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CHARLING SERVEL RECORDS WATER QUALITY SEMINARS PAGE 6

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 the Extension worker, in his role of educational leader, 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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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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Share and share alike

The article on page 16 of this month's Review pays tribute to our "right hands"—Extension secretaries. The members of the Virginia secretaries' association, mentioned in that article, have expressed interest in receiving the Review, as have other secretaries from time to time. Some want to know what's happening in Extension work across the country simply in order to do a better job in their own offices. Many others spend their off-duty hours doing volunteer work in the nutrition program, leading 4-H groups, and participating in or leading Extension homemaker activities or community development groups. They, like you, are interested in picking up new program ideas from the Review.

These essential members of the Extension team cannot, under present law, however, receive their own copies of the Extension Service Review. Free distribution is limited to professional employees who are on cooperative Extension appointments. And even if it could legally be done, adding all Extension secretaries to the mailing list could easily increase the circulation—and therefore the cost—by a third. A much simpler and more economical solution, it seems, would be to institute a policy of sharing the magazine between professional and secretarial staffs—if you're not doing so already.

So if you generally file away—or throw away—your Review after you've read it, why not share it with your secretary instead? The Extension organization just might be a little stronger as a result.—MAW

Colorado 4-H'ers view

One of the first and greatest problems every society must face is the gathering and organizing of enough knowledge for its self-government. Each age must make or keep its own government and determine its own future.

Seeing the State government in action was an exciting experience for 28 junior high 4-H boys and girls from the four counties in western Colorado's Tri River Area.

The State Citizenship Shortcourse emphasized three things:

—seeing the State legislature in action,

-visiting personally with local legislators, and

—involving the local community in helping provide a means for youth to become more knowledgeable citizens.

The Tri River Area State 4-H Citizenship Shortcourse idea evolved from member discussions in the Sub-District 4-H Council, and from area school administrators and area legislators. The program was aimed at junior high school 4-H boys and girls who do not participate in many other 4-H trips and State events.

The young people were exceptionally interested. Their opportunity to see State government in action had been very limited, since they live about 250 miles from the State capital, Denver.

As the program developed, it was evident that the members wanted more than just a guided tour of the capital and seeing the supreme court chambers and the governor's office. The 4-H'ers and area legislators emphasized the need to see government in action and to visit the legislators in their working environment.

State government in action

by
Arthur B. Carlson
and
Milan A. Rewerts
Area Extension Agents (Youth)
Grand Junction, Colorado

Several civic groups responded enthusiastically to requests for financial support. Within 2 weeks, more than \$1,000 was committed to the program and most sponsors asked to participate annually.

The first stop in the tour was at the State capitol, where the members viewed a film on the legislative process, toured the capitol, and were received by the lieutenant governor.

Every 4-H'er met and visited in-

formally with each legislator representing the Tri River Area. They also had an interesting meeting with two prominent lobbyists.

On the second day, the 4-H'ers observed the legislature in action and were impressed by the spirited discussion on the floor about the 1976 Winter Olympics. They were introduced to the House by one of their representatives.

Visiting Denver was a first for many of these junior high 4-H'ers. Staying in a downtown hotel and dining in one of the city's finest restaurants provided a unique experience, and tours of the U.S. Mint, the Denver Museum of Natural History and the Colorado State Museum were included in the program.

Each 4-H'er reported his citizenship experiences to his sponsor and was also highly sought after by his school and other local community groups to speak and to lead discussions on citizenship.

Not only did this spread the knowledge of this particular citizenship program, but it also served to broaden the understanding of 4-H and its function in the community.

Good citizenship is not inherent, it must be learned. It means understanding, appreciating, and doing things which make life better for all concerned. As youth agents, it is our responsibility to help guide 4-H members to be good citizens, concerned to act in an intelligent way to help others as well as themselves. In the Tri River Area, the Citizenship Shortcourse proved to be a good means to this end.

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Ranchers benefit from preconditioned calves



Tom Baker, right, shows County Extension Agent Ray Morris the creep feeder he uses in his calf program. Baker is one of eight county ranchers who pre-conditioned his feeder calves last year. by
Thayne Cozart

Extension Information Specialist
Washington State University

When the December 9 sale at the Omak Livestock Auction ended last year, six Okanogan County, Washington, ranchers knew that "preconditioning" their feeder calves had "post-conditioned" their bank accounts.

The 426 calves the ranchers sold were Washington Certified Feeders.

The calves had earned their credentials by going through a rigid set of standards which preconditioned them for the stress of transportation and adjustment to the feedlot.

Ray Morris, Washington State University county Extension agent assigned to the Colville Indian Reservation, launched the calf preconditioning program—with approval of the Tribal Council—in an effort to boost the profitability of Colville Indian cowcalf operations. Ranchers leasing Colville Indian land also participated in the program.

Morris contacted cattlemen by newsletter in September 1971, explaining the preconditioning program and offering to assist anyone desiring to participate.

Eight families responded, six of which sold calves in the December sale. The other two families preconditioned their calves but sold in October.

"To be a Washington Certified Feeder, a calf must be weaned at least 21 days, know how to eat hay and grain in a dry lot, have a numbered ear tag, and be vaccinated for malignant edema, blackleg, and shipping fever (PI₃ vaccine), be healed from dehorning and castration, and be treated with a pour-on insecticide for grub control," Morris reports.

"We actually went beyond the minimum requirements by weaning our calves 30-40 days before the sale. The hay and grain amounts fed varied between ranchers, and some made additional vaccinations."

Morris helped the ranchers weigh and handle their calves going on and off the preconditioning period. "We had to know how much our calves gained so we could evaluate the program," he reports.

Calves that were certified included Hereford-Charolais crosses, Angus-Charolais crosses, Hereford-Angus crosses, Hereford-Shorthorn crosses, Angus-Shorthorn crosses, straightbred Herefords, and straightbred Angus.

Morris figured that in order for the preconditioned calves to bring a premium price, they would have to sell in large enough lots to make them attractive to large feedlots buying full pens of uniform calves.

He contacted Alan Stookey, owner and operator of the Omak Livestock Auction, about the possibility of selling most of the Colville preconditioned calves in one sale. Stookey was highly cooperative and he and Morris set the sale date for December 9.

They gave the sale good publicity. Stookey ran advertisements in several daily newspapers and livestock market papers, and both men made personal contacts with cattle buyers.

The result of all their efforts was what Stookey termed "the best single sale I've ever had."

"The market was good anyway, and the addition of the preconditioned calves to our regular consignments really sent prices high," Stookey reports. "The sale price of 220 preconditioned steers averaged \$41.86 a hundred with a high of \$43.23 and a low of \$37.90. More than 200 preconditioned heifers averaged \$36.78 with a high of \$37.60 and a low of just \$35.90."

"The calves went all over the country," Morris remarks, "and we had a hard time keeping track of where they went and how they performed after they were sold. A lot of them went to Iowa cattle feeders."

However, one large bunch of the calves went to Stewart Pomeroy of Warden, Washington. He bought 87 steers representing five of the six Okanogan ranches. He also bought 12 non-preconditioned calves.

He is managing all 99 as one unit. At the end of May, the 34 heaviest calves weighed approximately 700 pounds. The 65 lightest calves averaged a few pounds more than 600 pounds. The calves weighed 400 pounds when Pomeroy bought them and he paid an average of \$42.80 per hundred.

Pomeroy reports that he lost no calves and had only one poor-doer. "The thing I liked about these preconditioned calves is having no disease problems and eliminating the need to handle them right after the stress of selling and hauling them."

He suggested that it would be helpful for the buyer of preconditioned calves to know exactly how the previous owner was feeding them prior to sale. "Then the buyer could keep them going right on the same ration," he says.

Morris's records on the 426 calves indicate that preconditioning would have been profitable even if the calves hadn't sold for a premium price.

"They gained enough that the extra gain more than paid for the cost of preconditioning," he says. The per head cost of grub control and vaccinations for the 426 calves ranged from 70 cents to \$1.15, hay costs ranged from \$2.50 to \$4.50, and grain costs ranged from \$1 to \$3.75.

The entire preconditioning costs ranged from a low of \$5.25 to a high of \$8.25.

The steers gained from 1.9 to 1.0 pounds per day. The heifers gained from 1.78 to .75 pounds per day.

The most important statistic of all was net return per head. Based upon the selling price per pound and gain during the preconditioning period, the calves netted between a high of \$12.03 above preconditioning costs to a low of \$3.60 per head.

Morris recalls that none of the ranchers had elaborate facilities. "They had a dry lot, some bunks, and a water tank. That's all it took besides the determination to make the effort to certify their calves."

The Okanogan County ranchers who preconditioned last year all plan to continue the program again this year. Others have indicated they'll join the program, too.

"When a rancher continues a preconditioning program, he builds a reputation for quality calves," Morris says. "That should help sell his calves in the future. Another side benefit of preconditioning is that the rancher usually improves the management of his cow herd and the quality of his replacement heifers."

Morris cites the Okanogan preconditioning program as an excellent example of the results of cooperative effort. County and State Extension workers, individual ranchers, the Colville Tribal Council, the Bureau of Indian Affairs, the Omak Livestock Auction, and feedlot operators all played an important role in the program.

"This cooperative effort has not only boosted the income of the participating ranchers, but also reinforced the Okanogan region's reputation as an excellent source of high quality feeder calves," he concludes.

Mary Ellen Lavenberg

Extension Home Economist

and

James T. Williams

Regional Community Resource Development Agent

Middlesex County, Massachusetts

Urban citizens discuss water crisis

"Water Crisis Now: Gone in 1980?" That's the title of a new series organized by the community resource development and home economics staffs of the Middlesex County, Massachusetts, Extension Service.

It is meeting the educational needs of community leaders, organizations, and consumer-taxpayers, as well as promoting good communications among them.

Middlesex County has a population of 1.4 million and is a predominately urban county composed of 54 cities and towns. The total county is facing many pressing environmental problems.

Lowell was selected as the location for this educational program in water quality because it is one of the largest communities on the Merrimack River. And the advanced state of pollution of the Merrimack is one of the area's major environmental problems.

Lowell, with its 92,000 residents, uses more than 10 million gallons of the river's water per day, and soon many other towns in the greater Lowell area will look to the Merrimack as a source of drinking water.

The first series of environmental improvement seminars on water quality took place in January and February of 1972. The county staff was supported in the pilot project by State Extension home economics and community resource development staffs and the Technical Guidance Center for Environmental Quality at the University of Massachusetts.

The meetings were a cooperative effort involving the Lowell League of Women Voters, Massachusetts Association of Conservation Commissions, Merrimack River Watershed Association, Northern Middlesex Area Planning Commission, Shawsheen River Watershed Association, and the Middlesex County Women's Advisory Council.

The planning for the series began after State Extension leaders introduced to county personnel the services available from the university in the field of environmental quality.

A key to planning the program was bringing homemakers and community decisionmakers together to interact. This helped to broaden the view of both audiences, as well as to open communications.

The planning also brought together the viewpoints of two groups—one, the home economists, the homemaker advisory council, the homemaker clientele, and the League of Women Voters; and the other, the community resource development agent and agency representatives from the Technical Guidance Center, Conservation Commission, Area Planning Commission, Army Corps of Engineers, and State Water Resources Commission.

The community resource development segment of the planning group supplied the expertise, and the home economics group brought a new audience into contact with these decisionmakers at a community level. The four-part series was planned and carried out with relative ease because of the teamwork between the two disciplines. An added bonus was that agencies and individuals involved in the program became more aware of the broad scope of Extension's services.

Each of the four meetings in the series was on a different aspect of the water quality problem in relationship to Lowell and the Merrimack River.

The first session was a panel presentation which looked at "The Merrimack River, an Asset in Your Community." Slides set the scene by illustrating the content of the river in its present state.

The Army Corps of Engineers presented "Designs for a Clean River: a Study of the Merrimack River," which outlined several feasible methods of water treatment to insure future improvement of the river.

Finally, a representative of a State regulatory agency described the mandatory schedules for water pollution control facilities to be operating within the next 5 years, dependent upon Federal funding.

The moderator for the panel was a representative of a private environmental planning and consulting firm.

The second session was titled "Your Community Can Protect Its Water Supply." It dealt with possibilities for action on the part of agencies in the local community. The highlight of this session was a film about the local water treatment plant. This "home movie," produced and narrated by the head chemist of the facility, was a real eye-opener for the public.

Other topics included flood plain zoning and protection, one community's solution to contamination of well fields by road salt, and the role of a regional planning commission. The moderator was the president of the State Association of Conservation Commissions.

Session three, "The Taxpayer Can Show His Concern for His Water Supply to the Changemakers," featured speakers representing local officials and citizens' groups.

The president of the League of Women Voters described legislative action through group participation. Massachusetts provides a unique opportunity in this respect, since every bill before the legislature must have a public hearing at which any citizen or group may express his viewpoint.

A housewife who has achieved national recognition for her knowledge of the problems of highway salting showed what can be achieved by an individual through research and study.

Also discussed were the efforts of a local watershed association and a waste treatment facility at a manu-

Pretending to be water pollution control commissioners, two participants in the water quality seminars try to bring their ponds into ecological balance as they play "Dirty Water."

facturing plant located on the Merrimack River. The manufacturing plant employs 10,000 and is a model for other industries and communities. The waste treatment plant is unique because the water it returns to the river is greatly improved.

The focal point of the final meeting was a water management game called "Dirty Water", developed by a private corporation. By playing the game, the audience became involved in the decisionmaking aspects which community leaders face.

"Dirty Water" is a board game similar to "Monopoly." Each player assumes the role of a water pollution control official who is responsible for stocking his lake. He does so by collecting appropriate organisms as he moves around the game board, confronting the problems of water pollution each time he lands on a "pollution" triangle.

Throughout the game he must learn to anticipate possible pollution of his lake, attempt to avoid the problem of overpopulation, manage his finances efficiently, and consider the problem of possible pollution coming from upstream. A player wins the game by controlling water pollution successfully and thereby being the first to completely stock his lake.

The regional community resource development agent developed a series of cardboard figures representing the various forms of plants and animals found in a river or pond, to explain the delicate balance of an ecological chain. These were used prior to playing the game, and also are an effective tool to help any group understand these systems.

The water quality meetings were publicized through local newspapers and radio. We prepared special releases featuring the speakers for use in their local weekly newspapers.

Publicity was sent to people on the home economics and community resource development mailing lists, and cooperation from other groups and agencies helped us to reach people not on our regular mailing lists. About 50 people attended all four of the sessions.

Evaluation by participants in the series was most favorable. Many indicated that they would be willing to serve on a planning committee for future programs of this kind. The Extension home economist, as a result of the seminars, developed a leader training program on this subject for homemaker study groups.

The City of Lowell now has before its city council a proposal for a flood plain zoning bylaw that would make Federal flood insurance available to the community. Also, there is now a movement in this area for regionalization of water supply and waste treatment facilities.

The Extension staff hopes to do another seminar just before town meetings next winter, focusing on solid waste disposal.

The Extension Service hopes that through programs like "Water Crisis Now: Gone in 1980?" communities will be more aware of the necessity to protect their resources, and taxpayers and community leaders will have a better understanding of the issues. □



Extension Service, USDA

There's no 'formula' for community development

There's no one way to community development. In Tennessee, Extension approaches the problem in different ways, according to the attitudes, desires, and needs of the people.

Ward Draper, an implement dealer and community leader in Jackson County, says, "About 10 years ago, we woke up. We started to take inventory. We found we had lost most of our people. The decline started about 1940. Most of the people were gone by 1960. We began asking, "What can we do to bring people back?"

Knowing that the Cordell Hull Reservoir would have a big impact on the area, county leaders began providing facilities needed for this water-based economy (the reservoir is scheduled for completion this year).

Draper and other community leaders sought the help and counsel of State, regional, and county agencies and organizations, including Extension. The result is improved or new water and sewer systems, schools, hospital, jail, and library. And they are working to improve access to the area and create new jobs.

"We realize we're not going to attract heavy industry, and possibly it's better if we don't," Draper said. He

thinks the small (population 8,000) county's best bet is to work on trade, services, and tourism before worrying about business and industry.

Through organized community efforts, however, the county has attracted enough jobs so that Draper thinks they have "turned the corner" in their 10-year-old development effort. A staunch supporter of "Small Town USA," he thinks per capita income and population will rise in this county, which formerly had the lowest perperson income in the State and was losing population faster than any of Tennessee's other 94 counties.

Do he and other community leaders ever get discouraged? Yes, he said. But then someone from a regional or State group comes by and notices progress being made, encourages the leaders, and offers help.

"We've got the organization it takes," Draper said. "We didn't at one time. When we get funding for a project, the problem is solved."

Are the rules and regulations of Government programs too stringent? "No," answered Draper. "We realize that there must be regulations. We understand that. But we do want a voice in policy, want to make our own decisions." The local development committees serve this function.

It took nearby Pickett County leaders a little longer to "wake up" to their dilemma. This still-smaller county (population 3,500) had a local development committee, but it wasn't accomplishing much.



An Extension leadership school was begun in 1969. County Extension Leader Lyle Donaldson said, "We got about 50 county government officials, community leaders, and businessmen together. We took a critical look at ourselves. We decided what direction to go. We didn't just sit and think about the problems. We started making studies, getting the facts."

By organizing into development committees, the local leaders have accomplished several things. The industrial committee, armed with a scientific labor survey, paved the way for the location of two new industries in Byrdstown, county seat and only town in the county. The new plants, both garment industries opening this year, will employ 600 people.

Donaldson said the industries were impressed with the quality of the labor force available and with the testing program offered through the county

*Mr. Strickland retired from the Extension Service on June 30, 1972, after 39 years of service.

8-



A metal fabricating plant in central Tennessee produced the huge pipe (above) for a steam plant. The rural industry employs local people in skilled jobs and has made a filtering system for the Saturn rocket program. At left, L. J. Strickland (right) and Lyle Donaldson, Pickett County Extension leader, look over the Cordell Hull Birthplace Museum. County Extension home economics clubs have helped restore and operate the memorial.

consolidated school system. As another example, the health committee attracted two doctors to the county (formerly there were none) and spearheaded construction of a community health clinic.

"People now wear a smile," Donaldson said. "We're beginning to show signs of growth. We can attribute this to a lot of hard work by local leadership."

And no wonder they smile! About a third of the population was on welfare at one time—700 families on Food Stamps. Opportunities for these proud, hard-working hill folk are now opening up, signaling the possible end to a long decline in jobs and resulting out-migration.

The industrial development, health clinic, a community center, 116 new homes built last year, and a new sewer system are just a few of the accomplishments which bring smiles to the courthouse square.

Responding to community need and interest, Donaldson now spends about 30 percent of his time on community development education. This has increased from practically nil only a few years ago.

Two other central Tennessee counties go about community development in still a little different way.

In Warren and Franklin Counties, relatively more prosperous than Jackson and Pickett, community clubs organized by Extension years ago have evolved into effective community development vehicles.

In Warren County, city-county cooperation seems to be the key to improvements. A high level of cooperative participation (electric, phone, and water co-ops, for example) demonstrates this.

The community clubs helped get rural water systems, which in turn have helped attract industry and provide jobs for rural residents. This has helped stop out-migration, which accelerated when the coal and lumber industries moved out.

Warren Extension Leader C. L. Ayers said, "We exploit leadership." By this he means that Extension stays in the background, but provides educational guidance—and maybe even a little push—whenever it can to urge on the knowledgeable, skilled community leaders.

In Franklin County, T. L. Mayes, county agent from 1935 to 1967, first helped organize community clubs in 1940. A countywide community council was organized from the 19 community clubs in the county. It has now been incorporated as the Franklin County Resource Development Association.

Expanded to bring in other groups, the FCRDA is in the midst of its first big community venture. With Farmers Home Administration assistance, a housing project is underway for the elderly.

These four Tennessee counties, then, are a vivid illustration that there is no one "formula" for community development. The goals, and the techniques for reaching them, might be ideal for one county, but completely wrong for the one adjacent to it.

Extension's job, these Tennessee Extension workers believe, is to help people decide what they want and need, let them know how Extension and other resource people can help, and then encourage community leadership to accept the responsibility for action—with the assurance that Extension is there for support and guidance whenever it's needed.

A fabric company representative, below, emphasizes a point during his presentation to consumers at one of the educational programs which Extension co-sponsored with the manufacturer and retail stores in six Pennsylvania areas. At right, two Philadelphia homemakers model clothing and home furnishings made from coordinated fabrics.



Cooperation for consumer education

by
Helen T. Puskar
Home Furnishings Specialist
and
Ruth Ann Wilson
Clothing Specialist
The Pennsylvania State University



A cooperative effort by the Pennsylvania Cooperative Extension Service, a fabric company, and six retail stores in Pennsylvania has reached more than 5,000 women with an educational event called "Looking at You in Your Home."

Sites of the programs, which took place during March and April 1972, were Scranton, Allentown, Camp Hill, Erie, Philadelphia, and Pittsburgh.

The objectives of this educational pilot program were:

—to provide up-to-date information about new fabrics, their fiber content, finishes, care, and use,

—to outline the wide variety of considerations consumers must know about as they select fabrics for garments, window treatments, and wall or furniture coverings,

—to stimulate interest in the home environment, and to help people recognize its importance to mental and physical health, and

—to focus community attention on creative and worthwhile programs in Cooperative Extension through cooperation with manufacturers and retailers.

As the project began, the Extension clothing and home furnishings specialists worked closely with Rudolph Alperin, the vice president of the fabric company, to set up program content and format.

Then they contacted the six stores to see if they were interested in this joint effort to meet the interests and needs of women in the surrounding area.

The Extension coordinator, a county home economist, and personnel from each store worked with them to plan details of the presentations. These varied from store to store, but several things were common to all.

Home economists chose six to 12 models to make and model clothing made from fabrics donated by the local stores and the fabric company. Stage settings varied from simple to elegant. In most cases, notions and patterns also were donated by participating stores.

Models ranged from 5-year-olds to grandmothers, with many 4-H members represented. These models wore their garments during the program to illustrate coordination of clothing and home furnishings. The fabric company representative gave an illustrated lecture stressing art, consumer, and design principles.

From the time the idea was first proposed by Helen Wright, then clothing specialist at The Pennsylvania State University, it was eagerly accepted by the fabric manufacturer, the retail stores, county home economists, and homemakers.

The large number of homemakers who attended shows clearly that there is great interest in improving the home environment and that women are looking for sources of information to help them to do this.

They were enthusiastic about seeing and hearing about what is new in color, design, texture, and decorating trends. It was an educational program from beginning to end, with a minimum of advertising.

Each participant made an important contribution to the success of the program. The local stores provided the room settings, which varied from a simple stage to detailed elaborate vignettes. One store moved out rolls of other fabrics to a truck for the day to make room for more women to be seated in their limited auditorium space.

The number of shows varied from two to four a day. Extra presentations were added at the overwhelming request of local homemakers who wanted to attend.

No newspaper publicity was given to the programs. Attendance was recruited by county home economists, who informed their adult and 4-H groups of the event.

The coordinator, a home economist from the area, helped plan the program, assigned models, and sent letters to agents in surrounding counties telling them the time and date of the presentations and the seating capacity.

Each county home economist, in turn, informed her of the number of tickets or space needed by the homemakers from her area. Many counties arranged for a bus to transport interested people. The specialist acted as a coordinator between the manufacturer, local coordinator, and participating store.

The manufacturer provided the fabrics which were used to illustrate the talk and presented the programs in a way which was well-received by the audiences. The homemakers enjoyed a learning situation which was visually pleasing and stimulating.

Keeping consumers up-to-date is a vitally important but almost overwhelming responsibility. In terms of time and availability of materials, no one person or group would be able to do this without the help of others. But when Extension is able to cooperate with local businesses and manufacturers, the results are satisfying.

Missouri tries multi-media team teaching

Mass education programs based on face-to-face teaching methods are becoming impractical, and almost impossible in today's expanding urbanized society. To communicate effectively, it is becoming more and more obvious that a team effort in teaching is feasible and can be a successful solution to certain education problems.

The University of Missouri Extension Division, with an entire State as its campus, has begun experimenting with multimedia team teaching to bring new information to Missourians in remote areas of the State.

A noncredit, 5-week course in practical horsemanship was given simultaneously this spring in 14 locations. The course used an amplified telephone system, which actually isn't anything new to Extension. But establishing simultaneous communications between 14 locations, not just two, is a newer concept.

The basic instructional tools for each weekly lesson consisted of a packet containing a set of about sixty 2-inch by 2-inch color slides, a professionally narrated audio tape or a cassette, and a printed guide which rein-

forced the material the slide-tape presented. This packet was produced by several information specialists in the University's Extension Information Office.

The actual instruction involved many Extension people. During the first phase of the weekly sessions a local area Extension specialist spent about 40 minutes presenting the slide-tape lesson and distributing the guide sheet.

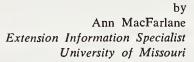
A coffee break followed which gave the students time to formulate questions and gave the local instructor a chance to read through the questions and select several that represented the most interest.

Contact with the Columbia moderator, Dr. Melvin Bradley, State Extension livestock specialist at the University, and the author for the week's lesson, was then made by amplified telephone.

Bradley accepted questions from various classrooms and guided the conversations with the horseman who served as instructor for that particular session. The amplified telephone hookup made it possible for all 14 class-

rooms to be able to simultaneously ask the instructor questions, hear the moderator pass the questions on, and hear the instructor's reply. About an hour was allowed for this type of discussion between students and teachers.

If the students did not get all of their questions answered in the telephone session, the local instructor mailed in the remaining questions to Bradley. He recorded the answers and mailed them back to the local center,





where the tape was played at the next class session.

Lesson topics and the horsemen who instructed were:

-practical horse psychology, Bradley, Extension horse specialist,

-pre-bit hackamore training, B. F. Yeates, Extension horse specialist at Texas A&M University,

-training by driving, William Slemp, manager of the University's College of Agriculture horse herd and a professional trainer,

-equitation, Jim Kiser, in charge of Iowa State University horses and an active judge, and

-horseshoeing, Jack Kreider, professional horseshoer and coach of the University's collegiate livestock judging team.

Through this type of team approach the Missouri Extension Division was able to reach more than 800 people 1 evening a week for 5 continuous weeks. Forty percent of these students were under 19 years of age.

More than 300 of them had not had any previous contact with Extension or its services, and 86 percent indicated they would take another horse course through amplified telephone. programs with audiences such as these are obvious.

with subject-matter experts who probably would not have been available otherwise.

Conducting a similar course in conventional teacher-classroom situations would have been prohibitive in terms of expense and time. Individual students paid only \$5 for the entire 5week course, and families paid only \$10.

"Perhaps the greatest effect we may see from this program is the 'educational fallout'," said Dr. Bradley. "Slide-tapes are being reused and shown to new audiences, the handouts will be included in the UMC Agriculture and Technology Guide series, and

The possibilities for new Extension This technique provided students

your materials with a red pencil," he said. It was made clear to the instructors through written comments on the course evaluation that audiences aren't anxious to hear a dry, prepared speech.

the question and answer sessions are

course. "You may feel you should

review your teaching methods a bit

after an editor, a photographer, and

an audio specialist from the Extension

Information Office have gone over

Bradley cited teaching appraisal as an added advantage to this type of

going into use as radio tapes."

"Courses that use old overhead projector transparencies, slides, and hurried-up preparation are not received well," said Bradley. "The compact presentation of the information in the time allowed for each weekly session seemed to be an advantage to both teacher and student."

Other course advantages the instructors noted were the ability to reach a large audience and the good interaction between the 14 local audiences.

This type of sophisticated use of media in teaching seems, at present, to be almost unlimited. Many audiences throughout Missouri could be easily accessible through amplified telephone and have shown an interest in courses that are more indepth than those usually available locally. Courses possibly could even be expanded to include college and high school credit programs.

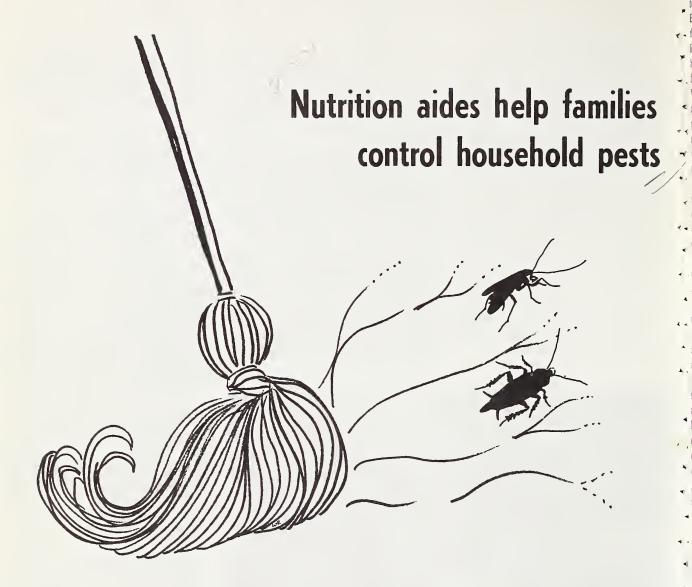
Amplified telephone is not the final answer to our educational process. The media teaching team can never fully replace the personal learning situation between teacher and pupil.

But with the right situation and materials, it can uncover a wealth of potential students who for reasons of age, income, locations, and time would not consider a return to the conventional classroom.

In Missouri it has offered the team of educator, communicator, and subject experts the opportunity to share their knowledge and experience with more varied groups of students than ever before.



An area Extension livestock specialist, above, presents a slide-tape lesson during the horse short course. At left, Melvin Bradley, moderator, and Don Mitchell, director of educational services at the university, receive questions from the 14 classrooms and relay them to that week's expert for his reply.



William H Robinson
Assistant Professor and
Extension Specialist, Entomology
Virginia Polytechnic Institute and
State University

Extension technicians (program aides) in Virginia have been asked to add household insect control information to their already full Expanded Food and Nutrition Education Program.

They have accepted the challenge of this new subject matter, and are busy teaching low- and moderate-income families how to control insects that may be creating unsanitary conditions in their homes and food supply.

Cockroaches, house flies, flour and grain beetles do not discriminate on the basis of income or housing, of course. But the people with the least of necessities often suffer the most hardship from these and other household or stored-food pests.

And in many instances low-income people are not reached through the standard Extension programs or publications. To keep these people from being overlooked, new methods were needed to provide them with the information and help.

Here are some of the ways the Virginia Cooperative Extension Service is dealing with this problem:

The biggest problem to be solved was finding a means of distributing information to low-income families. The Extension technicians working with the EFNEP seemed to be a logical link with this clientele. They were hired especially to work with needy families, were distributed throughout Virginia in both city and rural areas, and had already established some rapport with the very people I wanted to reach. The technicians could distribute publications and provide help during their regular visits and meetings.

Since the existing Virginia Extension publications did not seem applicable to low-income clientele, new ones had to be prepared. I wrote and illustrated two publications specifically for low-income people: "Get Rid of Cockroaches," and "Get Rid of Kitchen Pests."

They are brief—just four pages; they require little or no reading—10-14 simple drawings carry the message; and they emphasize a thorough clean-up program.

Chemical control techniques are shown also, but no specific chemicals are recommended. This gives the publications a longer life without the need for updating. The up-to-date chemical recommendations are provided by the visiting technicians, who get them via their supervising Extension agent from current control guides prepared by specialists.

The two publications were intended for distribution to needy low-income families by technicians, and designed to be nearly self-explanatory, except for the chemical recommendations.

Certainly, the technicians could not be expected to take on this new subject matter without some training. They needed the opportunity to become more knowledgeable, so they in turn would be confident and more help to the families. I designed a short (2-hour) training program which included about 40 color slides, and a 10-page training and resource manual for each technician.

The color slides depict areas around the home to be included in a thorough cleanup program, some food products likely to become infested with insects, and immature and adult stages of many household insects.

The manual provided to each technician includes:

- —important facts about the habits, life-history, and sources of reinfestation of household insects,
- —a brief illustration of a cockroach life cycle,
- -suggestions on household cleanup and insect control,
- -space to write in current chemical control recommendations,
 - -safety information, and
- -colored pictures of household insect pests.

The training was conducted throughout Virginia. Agents helped to bring together technicians from adjacent counties for the sessions. In fact, the agents shouldered nearly all the planning and organizing duties. This involved finding meeting places, providing projection equipment, and perhaps arranging for a coffee break.

A brief questionnaire, to be completed by the technicians, was prepared to help evaluate and improve the program. The technicians received the questionnaire after they had worked with the material for several months.

The technicians have been a responsive audience, and have offered many helpful comments during training sessions. For example, one technician told how she asked local restaurants to save large jars and cans with tight-fitting lids. She then offered these to families lacking insect-proof containers to store such things as flour, dry milk, and meal. Another technician suggested using a small amount of vinegar in a dish to help repel house flies from the kitchen.

An accurate measure of the success of the program may be some time off yet. But first reports from both technicians and agents are favorable.

Extension Agent Ann Sanderson says, "The technicians in Buckingham and Cumberland Counties have used the publications with homemakers during working visits in the homes. Because of the simplicity in design of

this educational material, it is most usable with all low-income clientele.

"The manual is quite helpful for reference. The technicians keep this in their notebooks to answer questions from homemakers."

Technicians working with Ms. Sanderson on the EFNEP report:

"I have used the training manual and publications in talking with my families, and many have said they were useful."

"Most of my families are interested in controlling insects in their home and are glad to have me leave the publications with them."

"I try to explain to my families that we all can have bugs in our homes. Then they don't feel so bad and try to control the bugs in their homes."

Cockroaches, house flies, meal-worms, and flour beetles invade house-holds with the best of incomes, as well as those with the least of incomes; they can infest the best of neighborhoods as well as the worst of neighborhoods. Extension programs should follow the pests and also reach all segments of the population.

Other specialists who feel their household insect program and publications are perhaps not reaching lowand middle-income families might consider asking the help of EFNEP program aides.



Welcome!

It is a pleasure to use this space to welcome the Southwest (Virginia) District Extension Secretarial Association to the family of Extension employee associations. That the group is both new and small does not dampen the members' enthusiasm. President Nancy Catron says plans already are being drawn, with the help of Director Skelton, to go statewide to form the Virginia Association of Extension Secretaries.

Organization of this association is just one more manifestation of Extension staff dedication—a characteristic of Extension workers that plays a major role in Extension effectiveness. As with other Extension staff associations, the basic purpose is professional improvement. Workers, both active and retired, who have devoted their entire careers to Extension, number in the thousands. Secretaries are no exception.

Specific purposes of the Association as stated by President Catron are to:

—establish and maintain a permanent professional organization of District and Unit Extension secretaries of the Extension Division, Virginia Polytechnic Institute and State University,

—promote professional improvement by encouraging members to avail themselves of educational benefits provided through the Extension Division, -encourage, promote, and maintain high professional standards among Extension personnel, and

—provide opportunities for recognition of service to Extension.

This association is a long overdue recognition of the secretaries' roles. They perform a function that would be virtually impossible for agents, specialists, and administrative staffs to perform. They are the ones who maintain continuity and efficiency in the day-to-day office operations. They are the ones who handle routine calls and correspondence by the thousands. They are the ones who handle the myriad of details surrounding such things as Extension meetings, short courses, seminars, and tours. They are the ones who provide most Extension clientele with that all-important initial glimpse of Extension, its functions, and its programs.

Detail, yes! But the secretaries don't let that bother them. They tackle all that detail with the same marks of professionalism—enthusiasm, dedication, and skills suited to the task—that others of us bring to our duties. That this group saw fit to form an organization with the objectives stated above is just one more demonstration of a professional approach to a most important job.

We congratulate all who contributed to the organization of this association.—WJW