks; health; frauds and gyps; drugs; and community services.

South Dakota Extension Home Economist Faith Cahalan played an continued on page 4



by Elizabeth Fleming Home Economics Information Specialist Extension Service-USDA



Senior citizens in Miller, South Dakota, above, sign up for membership in Friendship Center, their new community meeting place. At left, Extension Home Economist Elizabeth Roth (left) discusses meeting plans with two officers of the Gloucester County, New Jersey, Senior Citizens Organization. continued from page 3

important part in establishing a senior citizens group and a senior citizens center in Hand County, South Dakota. A survey to determine the needs of the county's older people led to formation of the Hand County Senior Citizens Organization.

This group then founded Friendship Center, the senior citizens' meeting place. The center is open 30 hours a week and features activities such as craft classes, potluck suppers, song fests, and educational meetings.

People over 65 are still interested in learning new things. And they need to learn how to cope with the special problems they face in this phase of their lives. Extension staffs in many areas are offering special classes on subjects of particular interest to senior citizens.

In Massachusetts, for example, "Good Eating Keeps You Swinging After Fifty" was the title for half of a two-part program offered to the elderly of three communities. "Gardening

in a Limited Area" was the second part of the program. More than 200 took part.

"Cooking for One or Two As We Grow Older" was the topic of a short course given for senior citizens in Nebraska. Most sessions were held in public housing units; 197 people attended.

Older men and women in three Minnesota high-rise apartment buildings participated in a series of Extension classes on food buying. Organizations of senior citizens have had special training meetings on good nutrition and food for fitness.

Kentucky has developed teaching materials to use in classes for the aging. "Emotional Health in the Senior Years" is the title of one publication; "Let's Think About Aging" is another. The materials include discussion questions.

Senior citizens have many talents which they can develop into hobbies, teach to others, or use to produce





Above, Extension Home Economist Jane Elliott of Montgomery County, Maryland, speaks to members of an Over 60 Counseling and Employment class. At left, a Tennessee volunteer leader shows others the art of macrame.

extra income. Some Extension staffs are helping them find outlets for their talents.

Extension sponsored a four-county hobby and arts show for Iowa senior citizens to interest them in art and hobbies, recognize people with special abilities, and provide a market for good crafts. Many of the 74 persons selected to explain their crafts to the 2,213 people who attended had not previously participated in Extension

activities; 77 percent had never sold their work.

Senior citizens in west Tennessee's Haywood County are serving as Extension leaders to teach others how to do macrame. They make belts, jewelry, and headbands. One necklace was priced at \$6 in a local store; the senior citizens made it for 35 cents.

Double benefits occur when senior citizens' talents can be channeled into community service. The community's needs are met, and the older person has an opportunity to feel useful and needed.

Women over 50 are finding rewarding and satisfying jobs as companions to elderly people or as mother substitutes for youngsters, through the Over 60 Counseling and Employment Service of the Montgomery County, Maryland, Federation of Women's Clubs.

Extension Home Economist Jane Elliott helps teach their training course, which includes practical psychology, environmental health, nutrition, food management, and responsibilities of the aide.

Through a Federally-funded program called RSVP (Retired Senior Volunteer Program) elderly people in Madison County, New York, are finding that life can be meaningful. The Extension Service has been chosen as the agency through which RSVP operates in that area. Senior volunteers are working at an infirmary—visiting elderly patients, playing games with them, writing letters for them, or reading to them.

Others work at a State school for retarded children, assisting staff in the library, and helping out in the occupational therapy department and in the classroom, as well as helping to feed and care for the children.

Mail can be an important link to the outside world for many older continued on page 6

Senior citizens sometimes need tips on how to prepare simple, nutritious meals. Here, Ethel Diedrichsen, Nebraska Extension specialist, conducts a workshop on "Cooking for One or Two."



continued from page 5

people. They look forward to it and read it carefully. Knowing this, many Extension agents use the direct mail approach to provide educational materials to senior citizens.

"Your Digest" is the title of a 6-page monthly newsletter sent to Arizona's older people. The publication deals with subjects such as the cost of living, food values and other nutrition information, and historical information about Arizona. The mailing list has grown from 1,200 in 1968 to 10,000 in 1972.

Senior citizens in Gloucester County, New Jersey, receive two newsletters from Extension. "Golden Harvest," published quarterly, publicizes programs and activities of interest to senior citizens. "With You in Mind," published 10 months of the year, features timely tips on such subjects as meal planning, shopping, homemaking, and other topics of interest.

Television is another means of taking an educational message directly into the homes of senior citizens. "Living," West Virginia's television series for senior citizens, is a cooperative project between WMUL-TV, the West Virginia Commission on aging, and the West Virginia Cooperative Extension Service.

The 1972 series consisted of 12 half-hour shows featuring senior citizens. They demonstrated mountain heritage crafts such as wood carving.

The retiree above is a home repair aide in Maine's Senior Service Corps, administered by Extension under a contract with the Council on Aging. The Corps employs 70 needy senior citizens in a variety of jobs. At right are the "Singing Senior Sisters," who open and close each program in West Virginia's TV series called "Living."



quilting, weaving, and spinning; played old musical instruments such as the dulcimer; told stories; recited poems; and sang old-time hymns.

Extension agents and specialists provided information on consumer problems, nature, and health.

And reports indicate that Extension is serving the elderly in many other ways, too. Agents are encouraging the eligible elderly to use food stamps or donated foods, using radio to reach senior citizen audiences with information, setting up exhibits in shopping centers, and training leaders who carry information back to groups.

Other methods include working with local groups to implement selected recommendations of the 1971 White House Conference on Aging. Through cooperation with the Commission on Aging, some States have been funded to carry on educational programs. Agents also employ and train aides to teach senior citizens on a one-toone or group basis.





A Minnesota high-rise apartment resident, above, listens intently as the Extension home economist teaches a class on food buying. At left, it's class change time for the 247 senior citizens who attended Clemson University's 1972 "College Week for Senior Citizens."



North Carolina organizes for

'PROJECT SAFEGUARD'

Ovid Bay
Agricultural Information Specialist
Extension Service-USDA

If you are a county Extension agent in one of the 14 Southeast States where the new project on safe pesticide practices has been initiated by the Extension Service and the Environmental Protection Agency, you probably are calling it an "add-on" program.

Officially, this concentrated educational program is called "Project Safeguard." The primary audience is the small farmers who produce 30 acres or less of cotton, peanuts, and soybeans and who usually do not participate in Extension's ongoing programs.

The goal is to avoid accidental poisonings in 1973 by alerting farmers that the substitute chemicals for DDT leave less residue but are much more dangerous for the people who handle them.

The program has been funded with \$750,000 from EPA and \$350,000 from the Extension Service. Extension will provide the leadership in hiring

and training "safety aides." These aides will make person-to-person contacts in the local communities selected by the States as the areas needing this special effort.

How does a State Extension Service "gear up" for one more assignment of this magnitude? North Carolina is a good example.

The North Carolina Extension Service recently held a training session for 35 county agents who will be conducting Project Safeguard in the selected counties in that State.

"We do not want to use 'fear tactics' to put the idea across, nor do we want to imply we can stop using essential chemicals," Frank Doggett, leader of the program, told the agents at that training session.

"But a lot of small farmers will be using highly toxic chemicals for the first time, and often with old equipment and no protective clothing or equipment. It's up to Extension to try to reach them."

Here's how they will do it:

—One agent in each of the 35 counties has been made responsible for Project Safeguard.

—Each county has an allocated budget to use in hiring local people to be trained as safety aides. Dr. G. T. Weekman, Extension pesticide coordinator, suggested that since the aides will be on an hourly pay scale and will need to travel, they should be hired in more than one area of a county. He also recommended that women be considered for the task.

—The State Extension specialists in entomology and information already are preparing educational materials for the aides to use as they contact farmers and to leave with them.

—A checklist stressing safety is being prepared for aides.

—A glossary of chemical and pesticide terms is being prepared.

—The EPA poster for display by dealers is being reproduced for use in each county.

—First aid leaflets telling the family what symptoms to watch for and what to do are being printed for each county.

A deadline of March 1 was set for all printed materials to reach the counties.

It was decided that the period to use the safety aides would be from March 15 to July 15 for most counties. Aides are to be hired and ready for a short training school by March 15.

Safety aide time has been budgeted for each county. Most counties plan to hire two or more part-time local people so they can make the contacts more quickly. It is believed that a few hours per day will prove to be the optimum time to visit these farmers.

Aides will be required to make reports to the county Extension office, including the name and address of each farmer visited, a few observations from the visit, and the number of contacts attempted but not completed.

These reports must be completed every 2 weeks or pay will be withheld. The lists of contacts also will be useful for updating current mailing lists in the 35 county Extension offices.

If a county contacts all of the cotton, peanut, and soybean farmers and has some funds left for safety aides, these funds may be used to reach producers of other crops grown in the county as they are sprayed with pesticides.

State and county Extension personnel will contact medical personnel to inform them about Project Safeguard and about the chemicals that will probably be used in the county so they will know what symptoms to suspect.

The agents will have the responsibility for explaining the safety program to pesticide dealers in the county. Agents also will work with EPA personnel and with Junior Chamber of Commerce members in the county who may be cooperating on the program. The Jaycees are sending a pesticide safety information kit to all chapters in the 14 States.

"We are expecting Extension personnel in the other 65 counties in North Carolina to contact dealers and

farmers in our ongoing program on safety with pesticides," says Dr. Weekman.

How will a safety aide be equipped to really warn farmers about the dangers of highly toxic pesticides?

During the Extension training session, he will study a "Safety Handbook," which is a manual prepared by EPA and USDA personnel. It covers 12 key areas, including:

-individual responsibilities,

-safe pesticide usage,

-safe transport of pesticides,

-safe storage of pesticides,

-personal protective equipment,

-safe mixing procedures,

-application procedures,

-re-entry precautions,

-cleaning up and good housekeeping,

-pesticide disposal,

-symptoms of pesticide poisoning and what to do about them, and

-emergency procedures for spills and fire.

"One of the real problems is what to do with tenant families who live on the edge of a cotton field and have children in the yard the day you apply chemicals," said Wendell Young, Hoke County Extension agent.

The answer: You have to stop planting cotton near them, or move them out the day the applicator plans to fly the field.

"Project Safeguard is a real challenge and an important program for Extension," summed up Dr. Carlton Blalock, associate director. "The need for this safety program is real—it will save some lives in this State in 1973 and the years to come."

An idea, like a seed of grass, should be planted in the right conditions and receive nourishment and care if it is to produce as it should.

The late Peter Breuer, then Extension irrigationist, planted the idea for the Standing Rock Irrigation Grazing Trial in June 1970 while planning a tour of the Standing Rock Sioux Tribe Irrigation Farm.

One-year results do not make a creditable research study, but they can give an indication of the potential. In this case, demonstrations showed that irrigated pastures, when given the proper management, can return more than \$50 per acre to labor and management.

The demonstration was conducted to help determine the beef production potential of yearling steers grazing an intensively managed irrigated grassalfalfa pasture.

The Standing Rock Sioux Tribe near Fort Yates, North Dakota, had been irrigating 240 acres of alfalfa with two different systems. A tow-line sprinkler system had been bought in 1968 and a center pivot system in 1969. The alfalfa was used in a cattle feeding operation on the farm. Calves were bought in the fall and wintered and sold.

Plans for the Irrigation Grazing Trial call for a 3-year period of grazing yearling steers on a grassalfalfa irrigated pasture. Last year the Standing Rock Sioux Tribe provided the land, steers, irrigation system, power supply, pump, and miscellaneous items to conduct the trial. The Bureau of Indian Affairs and Cooperative Extension Service, North Dakota State University, provided technical assistance and labor.



A tractor takes the "tow" out of tow-line irrigation. Sioux County Extension Agent Charles Soiseth prepares to tow line from an irrigated plot in the intensive grazing trial on the Standing Rock Sioux Tribal Irrigation Farm.

Expecting that supplemental irrigation water would be available in North Dakota in 2 more years, the late A. H. Schulz, Extension Director, named a multiple-discipline irrigation task force, whose functions are spelled out in these objectives:

—To keep abreast of the latest research and other technical information on irrigation development and practices in North Dakota and to continually upgrade the competencies of the specialist staff, and especially the county agents, on irrigation.

-To relate research needs on irriga-

tion to the research staff at NDSU and other responsible agencies and groups,

—To provide the latest educational information to irrigators and potential irrigators on irrigation development in North Dakota via meetings, workshops, seminars, farm visits, tours, and demonstrations.

—To coordinate the educational program with other interested and responsible Federal and State agencies, private organizations, agribusiness, and industry.

—To prepare educational materials in furtherance of the educational pro-

Irrigation offers hopes for higher income

by
J. J. Feight
Agricultural Editor
North Dakota State University

Two members of the NDSU Cooperative Extension Service irrigation task force take forage samples during the intensive grazing trial. Billy Rice (left), farm management economist, assists Duaine Dodds, conservationist.



gram and to use mass media techniques to inform the public on irrigation development and programs in North Dakota.

From idea to reality, the grazing trial followed this pattern. From June 1970 to March 1971, plans were completed for the trial and were presented to the Tribal Economics Committee and Council for their approval.

Fred Hamel, land operations officer of the BIA, presented an outline of the project plans to the Standing Rock Tribal Council in early March to get the Council's opinion. The Council expressed an interest in the project, because it showed promise of benefiting the Standing Rock people.

In April, Sioux County Agent Charles Soiseth presented complete plans of the project to Tribal Council Chairman Melvin White Eagle, and then to the Tribal Council Economics Committee. The committee presented the project to the Council immediately, and it was approved.

At this time, everything was "go" for the trial. With the technical assistance and supervision of Duaine Dodds, Extension conservationist, grass seed was bought. John Loans Arrow, a tribal farm employee, and the county agent planted the pasture in the latter part of April 1971.

During the summer, Soiseth and others closely associated with the trial attempted to irrigate the pastures, but because of several problems they were able to apply only an inch of supplemental water.

Not only was the water level in Lake Oahe lower than normal, but the pump sites were cluttered with driftwood. A tractor with power take-off to supply power to the irrigation pump needed repairs not counted on originally.

This experience suggests a warning to all potential irrigators—give yourself plenty of time when setting up any irrigation system. Be sure of your water source, power, and the system itself, including specifications as well as time of delivery and installation.

In March 1972, the BIA Department of Credit took over the management of the Irrigation Farm. Before that, it had been managed by the BIA's Land Operations Department. William Sherwood, tribal employee, was named farm manager.

Before selling the farm's feeder cattle in May 1972, Sherwood, Loans Arrow, and Soiseth randomly selected 30 head for use in the grazing experiment. These three men, along with BIA personnel and members of the Extension Service's Irrigation Task Force, were involved during the summer grazing period with such work as pumping water, moving pipes, weighing steers, and other details necessary in such a study.

Staff members of the NDSU Department of Agronomy and the Department of Soils also figured heavily in the success of the trials. Members of the Task Force managed the study and maintained records with Soiseth's help.

The trials again emphasized the importance of timeliness of applying irrigation water. Under the intensive grazing plan used, steers grazed under five controlled cycles. Delays of 5 to 10 days occurred due to equipment problems and a fluctuating reservoir water level.

The lower forage production following delays in water application increased the acreage required per steer from about 0.3 acres to 0.4 acres in cycle three and 0.5 acres during cycle five. As a result, the steerdays grazing per acre was reduced from a high of over 80 to 68 and 52 steerdays in cycles three and five, respectively.

The pastures in the grazing trials, established in the spring of 1971, used a grass-legume mixture consisting of 8 pounds of Lincoln bromegrass, 6 pounds of Sterling orchardgrass, 2 pounds of Garrison creeping foxtail, and 1 pound of Vernal alfalfa per acre. The mixture was double seeded. Oats was seeded as a nurse crop at about 20 pounds per acre prior to seeding the grass-legume mixture.

Highlights of the grazing trial in its first year include a return of \$57.20 per acre to labor and management. The steers, all but three of them crossbreeds of some type, averaged 1.97 pounds per day over a 132-day grazing season. The average gain per head was 260 pounds with a stocking rate of 2.7 steers per acre.

Returns to labor and management from other farm enterprises under irrigation in central North Dakota include: corn silage, \$16.95 per acre; corn for grain, \$19.99 per acre; and alfalfa, \$18.85 per acre.

Dryland returns per acre for crops grown in the State's famed Red River Valley in eastern North Dakota include: soybeans, \$14.71 per acre; pinto beans, \$24.90 per acre; and sunflowers, \$17.50 per acre.

If final results prove as successful as the preliminary ones, the trial could benefit the people of Standing Rock by increasing income and providing jobs.

Extension leads Kansas tax study



Gary L. Vacin
Assistant Extension Editor
Kansas State University

How to pay for services provided by State and local government—particularly local schools—has been the hottest public issue in Kansas for the past several years. This was the top-priority issue to come before the victors in the 1077 gubernatorial come.

priority issue to come before the voters in the 1972 gubernatorial campaign. It's the most crucial and difficult problem being debated in the current session of the State legislature.

As early as 1970, Extension administrators at Kansas State University agreed that some education should be done on the tax issue. Key leadership

strators at Kansas State University agreed that some education should be done on the tax issue. Key leadership in Kansas was in a mood to increase its knowledge and understanding of the problem. This mood was expressed by the payment of taxes under protest, formation of taxpayers' associations, general public unrest, and partially polarized positions taken in the mass media.

With this climate, leaders across the State asked Kansas State University to conduct an educational program in financing State and local government. It was clear that a "teachable moment" had arrived.

The University responded to the challenge. A college of agriculture research-teaching-Extension advisory group passed a resolution supporting

the fielding of a public affairs program and the employment of a specialist.

Objective of the program was to help local leaders gain a greater understanding of the various alternatives for financing State and local government.

Barry L. Flinchbaugh was employed as Extension specialist in public affairs. A native of Pennsylvania, his first task was to familiarize himself with Kansas. He traveled the State, visiting with Extension workers, local leaders, and the "man on the street," discussing public problems and how Extension might provide information to help solve these problems.

Next step was to collect relevant data and develop an educational package for delivery to the public. "One of the startling facts for a young man just beginning in Extension was that most of the available data was not in a useful form," Flinchbaugh recalls. "Much digging and interpolating was required to prepare the material for public consumption.

"For example, if decisionmakers are interested in changing the tax mix, it's extremely important to know how big an increase in the income tax would be needed, for instance, to lower property taxes 10 percent. Kansas law at that time (it has now been repealed) allowed local political subdivisions to substitute local sales and income taxes for the property tax. So it's extremely relevant, for example, to

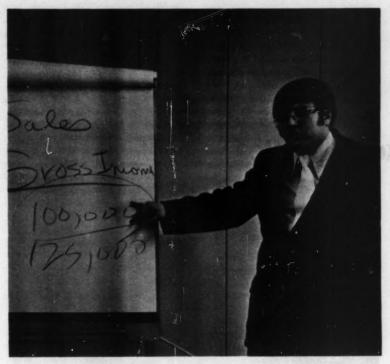
Small group discussions, like the one above, gave workshop participants a chance to design a tax package to support State and local government. Dr. Barry Flinchbaugh, at right, uses visual aids to illustrate a presentation on alternative financing methods.

know how much property tax relief can be brought about by imposing a local 1-cent sales tax."

Flinchbaugh and several Kansas Agricultural Experiment Station economists spent 4 months preparing background materials. This effort produced a 70-page bulletin containing a wealth of pertinent data on public service financing.

Flinchbaugh and other Extension specialists met with numerous groups and individuals who might have a stake in the taxation issue. This included legislative leaders, labor union representatives, State agency officials, county commissioners, leading newspaper editors, lobbyists, business representatives, and farm leaders. A public problem-solving approach was outlined and a timetable laid out as to the what, where, who, and why of the program.

This series of meetings generated additional program endorsement and gave key leaders an opportunity to become part of the program. Formal legitimation was accomplished by pre-



senting the program to Dr. James A. McCain, president of Kansas State University.

Next step was to give formal notice that the program was being launched. More than 150 key leaders were invited to attend a workshop on the K-State campus, where the program was announced.

Legitimation at the local level was gained by presenting the program for county Extension agents and board chairmen in each of the five Extension administrative districts in Kansas. Following the district programs, agents were given an opportunity to schedule the event in their county.

Flinchbaugh presented the seminar to audiences totaling more than 3,000 persons in 80 counties during the next several months. County Extension workers personally invited local leaders to attend. The public was not invited.

"Since our resources were limited, we decided that we could best reach our objective by working with the power structure," Flinchbaugh says.
"These are the persons who have the greatest influence on public decisions."

The decision to seek out the community leaders also dictated the approach the program would take. Flinchbaugh points out that he was careful to remain objective and avoid taking a position on the issue. His approach was to:

-clearly define the problem,

—discuss social and economic conditions at the national level and their effect on State and local government expenditures and tax patterns,

--present a comparative analysis of the current situation in Kansas and neighboring States, and

—offer alternative solutions to the Kansas tax problem and their probable consequences.

The last hour of the program was devoted to a workshop. Participants were divided into groups and challenged to design a tax package to support State and local government based on one of three alternatives:

—follow the current mix between property taxes and nonproperty taxes,

—place less emphasis on revenue from property taxes and more on revenue from nonproperty sources, or

—place more emphasis on revenue from property taxes and less on revenue from nonproperty sources.

Groups which selected the second alternative were asked to decide how much to lower the property tax and how to make up the difference. Information needed to determine how much to raise the income or sales tax rates in order to lower the property tax by various percentages was provided in the bulletin.

Groups also were given the option of changing the tax mix on a local basis. Those selecting the third alternative were challenged to decide how much to increase the property tax and which nonproperty taxes to lower.

Evaluating an educational effort of this kind is always difficult. One fact stands out, however. About half the participants had never attended an Extension meeting before, so new clientele had been reached and served.

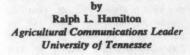
Flinchbaugh believes the program has proven that Extension is capable of helping Kansas leaders seek solutions to public problems. On several occasions, the economist has provided technical assistance to the Governor, the State legislature, and other elected officials. Currently, he is presenting a second round of seminars across the State.

Flinchbaugh feels the success of the program is due primarily to the objective manner in which it is presented. "No tax mix can be proven inferior or superior to another, scientifically," he says. "The only way to approach the problem is to present the facts devoid of personal opinion and value judgments—that is, to educate, not advocate."

One State legislator who has attended several of the seminars perhaps best evaluated the program in these words: "When the people are informed through a meeting like this, the job of legislating is much easier."

Tennessee workers illustrate

uses of SEMIS





SEMIS, the cold, impersonal, computer-coded, comrade-in-arms of Extension workers, came to life for 500 Tennessee Extension staff members at their 1972 State conference.

In a fast-moving, highly visualized, multimedia presentation, 12 staff members told and showed how the State Extension Management Information System—known in Tennessee as TEMIS—was working for them.

Using TEMIS data, these administrative, specialist, supervisory, and county staff members described broad objectives, staff resources and assignment, and specific work areas and time expended on them. Coordinated with this information were program thrusts planned and clientele needs.

Specific comments were then made by both State and county level staff members on how TEMIS data was being used to determine any needed reallocation of resources.

Associate Dean (now Dean) William D. Bishop, of the Agricultural Extension Service, set the stage by

Robertson County Extension staff members work with Associate District Supervisor Margaret Ussery (second from right) to plan their presentation on how they use TEMIS data to evaluate and redirect their programs. From left are Virginia Swoopes, Don Malone, A. B. Jordon, Jim Willhite, and Mary Ann Gregory.

defining the broad educational responsibilities of the Extension Service.

Assistant Dean Troy W. Hinton used TEMIS summary data to show how staff were assigned to each objective. "A first broad look at our objectives and staff assignments indicates that our organization is staffed to conduct the educational program with which it is charged," he concluded.

"Generally speaking, staff time expended is closely related to staff assignment: adult phase of agricultural production and marketing—33 per-

cent assigned, 32 percent expended; adult phase of home economics—26 percent assigned, 20 percent expended; 4-H and other youth work—34 percent assigned, 44 percent expended; community and resource development—1 percent assigned, 4 percent expended."

Continuing the analysis on the State level, Miss Virginia F. Boswell, Assistant Dean, described how time was being expended in specific work areas under the broad objective of home economics. She also described this work in terms of contacts with 10 different audiences, again relying on TEMIS printout data.

"As we anticipate future needs and make plans for program thrusts, we will need to make adjustments," she pointed out. "It may be that the only way we can develop and execute program thrusts will be to reallocate time from one work area to another.

"Another alternative would be to review and adjust current teaching methods and techniques of disseminating information and working with families in order to make efficient use of time.

"I challenge you," she concluded, "to make use of TEMIS information to more realistically plan and carry out effective programs in your assigned work area."

After a description by Assistant Dean Hinton of the time planned and time expended in the various crop and livestock work areas, M. Lloyd Downen, leader of agricultural economics work, explained present and potential importance of the State's various agricultural enterprises.

Downen, now Assistant Dean, pointed out ways by which Tennessee agricultural income could reach the \$1 billion level in the next dozen years.

He described certain obstacles that must be overcome for 12 different crop and livestock enterprises, implying the need for educational programs to assist farmers in overcoming these impediments to increased income.

As an example of how a program thrust might be implemented to over-

come obstacles to increased income, Clyde K. Chappell, leader of dairy Extension work, told of the adjustments made in time allocation and contacts as a result of agent inservice training.

"In the 42 counties where this special inservice training effort was made, agents spent more time on the dairying work area," he reported. "There was a 22-percent increase in time expended and an accompanying 36-percent increase in the number of contacts.

"These two increases brought about an important result. More herds and more cows were enrolled in DHIA work and average production per cow increased."

"Agents are managers of time," began Associate District Supervisor Margaret Ussery, as she opened the presentation on how TEMIS data is used in district and county program planning, execution, and adjustment.

She pointed out that by using TEMIS information, agents can quickly and easily review a year's work—objectives, subjects taught, audiences reached, time planned, and time expended—and determine whether time was allocated to the important line item tasks emphasized in the plan of work.

Miss Ussery explained obstacles to making shifts in programs, including clientele interests, lack of training on the part of the agent, and lack of data or failure to use available data.

She called attention to the various kinds of information that agents must secure to use along with TEMIS data in planning, such as size of audience, complexity of subject matter, opportunity for expansion, and clientele interests.

"Using these kinds of information, along with TEMIS data, an agent can see how and where to shift emphasis from one program area to another and can justify his reason for change without jeopardizing an ongoing, strong program," she said.

"Also, supervisors can better assist agents when this kind of information

is available and used. This approach can and will lead to effective planning and consequently to more effective performance and greater job satisfaction."

Four members of the Robertson County staff described their county's overall objectives for adult agriculture, adult home economics, youth, and expanded nutrition work areas and listed time planned and time expended for the appropriate State EMIS purposes. They pointed out variations between time planned and time expended, indicating points deserving further analysis.

Other Robertson County staff members then focused on a specific highpriority objective and associated line tasks in their plans of work.

Virginia Swoopes presented an analysis of an objective dealing with clothing construction and buying, emphasizing a task dealing with developing skills in construction.

She reported time planned and time expended, types of teaching methods used, types of audiences and numbers contacted, and results obtained.

She concluded, "More time has been spent in the clothing work area than in any other. Other work areas need to be given more time. Leaders should be able to assume more responsibility in the clothing work."

Reporting on an objective concerning leadership development in youth work, James Willhite pointed out, "For intelligent decisions to be made in shifting work from one task to another within broad areas of work, it is essential that accurate, complete reporting be done."

"In this era of emphasis on accountability in educational and legislative relationships, TEMIS-like information is absolutely essential," stated Associate Dean Bishop.

"It is only with this type of information that satisfactory answers can be given to questions being asked by governmental and legislative study groups who are concerned with the effective and efficient use of public resources."

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF
AGRICULTURE
AGR 101



Emphasis on the vowels

The vowel letters have a special role in the English alphabet. They are the catalysts of our words, and give meaning to our language.

Extension has a similar role in our Nation's society and economic life. It is the catalyst for programs and services, and helps to build meaning into the lives of people.

It is interesting to note that vowels are the initial letters of words that are basic in Extension's language. But first, let's identify the letters we call vowels.

When I studied spelling in a country school, our spelling books taught that the vowels are A, E, I, O, U, and sometimes W and Y. In this article, all seven letters are treated as regular vowels.

It is obvious that the "A" should stand for Agriculture. That means farmers, their farms, and the products of those farms. It also means agribusiness with the many materials and services it supplies for production of food and fiber.

And Agriculture includes the processing, transportation, marketing services, and distribution of farm products. It is our Nation's most basic industry. Extension has grown up with Agriculture in the 20th century and has helped Agriculture to grow up.

The second vowel in the alphabet is for Education. This, too, is a very basic function in any human complex that depends on progress. It is primarily a process, but its activation involves many elements. Among these elements are people, institutions, machines, materials, and procedures.

The "I" stands for Information, which is the content of the educative function. It is the raw material from which knowledge is assimilated. It also is the carrier for Education. Thus, in addition to being materials, it is people, machines, and media, which make up our vast communications system.

"O" is for Opportunity. Extension has helped to create opportunities for many millions of Americans in its 59-

year history. It especially has been noted for helping farmers utilize opportunities to improve their farming operations. In recent years, it has made great strides in equalizing educational opportunities for people of all ages, races, and economic levels in the United States.

The vowel "U" is best represented by the prefix "Uni-" which we find in our words unity, united, and unifying. For Extension, the one word most applicable is "university." The land-grant universities have had an especially unifying effect in Extension work.

The "W" vowel logically applies to Women. In their role as homemakers, women were one of Extension's first audiences. As their roles have expanded, Extension's help for them has grown also, to include such things as career guidance, help in achieving community improvement, and assistance in developing talents and abilities. And women are not only an Extension audience—they are also Extension educators who are playing an increasingly important part in planning and carrying out Extension's services.

The "Y" of our alphabet belongs to Youth. They were part of the beginnings of Extension. They have an even more important part in its educational process as Extension's scope spreads beyond its original purpose. Through 4-H, the only youth program sponsored by Government, they are the focus for much of Extension's out-of-school educational services. And they also take on a teaching role in it.

And so, this septet of vowel initials helps set the pattern of Extension. What stronger combination could be fashioned than this team of Agriculture, Education, Information, Opportunity, University, Women, and Youth!

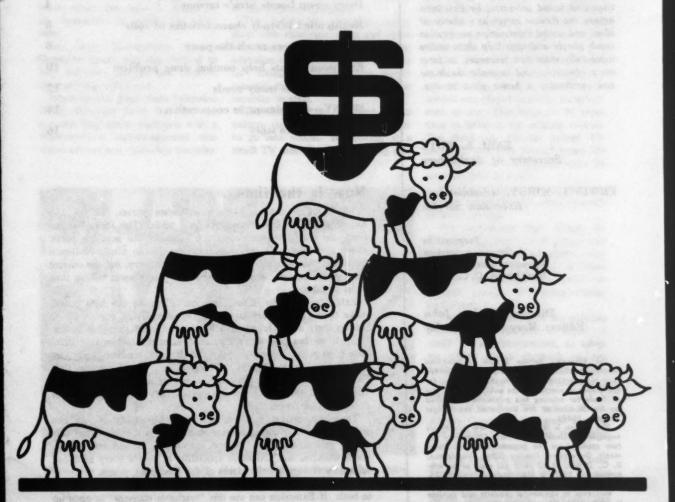
But we know that vowels alone do not make our language. Thus, we recognize the consonants along with the vowels. And Extension uses all of the alphabet of groups, institutions, materials, processes, and services to achieve its goals for the betterment of people and proper utilization of resources.—Walter John

EXTENSION SERVICE

REVIEW

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U.S. DEPARTMENT OF AGRICULTURE * APRIL 1973



DAIRY CO-OP BOOSTS ECONOMY PAGE 4 The Extension Service Review is for Extension educators—in County, State, and Federal Extension agencies—who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers Extension workers, in their roles as educational leaders, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

EARL L. BUTZ
Secretary of Agriculture

EDWIN L. KIRBY, Administrator Extension Service

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EXTENSION SERVICE

REVIEW

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Now is the time . . .

"The teachable moment"—it's a well-worn phrase, but it's also something that really occurs once in a while. This looks like the time—the teachable moment—for enlightening the nonfarm public about agriculture. It may never be possible to arouse universal interest in the facts about the agricultural industry, but the current food price situation seems to have made people more willing than usual to listen.

Extension can help in several ways. First, we can help people make their food dollars go further by intensifying our efforts to inform them about economical menus and good shopping tactics. Second, we can help explain to consumers the factors that influence food prices—such as supply and demand, weather conditions, and farmers' costs. Finally, no one is in a better position than Extension to help consumers see agriculture as an industry and a vital part of the U.S. economy—an industry whose future is of concern to everyone.

These educational jobs are not the responsibility of any one segment of the Extension Service staff. This is a subject that cuts across disciplinary lines. Home economists, agricultural agents, youth workers, and Extension specialists in nearly every field can each help fit together the pieces of the food price puzzle.

Conflict between farmers and the nonfarm public is detrimental to both. If Extension can use this "teachable moment" to open up the channels of communication between the two, everyone will benefit.—MAW

Video tape reinforces learning

Montgomery County, Pennsylvania, Extension agents are using a teaching technique that has "punch." It operates on the theory that people learn better when they have a chance to see themselves in action—via video tape.

Joe Way, Montgomery County Extension agent, uses this method to help dairymen analyze and improve their milking techniques.

When he and Penn State Extension Dairy Specialist Steve Spencer visit a dairy, they arrive equipped with a videorover—a battery-operated television camera and video tape recorder.

On a typical visit, Way tapes a milking routine which includes both good and bad milking procedures. Spencer uses a hand mike to comment on the milking operation.

The lightweight, portable equipment with automatic video and audio level controls makes Way a one-man television crew. He puts the recorder on "standby," focuses, and simply squeezes the trigger when he wants the recorder to start.

The red light on the front of the camera cues Spencer and the milker to go into action. By looking at a small TV monitor on the milking par-

lor floor, Spencer sees what is being recorded and can comment specifically about it.

The tape is played back right in the milking parlor so the specialist and the dairyman can see what changes need to be made and can make them right there.

The improved techniques, with Spencer voicing instructions and reasons for the changes, are then recorded and played back for the dairyman to see. This helps to fix practices as habit in the milking routine. The dairyman, through instant TV playback, has seen himself doing the old and the new thing—it won't be easy for him to forget.

The tapes are excerpted later to provide instruction for other individuals and groups.

The equipment was bought by Montgomery County 4-H groups and is used to tape livestock shows, judging events, and a variety of other things. Several counties have expressed interest in buying similar equipment.

The system consists of the portable recorder and camera, a tripod, a small TV monitor-receiver, an adapter which allows playback on any ordinary television set, carrying cases, and a supply of tapes. Total cost is about \$1,900.

Use of the first TV unit in Montgomery County was so great that the 4-H Horse Club bought their own recorder and camera.

They used the units at horse judging contests to record classes for use later in practice judging and training future judging teams. They also use video tape to teach riding techniques, gaits, and overall horsemanship.



Extension Agent Joe Way, right, films a milking technique while Dairy Specialist Steve Spencer comments. Instant playback fixes the lesson firmly in the dairyman's mind.

Dairy co-op boosts area's income

How can a rural farming area recoup after it loses some of its major agricultural enterprises? The people of Gunnison Valley in Sanpete County, Utah, have found an answer.

Their once-thriving vegetable crop industry faded out because it was too small for mechanization and thus the labor costs remained high.

A few years later the local sugar factory closed, as did several other factories that were close enough to make the shipping of sugar beets practical.

These losses were a terrific economic blow to the little rural valley whose agricultural economy had been built around sugar beets, vegetable crops, livestock, and dairy.

Now the loss has been reversed, thanks to the efforts of the Utah State University Extension Dairy Team, working with dairymen and local community leaders.

Dairying in general has been greatly enhanced in the Gunnison Valley through individual and team efforts of USU staff. But the most significant accomplishment, attributable largely to work of the USU Extension Dairy

Team, has been the establishment of the Gunnison Valley Dairy Association.

The Gunnison Valley Economic Development Committee, which Extension helped to initiate, studied the area's basic resources. Subcommittees considered enterprises that could improve the economy by capitalizing on those resources. Expanding the local dairy industry seemed to be the best alternative, but enthusiasm for such expansion grew slowly.

Some of the dairymen from the valley attended a series of multicounty Extension short courses dealing with feed production and opportunities for dairy expansion.

After some of the more enthusiastic dairymen talked with others, they contacted Sanpete County Extension Agent Jack Herring to get additional help from the university.

At this point, the Extension dairy team became involved. It consists of the Extension dairy specialist, economist, marketing specialist, agricultural engineer, Extension veterinarian, and the head of the USU dairy science department.

To back them, they had findings of a special marketing study conducted in the State, the experience of helping to organize a large pilot cooperative dairy enterprise, and the experience of helping several groups in the State organize dairy units of economic size.

At the invitation of the county agent, several of the team members represented the university at three organizational meetings. They explained the economic advantages of a large, consolidated dairy herd, man-

aged under one head and utilizing common facilities.

The group decided that each interested person would supply or finance the purchase of 25 to 100 cows to be put into a common herd. Initially, each person was assessed \$1 per expected cow, to indicate his desire to be a part of the proposed organization.

The resulting \$1,800 was used to finance a feasibility study conducted by members of the USU team, working with members of the fledgling dairy group.

The group elected five people to work with the Extension dairy team on the study and to spearhead subsequent action. The Extension economist met with them as they explored alternatives.

They determined that for tax advantage it would be best to organize as a production cooperative. The biggest hurdle, however, was to get adequate financing. Experience with other cooperatives had shown that regulations of the Federal agencies which finance much of agriculture prevented them from funding an organization of this type.

The other large Utah dairy cooperative that the dairy team helped form was financed with a loan from the Small Business Administration. After that pilot venture, SBA indicated a willingness to help finance similar organizations if the university team was involved.

To get an SBA loan to finance the new dairy facilities at Gunnison, 27 local residents organized a develop-

by
Cleon M. Kotter
Agricultural Information Specialist
Utah State University Extension



ment company with a board of directors and officers.

They consulted with members of the Extension dairy team as they went about securing financing, investigating and purchasing land, buying animals, and building facilities.

Before starting construction, they went on several idea-gleaning tours of large dairies in Utah and neighboring States, arranged by the county agent and the Extension dairy specialist.

At the team's suggestion, the group decided to buy only unbred heifers so that breeding by artificial insemination could begin immediately. More than 1,000 heifers were bought and put out under contract to local farmers to raise until ready to calve.

The Extension economist helped work out the financing. Ten percent of the initial money (that used for buying the heifers) was raised from among 23 members of the local development company, 30 percent from the Gunnison Valley Bank, and 60 percent from SBA on a 20-year loan.

When the milking operation began in November 1971, the Gunnison Valley Dairy Association was officially organized as a production cooperative. The bylaws assure retention of local resident control.

Under a unique arrangement, the Dairy Association leases the facilities from the development company and operates the dairy.

At the advice of the Extension team, the Association employed one of its own members as manager. He participated in a 2-week dairy managers workshop taught by the Utah Exsion dairy team and Extension staff members from Idaho and Wyoming.

The Gunnison Valley Dairy Association has been operating for a year. Guided by advice from the Extension veterinarian and dairy specialist, they have had relatively good herd health. Milk production has been maintained at a high rolling herd average, projected at 16,000 pounds of milk a year per cow.

The present output of more than 40,000 pounds of grade A milk each day from nearly 1,000 cows now milking is making a sizable economic input to the valley.

Economic projections made by the Extension dairy team indicate that as the dairy grows to its planned size of 2,000 cows, it will be bringing the area nearly \$2 million annually in milk and cattle sales.

This year, more than one-third of

a million dollars has been redistributed to area farmers for feeding the heifers and for the feed grown on contract by them for the dairy.

The \$440,000 spent for labor and building materials and a sizable tax assessment on the facilities and animals are making an important contribution to the local economy, too.

Many Extension techniques for involving people have been necessary to get this dairy association started. The Extension dairy team has spent much time and effort working with the local people and with SBA and other agencies, as well as working remotely from the university on specific problems.

Lessons the team members have learned in this project are being used as they work with other dairy groups. The Gunnison Valley Dairy also is serving as an educational showplace frequently visited by dairy groups from Utah and other States.

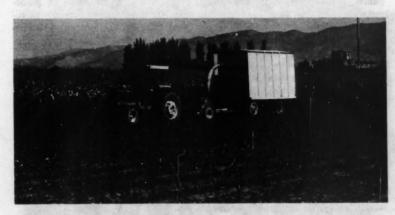
Corn and alfalfa hay fields now flourish in Gunnison Valley on acreages where sugar beets once grew. And they use the limited supply of irrigation water more efficiently.

The products of those acres now flow by trailer and truck into the huge feed storage pit and feed stacks of the locally-owned Gunnison Valley Dairy Association and into the storage areas of other modern dairies that members of the team have helped establish in the valley.

Practically all the forage grown in the valley is now used locally. This has strengthened the price and eliminated the necessity of trucking it elsewhere. And every major dairy processor in the State is offering attractive prices for the milk.

Sparked by the growing success of these developments, the three communities in Gunnison Valley are experiencing a spirit of pride and optimism that is fostering further economic development and growth.

In fact, the local banker reports that they are experiencing some of the best growth in the State. No longer do the local people lament the loss of their sugar beet industry.



Where sugar beets once grew, corn fields like the one pictured above now flourish, economically utilizing the land and irrigation water. At left, members of the Utah State University Extension Dairy Team confer on problems associated with dairy developments in the State.

Health officials study characteristics ered imperving suitable for of sewage." The health follow these

ered impervious and therefore unsuitable for the subsurface disposal of sewage."

The health boards realized that to follow these requirements in issuing permits for the installation of on-site sewage disposal systems, they needed a working knowledge of soil characteristics. So they asked for a program to educate those responsible for site inspections.

The setting for this program was the October 1972 annual meeting of the Massachusetts Environmental Health Association. MEHA members include agents for town boards of health, directors of public health, representatives of engineering companies, sanitary engineers, and sanitarians.

The development of the soils seminar is a study of cooperation between public agencies and private groups. The planning committee included the regional Extension community resource development specialist, a district conservationist from the Soil Conservation Service, and the president of the MEHA.

The Extension Service specialist arranged for speakers. He asked the SCS to provide soils and engineering expertise; called on the State Department of Natural Resources to cover wetlands delineation and pertinent legislation; and involved a private planning consultant with special interests in development densities.

During the seminar itself, the Extension specialist served as moderator and helped facilitate communications between the technical experts and the health officials.

The SCS district conservationist arranged for the Essex County Conservation District to hire a bus to transport participants from one session to another. He also worked with the Essex County Agricultural and Technical Institute to establish a field site and to have test pits excavated.

Another important part of his task was to guide his soils and engineering staff in preparing appropriate presentations.

The MEHA president handled arrangements for the indoor meeting place, luncheon, and registration. He also printed and mailed the program announcements and invitations.

The full-day program was set up in two parts. The morning session was held indoors to facilitate lectures and slide presentations, and to encourage questions and discussion.

During this portion of the seminar, the SCS soil scientist described the program for developing operational soil surveys for Massachusetts towns. This program is cost-shared by each town, which in turn receives comprehensive soils information drawn up in laymen's terms.

The second part of the morning program was a discussion of guidelines for development densities as related to soil characteristics. This subject was handled by the private planning consultant.

The third part of the morning session started into the practical application of soils knowledge. SCS specialists used slides and other visual aids to describe indicators of periodic ground water. The purpose of this segment was to teach health officials to recognize the indicators of ground water levels during the summer or during drought periods when the water itself does not show up in test pits.

The final morning session was handled by a land use administrator of the Massachusetts Department of Natural Resources. With the help of visual aids, he described the identification of wetland areas and State leg-

by
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When town boards of health in Massachusetts found themselves in need of some education, they turned to the Extension Service.

Their problem lay in Article XI of the State Sanitary Code, which makes them responsible for enforcing sewage disposal standards in areas where no municipal system is available.

Article XI has about 23 pages of regulations, but three of them prompted this educational program:

—"Disposal fields shall not be constructed in areas where the maximum ground water elevation is less than 4 feet below the bottom of the disposal field."

—"Excavations into or fill upon impervious material shall not be allowed."

-"Soil with a percolation rate of over 30 minutes per inch is consid-

islation pertinent to the alteration and protection of these wetlands.

This battery of subject experts set the stage for an afternoon of field study. After a luncheon arranged by the MEHA, the participants were taken by bus to the field site.

Through the cooperation of the Essex County Agricultural and Technical Institute, a hay field had been set up with four teaching stations, and soil observation pits had been

excavated. The participants were divided into four groups and were rotated between the four stations at half-hour intervals.

Two of the stations were established for the demonstration and discussion of surveying, or leveling tools and techniques. Although not an integral part of the soils theme, advantage was taken of this opportunity to show health officials how to check surveying and leveling instruments for accuracy.

They also were put through a short course in surveying to aid them in establishing and checking grades and elevations before and after the installation of an on-site sewage system. SCS technicians and engineers manned these two stations and did the instructing.

At one teaching station, participants had a chance to handle vartous soils, both in the dry state and after moisture had been added. The other two stations were manned by SCS soil scientists. Here, the health officials had the opportunity to study first-hand the textures of different soils, the visual identification of hardpan layers, and the identifying factors of fluctuating ground water levels.

The response to both the morning and afternoon sessions of the soils seminar indicated that careful advance planning had achieved its goal.

The practical identification and applied discussion of soils characteristics was eagerly received by the health officials. Most of them admitted to a basic lack of knowledge of the subject before the seminar.

The president of the MEHA said, "With the increase in development of areas of the Commonwealth where a municipal sewer is an impossibility, and with more emphasis on the proper installation of subsurface disposal systems, we, the sanitarians whose responsibility is to determine whether or not the soil is capable of supporting a septic system, are extremely grateful for these seminars."



SCS technicians and engineers put the officials through a short course in surveying to help them establish and check grades and elevations before and after the installation of on-site sewage systems. Dorothy A. Wenck
Extension Home Advisor
Orange County, California

Helping teachers reach the poor

A unique cooperative arrangement between University Extension and Agricultural Extension in Orange County, California, resulted in a credit course for home economics teachers taught by the Extension home economist last summer.

The course, titled "New Approaches to Consumer Homemaking Education," was designed to help home economics teachers improve the effectiveness of their teaching and make their classes more consumer oriented and more relevant to low-income students.

Home economics teachers throughout the country are making these changes in their methods and curriculums as a result of the Federal Vocational Education Act.

And Extension home economists are uniquely qualified to help them. They know the problems of the poor consumer; they have learned how to reach the poor through the Expanded Food and Nutrition Education Program; and they know how to use visual aids and other "how to do it" teaching methods to make consumer information come alive.

In Orange County, the idea for the course came from two home economics teachers on sabbatical leave who attended an Extension training class for volunteers on teaching consumer information to low-income homemakers.

They felt that the information was so practical and so valuable that it ought to be made available to more teachers.

They suggested that it be offered as a credit class in summer school, since most teachers prefer to earn credit for courses.

Agricultural Extension, however, is not authorized by the University of California to offer credit courses. This is the role of University Extension—a separate branch of the University.

Cooperation with University Extension was the answer. UC Irvine Extension enrolled the students and gave them credit for the course.

Agricultural Extension provided the meeting place, the home advisor as teacher, and handout materials. Since University Extension's only costs were processing student enrollments and grades, the fees charged the students were less than half the usual amount.

Once the cooperation of University Extension was obtained, the home advisor surveyed county home economics teachers—via her professional newsletter.

More than 70 teachers indicated an interest in taking the course. As a result of this response, the 40-hour class was scheduled to meet twice weekly, 9:30 a.m. to 2:30 p.m. (with a lunch break) for 4 weeks.

The class enrollment was 42, with 27 teachers taking the class for credit. Most were relatively young and had less than 5 years of teaching experience. However, several were teachers with more than 10 years of experience.

Three of the teachers taught junior

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high. The majority taught senior high. Six taught adults in low-income consumer education programs conducted by school districts and community colleges.

In addition, one participant was a community college teacher; one was a 4-year college teacher; several were college home economics seniors or graduate students. Four class members had taken the previous Extension class, but wanted to earn University credit

Objectives for the course were based on priorities listed by teachers on their enrollment applications. At left, a teacher of pregnant teenagers (left) talks with Dorothy Wenck, Extension home advisor, about the use of overhead transparencies. Below, bilingual teacher Lila Fernandez (right) uses techniques she learned in the class to interest Mexican-American homemakers in consumer education.



These included:

—improved knowledge of subject matter which is practical and useful to the low-income consumer: application of management principles to food buying, clothing buying and care, use of money and credit, house care.

—development of new or more effective ways to teach homemaking—especially to low-income students.

—better understanding of the life styles and social and economic problems of low-income families.

-learning about community agencies which help low-income families.

Those taking the course for credit were required to complete a project and share the information with class members. Choices for credit projects included:

—developing a unit on a specific consumer topic.

—developing a plan for a consumer education course,

—developing a kit of teaching materials (resource reading and visual aids) for a specific consumer unit,

—creating a unique new way to teach a consumer topic,

—doing an indepth case study of a community agency which aids families, or

—working as a volunteer with a welfare family under the guidance of the Welfare Department's volunteer coordinator.

Several of the teachers chose to work as volunteers with welfare families and found the experience challenging, rewarding, and frustrating. All of them continued to work with their families after the class ended and felt the experience gave them valuable insight into the problems of their low-income students.

Guest speakers from county agencies — Health, Welfare, Probation, Mental Health, Medical Center, Office of Consumer Affairs, Food Stamps, Employment—provided the teachers with a breadth and depth of understanding of community problems and services.

A highlight of the class was a guest appearance by the Los Angeles County EFNEP Home Advisor and three of her program assistants, who each gave descriptions of the problems of low-income families and how they helped them improve food buying and nutrition practices.

Since the teachers listed "consumer subject matter" as their first priority for the class, the home advisor concentrated on topics such as food buying, money management, credit buying, and consumer problems—all from the standpoint of the low-income consumer.

Her teaching served as an example of visual ways the subject matter

could be presented, emphasizing use of the overhead projector and the Velcro board.

In addition, the teachers received many pamphlets and printed materials from USDA, the University of California, and Orange County to supplement their learning and serve as resource materials for their classes.

The teachers also exchanged ideas and learned from each other—informally during breaks, and formally during class discussions and the final sessions when each presented her project to the class. Copies of the projects were kept on file in the home advisor's office for class members to use.

For their projects, several teachers developed sets of overhead transparencies. For example, a team of two completely visualized a unit on buying an automobile; another developed visuals for a unit on nutrition.

Another teacher built her own Velcro board and made up a skit in which two homemakers unloaded bags of groceries and displayed sample packages on the board.

Two class members who were not employed later received job referrals from the home advisor and are now working part-time. One is teaching low-income adults, and the other is teaching a class of pregnant high school girls.

The overall result of the class was that the participants became very enthusiastic about teaching management and consumer concepts to their students in visual, practical ways. They learned to be more understanding of the special consumer problems of their low-income students. And they became much more aware of community resources available to help.

Several planned to set up volunteer programs for their students to work with community agencies they had learned about.

The home advisor found the experience of teaching teachers to be challenging and enriching. She learned as much from them as they learned from her!

Extension agents help combat drug problem

Phyllis E. Stout
Program Leader
4-H/Youth Development
and
Kay Barnes
News Editor
New York Extension Service

More than half of the known narcotic addicts in the Nation live in New York State, and many other New York citizens experiment with amphetamines, barbiturates, and psychedelics. No community, rural or urban, can deny that a problem exists.

With its traditional concern for youth, the prime victim of drug abuse, the New York Cooperative Extension Service found itself in 1970 making decisions about its role in this uncharted area.

Extension's first involvement with the drug problem came at the request of 4-H agents in one district. They set up a 1-day meeting in May 1970 to share common concerns, increase understanding of drug abuse, become informed about State programs, and to profit from the experience and expertise of a fellow agent in the District.

This meeting generated statewide interest among Extension agents—home economics and agriculture agents as well as 4-H—and it quickly became evident that Cooperative Extension's official role needed to be determined. Several agents already were serving with local organizations

or were helping arrange talks and meetings with youth and parents.

A Narcotic Addiction Control Commission was created by law in New York State in 1966. It has responsibility for developing and operating all services and facilities needed for drug prevention, treatment, and research.

To carry out its prevention responsibility, the Commission has set up narcotic guidance councils at the community level. Some are county-

wide, others include one town, a city, or a school district.

Each council is composed of three to seven members. Each must include a doctor, a lawyer, and a clergyman, with the remaining members selected from the community at large. Persons under 21 are eligible to serve on the councils.

By spring 1971, more than 350 local councils were in operation, and another 200 were in the planning stages.

Arthur Freije, Broome County 4-H agent, conducts a class for volunteers on how to communicate with the public about the drug problem. The 4-H handbook, which he prepared, is also used by many other agencies throughout the State.

Cooperation with these councils seemed to be the obvious role for Cooperative Extension.

Agent interest in the drug problem soon was great enough to merit a 2½-day workshop conducted by the State Narcotic Addiction Control Commission.

Agents were briefed on the situation in the State, prevention, and programs available to combat the problem. Half a day was spent in discussing Extension's role.

As a result, agents are using their skills and knowledge to cooperate with community drug abuse programs. Some have helped establish narcotic guidance councils, a number have obtained literature and made it available to interested groups, and many have arranged informational sessions for youth and leaders.

The activities in Broome County are a good example of how New York's Extension agents are approaching the drug problem.

M. Arthur Freije, Broome County 4-H agent, has been one of the leaders in charting Extension's role in drug abuse education in New York. Freije became interested in the dangers of drug abuse while he was a drug company sales representative.

Broome County formed an Association for Drug Abuse Education at about the same time he became 4-H agent, and he encouraged the county governing body to establish a county narcotics guidance council with education and rehabilitation functions.

Broome County has about 29,000 youth in grades seven through 12

and two colleges with student enrollment of about 15,000. The State Narcotic Addiction Control Commission estimates that 30 percent of these students are involved in drugs. There are 125 to 150 hard-core addicts in the age range of 13 to 24.

At one college it is estimated that from 50 to 60 percent of the students are involved in drugs; at the other the figure is probably about 30 percent.

These numbers are probably about the same in other New York counties where there are colleges. In Broome County, however, the initial recovery rate—10 percent—is higher than the 3 to 4 percent in other city programs in the State. This is attributed to the county's active voluntary programs.

A counseling service is an integral part of a county narcotics guidance council. Broome County's counseling service is unusual, because lay people have been trained to staff it.

Freije designed and helped teach a training program for the lay counselors. The training included role playing, modified sensitivity training, demonstrations, and "learning by doing," plus on-the-job training in handling crisis calls.

Professional people, including doctors, back up the work of the lay counselors. Cooperation has been excellent with such agencies as the mental health clinics, social services, Red Cross, and family and children's societies.

Another of Freije's Broome County training schools resulted from the interest of local pharmacists. They had drug information, but lacked skills in presenting it.

So a training school on communication skills was held for them, along with high school and college students, and members of the Junior League. Freije helped them select topics to meet audience interest and taught them to use blackboards, slides, and other visuals.

To acquaint the public and other agencies with the drug abuse program and to gain their assistance, the

4-H agent spoke before many groups and made several guest appearances as a panel member of a television show.

He arranged informative sessions for 4-H leaders and members, too, and prepared a handbook for use by adults working with youth in drug education programs. More than 17,000 copies of this handbook have been distributed, primarily within the State.

Freije's work with the drug program in Broome County was recognized last spring when he received a Superior Service Award from the U.S. Department of Agriculture.

New York Extension agents' drug education efforts vary from county to county. But they generally agree that Extension's role should be directed primarily to prevention, education, and organization.

Specifically, Extension can:

-serve as a catalyst,

—help identify the extent of an area's drug abuse problem,

—help organize and develop Narcotic Guidance Councils at county and town levels.

—help develop community-oriented programs for drug abuse education,

—assist in the design and evaluation of educational methods used in these programs.

Throughout the State, Extension staff members are helping communities or citizen groups develop operational objectives and evaluation procedures, organize themselves for action, and become familiar with community resources that can provide program content.

Cooperative Extension has long been recognized for its expertise in improving agricultural technology and in seeking solutions to problems of rural and, more recently, urban living.

By meeting its responsibilities in the drug abuse field, it has a chance to demonstrate again how its approach can be used effectively to mobilize a community for a concerted attack on a devastating social problem.

Craft shop fills many needs

Riding through Denton, Maryland, on Route 404 you see a sign at Third and Franklin Streets that reads "The Handi-Box, Inc."

If you fail to stop in and browse, you are missing a real treat, because the handmade crafts of the people in Caroline County are varied, original, and of high quality.

The idea of a county craft shop to provide an outlet for quality handmade crafts and a source of additional income for craftsmen was spearheaded by Mrs. Doris Stivers, Extension home economist.

She says, "I saw many people in Caroline County who had talents which could be utilized to increase their income, express their creativity, satisfy personal needs, stifle loneliness, and allow them the opportunity to share with others."

A survey conducted through the local newspaper established that there was a tremendous interest in the project.

Many other individuals and groups

saw this as an opportunity, so a 10-member board was set up to develop the project. Mrs. Stivers served as coordinator.

Articles of Incorporation as a nonprofit organization were drawn up and The Handi-Box became a reality.

The planners located an old clapboard house to use as Handi-Box headquarters. It could be reached by incoming beach traffic and yet was convenient for the local residents, but it needed a lot of renovation.

When the call went out for volunteers, there was an overwhelming response from family groups, homemakers, Boy Scouts, Ruritans, young marrieds, senior citizens, and youths. They contributed more than 1,000 hours of volunteer time to renovate the building.

The Handi-Box, Inc. was officially opened on May 24, 1972, and within 5 months the number of visitors reached 2,800. They came from 210 communities in 25 States, and from several foreign countries.

Shirley Mott
Extension Home Economics Editor
University of Maryland
and
R. Doris Stivers
Extension Home Economist
Caroline County, Maryland





Volunteers continue to work at the shop, which is open every weekday from 10 a.m. to 4 p.m. and on Friday and Saturday from 9 a.m. to 9 p.m. During the summer season the shop is also open on Sunday from 3 to 6 p.m. to take care of the tourist trade.

More than 200 craftsmen have submitted their work to the shop. The sources vary. In one community an older-citizen group meets each week to work on crafts, and they submit some to the Handi-Box. Money from the sale of their crafts is used by some of the group for church improvements.

Many young people have joined with the older members to learn to produce crafts. A retired nurse, active in county organizations and head of the older-citizen group, sends in original petit point pictures. A retired man creates original geometric designs and boat pictures designed with string.

A halfway house for young offenders is located in the county and "The Handi-Box" before and after.



Volunteers of all ages gave of time and talent to put new life into the building. They contributed more than 1,000 hours of time to the renovation.

they submit crafts of wood made at the institution. The individual boys receive the money when their items are sold.

All crafts submitted must pass inspection by a quality control committee before being put on sale. Eventually, help will be given in improving quality of crafts.



Unique dolls with individual personalities, delightful cloth crabs characteristic of Maryland's Eastern Shore, ceramics, paintings, and crochet items are all displayed in original ways developed by the volunteers.

Money was scarce, so imagination took over. An old trunk was used as a purse bar, improvised screens were utilized, and the walls and stairwell provided excellent shelf space where breakable items could be displayed. A bright red stepladder holds knitted items or purses and an oil drum supports a round plywood disk featuring ceramic work.

The response from shoppers has been overwhelming. In the first 6 months, the county craftsmen were paid more than \$1,844. Every craftsman represented in the shop has received a check.

The Handi-Box has provided an outlet for the various skills of craftsmen, and has helped establish rapport with other agencies. It's a good example of what can happen in a community when talents are shared.

Because money was scarce, the volunteers used their imagination to develop attractive, inexpensive ways to display the crafts submitted to the Handi-Box for sale.

MIDNY - experiment in cooperation

by
Martin G. Anderson
Community Development Specialist
New York Extension Service

"MIDNY" is an acronym for Mid-New York—a five-county area involved in a 6-year Cooperative Extension Service pilot effort in community resource development. The MIDNY project was established in 1966 after community leaders asked for educational support for their regional planning efforts.

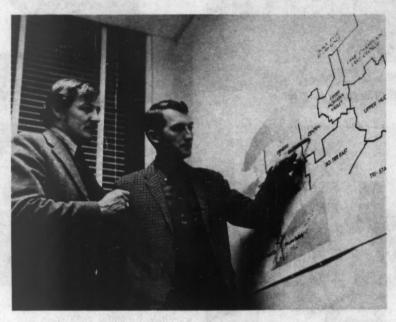
Many different agencies and organizations were helping the people of central New York in comprehensive planning, and they were talking with the community about their plans. But, all too often, the agencies weren't talking to each other as much as they could.

New York State Extension and Extension Service-USDA believed that the right kind of educational program could help these groups work together and communicate with each other.

And they were correct. By the end of the 6-year program, about 85 agency and organizational representatives and several thousand community leaders were involved in new processes of decisionmaking on public problems.

Regional problems are now being dealt with through a loosely-knit, freewheeling ad hoc committee structure, focused on regional issues.

Community educators provide the nucleus for coalitions of planning groups, agency representatives, and special interest organizations. Working together, these groups use research data and comprehensive planning information to help local elected officials make decisions on public problems.



MIDNY's objective was to use research and education to help leaders deal with complex problems brought on by rapid urbanization. Population in the area, which centers on Syracuse, increased from about 680,000 in 1960 to around 750,000 in 1970.

The MIDNY pilot project was started at the same time a regional comprehensive planning program was funded by the five cooperating counties and from State and Federal sources.

Two community development specialists worked out of Syracuse, with the help of two Extension associates who worked from the Cornell campus.

After considerable exploration, the four-man MIDNY staff focused on "improving the effectiveness of comprehensive planning," developing linkage with county and regional planning groups as it got underway.

Staff members had little precedent to guide them in this exploratory role,

and early efforts were frequently frustrated by lack of clear-cut direction, "boundary maintenance" problems with planning groups and cooperating agencies, and difficulty in evaluating results.

In time, these problems were resolved, and by the end of 3 years a fairly smoothly operating program had emerged.

The pilot effort was originally designed to run 3 years. By the end of that time, the Extension workers had become accepted and effective in the complex and highly organized region, and the project was showing some success. As a result, the two field specialists stayed on for 3 more years.

The second 3-year period saw substantial results, as many programing processes developed by the pilot effort were picked up by others. The staff utilized regional community education, focusing on public issues to bring together professional planners and a broad cross section of regional

John Snyder, secretary of the New York State Rural Development Committee, points out the central New York area where the MIDNY project is located. At left is Kenneth Cobb, one of the Extension community development specialists who helped guide the MIDNY work.

leadership. These issues provided the catalyst for a problem solving process using ad hoc interagency committees.

The process was generally initiated by MIDNY's invitation to small groups of key leaders to come together to analyze issues. Then, key members were selected to function as a steering committee. This group explored the issue and suggested action by educators, planning groups, and governmental agencies.

The process of organizing ad hoc committees recognized six governmental functions—planning, service, education, regulation, financing, and promotion. At least one ad hoc committee member was elected to represent each of these functions.

Some of these ad hoc groups functioned for several years, providing substantial information and opinions to planning groups and elected officials. This approach permitted the use of planning information—not as detailed planning documents, but rather by the interaction of professional planners with elected officials and governmental agency representatives.

During the final 3-year period, ad hoc committees worked on 25 public issues, encompassing such complex and diverse problems as low-income housing needs, preservation of agricultural land, solid waste management, and health problems of low-income families.

One such committee concerned itself with environmental education. The 12 members—planners and agency professionals—guided a series of environmental decisions workshops. More than 150 leaders took part in the first series, which focused on a local land use controversy.

About 1,000 elected officials and other leaders received the results of the workshop. The workshop also laid the groundwork for followup activities about environmental management councils.

The committee continued its activity after the workshops, zeroing in on water resources and social concerns.

The MIDNY staff evaluated and summarized ad hoc committee activities in 35 working papers and case studies. These helped guide the ongoing effort, provided documentation of the pilot effort, and helped Extension workers elsewhere in the State to develop similar types of educational programs.

At the conclusion of the 6 years, the two specialists were redeployed into a three-region district, with an opportunity to expand on the results of the pilot program. They spend much of their time counseling with planners, agency professionals, and Extension agents on new programing processes.

The regional comprehensive planning program has established technical advisory committees in many program areas. Each committee is assisted by a staff member of the Central New York Regional Planning Board.

The former MIDNY staff specialists work with these committees as ex officio members, and counsel on a one-to-one basis with the plan-

ning staff members. They work in a similar capacity with county Extension agents and with professionals from other organizations and agencies.

Much of the work begun in the pilot effort has been continued through county Extension efforts, the technical advisory committees, and a reorganized and revitalized regional community development committee. The latter is guided by a core group of a dozen representatives of planning groups, USDA, and State agencies.

Simultaneously, specialists a r e working with comparable leaders in the two adjoining regions to organize and develop programs in a similar manner.

Toward the end of the pilot effort, one specialist spent 4 months in a rural region of southern Illinois, testing transferability of the regional development method developed by the 6-year pilot experience.

He concluded that the basic processes used in MIDNY are transferable, with alterations, to accommodate differing regional conditions.

The project papers, and consultation with those who were deeply involved in the pilot effort, are enabling Extension to apply MIDNY's results statewide. For example, the MIDNY model is being analyzed by Cornell University and the Rockefeller Foundation for its applicability to an environmental improvement program in the 20-county Hudson Region, which terminates in New York City.

The State Extension community resource development program unit organizes and coordinates inservice training and program development workshops to spread the word about the MIDNY process to Extension workers in other parts of the State.

Extension workers in other States who want to know more about MIDNY can obtain the pilot program papers, a 10-minute slide-tape presentation, and a publication listing from Cooperative Extension in New York or from Extension Service-USDA.



The agriculture story

Today's news focuses on agriculture and its products. It tells of high prices of beef and other commodities, and some of the causes.

But this is not the real agriculture story. It is merely a short-time news focus on a transition from abundance to balance.

The full story of agriculture in the United States began 111 years ago when Abraham Lincoln signed into law three of the most significant acts ever passed by our Congress. One was the Homestead Act, which helped open the far reaches of our land to agricultural development. The second was the Morrill Act, which authorized the vast system of public college education through State land-grant universities. The third major act of that eventful year was the one establishing a department of agriculture as "the people's department."

These three acts were the first chapter in the burgeoning expansion of agriculture in our country. Subsequent acts and activities wrote new chapters in that history. The Hatch Act of 1887, establishing a system of agricultural research through the Department of Agriculture and land-grant universities, was one of those key subsequent acts.

Then came the Smith-Lever Act in 1914, which made Extension the third partner in this triumvirate of agricultural research and education.

Another important chapter in our agriculture story began in 1933. In that year, the Federal Government instituted a series of major programs to advance agriculture and rural development and to help bring about economic stability for farm people.

Notice that these major steps in agricultural progress have occurred about every 20 to 25 years—1862, 1887, 1914, 1933. We probably could add the early 1950's to that series of important dates. That was about the time we began to search in earnest for alternate ways to deal with the problem of farm surpluses.

And now we are at another major break in the action on farm programs. We have about solved the surplus problem. We are in the stage of finding proper balance between production and demand, both domestic and foreign. U. S. exports of farm products are at the highest level in the history of our Nation. They have helped to bring a new prosperity to the business of farming.

Where does Extension stand in this story of agriculture? Right in the middle of it! Cooperative Extension programs faced their first big test in the call for maximum food production to meet the needs of the United States and its allies in World War I. A different kind of test faced them in the years that followed and the worst depression in our history. As new farm programs evolved in the thirties, Extension was given an important role in helping to get them started. And World War II called for a repeat performance in food production.

After that, Extension settled into its role as educator—helping farmers with their immediate problems of production and marketing, and also helping them see both sides of any question of policy or national proposals. Through all of its years, Extension has advised farmers on how to improve their income—both gross and net.

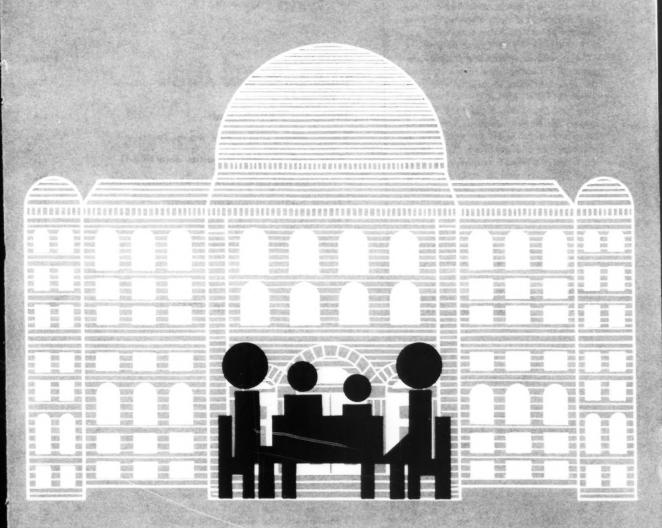
Typical of this latter effort is the example of an Extension agent in a county with relatively low agricultural income. In the mid-1960's, his area supervisor asked if his county could double that income in 10 years. He said they would try. The county more than doubled its farm income—not in 10 years, but in 7 years.

The knowledge gained from the research and education systems of the land-grant universities, complemented by national agricultural programs, has helped farmers achieve production records never before attained in the world.

America's farmers, assisted by education, research, and action programs, have proved repeatedly their ability to meet the food needs of our population plus generous supplies for other countries. We have the land and the equipment to maintain that record. With stability in prices and a growing market, our Nation will continue to provide glowing chapters to the agriculture story.—Walter John

REVIEW US. DEPARTMENT OF AGRICULTURE * MAY-JUNE 1973

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Involving Youth in CRD - page 2

The Extension Service Review is for Extension educators — in County, State, and Federal Extension agencies — who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers Extension workers, in their roles as educational leaders, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

EARL L. BUTZ
Secretary of Agriculture

EDWIN L. KIRBY, Administrator Extension Service

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EXTENSION SERVICE

REVIEW

Official monthly publication of Cooperative Extension Service; U. S. Department of Agriculture and State Land-Grant Colleges and Universities cooperating.

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Involving youth in CRD

In his foreword to a new USDA publication on youth in community development, Secretary Butz says, "Young people represent the future of our communities. Therefore, every effort should be made to have them participate in community planning and development.

"Young people can prepare for broader responsibilities in community decisionmaking by cooperating with fellow citizens in establishing goals for community development and carrying out community programs. In turn, the community that harnesses the unique abilities and enthusiasms of youth will become a better place in which to live."

The Extension Service is devoting considerable effort to encouraging young people to get involved in community development. An earlier issue of the Review reported the pilot 4-H/CRD program in Virginia and the national workshop on the subject for 4-H and community resource development personnel.

West Virginia's growing 4-H/CRD program is discussed in the article on page 14 of this issue. More examples of this kind of work will be featured in the coming months.

Young people have much to offer to their communities. As the youth-CRD work now underway in many States illustrates, the Extension Service is uniquely equipped to provide these young people an opportunity to develop as persons, share as citizens, and practice leadership.—MAW

by
Richard A. Nunnally
Extension Agent
Communications and Consumer Education
Newport News, Virginia

new offices, Two Extension agents and a second up the Newport News, Vin Extension staff about 15 years

programs

Two Extension agents and a secretary made up the Newport News, Virginia, Extension staff about 15 years ago. Their office was the six-room Blair Building. Their work consisted of assisting farmers, homemakers, and 4-H Clubs.

By 1972 the staff had grown to nine Extension professionals, seven paraprofessionals, and three secretaries. Their housing? Still in the Blair Building. Their work? Very different.

Now, the agents are working with a broad range of activities, including ornamental horticulture, Extension Homemakers Clubs, expanded food and nutrition education, consumer

education, turf management, and urban 4-H programs.

The Extension program in Newport News clearly had outgrown its surroundings. As programs developed and expanded and the staff grew, the Blair Building no longer provided the needed room.

On December 1, 1972, the Extension Service moved into new quarters provided by the City of Newport News. This new facility provides office space for agents and secretaries, sufficient work space for aides, a 125-seat conference room, and a demonstration kitchen.

With a mailing list of 6,000 individuals, the staff recognized a need to plan events to inform the general public of the changes in staff and facilities. After careful planning, it was decided to hold a two-part open house.

Part one was to be a Friday luncheon. The invitation list included the head of each city department, members of the city council, and certain members of the State legislature.

The program for the luncheon was simple: introduce the staff, eat, and tour the facilities. Not only did this provide an opportunity to show the new offices to these key people, but it also gave newly-elected council members a chance to develop their knowledge of Extension programs.

The highlight of the luncheon was a delicious, low-cost meal planned, prepared, and served by the Extension nutrition technicians (aides). After the meal, each technician spoke briefly about her work.

Part two of the open house came from 3-5 p.m. Sunday, when the general public was invited to visit the facilities. All professional staff members were on hand to meet and talk with the visitors. Extension Home maker Clubs provided refreshments.

Both these events were very successful. Not only did they provide an opportunity to exhibit new facilities, but they also allowed the Newport News staff to make people more aware of the growing programs of the Cooperative Extension Service.



City officials attending the Extension Service open house in Newport News, Virginia, await the special luncheon planned, prepared, and served for them by nutrition aides.

Duane B. Rosenkrans, Jr.

Associate Extension Editor

Mississippi State University



1.5 by '75

Mississippi passes its goal

A strong, long-term program of agricultural development will strengthen every phase of Extension work in a State. To succeed, however, such a program requires the active support of all Extension workers and the many other agencies and organizations with which Extension maintains ties.

The Mississippi Cooperative Extension Service launched a 10-year program late in 1965 to accelerate growth of the State's agriculture through better use of technology by more farmers.

The goal of this program, which led to its name—1.5 by '75—was farm production valued at \$1.5 billion a year by 1975. That goal was achieved in 1972—3 years ahead of schedule. This accomplishment represents a gain of \$82 million a year from the \$928 million total value of production for the base year, 1964.

During its 7 years, 1.5 by '75 has been a great asset to Extension in several ways:

—It influenced many farmers to improve their methods and increase their incomes. Under the 1.5 by '75 banner, timely production and marketing information became more dynamic and forceful. Almost from its beginning, belief in the program was strengthened by reports about individual farmers who had already reached the yield goals set for 1975.

—It focused the attention of the general public on agriculture as a major force in the State's overall economy. Much emphasis was put on the nature and scope of agribusiness. Con-



The 1.5 by '75 program emphasized special opportunities in Mississippi agriculture. One of the opportunities, shown at top, was expanding commercial catfish production. Above is an example of another outstanding feature of 1.5 by '75—helping farmers add something "extra" to their management.

sumer information was also a part of 1.5 by '75.

—It strengthened Extension's position of broad educational leadership in the State's agriculture. Other agencies and organizations, both State and county, enthusiastically endorsed the program and worked through the years to help make it succeed.

-It strengthened the support of

Extension by the Mississippi legislature and county boards of supervisors.

Dr. W. M. Bost, Director of the Mississippi Cooperative Extension Service, provided maximum administrative support for 1.5 by '75. Extension administration built a close working team of specialists from several fields to develop the program and put it into action.



New methods, such as the field storage of cotton for more rapid harvesting, above, were introduced with the help of 1.5 by '75.

The basic information for 1.5 by '75 consisted of 1964 base figures and economic projections, or goals in terms of value of production, for each of nine enterprise areas. Two more areas were added as new agricultural opportunities emerged.

These projections represented the combined effort of agricultural economists and other State specialists in agricultural production and marketing.

Goals also were expressed in terms of yields, such as 1,000 pounds of lint cotton per acre and 30 bushels of soybeans per acre by 1975. Assistance was given to county staffs in determining county goals for applicable enterprises.

"Value of farm production" was chosen as the measure for 1.5 by '75 because it represents the current market value and the total volume of production of crops, livestock, and forest products for the year. Although better prices for some commodities helped, it took much more than that to reach the goal 3 years ahead of schedule.

Achieving this goal is a victory for technology. During each of the 7 years of 1.5 by '75, farmers were

plagued by such things as wet weather at planting or harvest time, summer droughts, destructive insects, and plant diseases.

The Extension Service used many methods to publicize 1.5 by '75. These included producing materials for all news outlets, art work for educational and promotional messages in advertising, automobile bumper stickers and decals, and exhibits.

The distinctive 1.5 by '75 emblem—a key feature in any well coordinated campaign—has also appeared on stationery, signs, television station break slides, convention badges, and business cards.

A feature of 1.5 by '75 has been a Progress and Outlook Conference early each year in the largest ball-room in the capital city of Jackson. Bringing together 1,200 or more key leaders from all 82 counties, this is the largest meeting held in the State during the year.

The programs for these conferences were planned to last only about an hour. They began with introductory remarks and introduction by Director Bost of the State Agricultural Coordinating Council, representing the various agricultural agencies. The Governor or another top official spoke.

Finally, a visual show presented highlights of the previous year for the various enterprises; the economic outlook for the current year; and special agricultural opportunities.

An attractive publication was pre-

pared in connection with each 1.5 by '75 Progress and Outlook Conference. Additional copies were made available to the counties. The report for the 1973 conference was 16 pages and had pictures in full color.

Special opportunities stressed through 1.5 by '75 include more beef per cow and more cows per acre, commercial catfish, and ornamental horticulture.

The commercial catfish industry, now valued at \$18 million a year, was not important enough in 1964 to be listed as a 1.5 by '75 enterprise. Growth also has occurred in soybeans, forestry, and broilers.

County Extension staffs made excellent and often imaginative use of 1.5 by '75 information and materials. Besides working it into their regular communications, many developed special newspaper articles and radio and television programs.

Reports of overall county progress for the previous year in 1.5 by '75 were page one, main headline news.

Other local activities to support the program included talks before civic clubs and other organizations, exhibits at fairs and shopping malls, local progress reports using color slides, and visual presentations by 4-H members.

Once launched, there seems to be no end to such long-term agricultural development programs. They're much too valuable. When one campaign and its goals are completed, the staff is challenged to develop something even better.

Kansas agents study grain marketing

Robert W. Schoeff
Extension Specialist
Feed and Grain Marketing
Kansas State University



Marketing—especially grain marketing—is an important part of agriculture. And it's an area of Extension education that has received too little attention in Kansas, particularly at the county level.

In mid-1972 came the sharp increase in worldwide demand for food, feed grain, and soybeans, with the accompanying rise in prices.

County Extension agents found themselves without answers to questions about what was happening and why. We were faced with the problem of how to help them learn quickly about grain marketing and exporting.

One of the best ways to learn is to "go where the action is." After taking a group of 4-H wheat quality winners to the port of Houston, Texas, for a 3-day tour, I decided that a similar tour would be the best way to educate key county Extension agents and directors.

When the grain marketing tour idea was discussed with the Kansas Grain and Feed Dealers 'Association, they were anxious to cooperate. The assoA typical sight on the agents' grain marketing tour was bulk cargo ships being filled with wheat. The ship on the left is being loaded; the other, awaiting its turn, rides high out of the water.

ciation offered to finance the trip and to provide a local elevator manager from each agent's county to accompany him on the tour.

This seemed like a good way to "kill two birds with one stone"—supplement agents' marketing knowledge, while improving relations between them and local grain marketing management.

In fact, we found that even the local grain elevator managers needed to improve their knowledge of grain exporting. Most of them had never visited export facilities.

A marketing tour proposal was prepared, including objectives, participants, sponsors, tour dates, financial arrangements, and tour agenda.

The Grain and Feed Dealers Association enthusiastically approved the idea and appointed one of their members to help work out the details. Kansas Extension Service administrators were equally enthusiastic about this new approach and gave their full approval and cooperation.

Who would participate? Enthusiasm was so high that the first estimate was for 80 to 100 possible participants. Finally, a figure of 47 was agreed upon, since this was the seating capacity of the commercial bus that would be used for transportation in the Houston area.

Each of the five Kansas area Extension directors was asked to name five agents he felt could benefit most from such a trip. Final selection was based on availability of grain men and Extension agents who could participate on short notice.

Those who made the trip were 22 county Extension agents, 19 local grain elevator managers, 1 terminal warehouseman, the executive vice president of the Kansas Grain and Feed Dealers Association, the director of the Kansas Extension Service, the Extension television producer, and two Extension grain marketing specialists.

The Grain and Feed Dealers Association underwrote the cost of the 4-day trip. Local grain dealers provided transportation from their home counties to Wichita and back, and the group traveled by plane between Wichita and Houston.

The 3 days in Houston included:

—a visit to exporting facilities and ships,

—a boat tour of industrial development and shipping activity on the Houston ship channel, and

—a visit with representatives of ship owners, stevedoring companies, freight forwarding companies, Houston Merchants Exchange, USDA grain inspection service, and grain exporting firms.

At the end of the tour, all participants were urged to share their experience and knowledge with others in Kansas.

A Kansas State University Extension communications specialist made three direct radio reports while accompanying the tour.

The tour was the subject of six separate television programs the following week over the Kansas State Television Network. It covers 75 percent of the State and is serviced by KSU.

The film was edited into a 16-minute presentation with narration for showing at the Grain and Feed Dealers Annual Convention in April 1973.

In addition, the film and several slide sets are available for loan to agents or grain men.

Two radio reports were taped for the University station, KSAC, and the station will be broadcasting periodic progress reports on the grain movement and its possible effects on local marketing and storage of the new wheat crop.

A survey of the Extension agents showed that in the 8 weeks after the tour they prepared 21 newspaper articles, gave 20 radio talks, and made 28 slide presentations before 939 people.

The reaction of the agents and the grain marketers was so favorable that plans are underway to conduct a similar tour in January 1974.

One agent said, "I believe I learned as much in those few days as I would in a 2- or 3-week summer school."

"I learned more about grain marketing on this trip than I had previously in all my combined academic training," said another.

Kansas Extension Director Robert A. Bohannon, who went on the tour, said: "There is no question but what our county agents and the Kansas Grain and Feed Dealers who were on the tour considered it an exceptionally fine educational experience.

"It is through efforts like the grain marketing tour that we are able to develop closer working relationships between our county agents and other very important groups in the State of Kansas."

The reception accorded the tour group by the Houston Merchants Exchange and individual exporting firms was outstanding. They are anxious to set the record straight about grain quality and export practices.

They have extended an invitation to interested persons in Kansas and other States to visit them. We are now considering tours for grain producers and processing and marketing personnel.

One of the participating grain marketers seemed to sum up the feeling of the group when he said, "Only by seeing and sharing each other's problems can we better understand what grain marketing and exporting is all about."

'Windowsill gardens' open the door to 4-H

Take six brown peat wafers in a plastic tray, add water, and implant a vegetable or flower seed in each.

Cover with a plastic top and keep in a warm location for 1 to 2 weeks.

Mix well the interest and expectancy of a young child and watch both with tender loving care.

When the seeds have germinated, place the "greenhouse" on a window-sill, exposed to the sun. Encourage the child in proper care and nourishment of the seedlings.

Result: the growth of plants—and

This is windowsill nursery gardening—one of the most fascinating new projects added to Indiana's Cooperative Extension 4-H program in imagination of both the young and the not-so-young.

More than 2,000 nursery garden kits already have been ordered. Yet

recent years. It is capturing the

More than 2,000 nursery garden kits already have been ordered. Yet ink on the flyers plugging the project is hardly dry.

In fact, many orders arrived before the project was entirely ready, impatient youth agents in the field having previewed the plans. Other States also have shown a keen interest.

"The beauty of this project," says Dr. Edward L. Frickey, State youth leader at Purdue University, "is that it can be undertaken and enjoyed by the inner-city, apartment-dwelling, or housing area child as well as suburban and rural youth.

"Another thrilling and encouraging aspect of the project," he adds, "is the manner in which it has been received by school teachers and administration. They are simply delighted with its educational and visual potential."

In Lake County, the project is being utilized not only in urban schools, but also in an early learning center and a school for exceptional children.

Thus, the project reaches children and youth in all walks of life, including many never previously involved in 4-H.

"But who knows," envisions the State leader, "a number of these youngsters may decide to try other or more advanced 4-H projects as a result of the interest created by this one."

The windowsill nursery garden project is the brainchild of Bill Peek, State Extension specialist-youth at Purdue.



Bill Peek, left, State Extension specialist-youth, and Dr. Roman Romanowski, Extension horticulturist, check over project materials for the 4-H windowsill nursery gardens.

In preparing the project publication, he drew upon the assistance of Dr. Roman Romanowski and others in Purdue's department of horticulture.

Peek also credits a private company, Jiffy Products of America, with a "big assist" in developing materials used in the kits.

"It all started," recalls Peek, "with a cry for help by Lake County youth agents. They needed a plant project geared especially to the inner-city or urban child.

"First we tried supplying them with

by Ed Kirkpatrick Information Specialist-News Purdue University



Four-year-old children at the Gary, Indiana, Pulaski Early Learning Center use the windowsill nursery garden kits to learn about how plants grow.



Olene Veach, area Extension agent-youth in Tippecanoe County, Indiana, shows two young 4-H members how to transplant seedlings from their windowsill nursery garden kits.

a single wafer and seed, to be grown in a paper cup. The response generated by this simple effort led us to the windowsill nursery garden," he explains.

Each kit contains a plastic 5½-inch by 7-inch greenhouse, seven peat wafers, plant seeds, and seed sticks. A project publication completes the package.

What's the purpose of it all?

Well, windowsill nursery gardening helps the young (even the older young) to learn how to plant seeds in soil, how seeds grow into plants, and how plant appearance changes with growth.

They also learn how to transplant seedling plants into larger containers; how to care for plants by providing proper amounts of light, water, and plant food; and how to enjoy growing plants in a greenhouse, home, or outside garden area.

Actually, Indiana 4-H has three different kits. One is a windowsill mystery garden. Seeds in this kit include cotton, peanut, Tiny Tim To-

mato, Christmas Pepper, Teddy Bear Sunflower, and a Mimosa plant plants less common to the area.

Kit 2 is a Stop-Lite windowsill garden, so-called because of the red, yellow, and green vegetables produced. These include red tomatoes, yellow squash, and green peppers.

Kit 3, a windowsill flower garden, contains seeds of little Thumbelina zinnias, Dwarf marigold, Nierembergia, and Teddy Bear sunflower. The sunflower is the giant of the kit; by comparison, the others are midgets.

As a bonus activity, a seventh peat wafer is enclosed in each kit. Here, it is suggested, the "gardener" may wish to grow a citrus seedling, such as an orange, lemon, or grapefruit.

Simple planting and care instructions, with helpful illustrations, fill the attractive project publication. The manual also contains an educational picture guide, growing discovery guide, garden puzzle, and a plant research study chart.

It is hoped that the project, which is designed especially for the novice, will open the gate for many to other 4-H horticultural projects, such as flower gardening, fruit and vegetable gardening, or ornamentals.

"We had about 14,000 Indiana youth enrolled in 4-H horticultural projects last year," says Dr. Frickey, "and I feel windowsill nursery gardening will promote an even greater enthusiasm among the young for growing plants."

But even if it doesn't, many Hoosier youngsters will have been exposed to a "growing" experience.

If Phillipsburg becomes known as the "city of trees" in Kansas, it won't be by accident.

It will be because of the hard work of a dedicated group of citizens, and an active "community forestry program" led by State and Extension foresters at Kansas State University.

Gene Grey, Extension forester, looks upon the community forestry program as "fundamental to rural development as it concerns itself with making small towns more pleasant places in which to live and work."

The Phillips county seat, located only a few miles from the Nebraska border, has launched a beautification program that includes trees, trees, and more trees.

The program is in its infancy, so the town might not win any beautification contest this year. But watch out in the future!

In solving a problem that is familiar to so many communities, Phillipsburg could well serve as a model for other towns to follow.

Almost any small town that launches a successful community venture does so because one person or a small group of persons decides that something has to be done and convinces others.

In the case of Phillipsburg, the

community shade tree commission is that group. The Phillipsburg tree commission is not just another organization that looks good on paper but doesn't function—it's where the action is.

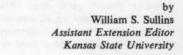
The commission is headed by D. T.(Bud) Broun, former mayor and retired automobile agency and theater owner. Other members are Buck Herman, telephone company manager, and Leon Durnil, insurance agency owner.

Broun may be retired from active business, but he doesn't spend his time in a rocking chair. He's what you might describe as a doer.

The Phillipsburg city council got the ball rolling 3 years ago when it provided funds for tree removal and planting under authority of a State statute.

It authorized establishment of a tree commission to give direction. The tree commission contacted State and Extension foresters at Kansas State

Kansas tree program aids rural communities





University for assistance. Fortunately, the university was in the process of launching a new urban forestry program, under which Extension foresters could work with cities on comprehensive tree planting and beautification projects.

Supported by technical assistance from the university and by the new city ordinance, the tree commission was in a position to get something done.

"The ordinance gave full control of the tree program to the tree commission for removal and planting of trees," explains Broun. "We have ordinances regulating electricity and car speed— why shouldn't a city control what belongs to it? Trees are one of our most important assets."

Even without trees, Phillipsburg would not be an unattractive town. But like many others in western Kansas, the city was losing elm trees to Dutch elm disease. One dead tree is an eyesore, and when many are dead, it is even worse.

As one of the tree commission's first official acts, it planted trees along State Street, the town's main eastwest artery.

Upon recommendation from Extension Foresters Gene Grey, Fred Atchison, and Jim Nighswonger, the city planted flowering trees along the street. The trees, beginning their third growing season, bloomed last year.

"Following that recommendation was the best advice we ever took," Broun said.

Phillipsburg, Kansas, tree commission members and KSU Extension foresters inspect future tree removal and planting sites. From left are D. T. Broun and Buck Herman, commission members; and Extension Foresters Gene Grey and Fred Atchison.

Grey, who's in charge of urban forestry at Kansas State, said the foresters recommended small flowering trees first because they "make a big splash" and would be an encouragement to local residents to participate in the program. Small trees also cause fewer utility line problems.

Residents of the town are participating in the tree removal and planting effort. Because of an arrangement made by the commission with a tree removal company, trees are taken out at a reduced price.

"Of course, we don't remove trees unless the owner agrees," says Broun. "We are not in the business of taking out healthy trees; just those that are diseased or detract from community appearance.

"We also replace trees that are removed, if needed, with a proper species for the site. The people in Phillipsburg do care about trees; they just haven't known what to do about them."

"The tree commission gets a positive response from most citizens, because they know we want to do what is best for them and their community," explains Herman.

"I remember Bud (Broun) advocating a systematic tree removal and planting program when I first came to town 11 years ago. He has a thorough knowledge of trees and what species will grow here. And people respect his judgment."

Broun takes in as many shade tree conferences as possible, including those held at Kansas State University.

Because the tree board's budget doesn't allow for wholesale removal of dead trees and purchase of new ones all at once, replacement will be a slow process. About 200 trees have been removed so far, involving 85 or 90 property owners. And 500 new trees are to be planted soon, both as replacements and in new areas.

Atchison, stationed at nearby Hays as an area Extension forester, believes the success of the program at Phillipsburg results from "dedication of the people on the tree commission."

He calls Phillipsburg "one of the pioneers in the United States in approaching tree removal and planting at the community grassroots level. The fact that Phillipsburg was one of the first towns in Kansas to outline a comprehensive tree program attests to the forward-thinking of community leaders."

Since State and Extension Forestry at Kansas State University received specific funding from the U.S. Forest Service for community forestry programs, the university has received requests for assistance from more than 200 Kansas towns, says Grey.

Most of the towns were just like Phillipsburg. They had tree problems and didn't know what to do about them.

More than 40 of those towns have created tree boards, or commissions, with membership varying from three to six.

Once a city establishes a tree board, KSU foresters recommend a community public tree inventory. The inventory, carried out by the foresters with assistance from local citizens, tells a community where it stands.

For example, a tree inventory enabled foresters to inform one community of 5,000 population that it had 1,995 street trees representing 31 species. Forty-two percent of the trees were Chinese elms.

A high percentage of one kind of tree is cause for concern, say foresters, because a concentration of a single species increases the chances of insect and disease attacks.

The foresters also suggest that the new tree boards define priorities, determine long-range goals, recommend legislative and policy changes, and prepare annual work plans.

It's not an easy job, but towns like Phillipsburg are proving that it can be done. And Grey believes that a town which can muster the active leadership, concerned citizens, and community pride needed for a vigorous forestry project also exhibits its ability to bring those things to bear on other community development problems.

Oregon women study government

When program planners from Lane County, Oregon, home Extension study clubs organized a tour of the Oregon legislature 10 years ago, 300 homemakers made the trip.

Little did the planners realize they were initiating a decade of study that would give 1,500 homemakers a new understanding of government, stimulate many to responsible community activities, and steer others to positions of responsibility in government and politics.

Velma Mitchell, Lane Extension agent who developed the "Know Your Government" series, observed that it has been fascinating to watch the interest in government and public affairs gain momentum.

The series peaked in 1972 with 4 of 10 home Extension study projects keyed to government and a variety of public services: "Local Budgets and Budget Makers," "Public Agencies and Their Services," "Crime Prevention—or Protection of Family, Self, and Property," and finally, a made-to-order lesson for families seeking in-

expensive recreation at a time of rising costs, "Recreation in Oregon— Low-Cost or Free."

And that wasn't all. The home Extension women also toured the legislature, listened in on several sessions, and took part in a 3-month series on land-use planning in 21 county areas.

Why all this interest in government and related subjects such as taxes, budgets, land-use, and—far from least—legislation?

Many Extension homemakers made no bones about the reasons. They are concerned about the phenomenal growth of government, its cost, and the increase in taxes.

But no small part of their interest is the homemaker's inclination to be a part of the action, to be involved in community affairs, to be heard in government. Homemakers have been overlooked too long as a source of trained leadership.

To gather the hard facts and figures homemakers were seeking, Mrs. Mitchell went to the people who headed up government and research projects, State senators and representatives, legislators, county commissioners, State and county planners, tax analysts, League of Women Voters, Extension specialists, and newspapermen.

No one refused to participate. Nor did anyone slough off without doing the homework. These people were prepared — and their presentations were as interesting as they were informative.

Volunteer leaders didn't lack for material to share in their own presentations throughout the county. Mrs. Mitchell summarized training lessons in fact sheets or brochures, illustrated flip-sheets or charts, color slides, tape recordings, and the like.

The leaders recognize that these "think" lessons are more difficult to teach than the family home skills they

Val Thoenig
Extension Information Representative
Lane County, Oregon



Government and public affairs have long been a part of the Extension study program in Lane County, Oregon. Velma Mitchell, Extension home economist (right), has kept it interesting through stimulating teaching methods like this giant budget chart on which an Extension homemaker is comparing local revenues and expenses.

can demonstrate. But the challenge didn't stop them, and the personal growth has been remarkable.

Take a subject as deadly sounding as "Local Government Budgets and Budget Makers." How could it be handled? Mrs. Mitchell involved both the State and county tax chairmen of the League of Women Voters, a county commissioner, and county tax analyst.

She added a ceiling-high chart—one that could be reached only by climbing a ladder. And climb the women did as they posted costs, taxes, income, and outlay for a county budget.

The 553 homemakers attending the lesson voted it "Year's Best." And of the 161 answering the questionnaire, 119 reported they'd become "aware of budget notices in the paper"; 113 reported they could "understand a bit better" how tax monies are spent; 87 said it was "easier to read" the tax statement; 93 discussed the lesson with families; and 75 shared the information with friends.

Games, questionnaires, and puzzles were a part of the "Know Your Government" series helping to lighten a sometimes heavy subject. And they got across an important point: "No one ever knows all the answers."

Basic training in "How a Bill Becomes a Law" attracted 1,232 homemakers in 1964. A State senator provided the information. Mrs. Mitchell transformed the information to colorful flip charts that soon were in demand by clubs, schools, even television.

That same year, 621 women studied "Oregon Taxes and Laws."

From 1968 on, the countdown was seldom missed. Topics have included "Know Your County Government," "Know Your State Government," "Planning and Zoning," and "Know Your Federal Government."

A total of 575 study group members took part in an in-depth study and discussion on "Local Agencies and Their Services" in 1972 and voted it their "No. 2 favorite of the year."

A survey reveals the lesson's impact. Of the 161 filling out the year-end questionnaire, 157 said the lesson on "Public Agencies" had made them more aware of resources available in the community; 136 reported a "better understanding" of volunteer and funded agencies; 70 volunteered for community services; 85 said public agencies were essential in combating crime and drug abuse, in protecting environment, and aiding education.

The study of "Crime—Protection of Family, Self, Property," was not aimed at stamping out crime. Instead, it stressed self-protection, handling of checks and credit cards, and ways to help the police.

Mrs. Mitchell developed the lesson in cooperation with law enforcement

officers from the Eugene Police Department and Lane County sheriff's office.

Of the 161 who returned the questionnaire, 147 knew whom to call in an emergency; 133 understood their rights; 47 had installed lights, door bars, or other protective devices in their homes.

And the women offered suggestions—citizen participation in law and crime detection; parental cooperation in teaching children respect for the law; street lights on rural roads; and education for defense.

The 10-year "Know Your Government" series has changed lives and influenced whole communities.

One homemaker said, "Now I can talk to my children about the things they are learning in school."

Another said, "How lucky we can learn these things in an informal way."

Another homemaker became so involved that she conducted a campaign for her favorite candidate and stumped the county in her fight for a public issue she cared about.

For many homemakers, the end result of the "Know Your Government" series was a determined resolution: "I'm going to get involved."

Joyce Ann Bower
State Extension Specialist-Press
West Virginia University

4-H/CRD gives youth a voice

Too often it takes a shocking incident to focus attention on the lack of communication between young people and "the establishment."

In Wood County, West Virginia, it was a disturbance after a football game late in 1971 that opened people's eyes to the problem. When Extension agents and others realized that youth had no outlet for communicating with community leaders or for relating their personal lives to community problems, they decided to do something about it.

What resulted was a program which one Extension worker says "has opened doors to youth participation with adults in community decisionmaking and problem solving."

In fact, the Wood County experience was so successful that it is being used as a model for the new 4-H Community Resource Development (CRD) program now operating in 12 West Virginia counties.

The Wood County Extension agents felt that involving high school students in local government would be a big step toward closing the "communication gap." In addition, they hoped that such involvement would help the area's outmigration problem by encouraging the young people to stay in the area to live and work.

The result was a 5-day workshop called Youth Leadership for Community Development, attended by 33 juniors and seniors from Wood County's three high schools.

The workshop was planned by a group of county 4-H agents, 4-H junior leaders, two local ministers, and Dr. Arun Basu, then Parkersburg Area community resource development specialist for the West Virginia University Appalachian Center (Cooperative Extension Service.)

Planners obtained \$1,800 from two local foundations to finance the event. The superintendent of schools and principals of the three high schools agreed on the value of such a program and pledged their support.

School counselors and principals selected the participants, most of whom had never before been involved in 4-H.

The workshop, coordinated by Basu and the agents, included train-

ing in human relations to help the youth become aware of themselves and of others, experiences for developing communication and leadership skills, and work sessions in problem solving, decisionmaking, and group processes.

For example, each of the four groups of participants was asked to build an ideal community using tinker toys. Then the four communities were combined into two. Finally, through negotiation and problem solving, one was formed.

"The unique thing about this workshop," commented Basu, "is that during the second phase, the young people faced 11 community leaders to express their thoughts about major problems."

Their goal was to discuss, negotiate, and agree on two important problems in the county which youth and adults could collaborate on for joint action.

The community leaders included the mayors of Parkersburg, Vienna, and Williamstown, local judicial officers, the sheriff, the superintendent of schools, the chairman of the county human relations commission, a



member of the city planning commission, a newspaper editor, and a leading industry representative.

Parkersburg Mayor William Nicely summed up his opinion of the workshop: "It was great, because it gave young people the opportunity to become involved in their communities. They're still calling me and wanting to know what they can do."

Attending the workshop prompted the mayor to initiate a Youth in Government Day for students in the local high schools. Sixty students selected by their principals spent the day with various officials to learn about their jobs.

Mayor Nicely also appointed three students to the Traffic Safety Commission, which required the approval of City Council. He plans to continue these appointments each year.

"Serving on committees and commissions helps youth realize that our problems are complex and that we can't make governmental decisions as easily as personal ones," he said.

Scott Stevens, one student appointed to the Traffic Safety Commission, noted that the students have been able to give other Commission members the youth viewpoint on traffic problems and safety.

"It's helped me, too, because instead of just knowing their names, I feel that I personally know these important leaders now."

Other workshop participants have volunteered to serve on the 4-H Expansion and Review Committee and the Blennerhasset Island Improvement Committee, a multicounty group developing this historic landmark. Others

have been working with the Parkersburg Urban Renewal Authority.

Several participants organized a service group, Youth Action for a Better Community (YABC), which planned several community projects, including helping senior citizens repair their homes and clean their yards.

As with any first effort, problems were bound to arise. The YABC members became busy with school activities and did not tackle many projects. Planners of the 1973 workshop feel that having it early in the summer will give participants time to form a more active group.

A criticism by the young people was that not enough adult leadership was available to help them with YABC's activities.

Wood County 4-H Agent Lyndall Jones is working to secure adult volunteer leaders to work with the teenagers after the 1973 workshop. "Several adults have indicated an interest in working with the youth as they become active in community work," he said.

Helen Carez, a senior who served as chairman of YABC, noted that many of the students are still interested in the group and that the 1973 session should motivate others to join.

Five participants in the first workshop were asked to assist with the second one. Kristy Dukas, one of those returning, said that participation this year would be on a volunteer basis.

"I think this is better than having them selected by school officials," she said, "because only those who are really interested will come."

Jones has contacted each civic organization in Wood County for funds to cover the expenses of this year's participants.

The 4-H/CRD effort has now spread to 11 other counties, financed by special Federal funds appropriated for such programs. West Virginia University Extension agents are supervising the work.

In most of the 12 counties, a paraprofessional program assistant has been hired on a short-term basis to

organize small 4-H/CRD groups by working with schools, 4-H Clubs, and other youth groups.

Between 35 and 50 youth participants will attend workshops in each of these counties which will be similar to Wood County's Youth Leadership for Community Development Workshop. The paraprofessionals also will train adult volunteers to take over leadership of the CRD groups.

The 4-H/CRD program will move to other counties in following years. Within 5 years, all 55 West Virginia counties should have an active 4-H community development program, through which youth can work with "the establishment" to solve community problems.

As Miss Carez pointed out, such workshops help young people know the individual community leaders and their responsibilities.

"In Wood County," she said, "we now know who to see about a particular problem. Before, we didn't even know where to start."

Young people and community leaders discuss mutual problems during Wood County's workshop on Youth Leadership for Community Development.

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Extension's families three

The Cooperative Extension Service has three official families.

Its family tree has shown steady growth, blossomed frequently, and borne much fruit. Its roots are deep in American Agriculture, and in the economic and social structure of our Nation.

The three main branches of that family tree have made a special surge of growth in the last 5 years.

Extension's first family is its sponsors—the ones which have given it primary leadership from the start. We'll call it the *institutional* family.

This family consists of the State land-grant institutions and Extension's other parent—the U.S. Department of Agriculture.

When the Cooperative Extension Service was established in 1914, all of the 48 State land-grant universities established State Extension Services. The territories of Alaska, Hawaii, and Puerto Rico also established Extension Services at their universities. Alaska and Hawaii became States in the 1950's and continued Extension work from their State Universities.

Within the last 5 years, four other educational institutions attained land-grant status and were added to the list of official sponsors of Extension. They include Federal City College and Washington Technical Institute in Washington, D. C.; the College of the Virgin Islands; and the University of Guam.

Another group in this institutional family consists of the 16 formerly known as Negro land-grant colleges, located in Southern and border States. Legislation recognizing them as land-grant institutions was passed in 1890, which is the basis for their being called 1890 colleges. Tuskegee Institute in Alabama is not a land-grant institution, but is receiving about the same cooperation and assistance from the Government as the 1890 colleges.

This rounds out the institutional family of Extension—a total of 72 universities and colleges, plus USDA.

Paralleling the institutional family is another system we will call the *jurisdictional* family of Extension. While institutions provide most of the leadership for Cooperative Extension work, the jurisdictions provide the authority and funds, and some leadership, especially in the counties.

The jurisdictional family consists of the Federal, State, county, territorial, and city governments. To be more

specific, it includes the United States Government and the governments of the 50 States, 3,150 counties, three territories (Puerto Rico, Virgin Islands, and Guam,) plus the District of Columbia and perhaps as many as 250 cities and towns. Two territories, the District of Columbia, and many of the cities and towns have been added to the jurisdictional family in the last few years.

If we go beyond our domestic borders, we could add to the jurisdictional family the foreign countries with which we have agreements for Extension work. This would include especially South Vietnam where we have had as many as 50 agents assisting with agriculture in the provinces. It also includes the 11 other countries with which we have Participating Agency Service Agreements (PASA).

Thus, this special family of Extension totals nearly 3,500 governmental jurisdictions.

A still larger family in the Cooperative Extension complex is its staff of employees. Until about 5 years ago, this *employee family* had stabilized at about 16,000 professional workers and 7,500 secretarial and clerical staff members in the States and counties.

Then came the Expanded Food and Nutrition Education Program, which added a large new dimension to our employee family—the paraprofessional. Although State Extension Services had experimented some with this type of employee, EFNEP gave this category its big boost. Most of the States call these employees "program aides" or "assistants."

Their success has been phenomenal, and Extension is proud to include among its official family the 8,000-9,000 paraprofessionals, mostly in nutrition but also in agriculture, rural development, and 4-H, now lending a hand in our educational role. This is a most significant example of our agency's growth.

Like most families, the families of Extension sometimes have their differences and their problems. One of the problems is that we never seem to have enough money for all the things we want to do. And at times we may disagree as to how we do things.

But one thing we do agree on—that there is a constant and urgent need for the types of educational services we provide for farmers, homemakers, youth, minorities, disadvantaged, and communities that we serve.—Walter John

EXTENSION SERVICE

REVIEW

J.S. DEPARTMENT OF AGRICULTURE # JULY-AUGUST 1973



The Extension Service Review is for Extension educators — in County, State, and Federal Extension agencies — who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers Extension workers, in their roles as educational leaders, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

EARL L. BUTZ
Secretary of Agriculture

EDWIN L. KIRBY, Administrator Extension Service

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EXTENSION SERVICE

REVIEW

Official monthly publication of Cooperative Extension Service; U. S. Department of Agriculture and State Land-Grant Colleges and Universities cooperating.

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"Convenience education"

Convenience foods, time-saving appliances, labor-saving equipment—today's lifestyle puts a premium on the quick, easy way of doing things. Education is no exception. People have less time for formal or informal "classes." They want to learn, but they want to do it at their convenience, in the most efficient way possible.

Extension, like other educational institutions, is experimenting with ways to make learning easy and convenient. A good example is the correspondence course in dairy production described on page 6 of this issue. The idea of correspondence courses is not new, of course, but this agent's tailor-made version for a special audience in his own county goes beyond the ordinary use of this method.

Another "home study" program is scheduled to appear throughout the country this fall. More than 240 newspapers will publish weekly lessons on "The Future of Man," a college-level course for which credit is being offered by about 180 universities. On two occasions, groups of enrollees will meet with an instructor at a participating university. The county agent in this month's Review article also stresses the importance of having some personal contact with course participants and giving them a chance to interact with each other.

Whether through correspondence courses, cooperation with local newspapers, or new uses of electronic media, Extension in the future will be serving people with more "convenience education." As these two examples illustrate, however, the new methods may work best when combined with the old.—MAW

Nebraska women lunch 'n learn

by
Roberta E. Sward
Associate State Home
Economics Leader
and
Kathleen Sullivan
Assistant Extension Editor
University of Nebraska

The employed woman is a very important homemaker. Has the Cooperative Extension Service overlooked her?

Answering a resounding "yes" to this question, Sandra Stockall and Jeanette Grantham, area home agents in south central Nebraska, decided to do something about it.

Sandy and Jeanette agreed that the working woman—whether she is young or old; married, single, or widowed—shares the common problem of managing an effective and efficient home.

"Lunch 'n Learn" reaches working homemakers in Holdrege, Nebraska. Extension home agent Sandy Stockall demonstrates some techniques of creative floral arrangement during a noon session held in a local bank.

But she also is committed to a partor full-time job away from her home, which often leaves no time for morning coffees or afternoon meetings. So how can she be reached?

The two home agents did not feel that night meetings were the only answer in involving this working woman. As Sandy put it, "Once we (working women) get home and get out of our girdles, a herd of wild horses couldn't drive us to a meeting."

So they looked for a time of day when employed homemakers did have time to spare.

Their solution: the noon hour—a time when these women could "lunch" and "learn" at the same time.

Sandy and Jeanette took their "Lunch 'N Learn" concept to two local industrial plants, employing some 600 persons, many who were commuters from small neighboring towns.

The personnel manager of one plant responded enthusiastically to their idea, offering use of plant facilities.

The first session presented "Slick Tricks With Mixes" to 45 women employees. In addition, the personnel manager videotaped the presentation and ran it continuously in the lunchroom the following day.

The next target audience for Lunch 'N Learn were women employed in the downtown community. Sandy and Jeanette sent information to local businesses, inviting downtown working women to bring a sack lunch and

eat during the session. Twenty-five homemakers attended the first meeting.

Both home agents feel their Lunch 'N Learn sessions have enabled them to carry Extension programs to people never reached before.

Responses from those attending have been encouraging. As one working homemaker put it, "Since I've gone back to work, I can't go to my Extension club, so these programs are a chance for me to get some good information."

And the working women do make allowances to attend the sessions. One said, "I'm going to remind my boss every day so I can be sure to get my lunch break at 12:00 on Friday."

The good public relations created by this program is an added dividend. As a result of Lunch 'N Learn, businessmen in the area are more aware of the Extension home economics program, and those already familiar with it have enlarged their concept of the Extension Service.

Sandy and Jeanette are making Lunch 'N Learn a regular part of their educational program, presenting it at both the industrial plant and the downtown area once a month. Eventually they hope to expand into several other communities in their four-county area.

Lunch 'N Learn, as a method of reaching the working woman, is catching on in other Nebraska areas,

Joan Lacy, Lincoln County Extension home economist, drew 65 employed homemakers in North Platte in her first Lunch 'N Learn presentation. According to Joan, this was an excellent turnout considering that the temperature was hovering around 18 degrees below zero that day.

Several other Nebraska home agents have plans to implement this program idea in their areas during the next year.

As Nebraska has shown, the Lunch 'N Learn concept can be a useful tool for serving employed women, both in urban centers and in less populated areas.



A virtual "carpet of red" greeted me one morning as I arrived at the Springfield Cooperative Farmers' Market. Everyone had tomatoes—lots of them.

Some were fresh-picked, but many had been carted back and forth to the market for days with the hope that demand would firm up and the crop would move. A check at the farmstead revealed piles of tomatoes that had been dumped because of their overripe condition.

As the Extension "man-on-thescene" I visited the market weekly to keep in close contact with the 20 to 50 growers who brought in their produce daily. My visits gave me an opportunity to consult with them on production problems as well as market opportunities.

That day I was greeted with cries for help, such as: "You Extension guys tell us how to grow these things—how about telling us how to sell them!" or "Why can't we get in a canning factory so we wouldn't have to dump out stuff?"

Their need was clear; some type of action was desired—even demanded!

Contact with the local press and other media, plus marketing specialists from the Massachusetts Department of Agriculture, yielded some fine publicity for "home grown quality produce."

The effort helped, but it was a case of too little, too late—a straw to a drowning man.

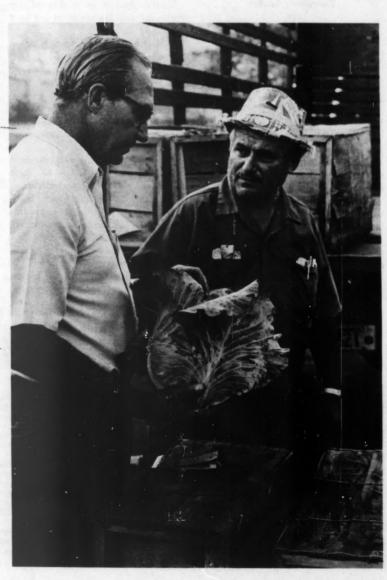
Occasionally I observed local people shopping at the market—there to purchase produce for freezing, canning, or fresh use by the family at home. They appeared pleased at the opportunity to buy "wholesale" at prices 20 to 50 percent below those advertised by retail stores.

"How about encouraging this type of purchase?" I asked Hollis F. Kane, market president. He liked my idea, and we pursued it further.

Again, local media answered our call and agreed to promote more consumer trade at the market. Their

Open house benefits farmers, public

Walter Melnick
Regional Administrator
Massachusetts Extension Service



eagerness to help a local industry resulted in several feature stories, and some film clips shown locally during prime time news.

Home economists in the area mentioned the Springfield Market at their meetings and wrote articles on food preservation, encouraging quantity purchase for canning and freezing.

Some improvement in the "walk-in" trade was observed, but not enough to move a great quantity of produce. Publicity had stimulated some interest in the market, but further action was needed.

During the winter months we reviewed the idea of an "Open House" with growers. Following considerable discussion, both pro and con, the co-op voted \$500 for advertising and promotion. This was matched by the Massachusetts Department of Agriculture, which also promised to lend the support of its promotional agency.

The growers appointed an "Open House" committee, headed by the newly elected market president, Herbert Morris.

Our purpose for developing the "Open House" was many-fold. Local consumers had long complained about the high price of produce—here was an opportunity to do something about it. It also was an excellent way to move surplus quantities of vegetables at a very low price to aid low-income families, and to increase the demand for local produce.

The first "Open House" was set for 8 a.m. to noon, Saturday, July 29, 1972. Bumper stickers and posters with the Massachusetts Department of Agriculture symbol were printed and

Extension Specialist Walter Melnick, left, visits the farmers' market weekly to keep track of trends and discuss problems with growers. The weekly "open house" has helped solve some of those problems while benefiting consumers at the same time. distributed. A contact with Milk Promotion Services, Inc. yielded valuable tie-in promotional posters and advice.

Extension home economists offered their assistance in demonstrating food preparation, issuing literature, and answering questions on canning, freezing, and food storage.

As opening day approached, the air was filled with apprehension and excitement. Our publicity and advertising campaign had done its job—calls to the Extension office indicated we had reached a wide audience.

But the weatherman had been uncooperative. Supplies were short and prices were at record highs. It was too late to turn back. Everyone assessed the situation and determined to do his best to make the "Open House" a success.

Finally, the day arrived; farmers lined up on both sides of the street to sell. Empty melon crates served as supports for planks on which produce was displayed. As had been feared, supplies of all produce were very short. In desperation, directors of the market cornered a supply of tomatoes, cucumbers, and sweet corn to have a decent quantity of these scarce items to sell.

The public came at 7:30 a.m. and kept coming until the market assumed the air of a community fair. Produce was snapped up quickly even though prices were higher than anticipated. Sweet corn moved at a furious pace. One grower scurried back home twice to reload and sold out within 30 minutes each time he reappeared.

Extension home economists Rachel Swicker, Avis Grover, Patricia Sacks, Ethel Ward, and Susan Lewis were swamped with requests for information. More than 600 bulletins and leaflets vanished as women, eager to learn how to can and freeze, snapped them up.

Interest was high in the demonstration on canning tomatoes and other vegetables. Other topics discussed were storage of leafy greens, freezing and packaging materials, and packing techniques.

Samples of half-sour dill pickles proved a big hit, and mimeographed recipes were quickly pocketed. People literally bombarded the home economists with questions on food storage, preservation, and preparation.

The next Saturday, supplies were better as more growers took part; all had a better idea of what the public was looking for. Smaller packages appeared to satisfy customers who could not handle a crate of sweet corn or a half bushel of summer squash. Extension home economists again were on hand at the information booth.

Produce moved quickly although the crowd was not huge. It was a buying crowd, however, and it continued to be so every Saturday thereafter.

"Open House" at the Farmers' Market continued until early October when supplies of local produce dried up.

A first-year assessment revealed that the "Open House" made firm friends of local consumers while convincing many grower members of its potential for moving large quantities of locally grown produce.

And the market achieved financial success. Estimates are that the 50 member farmers grossed an average of \$25,000 for a total income of \$1,250,000.

An added plus for Extension—the home economists' demonstrations and information booth introduced many people to their services.

Today the "Open House" is still going strong. The season began May 12 with bedding plants, flowers, asparagus, rhubarb, and wintered-over spinach and scallions. Since opening day the buying crowd has continued to increase as more produce becomes available.

Seeing the happy faces of the farmers and shoppers on a Saturday morning, one can't help being optimistic about this cooperative venture with a double dividend—savings to the consumer and greater sales for the farmer.

Dairymen choose to learn by mail

When given a choice, dairymen in Rensselaer County, New York, picked correspondence courses as the way they would like to learn.

In the fall of 1971 I surveyed all of the commercial dairymen in the county. The survey gave them four choices of methods for receiving information, including correspondence courses. The returns were a resounding demand for an in-depth course by correspondence.

The survey also gave them 14 areas of subject matter to choose from. They selected "Feeds and Feeding."

The course was ready in October 1972, and announcements and enrollment sheets were sent to dairymen who had shipped milk in the 1970-71 year. A reminder letter and another enrollment sheet were sent 15 days later.

Sixty-three dairymen enrolled, representing 3,027 milking cows or 28.6 percent of the cows in the county. The largest herd was 180 cows, the smallest was 15 cows.

County Agricultural Agent Philip Bemis deposits a weekly correspondence lesson at the post office for delivery to the participating dairymen. In addition, the 4-H agent sent a letter about the course to older 4-H youth who had dairy animals, and six of them signed up. Their lessons were routed through the 4-H agent's office so that he could follow their progress

The course ran from January 1 to April 15, since this is the period when the dairymen have the most free time. The lessons were mailed every other Monday.

The kickoff meeting, in November, was a box lunch affair provided by a local feed company. About 70 per-

cent of the enrollees attended. The meeting included a thorough discussion of the course, including how the dairymen could get the most out of this new educational effort.

This initial get-together seemed to help get a good return (49.2 percent) on the early lessons. Wives had been invited, too, and it was obvious that they were a factor in getting lessons completed and returned.

The objective of the course was to teach dairymen how to feed dairy cows to help them reach their genetic potential. The eight lessons, devel-



oped around the basic fundamentals, were designed to help the dairymen identify problems and then use recommended approaches to solve them.

Course materials included a manila folder to hold all the lessons and reference materials; eight lessons; two work-sheets; two information sheets; and two question-and-answer sheets.

Each lesson had a homework remailer with questions on the lesson and space for the dairymen's questions, comments, or suggestions.

The work-sheets were developed to help the dairymen work out feed problems. This was the laboratory section of the course.

To conduct a successful correspondence course, one must be ready to make changes if they appear necessary, and must keep the course flexible to meet needs that are expressed as the course develops.

The information sheets were developed after the course was underway, and covered topics on which the enrollees requested more details.



The responsibilities of a 108-cow dairy operation probably would have kept Phil Herrington from attending ordinary classes, but the correspondence course was as handy as his mailbox.

Nearly every completed lesson returned had a question from the enrollee, and many of them asked the same questions. Rather than answer each one individually, I developed the question-and-answer sheets so that all the participants could benefit from each question and answer.

It was hoped that this method would substitute for the question-answer-discussion periods of traditional meetings. Several wished, however, that there could have been a meeting of enrollees at the halfway mark for discussion and review.

The second work-sheet was prepared when several dairymen asked for more practice.

The course was evaluated at the end of the lessons. About 49 percent responded to the questionnaire. Ninety-four percent of those responding said the course was equal to or better than traditional meetings as an efficient use of their time.

The fact that 22 of the farmers had little or no contact with Extension in the last 3 years means that the course opened a whole new audience for us. Seventeen of this group were very low-income farmers.

Fifty-eight percent of those responding had used the first work sheet on their herd, and 26 percent said they planned to use it. If only half of them do, about 71 per cent of the group will have tried this important technique—a high percentage of acceptance of a recommended practice.

Many of the comments received said, in effect, "The course has lasting value because we can constantly review the material and references if we forget any of it."

About 15 percent of those who enrolled did not send in any lessons at all. One of these men remarked, "The course was very good and I'm ashamed I did not take full advantage of it."

The course revealed many needs of those enrolled, and a followup program has been set up. Since about 75 of the dairymen had no milk weight records on their cows, an inexpensive form was developed for them to use.

Enrollees showed a great deal of interest in the new feed concept—"Complete Feeds"—so two on-the-farm meetings were arranged to discuss this. The 22 enrollees who had not been in touch with Extension in at least 3 years will be contacted personally.

Two dairymen asked for help in analyzing their herds to determine what they have to work with, and this assistance has been given.

The county agricultural division's program committee is convinced that correspondence courses are a worth-while technique, and the committee has approved a correspondence course on heifer replacement for 1973-74. Ninety percent of those taking the first course have asked to be enrolled in the second one.

Correspondence courses can be a useful technique in Extension education. It is obvious, however, that even this will not answer all the needs of an audience. To be successful, the course must be flexible enough to include some traditional Extension methods when necessary.

An experiment in race relations



Students from a St. Louis junior high school discuss letters they are writing to students in Columbia, Missouri, with Extension Youth Assistant Gary Wilson, who helps coordinate the program.



It is easier to teach young people how to work with objects than to teach them to understand people. But the 4-H motto—"To Make the Best Better"—also applies to human relations.

Much 4-H project work emphasizes learning skills and producing something—a garden, birdhouse, dress, or animal. We also are interested, however, in producing a better youngster.

Considering this interest in producing a better youngster and thus a better adult, we need to ask "What are the greatest problems facing people today?" Most of the ones we can list will reflect some problem with human relations — people getting along with people.

What problems would you list? Would you include poor family life, crime, and race conflict? Would your list also include international affairs, the economy, or employment?

Each of these pertains to human relations and is affected by how well people get along with others. The logical question is "How do we set up a project in human relations?"

Our project—"An Experiment in Race Relations"—attempted to im-

In some cases, the letter writing has led to exchange visits between the two schools. At left, new friends eat lunch together in the school cafeteria.

prove interpersonal relations between the students in an all-white school in Jefferson County, Missouri, and an all-black school in St. Louis.

To accomplish this objective, we developed a series of learning experiences including classroom discussions, letter exchange between students, and an exchange of cassette tape recordings.

Our secondary objective was to develop a pilot program (a concept) that could be used across the State.

First, we contacted social studies teachers in the two schools. Both teachers were excited about the idea and each had a class of 20 students that could participate. Most of the students were seniors.

The principal in the Jefferson County school requested that a note be sent home explaining the program. These notes later became an excellent learning experience for the white students. He also asked that a pretest be administered to the students.

Before the students were told about the program and immediately following the pretest, classroom discussions were held in both schools on integration, personal feelings about people of other races, parent attitudes, perceptions about black-white communication, and black and white schools.

Letters to the Jefferson County parents were sent home with instructions for the parents to sign the letter and return it to the teacher if they did not want their youngsters to participate.

A discussion on parent attitudes had not been planned. The students were so surprised, upset, and disillusioned by their parents' reactions, however, that they initiated the discussion.

The third phase was the letter exchange. Each teacher provided a list of names for the other school. Students were encouraged to write to a specific individual.

As the letters were received, however, everyone wanted to read or hear all of them. As a result, any member of the class who took issue with one of the letters wrote a reply to that individual. When the program ended, each student had corresponded with several other students.

School, home, out-of-school activities, racism, and black-white relations were some of the topics discussed in the letters. These topics were developed by the students and their teachers.

Cassette tape recordings were used to give a more personal feeling. Students felt they could go into more depth on certain topics and use their voices to show more emotion than was possible in the letters.

The program had several significant results:

- —White students realized they were uninformed about race relations problems.
- —White students realized that the black young people in the St. Louis school do not want to be integrated into a white world.
- —The exchange showed the students that they had different values. The white students were most concerned about cars, hunting, fishing, dates, and athletics, while the black students were most concerned about racism, black power, equality, and education.
- —Black students realized that their white counterparts wanted to understand, but had not lived in an environment that would promote understanding.

During the next school year, in an exchange program for sixth graders, slide pictures of each child were added, plus exchanged video tapes of school activities, enabling the students to see their friends in action on TV.

Another exchange between two St. Louis schools and two schools in Cedar Rapids, Iowa, has recently been completed. Highlight of this experience was a trip by the Iowa students for a 3-day stay with the young people in St. Louis.

Student comments following each exchange reflect a greater understanding of varying lifestyles as influenced by race, culture, schools, and urbanization.

Although these human relations ex-

periences were conducted in schools, the same idea could apply to a 4-H project. To begin:

- —Select a group to communicate with that is in contrast to your members' lifestyle: white-black, urbanrural, plains-mountain, farmer-suburbanite.
- —Have the members correspond with someone close to their own age.
- —Encourage the members to select topics they want to discuss. Responses from several members of a group on the same topic will give a much clearer understanding.
- —Provide for exchanging pictures and other objects that will promote realistic understanding of lifestyles.
- —Use tape recordings and other forms of communication as often as possible.
- —Encourage the members to deal with their feelings, impressions, and beliefs about the other group.
- —During project meetings, discuss these feelings and impressions; exchange ideas and misconceptions.
- —Maintain contact with the other group's project leaders in a continuing effort to keep interest high and to provide new experiences for the 4-H members.

If you want exhibits and awards to be a part of the project, members should be able to develop displays, posters, or slide shows about their "friends."

Geographic mobility is a way of life for people today. If your 4-H members can gain some understanding of other people's lifestyles, communities, and customs, their adjustment to new locations and new people will be much improved.

Elaine Myers
Assistant Editor, Home Economics
Texas Agricultural Extension Service

ENP 'grads' become volunteers

Volunteers are hard to find in a fastpaced, inflation-plagued world, but the Texas Extension home economics program has succeeded in recruiting several thousand of them. Many are homemakers formerly enrolled in the Expanded Nutrition Program.

About 7,800 adults and youth serve as volunteer leaders for 75,000 young people in the youth phase of the ENP.

Other volunteers have entered the 4-H program and now lead newly organized clubs, often composed of youth who were encouraged to enter 4-H after participating in ENP.

Still others are leaders of adult groups in various Extension home economics programs.

Volunteers in Texas recruit, organize, and teach the youth and homemakers, as well as arrange for meeting places and assist with programs.

The more than 105,000 homemakers who have been enrolled in the adult phase of the Texas Expanded Nutrition Program are excellent prospects for volunteers.

After a homemaker participates in ENP for 18 to 24 months, she graduates and moves into other programs and activities, armed with information and eager to share it.

"One of these activities is to serve as adult leader for the youth phase of ENP," said Mrs. Florence Low, assistant director for home economics. "Most leaders teach youth groups organized for a series of nine lessons on nutrition."

Mrs. Tina Perez, of Brownsville, is a volunteer leader who began as a homemaker enrolled in ENP. She traced her participation in the program back to a door knock in 1969 when an ENP aide made the initial contact.

Mrs. Perez graduated from ENP after 24 months and became a volunteer leader, teaching a group of neighborhood girls that she'd asked parents "to lend me once a week for an hour."

Leader-training methods used for Mrs. Perez—and all Texas ENP volunteers—followed a plan developed by Texas Extension specialists in foods and nutrition and other fields.

Extension ENP agents, with some assistance from program assistants, train all volunteers in small group meetings using a set of nine lessons on nutrition, one each week.

And volunteers actually teach while they're in leader training, putting each lesson into practice immediately by teaching it to their youth group the same week they receive it.

After leader training is completed, emphasis is placed on teaching the nine lessons repeatedly, reaching as many new youth groups as possible. Nine additional lessons are available to youth who want to continue participation in ENP.

To actively involve youth in the lessons, volunteer leaders learn to teach them through effective use of youth-oriented language and visual aids.

Lesson language is designed with "youth appeal" as evidenced in lesson titles—"The Inside Story," "Fun-Filled Foods," "Mighty Meats," "A Groovy Breakfast," "Do-Your-Thing Meals," and "Mini Meals With Appeal."

Visual aids include colorful posters, charts, and handout sheets.

How these volunteer leaders function—adding their personal touches to teaching — becomes apparent in a quick scan over the State.

Mrs. Perez offered the first example.

"My classes with my girls were held once a week," she said. "I had 12 girls in my group—ages 9 to 12. All the girls participated in everything we did. I made my own posters to help teach the lessons."

Another example came from Odessa, where one homemaker's classes add an extra project to each nutrition lesson—such as making canisters to emphasize storage or pot holders for safety.

A third example originated in San Antonio, where a group of home-makers took up "team teaching." They were neighbors and didn't want to teach alone in their own homes, the agent said.

Still another example focused on group coordination in Kleberg County, where Mrs. Susie Gonzales, an ENP homemaker, volunteered as foods and nutrition leader for a group of youth in the newly organized Busy Bees 4-H Club.

"With a group of 20 boys and girls and little prospect of finding another leader, Mrs. Gonzales thought she could use method demonstrations and visuals to teach the entire group," Extension Agent Madeline Kennedy said.

"She gives demonstrations sometimes with one or two members assisting—and sometimes trains one or two members at home to give the demonstration for their group. Club members then have to practice at home and report back to the leader at the next project meeting."

This last example brings another facet of volunteer-leader training into focus—movement into additional leadership roles, or other activities, by volunteers.

Volunteer work develops leadership abilities, so many volunteers become leaders in 4-H work or adult programs and community activities, while many others continue teaching more and more ENP classes, say Texas Extension specialists. Figures reflecting this include the report from Tyler that 50 ENP volunteer leaders moved into 4-H work, along with 333 ENP youth.

And in Waco, homemaker Mrs. Shirley Lewis taught all 18 ENP lessons four different times to four different groups, reaching 64 children.

A look at volunteer leaders for adult groups finds them assisting aides in recruiting and teaching or reviewing ENP adult classes. Many serve in local ENP advisory groups, which help with organization and arrangement, while others have formed Home Demonstration clubs.

Still others serve as teachers in Extension home economics study groups—often formed of ENP graduates.

County Extension agents train volunteers to teach adults in the study groups.

Training focuses on subject matter, such as clothing, chosen by the study groups as their area of interest, and the agent uses material developed by Extension home economics specialists for this purpose.

In Smith County, study groups with volunteer leaders hold "clothing work-

At left, a class on dressmaking is conducted by two former ENP homemakers (far left and far right,) who now serve as volunteer sewing teachers. The former ENP homemaker below is now an active leader in the youth nutrition program.





shops," according to County Extension Agent Mrs. Hattie Sneed, who explained that agents train volunteers "to train others in their community."

Local fabric shops donate material for classes, and a local sewing machine dealer lends machines for volunteer leader training. The training usually involves 3-hour sessions lasting 5 days. Workshops usually last about 8 or 10 days.

"We also have ENP graduates who give information on food preservation to homemakers in their communities, and we hope to involve some in arranging meeting places and recruiting homemakers for an upcoming home care and maintenance pilot program," she said.

How are potential leaders chosen? In Hidalgo County, Bertha Garza, Extension ENP agent, describes one of her volunteer recruitment methods:

"Our ENP homemakers are organized into what we call the Community Leaders Committee—this title was chosen because homemakers respond to it very well.

"When the aide approaches a prospective leader, she asks if the homemaker would like to be a leader and then gives examples of what others are doing.

"She invites the homemaker to the Community Leaders' meeting so she can talk with them and decide if she wants to become a leader.

"Meeting as a county group every 3 months, the Community Leaders also call subcommittee meetings when necessary to plan achievement events or recruit new leaders for 4-H or the youth ENP," the agent added.

Assistant Director for Home Economics Florence Low commented on some of the ingredients that have made the volunteer aspect of the Texas program work so well:

"Continuous, effective training is important to successful volunteer work," she said, "and to the movement of volunteers into other areas. Success also relies on careful leader-recruitment processes and on the attitudes conveyed by the staff during these procedures."

Ted R. Holmes

Extension Specialist (Editor)

Louisiana State University

a class, play time, and refreshment

Between the scheduled meetings, the youngsters are involved in activities such as picking up litter, making extra handicraft items, learning to crochet, and making shelves and towel racks, ice cream, or pillows.

Most of the materials they use are scraps picked up here and there—anything that doesn't cost money.

All activities are oriented to the local community except on the last day, which is exhibit and graduation day. Last year, a program was planned by the youth leaders, and 275 participants brought more than 300 exhibits such as handicrafts, art, and posters. Each person who had participated in the local community sessions received a certificate.

"We see a lot of social development as well as learning," Mrs. Jones points out. "The close relationship that develops between younger and older youth and the volunteer adult leaders is also important."

'Balancing' a county's services

How can a small county staff meet Extension's obligations to low-income people while continuing to serve other highly responsive audiences?

Agents in DeSoto Parish, Louisiana, tested some solutions to this problem and now have a well-developed educational program with low-income farmers, homemakers, and youth to balance their extensive work among commercial farm families and established homemaker and 4-H groups.

A highlight of their work with lowincome youth has been a summer program in which older youth supervise and teach younger children. A cattle grazing result demonstration is designed to help low-income farmers.

For homemakers who must work outside the home to support their families, homemaker clubs and special interest group meetings are planned to fit into their work schedules.

A 6-week summer program in 1972 involved 450 young people in 13 communities. Three Extension aides, 19 Neighborhood Youth Corps workers, and 16 volunteer leaders assisted.

"The summer program offers three benefits to the young people," says Mrs. Leah Jones, Extension home economics agent. "They have fun, they learn, and they eat.

"All three of these are important to children whose parents work away from home during the day. Without this kind of program, many would have no adult supervision and if they had any lunch at all, it often would be sorely lacking in nutritional value."

Educational activities are geared to

advance the physical and personality development of the young people. The first session deals with the question "Who Am I?"

Other subjects include Working With Younger Children, Thinking Heads, Busy Hands, Looking Good, Health, Foods That Keep Us Healthy, Homemade Fun, Getting Rid of Litter, Decoupage, Needle and Thread, and Woodworking.

Each community group meets twice each week, and each session includes

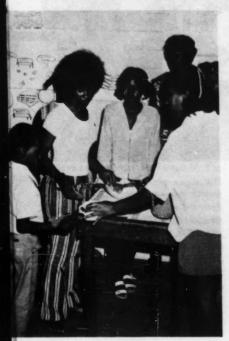


Jesse Latin (center) provided 11 acres of land for a grazing demonstration, following recommendations of Extension Agents Charles Johnson (left) and R. U. Johnson (right).

During the week before the summer program begins, Extension specialists train NYC workers and Extension aides in child development, working with children, play, crafts, and foods and nutrition. Extension agents provide additional training each Friday during the summer program.

The week after the program ends, the youth leaders get extra educational experiences, including tours to a power plant, trade schools, and scenic Hodges Gardens.

The first summer program was un-



Adult volunteers and older youth helped provide refreshments and gather other necessary materials for the summer youth program.

dertaken in 1968 in one community with one NYC worker, several volunteer leaders, and 25 youngsters. As other youth leaders were enlisted in succeeding years, they organized a teen group and opened membership to teenagers throughout the parish who wanted more recreational, cultural, and educational opportunities.

This organization now supplies most of the youth workers for the summer program. They have the advantage of having had seven monthly training sessions during the fall, winter, and spring.

"The youth programs have opened the door for a lot more Extension work with adults," Mrs. Jones comments. "Many of these children's parents work in a local poultry processing plant. Their workday ends at 5:00, and they'll show up for a homemakers meeting at 5:30."

DeSoto homemakers had 28 active homemakers clubs in 1972. Eighteen of these were in predominately lowincome neighborhoods.

Low-income rural people make up a sizeable portion of Extension's audience in DeSoto Parish. In the 1970 census, 71.1 percent of the 22,764 residents were classed as rural. Of 877 farms, 533 were selling less than \$2,000 worth of farm products per year.

Most of the small operators had cattle, but their calves were sold at light weights, yielding low income. Poor pastures contributed to their low return.

In 1971, Assistant County Agent Charles Johnson selected a group of leaders from among the 206 low-income farm operators in the parish and helped them plan and establish a result demonstration on the use of winter supplemental pastures.

The leaders selected the Jesse Latin farm as the site of the demonstration. A fertilizer spreading service, two fertilizer companies, and two local banks offered financial backing.

Jon V. Lowe, area Extension livestock agent, and several Extension specialists conducted a beef cattle school for all interested persons. In

November 1971 more than 150 people turned out to see 22 beef calves placed on 11 acres of ryegrass pasture.

The animals were sold in May 1972 in a special feeder yearling sale. In the 173 days they were grazed, the 11-acre pasture produced 505 pounds of beef per acre, bringing a net return to land and management of \$69.94 per acre.

County Agent R. U. Johnson says farmers, large and small, are enthusiastic in support of the winter grazing practice, and many are adopting it on their farms. Some are overseeding ryegrass on permanent pastures to help winter the breeding herd, and an increasing number are using rotation grazing.

Johnson also points out that the demonstration has led farmers to begin improving the breeding in their herds by buying high-quality sires. The cattle stocking capacity of several farms has improved because more fertilizer is being used on permanent pasture.

DeSoto agents continue to meet the demands of audiences that don't fit into the low-income classification. About 137 farms in the parish report annual sales greater than \$20,000 each. With 84 dairy farms, DeSoto supplies half of the milk used in the Shreveport area and receives the third highest gross income from dairy products among Louisiana's 64 parishes.

The parish is a leading beef area, with 30,000 head of cattle. It is a top timber-producing parish. Private landowners own all of the timber land, and these form an audience for Extension.

The agents also serve 27 4-H and special-interest youth clubs.

Service to these demanding audiences must continue, they point out. In fact, those on the top end of the economic scale could dominate all of their time.

The agents feel, however, that the quality of life in their parish will improve little until the educational and economic needs of all citizens, especially those in low-income families, are served.

Commission links government, people

People in Taos County, New Mexico, are looking around at their problems and opportunities. The waves they are making are causing splashes throughout New Mexico—and in some other States, too!

How? Through an organized, volunteer group of citizens called the Taos County Planning and Development Commission. The commission consists of 24 people representing individuals, organizations and government. You could say, without stretching things too far, that the commission represents everyone in Taos County.

"This is a communications linkage between the grassroots and the county commission," says Palemon Martinez, Extension resource conservation and development specialist.

He headquarters in Taos, and has joined forces with Abad Martinez, Taos County Extension agent, and others, to help the county commission organize the planning and development commission.

Many people have combined talents to design the commission and make it work. It all began with a request for a county manpower development plan from the Governor's Comprehensive Manpower Council.

The end result is the planning and development commission, which did produce a manpower plan. But manpower is only one segment of the commission's interests.

Others include economic development, senior citizens, general community services, housing, community facilities, agriculture and natural resources, land-use planning, financing,



legal matters, education, health services, law enforcement, domestic water, liquid and solid waste disposal, land titles, roads and transportation, recreation, and historical and cultural programs.

The commission's potential for providing a coordinated, comprehensive program for county development has caught the fancy of a lot of people. A commission handbook, containing organizational and procedural guidelines, has been distributed to every county commission in New Mexico. In addition, requests for copies of the handbook have come from a number of States.

Some New Mexico counties already have developed a commission similar to the one in Taos County, and others are in the process.

Ideas for parts of the planning and development commission structure come from other communities and other States. But the Taos County commission is a unique organization.

After the Governor named county commission chairmen to head man-

Discussing plans for the Planning and Development Commission are Taos County Extension Agent Abad Martinez, left; Palemon Martinez, Extension resource conservation and development specialist, third from left; a representative of the State Planning Office; and the three members of the county commission.

power development efforts, the State Manpower Council sought help from the State Rural Development Committee. Associate Extension Director Eugene Ross, committee chairman, asked Extension agents to assist.

One result was that Martinez and Ricardo Pino, Extension community resource development specialist in Santa Fe, were appointed by the Santa Fe County Commission to develop a set of bylaws for a Santa Fe County Manpower Planning Committee.

Revenue sharing was becoming a reality, however, and the Taos County Commission felt that a representative organization was needed to deal not only with manpower, but also with other programs. The organization, as seen by the county commission, could help determine needs and priorities.

Martinez, working with the State Manpower Council, the Taos Community Action Program, County Agent Abad Martinez, and the Taos County Commission, structured the planning and development commission.

The first step was to make an inventory of all Taos County organizations. This was done in the belief, as Martinez put it, that "anything that gets done usually is done by an organized group."

The 300 groups and organizations were divided into 24 categories. Representatives were invited to meetings called to explain the proposed commission and to elect commission members.

Commission members were elected in all but one or two categories; those members were appointed by the county commission.

The 24 members represent three broad categories: public officials, resident (geographic) areas, and private sector. The eight members from the private sector represent youth, labor, civic and service, resource, business, churches, professional, and education areas.

The county was divided into eight geographic areas to obtain representatives for the resident sector. Public sector representation comes from municipal, county, State, and Federal offices, from public schools, and from county members of the State legislature.

Bylaws were adopted at an organizational meeting. They call for reelection or replacement of members at staggered dates in the future. They also challenge members to report back to their organizations and to bring the thinking of those organizations to the attention of the commission.

The object of the commission, then, is to provide a direct line of communication between the county governing

body and 300-plus organizations and their members.

"I know many of these people, and I know there has been very good communication in many cases," Martinez says.

Communication between the county commission and the planning and development commission members is also good. One reason is that under the bylaws the county commission chairman is also chairman of the planning and development group. Other planning and development commission officers are elected.

The county commissioners have explained and obtained support for several proposals for using revenue sharing money, including the purchase of law enforcement vehicles and road equipment and the employment of a county manager.

Early in 1973, representatives of the State Planning Office, the Environmental Improvement Agency, the district highway engineer's office, and the Lieutenant Governor's office met with the planners to outline State plans for Taos County. The State Planning Office plans to have a representative at all future commission meetings.

Meanwhile, members of the commission worked on one of their major tasks—the gathering of information on the needs and problems of the county. A committee summarized the results in writing, and offered alternative approaches to solving the problems.

The county commission retains the responsibility for final action. But the elected government now has a closer link with residents. It has a better knowledge of county problems, opportunities, and priorities, and it has some suggestions for action.

The commission has had some important byproducts. Two unincorporated areas have formed nonprofit organizations to get things done. A

local development corporation, first organized about 3 years ago, has been revitalized. A consultant is helping them look for the types of development Taos wants.

Extension Specialist Martinez sees what is happening in Taos County as an application of the scientific problem-solving process.

"We have developed our philosophy, the objectives, and identification of the needs and problems," he says. "The next step is determination of priorities (which has now been done) and from there we will develop a plan of action.

"This is what we need to be doing—anticipating what's going to happen, and planning for it; developing community and county plans to meet the needs and problems through an organized, coordinated approach," he says.

The planning and development commission does provide some sound guidance for local governments as they make decisions. The 1974 Taos County budget allocated a substantial amount to meet needs expressed through the commission.

A sound, citizen-directed basis also is provided for seeking project funds from a variety of sources. Several projects have been directed to other agencies and organizations, with productive results.

The plan is moving people toward action. Meetings are being held, and people are thinking together about their problems. Many committees are at work, and closer relations have been established between the county and State governments.

The action phase will be the true test of success for the Taos County experiment. Actions and developments to date are favorable, and point to the necessity of linkages between local governments and the people they serve. Supporters believe the action stage will be equally successful.

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Facts - by and for farmers

American agriculture is noted for its abundant production of food, fiber, and related commodities. And another important product is *facts*.

Agriculture's facts usually are called statistics. But whatever the name, they are the basis for good farm management planning.

As with most of their other products, farmers are the prime users of the statistics they produce. From these statistics, when properly processed and applied, farmers can see the prospects of a suitable market for their commodities. And Extension has a considerable role in the use and application of such facts.

Also like other farm products, the processing of agricultural statistics is a very important factor in their usability. Processing of the major farm commodities includes such practices as milling, ginning, slaughtering, inspecting, and packaging. In the case of statistics, processing includes collecting, sampling, tabulating, interpreting, and printing.

The Government agency with major responsibility for processing of agricultural facts is USDA's Statistical Reporting Service (SRS). Its Washington office compiles and issues about 550 reports and its 44 field offices more than 10,000 reports annually detailing what's happening on the farm and to the farm.

SRS makes estimates on about 150 crops and 50 livestock and poultry products, plus other commodities such as fertilizer, milk, and seeds, on prices paid and received by farmers, on stocks of grain, on mink and naval stores, and on farm labor and wages.

To obtain facts for these reports, SRS must depend on farmers, ranchers, poultrymen, grain dealers, shippers, slaughter plant managers, cattle feeders, and many others.

SRS reports offer producers and buyers, alike, a source of reliable information for making reasonable decisions. For example, farmers need these statistics in planning their purchases, production, and sales. Bankers and other lending agencies need them to balance farmers' borrowing needs and available funds. Truckers, railroaders, handlers, storage firm operators, and hatchery managers need statistics to help them allocate their resources.

Proper collection of agricultural statistics is the most basic essential toward obtaining dependable reports. Information for SRS estimates is collected in several ways,

but all rely significantly on the cooperation and participation of farmers and others in the agriculture industry. In some cases, the surveys are made only by mail. At other times, mailings are followed by phone calls or visits. And sometimes there are personal interviews.

But current mail surveys alone cannot supply all of the information necessary for the degree of accuracy demanded for crop and livestock estimates.

An alternate method of getting information is probability sampling. Statisticians are able to develop a sample that represents a true cross section of U.S. farms. This removes the bias from estimates. Also, statisticians are able to compute sampling errors. This means that estimates can be made with a known degree of precision.

Mail surveys won't work if farmers are not willing to mail back completed questionnaires. The probability sampling won't work unless the farmer provides all of the information requested in mail, phone, or personal contacts. He is, after all, the best source of facts on agricultural activity.

This is another way in which Extension can, and does, help. The rapport which county and area Extension agents have with farmers gives them an excellent opportunity to impress upon farmers the need for full and accurate information about production of crops and livestock. They also can reassure farmers that the individualized information provided in SRS questionnaires will not be divulged.

The Administrators of the Extension Service and the Statistical Reporting Service in USDA recently signed an agreement which continues a close working relationship between the two agencies in gathering and using statistical information.

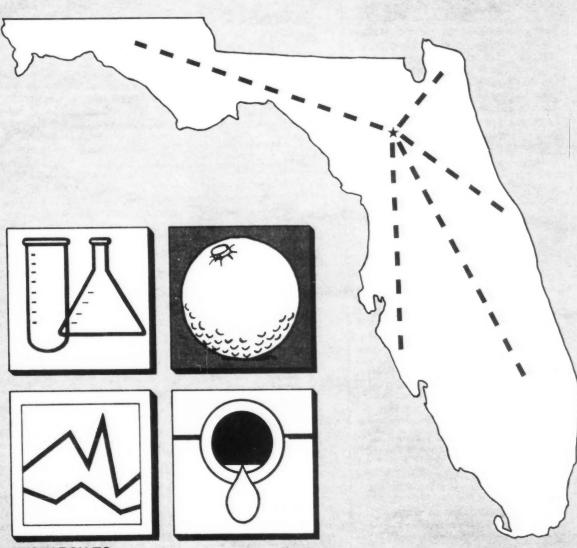
This agreement fosters the collection of crop and livestock statistics to serve agriculture and the national economy, the dissemination of these statistics to the public, and the conduct of educational programs to facilitate the interpretation and proper use of agricultural statistics.

Enumerative surveys, stratification, sampling frame, regression analysis, objective yield measurement, and other such esoteric terms may pepper the lexicon of agricultural statisticians. But a more common word that really describes the Department of Agriculture's crop and livestock estimating program is COOPERATION.—Walter John

EXTENSION SERVICE

REVIEW

LIS DEPARTMENT OF AGRICULTURE IN SEPTEMBER-OCTOBER 1973



RESEARCH TO CITRUS GROWERS—page 4

The Extension Service Review is for Extension educators — in County, State, and Federal Extension agencies — who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers Extension workers, in their roles as educational leaders, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

EARL L. BUTZ
Secretary of Agriculture

EDWIN L. KIRBY, Administrator Extension Service

> Prepared in Information Services Extension Service, USDA Washington, D. C. 20250

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The Secretary of Agriculture has determined that the publication of this periodical is necessory in the transaction of the public business required by low of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through July 1, 1978.

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EXTENSION SERVICE

REVIEW

Official monthly publication of Cooperative Extension Service; U. S. Department of Agriculture and State Land-Grant Colleges and Universities cooperating.

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The eye of the beholder

Because it is so many-faceted, both in scope and technique, Extension work is like the elephant being explored by the blind men. The public's conception of it depends on which segment they come in contact with. Someone observing only the Georgia rural development work described in this issue probably would have a very different image of Extension than one who saw only the Florida program that also is described here. These programs represent both ends of the spectrum of Extension work—from the simplest to the most sophisticated.

Significant progress has come to Liberty County, Georgia, as a result of the basic, person-to-person work of one county agent. Rural development is making steady gains as he travels around the county making one-to-one contacts with people from all walks of life. This is a technique that is as old as the Extension Service, but examples like this one prove regularly that for many situations it still is the best way.

At the other extreme is Florida's concerted effort to get research results out to citrus producers as rapidly as possible. Theirs is a complete, packaged, multi-media program which uses a variety of Extension methods and coordinates them statewide. Results indicate that this, too, is the right technique in the right situation.

Regardless of the means being used in our educational programs, the end product is progress for people. When that is evident, as it is in these two very different examples, the overall image of Extension will be good, regardless of how the individual pieces are perceived.—MAW

How does one measure Extension programs to determine educational growth, particularly among program clientele who do not respond well to written examinations?

For want of a better means of measurement, most of us have used our observations, the "numbers game," and the feelings and perceptions of others to measure the success or failure of our programs.

The planning staff for a recent Nutrition Day Camp in Minnesota was determined to plan an evaluation process that could measure, to some degree of validity, the written objectives of the camp.

The camp was planned for low-income inner-city youth from 8 to 10 years of age. Major objectives were:

—to help the youth understand the relationship of plants and animals to the food they eat, and

—to help them increase their knowledge about nutrition.

Since these children were likely to have difficulty with any type of written examination, it was essential to plan a testing instrument which would be fun to take and yet would yield data for program evaluation.

A simple 12-key electrical wiring board that could be programed for any subject was the answer. The child merely matched questions and answers by touching the correct keys and thus completing an electrical circuit which activated a small light.

The next problem was to write a program for the testing board which would provide a measurement of the camp objectives. Two programs were designed—one on the relationship of plants and animals to good, and the other on nutrition. Each incorporated pictures as well as words.

A pretest with a group of 8- and 9year-olds determined that the device was fun to use and that the level of understanding was within bounds.

Evaluating nutrition teaching

by
Daniel E. Lindsey
Assistant State Leader
4-H & Youth Development
University of Minnesota



A nutrition program assistant helps a camper complete a simple 15minute test of his knowledge, with the help of a programed electrical testing board.

Food and nutrition program assistants were trained to give the test, which they administered through individual interviews lasting about 15 minutes.

The test was administered to a random sampling of youth immediately upon their arrival at camp and to the same individuals at the conclusion of the fifth day.

A check group also was selected at random and tested just once at the end of the camp. This was an attempt to determine if learning occurred as a result of the camp program or from the test device itself.

From a total of 333 campers attending the two sessions, 53 participated in the evaluation. The evaluation showed that:

—Participants increased their knowledge about the relationship of plants and animals to the food they eat by 13.33 percent and increased their knowledge about nutrition by 17.33 percent.

—There was no significant difference between the knowledge level of children attending the first week's camp and those attending the second week. The first week's group learned more about relationships; the second week's learned more about nutrition.

-Nine-year-olds gained the most knowledge.

—Boys gained more knowledge than girls did.

The program's educational level, which had been planned for the median age of nine, was apparently correct. The youth did have problems reading and understanding, but they enjoyed taking the test.

The check group involved another 25 children. Their scores on each test were significantly higher than the first test of the study group, and slightly lower than the scores of the second test of the study group. This indicates that the study group learned primarily from the program, but that the test device also contributed to the learning process.

Since this was a pilot effort, it may not be statistically valid to apply the resulting data to other programs. The results do indicate, however, that the testing technique was appropriate to the clientele and that the program content was on the right track.

A major evaluation procedure is costly in terms of staff and program time. But it does get beyond the usual "seat of the pants" evaluation and can be an important tool in providing better program planning.

L. K. Jackson F. P. Lawrence and T. E. Crocker* University of Florida

Speeding research to the field

Getting research results put into practice is Extension's job. But how do you quickly make a large segment of an industry aware of the latest available technology and persuade them that adopting it is in their best interests?

The Florida Extension Service faced this challenge with the State's citrus industry. When times were good, the growers paid little attention to improving production practices, and available technology was going unused.

But as prices began to drop, Extension took advantage of growers' increasing receptivity to assistance and launched an organized effort to bring them the latest production technology.

The rapid expansion of the citrus industry in south Florida began after a severe freeze in 1962 brought about high returns from fruit. Now, nearly a million acres of citrus are planted in central and south Florida and the industry is still expanding.

Production in the last 10 years has increased from a low of about 90 million 90-pound boxes to crops of more than 200 million boxes. This rapid crop increase has reduced returns and forced growers to seek methods of cutting costs and increasing yields to operate profitably.

The need to cut production costs was brought to the forefront in 1968 when a citrus conference was held at the University of Florida.

At that time, the industry was in serious financial trouble because of huge crops and subsequent low prices. The goal of the conference was to present an analysis of possible marketing and production adjustments for improving the income position of the citrus industry.

Effective marketing adjustments would have been difficult to achieve and would have required considerable time to initiate. So the conference suggested that the most immediate aid to the grower would be through a lowering of production costs. This, they said, could be accomplished through improved communication between research personnel and growers.

Many cost-cutting methods were readily available, since growers were

not taking advantage of current technology. During seasons of good returns, they had been using luxuriant production programs.

Research scientists with the University of Florida's Institute of Food and Agricultural Sciences (IFAS) had developed ways to produce a box of citrus in a good grove for less than 50 cents. But many growers had production costs of nearly twice that figure.

Extension specialists in the Department of Fruit Crops were faced with the challenge of trying to improve growers' income through the wide use of research-proven production practices. Their solution was a comprehensive program for economical citrus production.

The Florida Program for Economical Citrus Production was developed with the cooperation of IFAS research faculty and the USDA Horticultural Field Station in Orlando.

The Extension fruit crops specialists subdivided the broad field of citrus production into irrigation, fertilization, pruning, pest control, weed control, fruiting problems, rejuvenation, and recordkeeping. Each specialist assumed the responsibility for preparing one or more sections of the production program,

The sections were prepared in conjunction with appropriate research workers and were reviewed and approved by the researcher prior to publication.

*Mr. Jackson is Assistant Extension Citriculturist, Mr. Lawrence is Assistant Professor, and Mr. Crocker is Professor, Department of Fruit Crops.



Each section consists of a documented literature review; current recommendations for each production practice; a bibliography; a section of tables, charts, and graphs demonstrating important points; and a set of color slides of each of the tables and charts.

Each citrus-producing county received a complete copy of the Florida Program for Economical Citrus Production, which consists of a compilation of all eight sections.

Since Extension and research faculties have jointly prepared the material in the program and all Extension agents in the field have the program at hand, recommendations are harmonious and without conflict. The program is continually updated by Extension specialists as new research information is made available by the appropriate research scientist.

Minor changes in the program are made routinely and mailed immediately to Extension agents in the field

THE RESPONSE TO REPRESENTED TO SERVICE AND ADMINISTRATION OF THE PROPERTY OF T

The irrigation material, above, is an example of the comprehensive production information contained in the packets of printed and visual material agents receive on each phase of citrus growing. This material is supplemented by other methods, such as field training, left.

for inclusion in their copy of the program. Major changes are handled in a similar manner but are followed by a training session of county personnel with the appropriate research and Extension faculty.

The training sessions also benefit State specialists and research workers through the feedback of problems from county Extension agents. The agents are quick to note any shortcomings or errors in the program and serve as a screening committee prior to public release of the material.

The irrigation section of the program, for example, contains:

—six pages of condensed, researchdocumented facts and recommendations derived from this research,

-a one-page summary of pertinent points,

—a list of references which allows the user to refer to the original source for further details.

—tables, charts, and graphs illustrating important points in the text, and

—color slides, placed in a transparent vinyl holder for ready reference and protection.

Other sections of the production guide are prepared in a similar fashion and the material is assembled into a comprehensive document.

An intensive weeklong training school is held each year for Extension agents from citrus-producing counties. At these schools agents are trained in the various facets of the Florida Program for Economical Citrus Production.

Extension specialists and research workers explain the research and resulting recommendations. Agents are then given guidelines for use of the program in the county.

At certain times of the year, all Extension personnel concerned with citrus conduct intensive programs on the same topics, using the material contained in the program. During the month of May, for example, fertilization might be emphasized. During that month, Extension agents throughout the State would hold meetings on fertilizer practices, send out special

newsletters, prepare news releases, and give recommendations on their local radio and TV programs.

Concurrently, information would be released to newspapers and industry magazines on the subject from the State office in Gainesville.

Research personnel are informed of the point of emphasis for the month and may be asked to help prepare news articles, appear at schools and clinics, or be on radio and TV programs.

This intensive saturation method is believed to be the best approach because of the size of the citrus industry. With more than 20,000 citrus grove owners in Florida, wide coverage in every available medium is needed to reach the desired individuals.

All approaches must be taken during the same time period to be effective. It appears that this united approach to a citrus production program greatly aids its adoption by growers, thereby helping to lower the cost of citrus production in the State. It also has promoted a healthy, cooperative relationship among research, teaching, and Extension faculty. And it reduces the time lag between problemsolving by research and acceptance of the information as a commercial practice.

The progress and effectiveness of the Florida Program for Economical Citrus Production are currently being studied. Surveys are being taken at grove meetings and analyzed by computer. These studies, when complete, will help Extension workers at both the State and county levels to increase their effectiveness. Joe Kurtz
Extension Information Specialist
University of Kentucky

Small farmers need personal contacts

The formula is not really complicated. It simply combines a large amount of personal contact and some of the demonstration techniques which were popular in Extension work 30 years ago.

Such is the approach being used to bring Extension assistance and help from other agencies to black families living on small farms in the southern part of Trigg County, Kentucky.

Extension programs geared to larger and more commercialized farms had not been effective in reaching these rural families. So, in 1968 representatives of the University of Kentucky Cooperative Extension Service and the Tennessee Valley Authority (TVA) agreed to carry out a special project with a selected group of black families on small farms (averaging 50 to 60 acres) in southern Trigg County.

Granville King, a black area 4-H agent, came in to serve as coordinator of the project. "He provided the key that unlocked our effort," said Keith Venable, Trigg County Extension agent for agriculture who played a major role in setting up the project.

King devoted a large amount of time to making personal visits with the families in the project area. In his early visits, he found a feeling of mistrust among some of the people he visited.

"Some accepted and trusted Extension workers more easily than others," he pointed out. "The feeling was strong in the minds of some that no one really cared about them and their situation."

While explaining the project and its

benefits to the families, King also spent a lot of time listening. "We wanted to give the people plenty of opportunity to talk about the things which concerned them," he explained.

"To develop trust and respect, we had to be sensitive to their needs. In a project like this, you don't turn people off just because they don't have the attitude you want them to have."

Another of King's main objectives in his early visits was to recognize potential leaders. After many of the families living in the area were contacted and some of the leaders were identified, they were asked to help plan a community-wide meeting for all families.

Most of the families had close ties

with one or more of the several small churches in the area. The first meeting took place at one of these churches, the Corinth Community Church, in October 1968.

"We tried to make the leaders, and especially the people, feel that any program action in which we got involved would include their ideas," said King.

"We provided a framework in keeping with Extension capabilities—youth development, home economics, and agriculture—a total family approach."

The agricultural program emphasized crop demonstrations, because almost every farmer was engaged in crop production. The crops included burley tobacco, dark fired tobacco, corn, and pasture. Tobacco received the most attention because it represented the main source of income for families in the community.

Area Extension Agronomist Charlie Wyatt coordinated efforts with TVA to supply fertilizer for crop and garden demonstrations. In addition, local businesses contributed seed and chemicals.

Venable and King helped select the best crop sites, had soil samples tested,



Pete G. Thomas, Jr., left, agricultural aide with the Trigg County Extension Service, discusses tobacco production with Claudius Greenwade, a Trigg County farmer who has been growing tobacco since 1910.

made fertilizer and lime recommendations, and helped get the needed lime.

"We helped farmers pick up and spread their fertilizer properly," said King. "We assisted in seed selection and advised on planting methods, cultural practices, insect and disease control methods, harvesting, and preparation for marketing.

"We saw every farmer two or three times a month—sometimes more often —and spent 1 to 2 hours per visit."

The program in home economics included community-wide basic sewing classes, and also home gardening and food preservation training. County Home Economics Agent Elaine Clift arranged meetings and involved 16 families in sewing classes.

Each family was encouraged to grow a home garden based on the needs of the family. Fertilizer was provided to families agreeing to become involved in growing a family garden.

With the establishment of the Expanded Food and Nutrition Education Program in Kentucky in 1969, a young woman in the community, Jossie Bridges, was hired as an Extension assistant to work with families in the South Trigg project area. She was introduced to leaders and began to make extensive visits in the homes.

The youth program centered on the organization of a community 4-H Club. It began with 12 members, and most of them completed projects and turned in project record books the first year. Club members also established demonstration plots for gardens, tobacco, and corn.

Many Government agencies became involved in the South Trigg project. "We have always had good rapport with other agencies," said County Agent Venable. "The Farmers Home Administration, Soil Conservation Service, Agricultural Stabilization and Conservation Service, Office of Economic Opportunity, Social Security, and the Economic Security Office all helped early in the project and have continued to be involved."

The TVA demonstration fertilizer program has continued every year

since 1969. A TVA discount certificate is supplied for fertilizer needed as shown by a soil test sheet, and is an important economic incentive, according to Venable.

King is no longer working with the project, having moved to Lexington to become a State program specialist in 4-H. A progressive young farmer in the South Trigg community, Pete G. Thomas, Jr., was hired in 1972 as an Extension agricultural aide in the county. Venable credits Thomas with playing an important role in maintaining close personal contacts with farmers in the project area and helping to make up for the loss of King.

Yields of burley and dark fired tobacco on farms in the project showed significant increases in 1969, the first year of the project, and have continued to increase.

Most farmers say they have produced some of their best crops since the project was initiated. For instance, Harry Wilson credits the increased use of fertilizer with boosting his corn yield average 25 bushels per acre.

New County 4-H Agent Randy Newton calls the 4-H Club "one of the best-run clubs in the county." Members have participated in county and area rallies, dress revues, camps, and the State 4-H Congress. They also organized, planned, and raised most of the finances for an educational trip to St. Louis, Missouri, last year.

The home garden program has been one of the most successful aspects of the project. A community-wide garden tour is held every summer, with as many as 75 people participating.

"When the garden program started, very few families recognized the economic or nutritional value of a good garden," said Venable. "Now we almost have to draw straws to select gardens for touring. Ever one is proud of his garden."

SCS personnel say the number of farmers in the project area carrying out soil conservation practices is encouraging and has increased over prior years. ASCS office records show increased participation of families in

programs administered through their office.

Some older farmers have been made aware of their eligibility for Social Security. Three new homes have been built with the help of FHA loans and there has been one loan for home improvement.

Three community-wide events are held each year—the garden tour, a farm tour, and a fall harvest festival. The tours give the people a chance to show how well they have done with their crops and gardens and demonstrate the value of fertilizer and improved production practices. They also help promote community pride and unity. The tours always end with a barbeque lunch at one of the farms.

The fall harvest festival, which takes place at one of the churches, is the highlight of the year for the project. Farmers bring samples of their crops, and women display food products. The events and progress of the past year provide the topic for conversation.

"They are very religious people and are very appreciative of their crops and the gains they have made," says Venable.

The work of the community leaders has been important in making the project succeed. One of the most enthusiastic leaders is the Reverend Prather Thacker, a farmer and a minister for one of the churches in the community. He encourages other farmers to attend meetings and takes an active role in planning and helping with the tours.

Another early supporter, Mrs. Virginia Rogers, serves as the 4-H Club leader and is active in homemaker activities.

Dennis Goodman, a former 4-H agent in Trigg County who is now on the State 4-H staff, calls his work with the project "one of the most rewarding experiences of my life."

And he shares a feeling which is common to all the Extension workers involved with the project: "More projects like this should be started all over the country."

Missouri's 'Teen Teachers'

by
Jim Sawyer
Area Extension Youth Specialist
University of Missouri

The air is filled with enthusiastic shouts in a city park in Nixa, a small community nestled in the Ozarks of southwest Missouri, as two peppy teenagers lead a group of 20 younger girls in a cheerleading exercise.

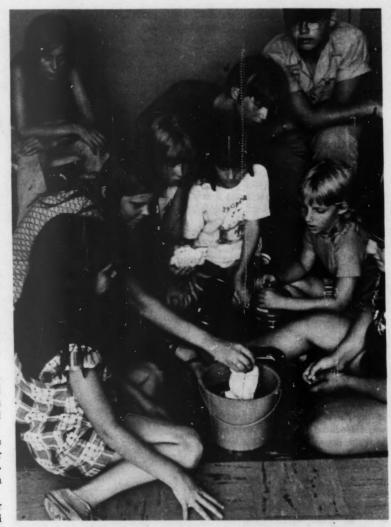
In another town, in the community building on the square, a teenage girl works through the basics of ballet with 15 young girls.

In still another community, a teenage boy teaches a course in model car construction to a group of boys from predominantly disadvantaged families.

All of these teenage "teachers" are working toward their Teen Teacher Diplomas issued through the University of Missouri Extension Youth

Area Youth Specialist Jim Sawyer saw that many southwest Missouri teenagers were idle in the summer of 1970. Most were talented in one way or another, but never had been involved in a leadership training program.

He knew that younger youth looked up to teenagers somewhat idealistically and that the involvement of younger youth with teenagers in a wholesome educational youth development program would be a worthwhile objective. It would provide leadership experiences for the teenagers and at the same time provide opportunities for fun and learning for the younger children.



His solution was the invention of the Teen Teacher Program, a "trial balloon" which has now completed three summers in the 10-county Lakes Country Area of southwest Missouri.

The Teen Teacher Program focuses on practical experiences. It is for all teenagers, regardless of career choice. But its value to a teenager bound for a career requiring group leadership cannot be denied.

Brochures describing the program were handed out at schools and sent to civic clubs, churches, and other youth-serving organizations. Additionally,

these were left in libraries and offices.

Sawyer recruited the Teen Teachers primarily through schools, giving talks during class meetings and assemblies.

The summer of 1971 saw teenagers teaching in such areas as baton twirling, softball, baseball, ecology, cheerleading, model car building, food preparation, sewing, first aid, forestry, money management, dog training, ballet and tap dancing.

They also held classes in arts and crafts, babysitting, poisonous plant and tree identification, personal care, e m b r o i d e r y, music appreciation,

Below, teen teacher Mary Anne Laurence helps youths make puppets during a summer recreation program in a St. Louis suburb. At left, Wenda Magee, another teen teacher, demonstrates the art of candlemaking to her class of younger children.



camping, science, flower arrangement, and gardening, as well as helping with Vacation Bible School activities.

The 1971 Teen Teacher Program grew beyond expectations, considering the limited population of the two counties where it was launched.

The combined total population of Christian and Webster Counties is less than 30,000, with a total youth population of 5,500. Yet more than 100 young people expressed an interest in becoming Teen Teachers. Of this number, about 30 filed their initial plans and followed through to completion.

Their combined pupils numbered over 300, which is 6 percent of the youth in the two counties.

The Teen Teacher Program requires the teenagers to develop plans of action listing the subjects they are going to teach, how they are going to recruit pupils, and an outline of their lessons. Six lessons are required, although most teach more.

If a Teen Teacher applicant wants to teach an academic subject, such as reading or math, he must have a certified teacher help formulate objectives and make lesson plans.

Each enrollee receives a Teen Teacher Manual to help with such things as pupil recruitment techniques. They also receive a comprehensive leadership training guide which answers many questions about such things as pupil motivation.

When the teenager finishes his plan of action, a copy is sent to the University Extension Center in his county for approval. When it is returned approved, the teenager begins his lessons. The "filing" of the plan gives the needed leverage to spot dangerous adventures and to eliminate them.

The University has printed materials available on various youth projects, but the Teen Teachers are not required to use them. They are encouraged to put into practice a talent, skill, or ability they have already developed.

Most Teen Teachers teach their classes in their homes or elsewhere in their own neighborhood. The classes usually are held once a week for 6 weeks.

Some teenagers work with youth groups in camps and other situations where the six lessons are finished within 1 week. The teenager plans the frequency of the lessons and the time periods.

After each lesson, a report is sent to the county Extension Center. The report tells the time and location of the next meeting, the number attending the last session, and what was covered.

This provides information to send to newspapers and to give to people who want to enroll their children in a class.

The teenagers are supplied with lesson plan sheets to help them with advance planning.

After the teenager completes the required six lessons, he applies for the Teen Teacher Diploma. The application is a summary of the experience

and a questionnaire asking whether or not be would be willing to teach again or help train other teen teachers.

After the application is received and reviewed, the teen teacher receives a diploma stating that he has taught a youth course and had basic leadership training.

A verification record is sent to his high school for entry into his permanent records under out-of-school activities.

Leadership training for the Teen Teachers, offered through the University of Missouri Extension Division, helps them develop an understanding of boys and girls 8-12 years of age. Also covered is an understanding of leadership, how to develop a helping relationship, and how to communicate effectively.

The Teen Teacher Program is now offered in each county of the Lakes Country Area and also in other areas of the State.

It was administered in urban St. Louis and the surrounding area for the first time in 1973, under the leadership of Dawn Porchey, educational assistant-youth.

One St. Louis school let some of the Teen Teachers use the school library facilities during the summer. As a result, summer library participation nearly doubled.

Teen Teacher activities there included a story hour, puppet making, and candle making.

Ms. Porchey says her Teen Teachers gained valuable learning experiences while helping younger children keep busy in areas where there were limited summer recreation programs.

Sawyer made presentations about the program in 61 high schools last summer. Radio stations received a series of promotional spots from the University of Missouri, and two television stations used Teen Teacher station break slides.

This was the final year for school assemblies and special promotion, however. "Now," Sawyer says, "it's got to fly on its own."

Judging from the success so far, it should fly well.

Extension gets help from 'Master Gardeners'



Extension Turfgrass Specialist Roy Goss, above right, discusses a common lawn problem with two of Washington's Master Gardeners. At right, Dr. Dave Gibby, left, is interviewed by a Seattle television station during a gardening clinic at a shopping mall.

A master gardener—lower case might be anyone skilled in the art and science of gardening. A Master Gardener—upper case—is all of that, and more, in the State of Washington.

He or she is public-spirited, specially trained, willing to share knowledge, and a very good friend of Washington State University's county Extension agents and horticulture specialists.

Washington's Master Gardener is a Very Important Person nurtured and now working in many corners of the Puget Sound country in and around Seattle and Tacoma, and in the Spokane area in eastern Washington, where the questions from backyard gardeners and urban homeowners were about to drive Washington State University Extension personnel up the wall.

Part of the problem was the simple frustration of not being able to cover all the bases adequately. The Extension staff had all the skills necessary, as one would expect from people in their positions, but ringing phones and incoming mail left them further behind at the end of the week than they had been on Monday.

Dr. Arlen Davison, Extension plant pathologist at the Western Washington Research and Extension Center, Puyallup, and Dr. Dave Gibby, area horticulturist in the Seattle-Tacoma region, took initial steps to set up the Master Gardener concept.

The teaching help from other WSU specialists grew quickly to provide the needed training. Their efforts were followed quickly by Extension Horticulture Agent Dave Bosley, in Spokane.

After several months of planning, more than 150 interested citizens were recruited for 54 hours of special study under these WSU people. At the end, a written examination was administered by the State Department of Agriculture.

Students consisted of homemakers, school teachers, commercial applicators, and retired people, including several from the military. It was an especially important move for some in the latter group, who said it had done as much for them as they were doing for it.

"... a renewed interest in life," was the description one retiree gave the program.

In return for their training, the Master Gardeners agree to spend a few hours per week during the growing season in areas of heavy public traffic—such as malls, shopping centers, and public parks.

Their training and basic knowledge worked. They are answering 95 per-

cent of the questions brought to them. For that other 5 percent, they can turn to specialists at the Puyallup Extension Center, or, in other cases, merely flip open a specially prepared booklet of colored pictures and accompanying script. One way or the other, the public is being served.

Dr. Dave Gibby, close to the actual firing line as he tours both the Seattle and Tacoma vicinities, finds the Master Gardener program an excellent means of obtaining radio and television time. The interest is high. Hard news and feature editors, along with the regular gardening programs, welcome him. He takes full advantage of the opportunity.

Earlier in the program's development, a widely read gardening magazine gave substantial space to the idea, with full credit to WSU.

Signs tying the program to WSU and the Cooperative Extension Service have been strategically placed for optimum display in any visual coverage given.

The basic idea of providing free gardening and yard advice has been well enough received that agents elsewhere in the State have started implementing their own Master Gardener program without waiting for official results of this year's pilot program. The conclusions appear obvious.



Barry W. Jones

Rural Development Editor Georgia Extension Service

Development gets free rein

When people in Liberty County, Georgia, call their local Extension office, they want to know far more than how to keep beetles out of their beans.

Agriculture, home economics, and 4-H work are still very much a part of the Extension program in this coastal county, but leaders here have given free rein to another Extension dimension-Community and Resource Development.

When Liberty Countians call their Extension office, they are likely to pose questions such as, "How can I get a new house built?" "How can I get the road paved in front of my house?" or "What can I do about all this junk sitting in my yard?"

Community and Resource Development is not a new Extension approach, but it is receiving more attention from Georgia Extension agents in counties like Liberty where production agriculture is not the economic mainstay it

Clarence Williams is the agent helping Liberty County residents find the answers to questions on housing, road paving, solid waste, and a myriad of other problems.

Supported by Chairman Jones Peebles and Extension Agent Alfreta Adams. Williams works under a clear mandate from his County Commission.

Two years ago, commissioners charged Williams with responsibility for community and resource development work. They asked him to serve as coordinator for community and industrial progress in the county, and since then he has moved full steam ahead on development projects.

"All my commissioners asked me to do was coordinate with individuals and groups so that we all could work together on projects," Williams said.

"Extension is not in a position to do everything the people need in a county. It takes a lot of different people and a great number of organizations to get things done.

"We're working toward an attitude in Liberty County where any person or group planning a project will feel free to call our office and involve us," Williams emphasized. "We just want to be close enough to the people here so they will want to share their efforts with us.

"We're trying to avoid a community situation where every agency or organization is concerned with getting credit for a certain project. We want everybody involved right from the beginning."

One way Williams has sought to foster this community feeling is to do a great deal of person-to-person work. He spends much of his time talking with people about their problems and digging out what they think solutions might be.

With these personal surveys tucked away as background information, Williams moves toward finding solutions. Sometimes a solution rests with more door-to-door work.

"Often when the county is ready to pave a road, we have trouble getting the right-of-way easements," Williams said. "I find it takes knocking on doors, meeting people in the roadway or out in their fields to tell them face to face they now have a chance to get

their road paved. It's a person-toperson education job.

"Most of them are willing to work with you after you explain the facts to them," Williams continued. "The important thing is that the trust is there.

"When people come to you for help on a community project, you have to commit yourself to fulfilling your end of the bargain. If you do, they will learn to trust you."

Williams enjoys this kind of trust from Liberty County citizens. He's built it over the past 23 years with this person-to-person philosophy.

"Clarence Williams has been a real asset to Liberty County," said County Engineer Leroy Coffer. "I can't think of anything going on in the county that Clarence is not involved with in some way. He helps out in every way he can."

Glenn Bryant, chairman of the Liberty County Commission, is one of the people who has worked alongside Williams and has watched the community's trustful attitude grow.

"We've been working hard at it and discussing it for 5 or 6 years," Bryant said. "Liberty County didn't get this way overnight, and what we've accomplished has taken the efforts of many people."

Williams' trust philosophy often has had to be applied in the direction of the County Commission. One example of this developed when he became active in helping low-income families get new housing.

Most of the land in this coastal area is low. It presents a significant problem for low-income people trying to establish new housing.

"I started asking my county commissioners to have a few loads of soil hauled out to sites where people wanted to build houses," Williams

"Soon they were telling me this practice couldn't be continued because of the expense. I sat down with them and asked them to look at the problem from a different angle. I figure that every time we influence someone to



County Agent Clarence Williams keeps his finger on the pulse of what's happening and what's needed in Liberty County. At left, Williams and Extension CRD Specialist Horace Hudson, right, talk with a builder about progress of a construction project.

build a new house, we add to the tax digest."

The commissioners agreed, and now lack of proper soil elevation in Liberty County is not a deterrent to new home construction.

Housing has not been Williams' only successful effort. He has been involved, at least in part, with almost every form of development in the county in recent years.

He has helped carry out Extension cleanup and paintup campaigns. He is active in economic opportunity programs, Coastal Area Planning and Development Commission work, and other service efforts.

These broadbased cooperative community efforts, in Williams' view, have combined to make Liberty County a growth center.

"This working together has caused Liberty to thrive, and we've been relieved of a lot of the problems other communities are having," Williams said.

Working together has brought Liberty such things as a comprehensive high school, a viable industrial authority, and a large industrial park.

The county also has one of the first regional jails in the Nation (serving six counties). And city-county efforts to combat mounting solid waste problems are in high gear.

Clarence Williams at last sees his people moving in their community. He plans to keep it that way.



One of Clarence Williams' major activities has been to help low-income families get better housing. Here, he visits with homeowner Ed LeCount on the porch of his new brick home.

"For the first time, people began to trust each other."

"We've learned to talk and listen."
The Extension Service's Family
Center in Windsor, Vermont, has improved communication among all age
groups—so say family members participating in the Center programs. They
gather to study specific subjects, such
as nutrition and home management,
as well as to learn from each other.

A survey in 1966, "A Profile of

Poverty in Southeastern Vermont," showed that the respondents wanted financial and job security, better housing, good health, family stability, and a better education.

The survey showed an alarming lack of information on many existing activities and programs. It noted that outside media were not the most effective means of communication—they should be supplemented by face-to-face contact.

Disadvantaged families in Windsor needed help to solve problems in their home and community life. About 20 percent of the families had an income of less than \$3,000. The high school dropout rate was high; unemployment was widespread.

The families needed encouragement to do something for themselves and achieve satisfactions for successful living in a community. Individuals needed to regain self-confidence, use more community resources, and become more employable. Many of them lacked education and skills and, in general, were unprepared for life.

The county Extension home economist and the supervisor and program leader in home economics visited the town manager to discuss the local situation. What funds were available, they asked, to establish a center to strengthen and enrich family life, improve family health and homemaking skills, raise aspirations, and enable individuals to participate more fully in the community?

Though town officials were aware of the problems, they could offer no

The Family Center has an active program for young mothers and their families. At left, Director Monica Porter gives a young mother the latest nutrition information published by the Vermont Extension Service. Below, a group of the Center's day care youngsters listen to the rules of a game before they start playing.



Vermont project aids families

by
Doris H. Steele
Supervisor and Program Leader
Vermont Extension Service



financial support. But they would welcome Extension's help. The way was clear to move for a center. But how?

A proposal was presented to the U.S. Office of Education for a grant to establish a family center, and the request was approved. On July 1, 1969, the Center started as a Federally funded project, renewable twice on a yearly basis. It was located in a vacant store near the Jarvis Street low-income area of the town.

A feeling of warmth and welcome radiates the moment you step in the door. The placard in the window reads: "The Family Center is the University of Vermont Extension Service reaching out to low-income people, trying to give them the same kind of practical help it has given the American farmer for years."

Furnishings are in keeping with those of the people who frequent the Center. Donations from individuals, churches, and other agencies, and purchases from secondhand stores are in evidence.

The related arts specialist made suggestions for decorating, and all the work was done by volunteers—even passersby stopped to lend a hand. The staff wanted the people to feel it was their Center.

The project staff includes a director and a half-time secretary. Other agencies have staff working with the Center in such areas as basic education, mental health, social welfare, vocational rehabilitation, planned parenthood, legal aid, and alcoholic rehabilitation.

Often a person from an agency is available to meet families at the Center. Programs such as Neighborhood Youth Corps, Family Assistance, Work Study, Duo Program, and Manpower also have assigned workers to the Center.

Local churches and citizens have contributed time and money.

The staff hoped volunteer help would come from the target audience. It has. People in the community want to work at the Family Center, not only because they need financial help, but also because they desire to belong and help others.

Eight of the staff assigned by other programs to work at the Center are from low-income homes with severe problems. Employment of these people emphasizes their improvement so they not only give more to others, but also receive help in their own permanent job placement.

Work hours include time to learn skills and attend classes, such as Adult Education or Extension training sessions. Sometimes guest speakers discuss such topics as job responsibility, the need for work, community organization, and human relations.

Staff meetings are held weekly to make plans for the coming week and discuss interpersonal problems. Each person reports on his or her activities.

Cooperation and responsibility have mushroomed. The staff has become a close working group whose members trust each other.

The Center staff also has monthly meetings. At this time the State supervisor and program leader of home economics, who supervises the project, and the county Extension home economist and youth agent, who are advisors, meet with the staff members.

A 17-member advisory board, composed of 10 low-income members, one legislator, and six other town citizens, meets every month to learn of the Center's progress and elicit help.

Personal contact has been the most successful means of involving 300 families in the Center programs. In the beginning, home visits acquainted people with the Center and established rapport. Gradually they came. Unstructured programs were especially successful.

Classes have been established, but the individual contact is retained. Everyone from preschoolers to grandparents enjoys learning—sewing, cooking, gardening, budget planning, consumer buying, child development, basic health, and sanitation.

A teenager finds a resource to help him; a homemaker finds encouragement. All this education takes place through formal and informal discussion groups, classes, home and Center visits, newsletters, and tours.

So much has happened in these 3 years. More than 300 families are participating; 10,000 contacts are made annually. An advisory committee helps the families express their needs and problems to local officials.

In one of the basic education classes, 23 men and women enrolled. Some were high school dropouts who have since found employment. Forty boys and girls participated in a carpentry course.

One summer, 11 families had gardens. Children and parents worked together in this project, planting, weeding, harvesting, preserving—and eating.

During the 1973 floods the Center became an evacuation area. The director was unable to reach the Center, but a parent took over and managed 40 people there for two nights. Nothing was broken; no vandalism occurred. Leadership is just waiting to be tapped!

The Governor's Committee on Children and Youth presented a Distinguished Service Citation to the Center. It said, in part, "The Center is a beehive of activity. It fulfills a wide range of needs in young and old. It is a place where the alienation of youth and generation gap are minimized through the interaction of people. . . . The Center and its staff have been instrumental in creating broader understanding and support throughout the citizens of Windsor."

Attitudes toward work and education are improving. People, learning to share, are less lonely. Parents are serving as volunteers and extending the hours the Center can stay open. People are gaining self-confidence and a more positive feeling of self-worth.

Progress, of course, is slow. But more and more men, women, and children are returning to the mainstream of life. The Center's philosophy is to promote the unity of the family instead of its disintegration. By working with all age groups—from tots to seniors—the Center is helping to bridge the generation gap.



Four H's = Honor

The 4-H program has chalked up nearly 60 years of success, and is still growing and achieving. Like the Cooperative Extension Service which sponsors it, 4-H is based on principles that have been tested repeatedly and found to be sound.

Its pledge emphasizes the elements of life that have helped to build a great Nation.

"I pledge my head to clearer thinking." This is the essence of human achievement. It is one major factor which helps to lift mankind above the remainder of the animal kingdom.

"My heart to greater loyalty." An act of dedication to those things which we consider essential to a strong society.

"My hands to larger service." This is the extension of the individual toward helping others.

"My health to better living." A recognition of the body's role and of the necessity to keep it functioning well.

"For my club, my community, my country." Expansion of the 4-H program idea to more than 80 other countries and the exchange of youth among these countries has prompted 4-H to add "and my world" to that part of the pledge.

The culmination of these pledges results in *Honor*. It would be presumptuous for one to pledge to achieve honor as a goal. Honor is bestowed by others and comes to a person as a result of that person's conduct, service, and achievements.

Youth bring honor to themselves by clearer thinking and better living. They help to bring honor to others, and to themselves, by greater loyalty (to parents, friends, teachers, and leaders) and larger service to their local organizations, their communities, their country, and their world.

To 9-year-olds, 4-H is fun and friends. It's also an honor. To 19-year-olds, with several years of 4-H experience, it's learning to see themselves as individuals, helping others

of their age and younger, and working with adult leaders. That, too, is honorable.

To adult volunteer leaders, 4-H is the joy (and frustration) of sharing knowledge and skills with young people. This brings them honor.

To parents and local businessmen, it's a good organization for young people because they're learning to use their time constructively. It results in honor for the youth and the community.

To industry executives, it is a privilege to see the achievements of youth in 4-H. They feel honored to share their time and their companies' funds to further the education of 4-H'ers and recognize their achievements.

To Extension workers, 4-H is a duty and a satisfaction. They take pride in watching young people grow and develop through 4-H and in the total honor that the program brings to counties, States, and the Nation.

The Cooperative Extension Service emphasizes the fact that it consists of a three-way partnership. Federal, State, and local governments share in the leadership and the funding of Extension work.

The same threesome lead and support 4-H. It also has another three-way partnership consisting of the National 4-H Foundation, the National 4-H Service Committee, and the 4-H program of the Cooperative Extension Service.

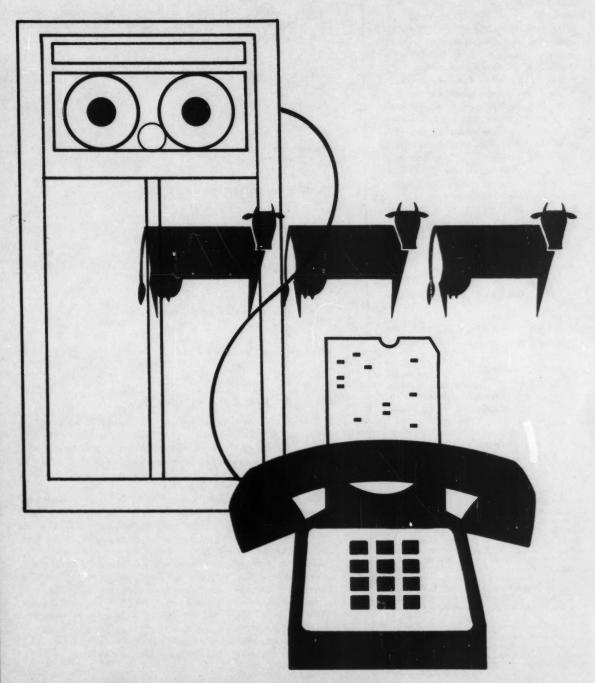
And coincidentally, 4-H sponsors three major events each year. One is the National 4-H Conference in Washington, D.C., another is the National 4-H Congress in Chicago, and the third is National 4-H Week, observed in all parts of the country.

Goals of all of these threesomes are to help American youth develop their full potential. In that process, 4-H brings honor to all who are properly involved in it.

-Walter John and Sue Benedetti

EXTENSION SERVICE

US DEPARTMENT OF AGRICULTURE *- NOV-DEC 1973



Computer Calculates Cows' Rations - page 10

The Extension Service Review is for Extension educators—in County, State, and Federal Extension agencies—who work directly or indirectly to help people learn how to use the newest findings in agriculture and home economics research to bring about a more abundant life for themselves and their communities.

The Review offers Extension workers, in their roles as educational leaders, professional guideposts, new routes and tools for speedier, more successful endeavor. Through this exchange of methods tried and found successful by Extension agents, the Review serves as a source of ideas and useful information on how to reach people and thus help them utilize more fully their own resources, to farm more efficiently, and to make the home and community a better place to live.

EARL L. BUTZ
Secretary of Agriculture

EDWIN L. KIRBY, Administrator Extension Service

> Prepared in Information Services Extension Service, USDA Washington, D. C. 20250

Director: Walter John Editor: Mary Ann Wamsley

The Secretary of Agriculture has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through July 1, 1978.

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EXTENSION SERVICE

REVIEW

Official monthly publication of Cooperative Extension Service; U. S. Department of Agriculture and State Land-Grant Colleges and Universities cooperating.

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Changes Are Coming

With this, the last issue of the Review for 1973, we close out more than just another year. This issue is the last to be produced under the excellent guidance of Walter John, who has been Director of Information for Extension Service-USDA for the last 9 years. He is retiring as of December 31, after nearly 40 years in information work with four USDA agencies.

We shall miss his good counsel and his strong support for keeping the magazine relevant to its major audience, county Extension workers. And we are sure that readers will miss his editorial observations, which have appeared regularly on the back cover of the Review for the last year.

Replacing Walter John's name on the masthead at left will be that of Ovid Bay, who has been appointed acting director of information. He has been information program leader for agriculture and natural resources on the ES-USDA staff for 2 years.

Finally, your editor will be taking 4 months of maternity leave beginning the middle of January. Please continue to submit your ideas for articles—the staff members who will be taking over in the meantime will welcome your suggestions.—MAW

Professional improvement opportunities

Western CRD Workshop

The fourth Western Regional Community Resource Development Workshop will be held June 11-21, 1974, at Colorado State University. Participants from throughout the United States and from abroad are welcome.

The workshop is based on the assumption that the greatest help the CRD professional can provide communities is to facilitate citizen involvement in decisions and action toward their perceived goals. Its objective, therefore, is to enhance participants' understanding of the supporting, helping role essential to developing effective community decisionmaking.

The workshop will be flexibly structured to allow maximum opportunity for mutual help on individual and group concerns and pursuits.

Specific objectives for the workshop are to provide participants an opportunity:

—to develop a working knowledge of some basic concepts underlying locally motivated planning and organization for identifying and working on significant CRD problems, and of their implications for the professional CRD worker;

—to increase skill in using this knowledge in working with actual CRD planning groups; and

—to deepen personal commitment to the facilitating, guiding role in working with people on their concerns. Details about registration fees and accommodation rates will be announced later. For more information, contact Dr. Donald M. Sorenson, Workshop Coordinator, Department of Economics, Colorado State University, Fort Collins, Colorado 80521, telephone 303/491-5394.

Missouri CRD Shortcourse

The seventh annual Community Development Summer Course and Workshop will be May 19-31, sponsored by the University of Missouri-Columbia. Theme will be "The Application of Community Development Theory in Practice."

The program will be in a retreat setting at the Metropolitan St. Louis YMCA's conference center, Trout Lodge, near Potosi, Missouri.

The University of Missouri Department of Regional and Community Affairs invites the participation of professionals in community development, planning, and related fields, who are interested in application of the community development process. The course is noncredit and participation is limited to 40 persons.

For additional information, contact Donald Littrell, Director, Surnmer Course and Workshop, Department of Regional and Community Affairs, University of Missouri, 723 Clark Hall, Columbia, Missouri 65201.

University of Chicago

Extension workers interested in the planning, administration, and evaluation of adult education programs in a multi-institutional urban environment are invited to apply for admission and financial assistance at the University of Chicago.

As an urban private institution, the University of Chicago provides a unique opportunity for Extension workers to learn about adult education work at private colleges and universities, public schools, community colleges, health and welfare organiations, and other agencies, institutions, and organizations outside of the land-grant system.

The M.A. and Ph.D. degrees and the Certificate of Advanced Study are offered in adult education. In addition to their work in adult education, students may elect to concentrate on the study of administration, agricultural economics, anthropology, sociology, or any other social science. Through the C.I.C. program, students may arrange to take courses at any of the Big Ten universities as an integral part of their doctoral program.

Because the adult education graduate students at the University of Chicago come from a variety of adult education institutions, the informal learning opportunities provided by the Journal Club, seminars, and other student-managed activities facilitate the development of a practical understanding of the competing and complementary roles of the diverse institutions engaged in conducting adult education programs.

Fellowships, scholarships, and assistantships are available on a competitive basis. Special internships may also be arranged for students desiring

practical experience in various adult education institutions.

To obtain applications for admission and financial aid, to request detailed information on the graduate programs, and to get advice concerning your graduate study plans and problems, write to William S. Griffith, Chairman, Adult Education Special Field, University of Chicago, 5835 South Kimbark Avenue, Chicago, Illinois 60637. Applications for fellowships and scholarships for the 1973-74 academic year must be submitted by February 1, 1974.

University of Maryland

One graduate assistantship in the Department of Agricultural and Extension Education is available to Extension workers interested in pursuing the M.S. or Ph.D. degree in Extension and Continuing Education.

Additional assistantships may become available. Assistantships are for 12 months and pay \$3,480, plus remission of fees which amount to \$1,416.

Contact Dr. E. R. Ryden, Department of Agricultural and Extension Education, University of Maryland, College Park, Maryland 20742. □

Harvard Fellowships for Government Careers

Littauer Fellowships

These fellowships are for public servants who have had considerable experience in government, and preferably some graduate study in the social sciences, and who plan definitely to continue their careers in government service, at either the Federal, State, or local level.

Students in the School pursue individual programs of study. These may be concentrated in one of the social sciences, particularly economics or political science, or they may combine two or more fields in a manner suited to specific needs.

The fellowships are adjusted in amount to the needs of the student and may normally carry stipends up to a maximum of \$6,800. Exceptions may be made at the discretion of the Fellowship Committee.

Administration Fellowships

These fellowships are for recent college graduates who have had some experience in the public service and a distinguished record in their undergraduate work. A limited number of these fellowships are also available to recent college graduates without government experience who intend to enter the public service. Administration Fellowships carry stipends up to \$5,400 with amounts adjusted to the needs of the student.

Persons interested in fellowships or admission may obtain application blanks, catalogs, and other information by writing to Harry Weiner, Assistant Dean, Kennedy School of Government, Littauer Center, Harvard University, Cambridge, Massachusetts 02138. Applications should be filed by February 15.

IFYE

The IFYE Alumni Fellowship, now known as the International Four-H Youth Exchange Fellowship, will be offered for the fourth time beginning in August 1974. This is an 18-month fellowship which offers an opportunity for graduate work in the Washington, D.C., area, as well as an opportunity to work half-time for the IFYE Association of the U.S.A.

The fellowship is paid by the IFYE Association of the U.S.A. and the National 4-H Foundation. Responsibilities include editing and publishing the IFYE News four times a year; maintenance of all permanent records of the Association; promotion of membership and involvement in the Association: assistance to Association officers in the execution of their duties: assistance with national IFYE conferences and with the National 4-H Foundation's international programs; as well as serving as a liaison between New Zealand and the national association concerning the 1977 World IFYE Conference.

Those interested in applying should write to: IFYE Association of the U.S.A., International Division, National 4-H Foundation, 7100 Connecticut Avenue, Washington, D.C. 20015. Applications should be in the hands of the Association by February 15, 1974.

Warner Scholarship

Mu Chapter of Epsilon Sigma Phi will award one scholarship of \$100 to professionals in Extension Service for study of Extension methods through one of several ways—a 3-week summer or winter Extension school, academic study while on the job, or study leave.

Applications may be obtained from the State Extension training officer, or from the Staff Development Office, Extension Service, USDA, Washington, D.C. 20250. The deadline for filing applications is April 30, 1974. Announcement of the recipient will be made in May; the award will be granted after the study is completed.

Cornell University

The Department of Rural Sociology provides Extension, research, and teaching assistantships paying \$3,720 annually plus payment of fees and waiver of tuition. These grants are available only to graduate students majoring in development sociology who are full candidates for a degree.

For further information, contact Dr. Harold R. Capener, Head, Department of Rural Sociology, New York State College of Agriculture, Cornell University, Ithaca, New York 14850.

Florida State University Graduate Programs in Adult Education

Florida State University conducts a graduate program in adult education that may be of interest to many Cooperative Extension personnel. This program is available to degree and non-degree students and can lead to master's, advanced master's, and/or doctoral degrees.

Although no rigid curriculum is prescribed, students pursue a core of studies in adult education, educational foundations (philosophy, psychology, and sociology of education), and the social sciences.

In addition, students can design a program of studies focusing on one or more specialized areas such as community development, program development and evaluation, management and administration, adult basic education, and others.

University fellowships and a number of assistantships are available, but vary from year to year, depending on the nature of the projects being undertaken by faculty and students.

Past projects have included technical assistance and materials preparation for public schools; adult basic and migrant education programs; training of educational leadership for the aged, for State agencies, for surgeons, and for health-related professionals; workshops for correctional education instructional staff; evalua-

tion of statewide adult education programs; and consultation services to other colleges and universities.

In addition, a limited number of internships have been made available with the following agencies: Federal Correctional Institution, State Department of Education, Florida Board of Regents, Florida State University Division of Continuing Education, Tallahassee Memorial Hospital Family Physicians Training Program, and others.

Admission applications for the graduate program should be submitted at least 6 weeks prior to the expected enrollment date.

Applications for fellowship awards are needed by early February for the following academic year. Assistantship applications are accepted at any time, but early spring is preferred.

These awards range from \$200 to \$400 per month, depending on student experience, the nature of the award, and funds available.

Additional information about this program can be obtained from Dr. Irwin R. Jahns, Associate Professor and Graduate Coordinator, Adult Education Program, Division of Educational Management Systems, Florida State University, Tallahassee, Florida 32306.

Carver Fellowship

The University of Missouri College of Agriculture offers a 2-year George Washington Carver Fellowship for outstanding graduate students in an area of study and research supervised by a department within the College of Agriculture.

Stipends for a Master of Science candidate are \$4,400 for the first year, and \$4,600 for the second year, and are renewable. The Fellowship is designed for promising young scientists who will bring distinction to the Missouri Agricultural Experiment Station with research and contributions as members of the research staff.

For further information and an application, write to: University of Missouri, Dean, College of Agriculture, 2-69 Agriculture Building, Columbia, Missouri 65201.

Hatch Fellowship

The William H. Hatch Fellowship offered by the University of Missouri Agricultural Experiment Station is for candidates for the Ph.D. degree. This distinguished fellowship honoring the author of the Agricultural Experiment Station legislation which is widely known as the "Hatch Act" carries a stipend of \$5,000 the first year, and \$5,200 the second year. There is no restriction on the area of study and research except that it must be supervised by a department within the College of Agriculture. The candidate may choose his department.

The effective date of this fellowship is July 1; however, applications must be submitted for consideration prior to January 10, 1974, as the recipient will be announced on February 15 or soon after. The Dean of the College of Agriculture is in charge of selection.

A copy of the brochure and an application may be obtained from the Dean of the College of Agriculture, 2-69 Agriculture Building, Columbia, Missouri 65201.

University of Vermont

One graduate research fellowship is available in the Department of Vocational Education and Technology for workers interested in pursuing a master's degree in Extension education. The fellowship pays the full \$2,400 out-of-state tuition plus a \$3,100 salary on an 11-month basis.

Contact Dr. Gerald R. Fuller, VOTEC Department, Agricultural Engineering Building, University of Vermont, Burlington, Vermont 05401. □

Tyson Fellowship

The Woman's National Farm and Garden Association offers a \$500 Sarah Bradley Tyson Memorial Fellowship for a woman who wishes to do advanced study in agriculture, horticulture, or "related professions," including home economics.

Applications should be made by April 15, 1974, to Mrs. J. W. Gerrity, Box A, York Harbor, Maine 03911.

University of Wisconsin

The University of Wisconsin-Madison offers a limited number of assistant-ships through the Division of Program and Staff Development, University Extension, consisting of \$343 per month for 12 months, plus a waiver of out-of-state tuition. Contact Patrick G. Boyle, Director, Division of Program and Staff Development, 432 North Lake Street, Madison, Wisconsin 53706.

Behavioral Sciences

The Center for Advanced Study in the Behavioral Sciences provides scholars free time (at their normal university salary) to devote to their own study and to associate with colleagues in the same or related disciplines. The Center requests nominations from certain graduate departments and research centers. Fields: the behavioral sciences. Write to the Director, Center for Advanced Study in the Behavioral Sciences, 202 Junipero Serra Boulevard, Stanford, California 94305.

Farm Foundation Fellowships

The Farm Foundation offers fellowships to agricultural Extension workers, giving priority to administrators, including directors, assistant directors, and supervisors. County agents, home economics agents, 4-H workers, and specialists also will be considered. Staff members of the State Extension Services and USDA are eligible.

Courses of study may be one quarter, one semester, or 9 months. The amount of the grant will be determined individually on the basis of period of study and need for financial assistance. Maximum grant will be \$4,000 for 9 months' training.

It is suggested that study center on the social sciences and in courses dealing with educational administration and methodology. Emphasis should be on agricultural economics, rural sociology, psychology, political science, and agricultural geography.

Applications are made through State Directors of Extension to Dr. R. J. Hildreth, Managing Director, Farm Foundation, 600 South Michigan Avenue, Chicago, Illinois 60605. Forms are available from State Extension Directors. Applications must reach the Farm Foundation by March

Electrical Women's Round Table, Inc.

The Electrical Women's Round Table, Inc., an organization for women in the electrical industry, annually offers a grant of \$1,500, the Julia Kiene Fellowship, to a woman for graduate study in electrical living and allied fields.

Graduating seniors and women with degrees from accredited institutions are eligible to apply. Applications are judged on 'the basis of scholarship, character, financial need, and professional interest in electrical living. Study is toward advanced degrees in such fields as advertising, education,

electric utilities, electrical engineering, electric home equipment manufacturing, Extension, housing, journalism, radio-television, and research.

The college or university selected by the recipient must be accredited and approved by the EWRT Fellowship Committee. Completed applications must be in by March 1.

For application forms and further information, write to Miss Lois Deneke, Chairman, EWRT Fellowship Committee, 900 Moreau Drive, Lincoln University, Jefferson City, Missouri 65101.

323, Agricultural Sciences II, Washington State University, Pullman, Washington 99163.

N.C. Summer School

The North Carolina State University 3-week summer session will be held June 10-28, 1974. Plans call for offering 3-hour courses in Administration of Cooperative Education, Adult Basic Education, Community College Teaching, Evaluation of Adult Education Programs, Extension and Public Service Function in Higher Adult Education, Modern Practices of Adult Education, Teaching Disadvantaged Adults, Family Economics, Current Trends in Foods and Nutrition, Horse Management, Residential Landscaping, Plant Disease Control, and Soil Fertility.

Address Dr. W. L. Gragg, Department of Adult and Community College Education, North Carolina State University, Box 5504, Raleigh, North Carolina 27607.

Ohio State University

The Ohio State University offers research associateships of \$3,600 to \$5,400 and a number of university fellowships on a competitive basis, about \$2,400 each. All associateships and fellowships include waiver of fees.

Application deadline for university fellowships is February 1. Associate-ships may be applied for at any time. Contact Dr. C. J. Cunningham, Department of Agricultural Education, 2120 Fyffe Road, The Ohio State University, Columbus, Ohio 43210.

4-H Agents

The National Association of Extension 4-H Agents will award a minimum of ten \$100 scholarships to 4-H agents who are members of the association. The scholarships may be used for summer school, travel study, and independent study or a full-year degree program. The only requirement for application is that a professional agent must have been an Extension Service youth worker and a member of NAEA for at least 2 years.

One of the 10 scholarships administered by NAEA is the \$100 Rockford Map Publishers Scholarship. This scholarship is limited to the States of Minnesota, Indiana, Wisconsin, Ohio,

West Virginia, Michigan, Illinois, and Pennsylvania.

Application forms may be obtained by contracting Nancy B. McKinney, Box 607, Litchfield, Connecticut 06759, or by contacting the Professional Improvement Committee Chairman of your State 4-H agents assocciation. Application deadline is May 1.

Washington State

The Edward E. Graff Educational Grant of \$1,500 is for study of 4-H Club work in the State of Washington. Applications are due April 1. Contact Tom Trail, Associate Professor of Extension Education, Room

Colorado Summer School

The National Extension Summer School at Colorado State University is being planned for June 10-21, 1974. For further information about the program, contact Dr. James M. Kincaid, Jr., Director, National Extension Summer School, Room 213 Liberal Arts, Colorado State University, Fort Collins, Colorado 80521.

Harnessing 'cow power'

Donald A. Harter
Area Resource Development Agent
Pennsylvania Extension Service
and
Donald L. Nelson
Program Leader
Rural Development Information
Extension Service-USDA

Editor's Note: USDA recently announced a \$59,610 grant to Tennessee State University, Nashville, for a year's study of ways to convert agricultural solid wastes to methane gas and sludge. The Environmental Protection Agency is cooperating. In addition, Extension Service-USDA will sponsor a seminar in: January on the feasibility of methane gas production from wastes on poultry farms.

A potential source of energy—crop and animal wastes—exists on nearly all farms. With the current energy crisis, production of fuel from these wastes may not be too far-fetched.

But where would you start if you wanted to educate farmers about the energy-producing potential of agricultural wastes?

Two field agents from Lebanon County, Pennsylvania, decided to start by using the time-proven Extension demonstration method to show how bacterial decomposition can be used to convert animal waste into methane gas for farm fuel.

The idea had its origin at an Exten-



sion committee meeting of agent and specialist personnel held for the purpose of coming up with environmental exhibits for 1973 Ag Progress Days.

This annual event, one of the largest outdoor educational activities in the East, is sponsored by Pennsylvania's Cooperative Extension Service.

In 1973 it was held in the southcentral area of the State, in the home territory of Lebanon County Agent Glenn Miller, Assistant County Agent Newton Bair, and Don Harter, Area Resource Development Agent and chairman of the Environmental Committee for the event.

Several committee members pointed out that in comparison with the successful experiences in countries such as India, which has more than 2,500 anaerobic digestors for producing methane gas from agricultural wastes, there has been little application of this process in the United States. Methane can be used for heating, lighting, or for powering gas engines.

While the idea is not new, little attention has been given to the possibilities of producing this fuel. It has about two-thirds the calorific value of natural gas and burns relatively pollution-free.

The organic waste from 100,000 cattle has the potential of supplying the natural gas needs of 30,000 people, even though most United States researchers thus far have claimed that the economics of the process is highly marginal.

Committee member Roger Grout, agricultural engineering specialist, emphasized, however, that "the economy factor appears to be rapidly diminishing in importance in view of the energy crisis, our concern for a cleaner environment, and our need for supplemental sources of fuel at a time of scarcity. This could be an idea whose time has come."

Lebanon County Extension Agent Newton Bair, at left, demonstrates his garden tractor, which is powered by methane gas generated from decomposing cow manure. Further discussion centered on the critical need to inform farmers of this bacterial process and to evaluate their attitudes about it.

Specifically, the committee agreed that an attempt should be made to build a demonstration model digestor and then get verbal and written feedback from farmers on this question: Do you feel that the concept of methane production for farm use is worthy of further research and development?

Harter obtained a how-to-do-it manual from the Gobar Gas Research Station in Ajitmal, (U.P.) India, and a literature search provided information on research in the United States. At this point, Miller and Bair took over.

Using these research findings, the pair built a 30-gallon capacity digestor which use a mixture of cow manure and water. The mixture is heated to about 90 degrees.

For three sweltering hot days farmers flocked around the demonstration, looking and listening intently as the three Extension workers explained the how and why of the exhibit. The visitors often brushed by gleaming farm equipment displays and beckoning cold drink stands to try to find the "manure machine."

Bair started and restarted his "cowpowered" garden tractor while telling the large crowds that the residue remaining after gas production does not lose any of its fertilizing value for crops.

Miller lit a gas mantle light from the methane gas produced and fried eggs on a methane gas burner. They distributed literature and told fascinated farmers how the generator was built and how it works.

Of the farmers who filled out comment cards at the exhibit, 98 percent indicated that this synthetic fuel concept was worthy of further research.

"With today's energy crisis," said one farmer, "it is my opinion that any research into the possibilities of utilizing organic sources as fuel is a must!"

"I would cooperate with any research idea that is practical to develop this kind of energy conversion sys-

tem," said another.

Others advised that funds should be made available for further tests and experiments.

Extensive coverage was given to the demonstration by regional and State news media. It also was highlighted in articles carried by several national publications. A request has been received from a major television network to use a videotape of the demonstration, and the organizers of the weeklong 1974 Pennsylvania Farm Show want the demonstration presented there.

An inter-college meeting was convened recently by Dr. Milford Heddleson, Coordinator of Environmental Affairs at Penn State, to evaluate the interest shown during the event as well as the numerous communications subsequently received from people throughout the United States.

Participants agreed to ask Dr. James Beattie, Dean of the College of Agriculture, to appoint a faculty committee to study the feasibility of developing a research proposal and to explore sources of funding support.

Another important outcome was a reinforcement of the conviction that county staff can make creative educational contributions in non-traditional roles if given a challenge which is perceived as meaningful.

In one sense, being involved with research was not a new experience for Miller and Bair, since they previously had assisted with such activities as off-station research plots.

But as Miller notes, "before starting the project we had some real misgivings about whether we were capable of playing a significant role in helping to identify environmental research needs. Our experience at least seems to indicate that the answer to that concern is a definite yes."

Extension's strength in the past has been its ability to adapt program approaches to meet the real needs of people. Indeed, increased use of nontraditional approaches may help county staffs become more effective in responding to challenges such as the energy crisis.

At the University of Michigan in Ann Arbor, they used to refer to Michiigan State University (just down the road at East Lansing) as "Cow College" and "Moo U."

But guess who's planning meals for the "moo-cows" these days?

For thousands of dairymen in Michigan and elsewhere, it's a computer named "Synthia"—at the University of Michigan. She helps them determine least-cost rations for their herds. She does it through a direct connection with the "Telplan" computerized management program of MSU's Cooperative Extension Service.

Synthia, the computer, has a memory bank stuffed with current data about feedstuffs such as nutritional and energy values, protein content, and local and current prices. Input was prepared by Jim Schoonaert, Ingham County Extension agricultural agent; Steve Harsh, agricultural economist; and Don Hillman, dairy specialist.

The dairyman runs down a checklist at the county Extension office, telling Synthia vital statistics about his herd. This might include the type of feed being used, how often the herd is fed, amount and quality of milk produced, and other statistics about the cows.

The computer then figures the cheapest and most efficient feed for that particular herd,

Synthia responds to 41 different programs ranging from tax information to crop planting and livestock feeding—and can even advise on life insurance needs. Harsh currently heads up the overall Michigan program.

Agent Schoonaert premiered the computer service for least-cost rations at his Ingham County office.

Response was excellent, and savings to dairymen were even better.

"Some dairymen recover their costs in less than a day," reports Schoonaert.

He currently has 24 dairymen paying \$5 a year for a touchtone phone in the county Extension office which is hooked directly to the computer in

Ann Arbor (about 65 miles away). They pay another 20 cents a minute to use the phone. Average least-cost ration call is 20 to 25 minutes. Cost—another \$4 or \$5.

One of the best payoffs came to Bob Hayhoe, Onondaga dairyman. The computer told him to increase his protein by adding 40 pounds a day of soybean oil meal.

The soy cost \$2.20 a day for his 38-cow herd. But milk production jumped 150 pounds a day (worth

about \$9). Bob gained \$6.80 a day. Over a month, that's \$180 more profit, even if you subtract the cost of hauling the extra milk.

To prove the payoff of the leastcost ration, Schoonaert put 48 dairymen on the program for a year free of charge. (Costs were picked up by the W. K. Kellogg Foundation.)

The dairymen were randomly selected by Schoonaert to represent three herd sizes. A letter was sent to each dairyman stipulating that he must



Above is a telephone computer typical of those in Michigan Extension offices. First, the agent helps the farmer prepare an input-output form (beside phone) for his dairy ration program. After having dialed the computer, County Agent Schoonaert, right, feeds through a series of coded cards to retrieve specific ration recommendations.

Computer calculates cows' rations

by
Ken Fettig
Publications Editor
Department of Information Services
Michigan State University

come to the county Extension office for an explanation of the program.

"This meeting usually lasts about an hour," Schoonaert says. "After looking at the dairyman's rations, we would run a basic analysis and give him three or four alternatives.

"You have to get on a one-to-one basis to really be effective," Schoonaert emphasized. "Farmers are often too proud to be real honest in a large group—they won't tell you if the quality of their hay is poor. But on a one-to-one basis, you can take a look at a sample of the farmer's roughage and talk frankly with him."

After the initial visit in the Extension office, a 15-minute phone call is all that is needed to update the ration. Schoonaert recommends that this be done at least twice a year, or whenever the roughage program changes—usually in the fall when corn silage becomes the basic feed and in June when haylage or greenchop is fed.

In the initial analysis of the 48 operations Schoonaert figured potential savings in feed cost would average 12 cents per cow per day and range from 1 cent per cow per day to 61 cents.

In other words, a dairyman with 80 cows, saving the average of 12 cents per cow per day, would recover the cost of the computer charge (\$5) and the phone call (\$4 to \$5) in a single day.

Farmers using the computerized least-cost ration saved money because they found that they were feeding protein supplements that were too expensive, or they were feeding low producers too well.

Only one of Schoonaert's dairymen was feeding too much protein. The computer showed Lynwood Nims, that he was wasting time and money by topdressing soybean oil meal when he already was feeding a 17-percent grain ration. That saved him \$6 a day with his 35-cow herd.

Besides saving feed money, 18 of Schoonaert's 48 dairymen increased herd production by more than 190 pounds per day.

"Cows produce best when they get a good balance of protein and energy," says Schoonaert. "Milk production in one 85-cow herd had dropped to 2,750 pounds a day because the ration was out of balance. The computer showed the dairyman that he should cut his high moisture corn level almost in half, because he was feeding too much energy.

"It also showed him that he should increase the protein in his parlor feed. As a result, he increased his herd production from 2,750 to 3,400 pounds in less than 10 days."

Schoonaert advises his dairymen to rebalance their rations whenever they have a change in the kind or quality of roughage. Another time to check the ration is when prices change on feed inputs—a substitute might offer a less expensive feed.

The ration also should be checked when there is a substantial change in production. Fresh cows will need more protein and energy to kick out that extra milk. And when there is an unusual decline in production, the computer can figure out why.

After the year's "free trial," which included as many as six analyses during the year for some of the dairymen, Schoonaert told them that anyone who wanted to continue on the program had to pay his own way. Half of them are now doing just that. And some of the rest will be using the program in the next year.

Schoonaert has concluded that dairymen really appreciate programs like Telplan. "It's tough to balance a ration with pad and pencil, and next to impossible to keep it economical, too," he says.

Dairymen trust computers. Fortyseven of the 48 participants said men might make mistakes, but computers never do.

"No doubt about it," says Schoonaert, "a dairyman will adopt a computerized least-cost dairy ration program when he can see its potential payoff and how easy it is to use.

"The program fits all dairymen; the smaller ones might just take a little longer to recover their \$10 investment. I think that's a pretty inexpensive 'insurance policy' for better production and feeding efficiency."

Other States also are making use of Synthia. Most combine campus hookups (at the land-grant university) and field terminals to make the computer as accessible as possible. The number of terminals in each State varies—Michigan has the most by far with 40.

Other States with from one to several direct hookups with Synthia are Illinois, Wisconsin, Indiana, Ohio, Minnesota, New York, Iowa, Kansas, North Carolina, North Dakota, South Dakota, Oklahoma, Pennsylvania, Montana, New Hampshire, Delaware, and Nebraska.



Meat science made practical

Ever had to alter a pattern or blueprint? Take a tuck here and there, redraw some lines—hey, it fits!

That's the way it was in Iowa with the scholarly sounding topic of meat science. A group of Extension specialists at Iowa State University and in the seven-county Cedar Rapids area have done some translating.

Their recipe? Take two collegelevel courses in meat science. Condense the content into ten 2-hour sessions for middle management of a meat packing company and for home economists. Then do a further condensed 1-day consumer version for homemakers. Finally, plan a new batch for restaurateurs and others who deal in quantity cookery.

"Adapt" is sort of a middle name for the Extension Service. College kids have certain needs, but foremen at a packing plant or home economists from the power company have others.

According to Eldon Hans, area Extension livestock specialist, "The college courses were condensed into 10 sessions because we can assume some practical experience—meat cutting, buying, and so on—on the part of this audience. They just needed some updating on the scientific part."

The series of professional level lessons on meat evolved from sessions on quantity cookery for schools and churches held earlier in the same area. Because of the high interest in meat, a special short course was planned.

The course included sessions on topics like the physical and chemical structure of meat, the microbiology of meat, meat animal carcass composition, market grades for meat and meat products, buying on specifica-

tion, meat processing and preservation, as well as inspection and sanitation.

When news of the sessions got out, there were enough additional requests to warrant a repeat of the course. "Participants are still calling in to ask for copies of material used," said Hans.

The school included the "students" in planning phases. The course outline was sketched out by representatives from a meat market, a hospital, and a packing plant, as well as State Extension Meat Specialist Bob Rust, and Hans.

As proof of its professionalism, the course was approved for accreditation by the American Dietetic Association.

"Method of instruction was geared to the needs of the on-the-job professionals, too," Rust commented. A lot of visuals, like overhead transparencies and slides, were used.

Not just one professor, but a wide range of experts taught the course; they talked on the subjects they work with daily—meat inspection, muscle chemistry research, production.

Topics were immediately practical. The dieticians, for example, could use on the job the next day the information on such things as differences in meats and causes of off-flavors.

In addition to lectures, the instructors used the demonstration method to reinforce points—nitrates and nitrites in hot dogs, hamburger mixing to avoid over-binding of the protein, different casings for sausage, and the like.

Tests? "Not for these folks. They were beyond that," Hans said. "They're experienced already and were highly motivated."

The 10 lessons were an educational bargain at \$15 per participant. It was an elite affair of almost engraved invitation caliber. The planning group recommended their coworkers, and these people got personal invitations.

"It was geared to a specific audience, so this was the best way to publicize it." Hans added.

"The meat packers said the course made them more aware of how much their work affects the appearance and quality of the products consumers buy," Rust said.

Next the Extension folks translated their messages again to fit the language and day-to-day concerns of the family grocery shopper. Subject matter, lesson presentation, and time were altered.

One-day "Meet the Meats" sessions in each of the seven counties drew 378 consumers. This time the mass media were used to reach the larger audience—direct mail fliers, newsletters, and television.

Here the emphasis was on meat's place in the diet and dietary requirements. "Timing couldn't have been better," said Hans. "Meat prices were going up and the home economists were getting requests for meat stretchers and low-cost meals."

The county home economist was the head teacher. Then came practical talk on palatability of meat tenderness, juiciness, flavor—as well as meat grades and buying tips from the livestock production specialists.

As a finale, Charlotte Young, Extension consumer and management specialist for the area, pointed out the advantages of buying meat on sale and buying larger cuts of meat to trim down at home.



Bob Rust, Extension meat specialist, shows participants in a meat science short course how to do a fat analysis test on ground meat.

Ah, but the proof came in the tasting! The homemaker-consumers were treated to a luncheon of meat dishes and were given the recipes.

And the kids in school weren't forgotten, either. Their lunchroom cooks, along with people from restaurants, nursing homes, and hospitals sat in on a 1-day clinic on meat cookery in quantity.

The Extension institution management specialist gave tips on menu planning; Rust discussed cutting, buying, and handling meats; and a man from the Department of Social Services gave the word on meat preparation.

"A secret to success in each case was involving audience representatives in the planning," revealed Hans. "We gave them an idea of what was available through Extension and what we could do, then got their reaction to what would be most relevant to them.

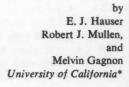
"It pays to get their views on tim-



ing, format, and schedules, too. We also got a chance to meet key people in certain jobs in the community."

Meat is still a big topic of conversation around the dinner table, over the meat counter, in the packing houses, and in restaurant and institution kitchens. Extension passed easily understood, up-to-date information to the places in the Cedar Rapids area where it could be used best.

Eldon Hans, livestock production specialist, tells Charlotte Young, consumer specialist (left), and Susan Uthoff, Extension home economist, about the effect of marbling on meat tenderness.





River rafts open new world to 4-H'ers

Camping, combined with river rafting and exploring, has southern California 4-H members and leaders discovering more of the natural environmental learning resources in their own home territory.

They are discovering more teamwork, too; this kind of project won't work without it.

The principle involved is looking toward those natural resources in your own area around which 4-H activities can be developed or combined.

In our case, the organizing element is the Colorado River along the California - Arizona border. Between Blythe, California, to just north of Yuma, Arizona, the river flows gently for 55 miles through semi-isolated desert-mountain country. It's ideal for a 3-day, fun-filled outing.

Last spring and early summer, two group trips were organized, involving 35 rafts and nearly 400 members and leaders from San Diego, Imperial, and Riverside Counties. The first trip, held the previous year, had 10 rafts and 75 participants.

Rafting through this quiet desert provides a different dimension. The raft is transportation into—and more vitally, out of—the wilderness. It is a tightly crowded "home" for the 8 to 10 persons aboard.

It takes work to keep it moving, people pitching in to select and set up shore camps each day, and someone to do the cooking and cleanup.

Regardless of how many other rafts are around, each becomes an island of interaction for its own particular group. And because that bobbing cork has such an important role, the success of the trip hinges on the teamwork that develops, starting with the planning and building of the raft itself.

As put by Lewis Hayes, a volunteer leader from the Fallbrook 4-H Club, "It takes working together. There's no room for goof-offs and

those who don't pull their weight get left at home—or thrown overboard."

Two boys were, in fact, sent home because they wouldn't "pull their weight" in camp chores and paddling. That decision was made by one of the raft groups, not by the trip organizers.

Sound drastic? No, our kids were out to enjoy this trip. They seemed to discover pleasure in creating the smoothest-running operation because it left them more time for the fun they'd come for.

"Seeing the achievement of the kids provided me the greatest satisfaction of the whole trip," said Joe Nierodzinski, leader for the Jamul Chaparros.

"The club started with an idea and carried it off. Our members examined various alternatives for building a raft with different materials, weighed the costs of each, and made their decisions. They had to learn some new techniques for working with the plastic foam and resin that they selected for their basic flotation."

Each member of his group of eight put up \$5 for materials and invested

^{*}E. J. Hauser, 4-H youth advisor, Imperial County; Robert J. Mullen, farm advisor, San Diego County; Melvin Gagnon, Extension communications specialist, University of California at Davis.

Loaded with supplies and manned by well-coordinated crews, the rafts, left, proceed at a leisurely pace down the Colorado River. Below, one of the 35 craft designed and built by the 4-H'ers awaits its turn to be launched on its adventures.



several weekends of labor in construction. Members put in another \$5 each for expenses, including "hot chow three times a day," that necessarily also called for shared investments in camp jobs.

4-H member Terri Nierodzinski told of another kind of sharing. "Some kids know different things about plant life or the geology of the desert. We could talk about what we were seeing, and learn from each other. One girl used to live in this country, and we stopped and she led us on a search for pumice stone. We didn't find any, but it was fun looking and we saw things we'd otherwise have missed."

Most significantly, the members and their chaperones adhered to the basic purpose: they planned a raft, gathered supplies, transported themselves and their rafts, in some cases 100 to 200 miles, and worked together to get that raft downriver. They shared the work and fun of a true camping experience.

Rafting at a mile or two per hour is an almost drastic change of pace for many, especially those from the busier cities. But it's a good one. You can't be in a hurry.

Like it or not, you're forced to look at the scenery, because it moves by slowly. Pretty soon you can begin to see the appreciation that develops in these kids for this different way to discover the out-of-doors.

Success of our venture can be traced to several essentials.

Planning: A general meeting has to be held several months in advance for interested groups to consider and plan for the trip. We provide raft designs as a guide, but encourage individual ideas. Each group must name a raft captain and chaperone or leader; authority is needed to insure safety of the group.

Organization: members must work out construction assignments, finances, meals, and cooking chores. Supplies must be purchased and packed. Supplies must include containers for carrying drinking water, oars for paddling, rope for lifelines, and of course, life jackets.

Construction: consideration must be given to ease of handling, transportation, and assembly at the river launch site. The raft should have a sunshade and must have a storage box for food and camping gear.

Each raft should be tested in a swimming pool or nearby body of water under weight equal to that of the group and gear that it must carry. Organizers must have the right to reject unsafe rafts.

Transportation: each group is responsible for getting its raft and crew to the river; many have been able to do this with a single truck. All groups should assemble by a given hour, preferably the evening before, so vehicles can be shuttled to the trip's end-point. The shuttle eliminates tiresome delays at the trip's end waiting for transportation when most are tired and want to load up and go home.

The trip's organizers must check well in advance with marina or boat landing authorities at both ends to insure use of particular areas.

Embarkation: trip starts should be near a scheduled hour so rafts can stay reasonably close together.

We strongly urge the use of accompanying power boats. They can scout campsites and the river ahead, herd the stragglers, or be available to handle emergencies or injury. Their motors should be strong enough to pull a raft, if necessary.

We encourage rafts to carry small motors to keep them off the riverbank and out of side channels.

Power boats add a big plus in keeping the group from scattering over isolated camp spots. After all, it's important that the rafters have opportunity to gather in the evening to share the day's experiences.

For many from widely separated clubs at home, this is an opportunity to get acquainted. It seems a shame to travel several hundred miles together to make this trip and still pass each other on the river as strangers.

River rafting, then, for us has provided the complete outdoor experience. It teaches appreciation for nature's beauty and builds cooperation and fellowship among the participants. No one comes home without a feeling of accomplishment.

POSTAGE AND FEES PAID U.S. DEPARTMENT OF AGRICULTURE AGR 101



The fuel and the spark

Two of the most basic needs of a motor are fuel and a firing mechanism (spark). In these days of the energy crisis, we are concerned about efficient use of both.

The human body has similar needs. Its "fuel," of course, is food. Its "spark" is the function which motivates a person to make proper use of that food. Let's call it knowledge, or education. We are in a sort of crisis in satisfying these two needs efficiently, also.

Cooperative Extension was founded with these two basic needs in mind. It was established at a time when agriculture was struggling to provide the food and fiber to support a rapidly developing Nation. And its congressional founders recognized the necessity for a program to provide more assistance in utilizing that food and fiber.

Thus, the Smith-Lever Act called for nationwide educational services in agriculture and home economics, with a youth program related to both. This article deals primarily with the home economics phase of those services, and more specifically with the recently adopted Expanded Food and Nutrition Education Program.

EFNEP, as it has come to be called, has produced an added "spark," or motivation, to the home economics program, and, in fact, to the entire Extension function.

Started just about 5 years ago with an initial grant of \$10 million, Extension's nutrition education program has accomplished much in improving the health of America's low-income families. It has brought a new vigor to education at the grassroots of our society.

In those 5 years, the Cooperative Extension Service, through the States and the Federal Government, has employed about 20,000 nutrition program aides to help teach low-income homemakers how to feed their families better. The program aides have had about the same experience with poverty as have the nearly one million homemakers they have reached. They have empathy for their disadvantaged neighbors and an understanding of what they need.

This one-to-one method of teaching always has been a basic part of Extension's educational repertoire. It has proved particularly effective in the Expanded Food and Nutrition Education Program.

EFNEP has touched the heartstrings of America, and has vibrated throughout the Nation. After seeing initial

results of the program, Congress has appropriated about \$50 million a year as a Federal contribution to the work in the States, and the States have responded in supplementing that support with their own funds and expertise.

The program actually resulted from a pilot project started in Alabama nearly 10 years ago. Today, aides across the Nation use every teaching method available to reach homemakers of various cultures with these messages for better nutrition. They are helping their neighbors catch up in nutrition knowledge with their more prosperous counterparts.

These aides also are lending a hand to poor families by advising them of the Food Stamp Program and availability of donated foods. They show the homemakers how to make the best use of their food stamp dollars as they shop for groceries.

The Cooperative Extension Service has scheduled a workshop for May 1974 to help evaluate the first 5 years of EFNEP and to determine what course it should follow in the years ahead. This will be an excellent opportunity not only to take stock of the program's resources and benefits, but also to tell the public about them.

Continuing evaluation has been one of the strong points of the nutrition education program. Studies by both Government and commercial researchers have helped to guide the program through its various stages. One of the principal measures of its success has been the extent that homemakers and their families have adjusted their diets toward more nutritional foods and a good balance.

I salute the Home Economics Staffs of Cooperative Extension, and particularly the nutrition leaders, for the remarkable success they have achieved in helping poor families to live better. It is one of Extension's inspiring accomplishments.

I am confident that American agriculture, with the constant help of Cooperative Extension, will continue to provide adequate "body fuel" for our Nation's 210 million people, and for millions more in other countries. And I am equally confident that Extension's home economists, nutrition leaders, and program aides will continue to provide much of the "spark" that will guide our people toward better health and better living.—Walter John