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EAR TO THE GROUND

Pork chops, fruit and vegetables, milk and eggs—no, that's not a Christmas menu or a shopping list. It's a few of the subjects discussed in this Special Marketing Issue, especially written to help all Extension agents in the tremendous challenge of attaining a more efficient marketing system.

Milk tasting, grain judging, apple merchandising and roadside marketing are only samples of what's being done to improve the quality of foods enroute from farm to consumer. In States, Extension people are helping packers, processors, retailers and others who handle the food from the time it is produced till it is used. That includes consumers, too.

The food marketing information program for consumers is a part of Extension's total marketing program. Using mass media as well as personal contacts, Extension workers aim to provide consumers with timely information to help them make economic choices based on facts about nutrition, use, storage and preservation.

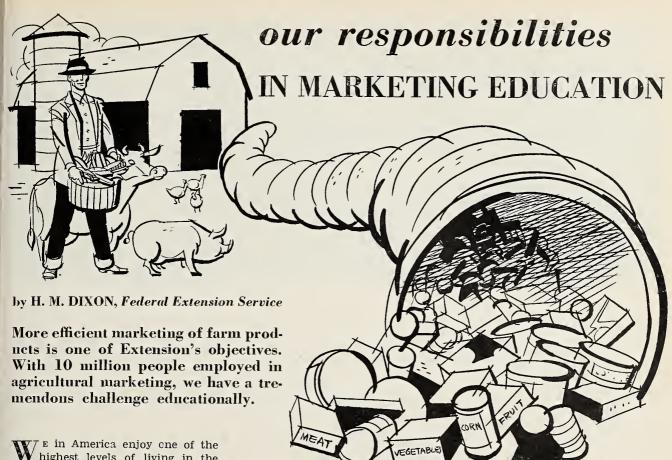
• Next month, in the January Review, we hope to tempt you to step back where you can get a more objective view, and take a look at yourself—your professional self. To keep in step with our changing world, it behooves each of us to take a little time for self-appraisal, and if we are slowing down or becoming careless of our own high standards of performance, perhaps this is the time to do something about it.

You will find some interesting methods suggested by your own coworkers for streamlining your work, for giving it new meaning and direction, and for getting the inspiration, ideas and guidance that make the road ahead more inviting.

Best wishes for a happy Christmas holiday.—CWB

Cover Picture

Fred Corey (left), agricultural agent in Monroe County, N. Y., looks over an apple display in a supermarket that won the cup last year in the National Apple Week Merchandise Display Contest.



highest levels of living in the world. We are a nation of nearly 170,000,000 of the world's best fed, best clothed, and best housed. We are able to provide this level of living through the help of about 8 million workers on farms or about 12 percent of the total labor force, producing the necessary food and fiber. Efficient farm production has been a major factor contributing to this high level of living.

Efficient marketing of the products of the farms also has contributed importantly to the wealth of our Nation and our well-being as individuals. For the American people to enjoy an adequate, balanced diet with great variety in meats, fruits, vegetables, and other foods during all seasons and to be attractively and comfortably clothed and housed requires an intricate marketing system. The products of the farms must be assembled, transported, stored, processed, and distributed to the users at the time and in the place they are wanted. Just as great progress in farm production has benefited us

all, so has progress in processing, transporting, retailing, and other marketing services.

Agricultural marketing is big business. It is taking place in every city and county of the United States. It employs about 10 million people. About 18,000 firms processing food and kindred products and about 46,-000 manufacturers of clothing textiles, and leather products are a part of this agricultural marketing business. Also involved are about 75,000 firms engaged as assemblers, wholesalers, brokers, and jobbers; over 400,000 retail food firms; over 300,000 eating establishments; and about 140,000 firms operating clothing and shoe stores. And paramount are the people they serve—nearly 170,000,000 consumers. Each of the firms transporting, processing, and handling a product, and each of the workers employed is adding to the value of the product of the farm and contributing to the total cost of the final

Ours is a dynamic, ever-changing economy. Public and private agencies conduct research to develop new or to improve old products and to evolve means of producing and marketing them at lower cost, thus making it possible to achieve a higher level of living. New methods of materials-handling, refrigeration, processing, packaging, merchandising, and so forth are being developed at an increasing rate. Population centers are shifting. Consumer tastes and preferences change. Food-preparation facilities and methods in homes and institutions are undergoing continuous improvement. These changes require that the firms marketing farm products continuously make adjustments.

The Cooperative Extension Service is making an important contribution in the furtherance of efficient agricultural marketing. Agricultural agents, home agents, and specialists are participating in this progress. We serve consumers and farmers and the

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First-Class Fare for FRUITS and VEGETABLES

Getting fresh fruits and vegetables to market in first-class condition calls for a first-class ticket, especially when the destination is 3,000 miles away. What the specifications are for a first-class ticket has been the subject of an extensive study by California specialists.

by JOHN McELROY, Marketing Program Director, and HOWARD DAIL, Information Specialist, California

EXTENSION staff members have traveled to major markets of the country to determine the arrival and final marketing condition of many of California's fresh fruits and vegetables. This information has been brought back to the State and presented to growers, shippers, handlers, and others concerned with the products.

These surveys have uncovered many ways in which producers and shippers can present a higher quality fresh product to the consumer when he or she steps up to make the purchase. The surveys also have focused attention on problem areas needing research.

While extension workers have carried much of the survey load, they

have received assistance from the various departments of the division of agricultural sciences of the University of California, the Federal Extension Service, marketing groups, handlers, food markets, and others. Appointed recently was a new university overall research-extension advisory committee on the marketing of fresh fruits and vegetables. It is expected to develop coordination and integration in this field.

In most cases, the association or marketing organization concerned has given both financial and physical help to determine what factors could be improved. Much of the funds for these observation trips to markets has come through the Federal Extension Service from special funds provided under the Agricultural Marketing Act. Transportation interests have cooperated in marketing improvements and have devoted much of their biennial conferences to marketing discussions.

To date, marketing of fresh fruits and vegetables has received most emphasis. These products account for more than 15 percent of the State's $$2\frac{1}{2}$$ billion agricultural income.

For 4 years a study of the fresh grape market has been carried on in a number of cities by various units of the division of agricultural sciences with the cooperation of the industry. Already the information has indicated that reducing the time from the harvest to the precooler does much to help the final product. Keeping the fruit as cool as possible by storing it temporarily in a shaded area also is of value. Handling the fruit as little as possible and fumigating promptly and thoroughly with sulphur dioxide are other suggested steps.

This information has gone to growers, and already changes have been made. As a result of fruit studies, a new precooling method has been developed by university staff members, and a demonstration cooler has been shown at regional meetings. The process used is called precooling with forced air. It greatly reduces the time required to cool fruit of various kinds, including, not only grapes, but peaches, apricots, strawberries, and others. Several large shipping associations and companies

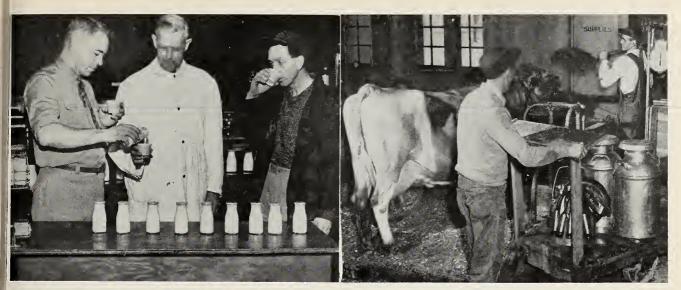
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This demonstration precooler, built by University of California agricultural engineers, served to demonstrate a new method of cooling fresh fruit much more rapidly than previous methods. Growers and shippers attended this Tokay Marketing Day.



Extension Specialist H. B. Richardson (left) and Farm Adviser Gordon Mitchell of California inspect fresh Tokay grapes in a packinghouse prior to shipment eastward. Later they checked the arrival condition of such grapes and methods of marketing used.





Left: A milk-tasting team.

Above: Feeding silage after milking.

Vermonters Improve Milk Flavor To Increase Sales

by W. A. DODGE, Extension Dairyman, and ALEX BRADFIELD, Professor of Dairy Manufacturing, University of Vermont

In an all-out campaign to improve milk flavors and increase sales, Vermonters have been learning to judge milk by tasting it.

In a year's time over 400 Vermont milk inspectors, handlers, and producers have been trained to judge milk flavors. They put their training to use immediately and as a result, 98 percent of the State's 10,500 milk shippers were scored at least 3 times during the winter of 1955-56.

The appeal to produce milk that tastes better seemed to click with every one interested in Vermont dairying, from the producer to the consumer. The idea started with the Vermont Dairy Plant Operators and Managers Association which asked the State Commissioner of Agriculture to help improve the consumer acceptance of Vermont milk.

With the help of the Extension Service, a large committee was organized, representing producers, processors, and consumers, then subdivided for working with the farmers, the processors, and the handlers. They spent about 8 months planning the program.

Good Tasting Milk, an attractive 20-page leaflet, was prepared by the Extension Service. This brieflet, as it is called, tells how to produce good-tasting milk and describes the cause and remedy of the eight most serious off flavors found in milk in Vermont. Word was spread around that a drive to improve the flavor of milk would start soon.

Forty key people from all over the State were invited to a 1-day conference at the University of Vermont. After the program was explained, a large part of the day was devoted to practice in tasting milk. Samples representing several serious off flavors were prepared in advance. Discussion followed regarding the causes of these flavors.

Agents Plan Training Schools

Following this meeting 11 schools were held in various parts of the State to train tasting teams. Each school was arranged by the county agent in the area and the people who had been at the first conference. A team for each of the 95 plants in

the State was composed of the milk inspector in that area, a representative of the milk plant (either plant man or fieldman), and a milk producer shipping to that plant. At these schools, over 400 people were trained as milk tasters.

Scoring the producers' milk started soon after. Samples of each producers' milk were taken at the weigh stand during the receiving period and pasteurized. This was done by placing the bottles in a water bath and raising the temperature to 145° F. After holding for 20 to 30 minutes, the samples were cooled to 70° F., which was the temperature used for tasting.

The bottles were all coded, so the judges did not know whose milk they were tasting. They were judged good, fair, or poor, and checked for flavor defects, such as feed, barny, salty, rancid, malty, high acid, oxidized, and unnatural. Each team member signed the scorecard.

Every producer received a letter with a scorecard and report on his milk, as well as an explanation of (Continued on next rage)

Improve Milk Flavor

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the effort to improve milk flavors and ultimately, to increase consumption. The leaflet on Good Tasting Milk was enclosed or he was told that he could get it from the county agent. The letter was carefully written to interest and encourage the milk producer.

Followup Work

The milk plant kept one copy of the scoresheet and sent the original to the producer. Followup work on those scoring fair and poor was done as soon as possible by milk plant representatives. The poor ones got first attention. After each scoring a report was sent to the State extension dairyman to provide a cumulative total which was used to measure the progress of the program.

At the beginning of this program some of the county agents were fearful that the dairymen would object when they got poor scores on their milk. This did not occur. The agents have had almost no repercussions from the field. Gordon E. Butler, the county agent in Washington County, said, "The plant manager tells me that after scoring they immediately call on the dairymen who got fair and poor scores. The farmers are generally very cooperative and anxious to adjust so they can ship top quality milk. He says there are a few who do not care, and they are on their way out. Nobody wants their milk if it isn't top quality.

One plant that had completed its third round of testing had the following results:

Round of Sampling		Good	Fair	Poor
1st	98	57	26	15
2nd	92	63	23	9
3rd	99	84	7	8

Laying the groundwork for this type of a program that necessarily requires leadership and guidance from the State Extension office is extremely important to its success. Once the county agents knew the values that could accrue to their dairymen they were 100 percent ready to cooperate.

Marketing Education

(Continued from page 219)

handling agencies in between. Our work is concerned with (1) helping consumers make more enlightened decisions in their purchases; (2) helping provide a marketing system that clearly transmits consumer demands to marketing firms and producers, enabling them to make wise decisions concerning volume, time, place, and form in which to sell; and (3) assisting retailers, wholesalers, transportation agencies, processors, and other marketing firms to adopt improved practices and increase the efficiency of their operations.

Extension is gaining in experience and knowledge in marketing education. Increasing amounts of marketing research are available. At the same time new opportunities for service unfold. Many of the earlier methods of working with farmers are proving their value in work with marketing firms. New methods and new approaches are tried and tested as programs are developed with marketing groups not previously reached. Articles in this issue tell some of the ways extension people are doing this job.

Many problems in marketing require for a solution the abilities of people trained in a variety of subjects. The Extension Service, with personnel in many related fields, is particularly well equipped to work on these problems. Frequently economists, engineers, horticulturists, pathologists, and others work together in a coordinated attack on such marketing problems.

Special marketing agents have been employed in several States to work in one or more counties. In some cases, New York, for example (page 235), these agents serve marketing firms in their distribution centers. They are to marketers what agricultural agents are to producers, developing programs to serve their needs with information drawn from many sources. In other cases marketing agents cover a production area or a county, providing producers and marketing firms with more intensive marketing assistance than regular agricultural agents are able to give.

Extension is developing increased

work in the utilization of agricultural products to help processors adopt research results on new products and new or improved processes that will increase their efficiency. Tomatojuice powder and dehydrated potato granules that become fluffy mashed potatoes are examples of products they are helping make available.

Programs with retailers and wholesalers are being developed in several States with emphasis on greater efficiency. Producers, packers, and other agencies also are being provided educational service to meet their needs. Marketing work with consumers has been expanded to reach more people and is being refined to more adequately serve agriculture and consumer needs. Our work in marketing is maturing and developing in other ways also to more adequately provide assistance to the marketing firms, producers, and consumers.

The American people will continue to enjoy higher levels of living made possible through more efficient agricultural production and marketing. Agricultural Extension, building sound marketing programs on research and experience, will continue to have an important role in future progress. Judging from recent trends, we can expect the Cooperative Extension Service to employ many more agents to develop marketing educational programs. While marketing work with farmers will be expanded further, more emphasis is likely to be placed on work with processors, distributors, and consumers in an effort to increase efficiency of those segments of agricultural business bevond the farm.

Heads Up

Michigan Extension has set up special services to intensify interest in personal newspaper columns and provide county extension agents with attractive column heads.

Earl Richardson, extension editor, sent agents copies of a proof sheet showing new headings that have been prepared for county extension agents. These cover personal columns for county agricultural, home demonstration, and 4-H Club agents. Several can be used for general columns of extension items.

Roadside Marketing



by JOSEPH F. HAUCK, Marketing Specialist, New Jersey

The broad field of roadside marketing is wide open for productive extension work. Although the potential and stage of development of this industry varies greatly from State to State, there are opportunities for good educational programs in many areas.

The agricultural agent, the home agent, the club agent, or the extension specialist often find that efforts expended on roadside marketing show tangible results in a relatively short time. A carefully planned program will benefit both farmer and consumer, an opportunity not to be passed over lightly.

To place the New Jersey extension program on roadside marketing in proper perspective, a word about the industry is necessary. A recent county-by-county estimate by agricultural agents showed some 2,100 stands operating in New Jersey. The annual volume of business was estimated at \$11 million, probably a conservative figure. Some of the most heavily traveled highways in the country are located in New Jersey, and are often densely populated with markets.

Many types of markets can be found. They range in size from those selling in the shade of a tree to those with tremendous displays, walk-in cold rooms, large hard-surface parking areas, and a volume of business in six figures. We have some of the best markets in the country, but some poor ones as well. Some are farmer-owned and operated; others are run by nonfarmers. Many stands

sell only locally grown produce. Others buy at many places, including terminal markets.

Many stands are good places to patronize. Customers are assured of fresh products, good variety, a guarantee of quality, and courteous service. Unfortunately, there are also some more interested in a quick dollar. These operate on the principle, "Let the buyer beware."

The New Operator

When a grower thinks he would like to go into roadside marketing, the Extension Service can help. His first problem is to think through the economics of the contemplated market. Is family help available? How will a market fit in with the rest of the farm business? Will it increase net income? Here a careful analysis can encourage a worthwhile project or discourage a not-too-promising venture.

New Jersey agents and specialists help growers who decide to go into roadside marketing in many ways. They obtain traffic counts, provide plans, and help with location, size problems (buildings and business), parking area, display, advertising programs, refrigeration, and other problems confronting the new operator. The agent often can help where local zoning laws or other restrictions must be understood.

(Continued on next page) ,

Hill Fliteraft (center), Extension Agent in Food Marketing in New Jersey, supervises setting up a model roadside market at the Mid-Atlantic Farm Show.



Roadside Marketing

(Continued from page 223)

The agricultural agent often is called upon to help operators find good reliable nearby sources of vegetables and fruits. Since many operators do not grow a large variety of products, this is a valuable service to markets offering a full line of products. At the same time this service helps local growers obtain good outlets for part of their production.

Some agents help roadside marketers plan and grow products particularly for their market. In some cases, these are crops not formerly grown by the operator and new to him.

The agricultural and home agents can help the roadside marketer by providing information on good varieties to can and freeze, and by supplying other information to help the operator deal intelligently with his customers.

In heavily populated areas, many stands have developed a large volume of business in ornamental plants, flowers, and even in garden supplies. With a business of this kind, the operator often depends on the agricultural agent for advice and guidance in selecting plant varieties, insecticides, fungicides, and other related items.

Local Products

Counties with strong extension programs of marketing information for consumers help the roadside operator directly and indirectly. Since local products in season often are featured in press and radio, consumers go to the roadside market and ask for these items. The first local strawberries, asparagus, sweet corn, and peaches are eagerly awaited in urban and semiurban areas. Good demand for these at roadside markets inevitably follows a news story or radio broadcast.

For example, more than 200 persons visited a local grower in a northern New Jersey county following a story on poinsettias at Christmas time. A stand featuring fruit attributed business amounting to over \$2,000 from a local peach story. All types of agricultural products are included in Marketing Information

for Consumers programs, but local stories, featuring local people and local products, are most popular in the press or on the air.

Marketing Associations

Over the years, the Extension Service has worked with farmer-operators in establishing roadside marketing associations. These were dedicated to providing farm-fresh produce to the consumer and to building goodwill for association members and roadside marketing in general. Member stands were given large signs to hang in conspicuous places so that customers would recognize association members. Member stands were able to gain confidence of consumers and capitalize on good advertising programs.

These associations broke up for one reason or another over the years. Today, the New Jersey Farm Bureau is in the process of again activating a certified roadside marketing program. The Extension Service and the State Department of Agriculture are closely cooperating in this worthwhile project. Keen interest in similar organizations exists in Massachusetts, Delaware, and probably in other States with extension personnel helping to develop the program.

Educational Helps

The extension specialists in forestry noted the great number of new houses with fireplaces being built in New Jersey in recent years. Roadside markets seemed to be a good place for these homeowners to obtain their cordwood needs. Consequently, a program for selling fireplace wood in small units suitable for the trunk of an automobile was developed and is expanding. A leaflet entitled, "Marketing fireplace wood from the farm forest," was written to help promote the program.

Several years ago the extension marketing specialists in Massachusetts prepared a set of posters giving excellent suggestions for improving roadside marketing. These were designed to help the operator and his sales personnel. Six hundred sets of these posters were distributed through agricultural agents in New Jersey with good results. Some still may be

seen tacked on the walls of roadside stands.

A life-size model roadside market was constructed at the Mid-Atlantic Farm Show last November. The Extension Service worked with members of other organizations to make this exhibit a center of attraction. There are many opportunities at fairs and large meetings where the principles of good roadside selling can be demonstrated.

A set of 38 colored 2 by 2 slides was prepared for use at meetings where roadside marketing is under discussion. Many types of markets are shown, and pointers on display, advertising, selling, and other features are included in this educational slide series. The Federal Extension Service has made several duplicate sets of these slides, which may be borrowed.

A well-illustrated circular, Roadside Marketing in the Garden State, has had wide distribution. It is especially useful in helping to answer the many requests agents and others receive for information on selling at roadsides. Excellent bulletins have been prepared in a number of States and used in New Jersey.

Our extension program is rounded out with news releases, radio programs, and magazine articles designed to help improve roadside marketing. Most of us feel that our efforts are most worthwhile and wish more time were available to work more intensively with the roadside market operator.

Builds Good Press Relations

Hank Sciaroni, a California county agent, recently sent his State information office a sheaf of news items, editorials, and letters that followed the issuance of the San Mateo annual report. This report dealt with agricultural population increase and water problems in that county.

The excellent comments from newspapers indicated that the extension staff has cultivated amicable relations with the press through the years. Hank comments that regular attention to keeping the newspapers well informed builds understanding, a friendly spirit toward you, and confidence in your work.



by CHESTER E. SWANK, Extension Specialist in Consumer Food Marketing, Ohio

7 ITH the city moving into the country, the county extension staffs have more demand for help in food buying. This includes interpretation of information on supplies, quality, selection, care, use, marketing margins, marketing trends, new packages, and packing methods.

Marketing Information for Consumers, MIC for short, is a part of our overall extension program, included in home economics, 4-H Clubs, and agricultural work. In Ohio the procedure varies from county to county, but usually one agent carries the responsibility of initiating and directing the program.

The MIC program adds variety to extension work and makes it possible to help many persons Extension might otherwise not reach. It is one of the best activities we have for developing good public relations.

We are building better understanding between producers, handlers, processors, retailers, and consumers, and of course we are improving the marketing of farm products. Farmers benefit from more orderly and efficient marketing, which is possible when consumers know what farmers' products are in abundant supply and buy them.

Extension specialists at the Ohio State University prepare a threepage weekly food marketing bulletin, Let's Go Shopping. All county extension offices, mass media people, and others interested in food buying receive Let's Go Shopping.

The first page is composed mainly

of marketing information on products in good supply, explanation of marketing functions and costs, new developments in marketing, new foods and other items of interest to consumers.

The second page includes information on the selection, handling, care, preparation, use, storage, and miscellaneous items on a commodity. This is usually a commodity that is in good supply. Occasionally the second page includes information to help consumers understand marketing functions and costs.

The third page outlines a demonstration, exhibit, or presentation (usually pertaining to the topic discussed on the second page.) These are used by extension agents, home economics teachers, 4-H Club advisers and members, home demonstration council members, and others.

County extension workers use the weekly bulletin in releases to local papers and TV and radio stations, adapting the information to their area

Following are some of the ways in which this information is used:

- 1. Many extension agents write regular news columns, such as The Market Basket.
- 2. Food and market facts go to food columnists, radio and television food editors, and others who inform the public.
- 3. Extension agents and specialists write feature stories for use in local papers. County agricultural agents provide information on local crops, seasonality, quality, and volume of

the crop. Also, they interpret production and marketing problems for consumers. Extension agents inform the press of good stories on local produce and marketing activities and help supply the facts.

- 4. Guest appearances on radio and television or regular programs offer agents opportunities to discuss food buying and market information.
- 5. Food and market information reaches consumers through regular or special newsletters, in project lessons conducted by the home economics agent, or perhaps the county agricultural agent or lay leaders, and in other countywide extension meetings.
- 6. Short demonstrations from the third page of Let's Go Shopping are often given at home council, 4-H Club, and other meetings.
 - 7. Exhibits have been effective.
- 8. Extension agents help food buyers for institutions, especially the smaller ones, with their buying prob-
- 9. Other individuals and organizations to which Extension supplies food buying and marketing information are: Home economics teachers, business home economists, schoollunch managers, convalescent homes, hospitals, retail stores, farm organizations, and health and welfare agen-
- 10. The needs and wants of consumers, based on research, are interpreted and reported to food handlers and producers.
 - 11. It is easy to tie MIC into the (Continued on page 232)

Quality Grain Efficiently Marketed

Efforts of extension agents have paid off in their work with Oklahoma farmers and the grain industry to bring about improved quality and higher efficiency in moving the grain to market.



by D. G. NELSON, Grain Marketing Specialist, Oklahoma

If grain marketing is to be thought of as merely "buying and selling" grain, a county agent will find little incentive to attempt an education program with either his farmers or grainmen. But if it is considered to involve all the processes in moving grain from the producer to the consumer, as it is in Oklahoma, county extension activities in this area of work are unlimited.

Because marketing involves buying, selling, pricing, quality improvement, storage, processing, transportation, consumer education, and packaging, educational projects cannot be limited to work with farmers. Every effort must involve the entire grain industry. Industrial groups work endlessly at solving problems common to the grain economy when they are a part of an overall improvement program and are not singled out as a weak segment in the marketing system.

James Enix, extension wheat marketing specialist, and I do not know exactly which of the areas of work from wheat variety improvement to elevator management schools has had the greatest effect on Oklahoma's wheat income, but the results are gratifying.

In 1944, Oklahoma wheat price paid to farmers was 6 cents below the national average price. Since then there has been a steady increase until 1955 when Oklahoma farmers were receiving 6 cents above the national average price. With the 1956 64-million-bushel crop, it means that Oklahoma farmers received almost four million additional dollars for having an industry doing a better than average job of producing and marketing wheat alone. This does not include the results of the \$60 million feed and milling industry.

marketing channels until it became 68 loaves of bread.

Variety Improvement

A Millers Buying Guide in 1949 circulated a map to its subscribers reporting areas with acceptable and with undesirable wheat varieties. Kiowa County, Okla., was in the center of a big red "don't buy" circle and was shown to have less than 50 percent of its wheat acres devoted to varieties acceptable to the milling industry. Today only a trace of the less desirable wheats are present, and the county is recognized as one of the leading certified seed-producing areas supplying the Southwest. Kiowa County Agents Tom Morris and

Charlie Burns worked with the farmers to increase the amount of milling wheat of superior market quality produced and marketed in their county.

Organize the Grain Trade

Eight country elevators operate at six local points in the county. The managers were assisted by Mr. Morris in organizing the Kiowa County Grain Dealers Association which is supported by voluntary assessment of 1 cent per bushel on the volume of grain handled. This organized group of grainmen with their interest in developing both youth and adult grain-marketing-improvement programs has assisted in planning, financing, and executing varied activities.

Certified Seed for 4-H Members

To increase the use of high-quality market wheat, the elevator managers in the various communities contacted 4-H Club members enrolled in wheat projects and offered them certified seed of recommended varieties. This was not offered as a gift but called for certified seed to be returned after

the project was completed. The members experienced all the usual undertakings in any regular production project, but the result surely affected their market. In 1952, 204 4-H members were enrolled in wheat projects in Kiowa County. Of those completing project reports, only 40 percent used a recommended variety, and none reported using certified seed. In 1956, 236 members were enrolled and of those reporting, all used recommended varieties; and all used registered or certified classes of seed, a decided market advantage when looking for premiums.

Wheat Demonstration

Variety performance demonstration plots established in the county for several years in cooperation with Oklahoma Agricultural and Mechanical College continuously call attention to agronomic performance of the various wheat varieties. The demonstration locations have provided the Kiowa County agents and the elevator managers with an invaluable place to discuss variety premiums and discounts, grain sanitation, quality, and phases of marketing information with local farmers.

Wheat-O-Rama

The Kiowa County folks used a popular title when they coined the term Wheat-O-Rama as the name of their 1-day wheat show program. In this show, as in many others throughout Oklahoma, visitors may see the wheat samples produced by the local exhibitors, a sample of the flour, the farinograph mixing time curve, and a

Kay County, Okla. 4-H Club on a tour of local elevator storage and handling facilities. Elevator Manager Russell Raines explains the moisture test and its importance in determining the farm price of grain. slice of bread baked from each exhibit. The relative market value of the various varieties of wheat shown can be seen readily by 4-H Club members, farmers, bankers, and others interested in quality improvement.

Particular interest was displayed this year when a panel of "experts"—a farmer, baker, elevator manager, miller, researcher, and farm editor—discussed "what we can do to improve the wheat variety and quality of Kiowa County wheat." Over 100 local people participated in the Wheat-O-Rama activities and studied displays provided by the Extension Service, local bakeries, feed millers, elevator terminals, and seed dealers.

Grain Grading

In 1955, 4 grain-grading schools were held in strategic points in the State which attracted attendance from 108 cities and towns in 54 counties. These schools were designed to offer training to grainmen and other interested agricultural workers in the techniques and principles of commercial grading of grain according to the official grain standards.

The instruction sessions were audience-participation schools with over 1,000 samples being examined and classified or displayed. Other organizations and agencies assisted in the preparation and instruction of the schools.

Elevator Management

This past year, series of office conferences were held with elevator managers in 93 grain-marketing associa-

tions in 33 counties. Plans were expanded to include more group educational work in the field of elevator management. Individual assistance was given in the general areas of public relations, personnel supervision and job analysis, bookkeeping procedures, and grain grading.

In addition, series of elevator managers' meetings were held in cooperation with the Oklahoma Grain and Dealers Association. These meetings were preharvest discussions of timely information which might expedite the handling of grain during the rush season. The Extension Service personnel, including the county agent and State specialists, led discussions relative to grain sanitation, pink wheat, and wheat seed and variety selection. The Agricultural Stabilization and Conservation Committeemen discussed the marketing card as it affects the country elevator manager.

In 1956, the first annual training course in grain elevator business was organized by the Extension Service in cooperation with the statewide grain industry organizations. The first 2-day session attracted 125 managers from all parts of the State. The training course is designed to supplement experience with a searching analysis of the fundamentals of business related to the operation of grain elevators. Efficient and capable management in the marketing organizations serving farmers is of particular interest and concern to extension workers. Opportunities for real service exist in this area.

(Continued on page 234)



Kay County Agent W. R. Hutchinson instructs one of his 4-H members in the Clean Grain Program to interpret a grain thermometer. Proper interpretation may suggest the need for fumigation or aeration.



Determining test weight of wheat is serious business to these 4-H'ers as they tour the State Grain Inspection Laboratory as a part of their State Wheat Show educational activities in Oklahoma.

OBSERVE NATIONAL 4-H

An opportunity to strengthen your work with young people



Report to the public and welcome to new participants



Representatives of a 4-H Club in Cayuga County, N. Y. present a flagpole and memorial plaque to Scipio.

7 ou are probably already making plans for observing National 4-H Club Week, March 2-9, 1957. Early planning is essential to accomplish your objectives. Through your county program planning and development committees, you may have determined some of the 4-H needs. These will help guide you in deciding how to make the most of this opportunity to tell your public about 4-H Club work.

What areas of endeavor should have special emphasis? Does your public understand what 4-H Clubs are doing? Is participation lower than you wish? Could you accomplish more with stronger community backing? Recognizing your needs, you can more purposefully plan your observance of this week to strengthen 4-H Club work in your county.

The values of 4-H Club Week are many and varied depending on the objectives which counties and States set up. In general they may be stated as follows:

- To provide members a special occasion for evaluating past achievements and making plans for future activities on their farms, in their homes, and in their
- To inform the public, including parents, of the value of 4-H training.
- To recognize the important part played by local leaders, and enlist more public-spirited, youth-minded citizens to volunteer for this service.
- To interest other young people in enrolling in local clubs.



An attractive window display like this garden exhibit placed in a large department store is a splendid tribute.



The Hailesboro (N. Y.) 4-H Club elec- Grand Traverse County, Mich. 4-H'ers



trical float at the county fair won a had an 8-day exchange program with \$10 prize from an industrial concern. a Hampshire County, Mass. club.

LUB WEEK

March 2-9, 1957

THE photographs on these pages illustrate some of the ways in which you can (1) report to the public on 4-H activities and, at the same time, welcome new participants; (2) pay tribute to the services of volunteer local leaders, and thereby invite others to assist; and (3) review and evaluate the achievements of the boys and girls.

Vivian Spradlin, Virginia 4-H girl, paints the edge of the basement steps as a safety measure, one of the many practiced by 4-H'ers



Salute senior and junior leaders



Three 4-H Club presidents receive club charters from Willard Bitzer, club agent of Sussex County, N. J., at a 4-H Club Week banquet.

• Review and evaluate achievements of club members



Maine 4-H dairy teams ready for inspection at the State Dairy Exhibit. Photos of 4-H activities speak for themselves in local papers.



Another action picture that tells of the interest and efforts that 4-H'ers put into community services. This is in Humboldt County, Calif.



Local 4-H Club leaders learn to judge grain quality at a Montana State Leaders School. Local publicity encourages leaders.



A poultry show held in Canton, N. Y. where 4-H'ers learn to judge quality of dressed turkeys as well as how to raise them.



A Washington State 4-H Club girl gives a talk on selection of clothes. The photograph illustrates well the educational phases of 4-H Club work.



Governor Goodwin J. Knight of California delivers a special message to the State's 30,000 4-H Club members during National 4-H Club Week.



How North Carolina answered county extension agents' question: "We have had years of experience in production work, but how can we build a program in marketing?"

by JOHN M. CURTIS, In Charge of
Extension Marketing, North Carolina

The farmer and his wife sat in the front row. He smoked his pipe and thought about the weather and his pastures and the beef cattle that lazily roamed his land . . . the part that surrounded the islands of tobacco here in the heart of tobaccoland. His wife was deep in conversation with two women from the county seat. They had been introduced by the home demonstration agent who sat in the same row.

A part of his mind edged along a thought: "About time to consider marketing some cattle. Maybe a good time to really think about it," he mused as two of the local livestock market operators entered the room. "After all, I was asked to attend this meeting to take part in developing a marketing program for the county. Why not strike a few licks for my own marketing program?"

Now the county agent was on his feet, and the meeting began. If the agent could have read the cattle producer's thoughts, he would have added his enthusiastic approval. For this was the purpose of the meeting: To develop a marketing program for the county which would fit the needs of each person in the county.

But let's get a little background information before we continue our meeting.

The objective of our extension marketing work in North Carolina is to provide an educational program to improve the marketing of farm products. While varying in terminology, this same objective guides the extension marketing programs in every State. Our efforts to achieve this objective are aimed at increasing farm incomes, improving the efficiency of our marketing system and facilities, and providing consumers with products of high quality and at reasonable prices reflecting the quality delivered.

Basically our program is organized along commodity lines, with a specific program for consumers. Within this organizational framework, the marketing specialists develop information for and work with farmers, marketing agencies, and consumers. When problems arise in a specific market area, interested groups or persons are consulted to get their ideas as to the nature of the problem, the factors causing the problem, and the best possible solution.

Once the problem has been isolated and described, and its cause has been determined, alternative solutions are then prepared. These solutions and their expected consequences are presented to the groups or persons who are affected.

The actual selection of a solution, based on all available information, remains a function of the people on the scene. Assistance and guidance are given to help make the decisions of the people succeed. This assist-

ance continues, but does diminish as local experience and leadership grow. Of course, as improvements in the market structure and market facilities are made, the consequences of these improvements are discussed with farmers and market operators so that, with more complete knowledge, they will be able to make more rational production and marketing decisions.

County Meeting

This effective approach is continuing with significant results. But an important and fruitful tool has been added, a planned marketing program at the local level. This is where we met our farmer friend. He was taking part in organizing the program which gives county extension personnel a blueprint for leading the way to better marketing in their county. It is an attempt to answer the fundamental question which is so often raised by county extension workers: We have had years of experience in production work, but how can we build a program in marketing?

A committee of county farm and home demonstration agents was asked to meet with the marketing staff to work out an answer to this question. A suggested procedure was developed, and it was presented to the agents at the district meetings. They accepted the program, but as every extension worker knows, a demonstration is usually needed before a recommended practice is adopted.

The agents in three counties eagerly accepted the marketing specialists' invitations to act as demonstrators, and the district agents endorsed the idea. Committees were organized for each major commodity produced in the county. These commmittees included producers and representatives from all local segments of the marketing system for that commodity. A consumer committee completed the basic organizational setup.

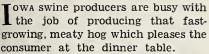
An exhaustive compilation of background information was completed in advance. This information charted the production and marketing picture as completely as possible. When all available data were assembled, and all the plans were ready, the en-

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"SIX LEAN PORK CHOPS, PLEASE" . . .

A production story on how Iowa farmers are learning to produce a meat-type hog that will come closer to satisfying the consumer.

by DWIGHT M. BANNISTER, Assistant Extension Editor, Iowa



Evidence of this is shown by their requests for 15,000 litter record cards from their county extension directors during the first 6 months of 1956. The cards are furnished through the Iowa State College Agricultural Extension Service for farmers who wish to undertake their own on-the-farm testing program to develop fast-growing, efficient meat-type swine breeding lines.

The extension program directed at the production and marketing of meat-type hogs involves working with breeders, commercial producers, commission firms, order buyers, and packers. It includes working with breeders and commercial producers in the production of fast-growing, meat-type hogs and working with hog buyers and packers in a mutual assistance program in developing techniques for buying and pricing by grade.

This program includes instruction by extension animal husbandmen from the college and by local county extension directors in selecting meattype hogs. The program includes identifying and recording birth dates of pigs, full feeding, weighing, measuring backfat, and selection of meatier strains based on the pigs' feeding efficiency, conformation, and meatiness. The program for on-the-farm tests by farmers provides conversion charts by which the farmer

can standardize backfat measurements to 200-pound weights on a statewide uniform basis.

Three Iowa counties have swinetesting associations composed of breeders who employ a tester on a basis similar to that of the Dairy Herd Improvement Associations. Several other counties have started plans for such associations.

Boar-testing Station

In 1955 the Iowa Swine Producers' Association voted to sponsor a central boar-testing station. The object of the station is to identify meat-type individuals and demonstrate the technique that may be used on breeders' farms to improve their own herds.

The Iowa testing station opened last April with a capacity entry of 51 lots of pigs. Breeders submit four boars and two barrows sired by the same boar but from three or more different litters. These animals, both boars and barrows, are fed a fattening ration recommended by the Iowa Experiment Station nutrition researchers. Feeding a high-energy ration is important in that it allows the genetically fat individuals to express their fatness. These can then be discarded.

The rates of gain and efficiency of gain are recorded and backfat thickness determined by probing the live hogs. The barrows are slaughtered and their carcasses evaluated. Breeders who wish to take the boars back to their own herds pay the testing station cost in advance and must make this decision when they submit their entry.

Those sold at auction are boars determined by the station's technical advisers to most nearly meet the qualifications for fast-gaining, efficient-feeding, meat-type animals that, when mated on desirable sows, will sire market pigs that meet consumer demands. The animal husbandry extension service provides technical direction for the station, assisted by the Iowa Experiment Station, but the policies are set by an industry-appointed board of directors composed of breeders and farmers.

Each individual in the testing station is ranked at the end of the test on an index based on meat type, rate of gain, and efficiency of gain on a full-feed corn-fattening ration. The top 40 percent of the lots on this index at the close of the first test included representatives from six of the major Iowa pure breeds of hogs. The top lot averaged 1.99 pounds daily gain, used only 261 pounds of feed to produce 100 pounds of gain, had an average backfat thickness of 1.19 inches on the boars, and the barrows dressed out 52.6 percent lean cuts. Buyers at the auction following the first tests were largely commercial producers who intend to use the boars in their crossbreeding program to produce market hogs.

After examining the records of the 306 pigs tested in the summer of 1956, Ralph Durham, extension ani-

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Lean Pork Chops

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mal husbandman, Iowa State College, who serves as adviser to the testing station, and L. N. Hazel, Iowa State College breeding researcher, had these comments.

"The meatier pigs require less feed per unit of gain than fat pigs.

"There is no appreciable relationship between meatiness and growth rate.

"The faster-growing pigs require somewhat less feed.

"Body length is a poor yardstick of meat quality. Bred-in muscling is a separate and independently inherited characteristic.

"Tremendous variation exists in all breeds in growth rate, feed requirements, and meatiness. Since much of this variation is caused by heredity differences, identifying and multiplying the best individuals and strains afford an excellent opportunity for increasing productive performance in swine."

Within the past 5 years, L. N. Hazel has demonstrated that on-thefarm problem is the selection of meaty-fast-gaining strains in the established breeds. There is a wide variation within breeds, and the development of any single meat-type breed will not meet the commercial breeder's problem. He also demonstrated that the boar must be substantially leaner and longer than the market barrow he is to produce, and that he must be fed on a full fattening ration like his offspring will receive if breeders are to be able to select boars that will actually produce meat-type offspring.

Much work in extending this information to the breeders has been done by Extension Animal Husbandman E. J. Quaife, who assisted in the development of several regional barrow shows which have emphasized meat-type characteristics.

Economists and animal husbandmen in the Iowa Extension Service have for many years been working in cooperation with the interior packers in Iowa in a mutual assistance program in developing techniques for buying and pricing by grades. Option of selling on a carcass grade basis is now offered by

several packing plants in different parts of the State.

Extension Economist Sam Thompson has conducted schools for cooperative marketing groups and young people with the help of the Iowa State College meats laboratory staff. William Zmolek, livestock marketing specialist, has worked closely with both packers and producers. Extension Economist Francis Kutish, market outlook specialist, and Mr. Zmolek have presented information both directly to producers and through radio, television, and other mass media in programs illustrating both the economic need for the meat-type hog and methods of developing him.

There is one public market in Iowa. Extension specialists William Zmolek and Ralph Durham early this year held a demonstration meeting with about 175 commission salesmen and packer and order buyers at this market on the live grading and probing of hogs, followed by carcass inspection. This meeting was followed by meetings with about 150 purebred breeders in the market's area covering four States. The Sioux City market officials and buyers worked with the extension men in these meetings, discussing the need for improvement in hog quality and the methods of getting it done. Several of the Iowa county extension directors have also been trained by extension specialists in probing and grading on the basis of meat type.

A motion picture, Probing for Profits, produced early in this year by the Iowa State College Film Production Unit, was enacted by Mr. Durham. It teaches on-the-farm techniques for identifying meat-type animals for farmers. This film has been widely used throughout the State. Another film covering the meat-type hog subject from the barn lot to the homemaker's table is nearly completed.

Use Specialists' Photographs

Kentucky is assembling glossy prints and mats of specialists and researchers for county use in publicizing programs in which they participate. County extension workers are urged to make a request in plenty of time for the mats or prints, whichever the local newspaper prefers.

Market Basket Help

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4-H Club program. All young people buy food. One effective way is to include food selection, buying, storage, use and related information in 4-H Club food project books. Another means is through demonstrations at club meetings, county fairs, and other extension meetings for adults. Interest in food and marketing demonstrations can be stimulated by suggested related ideas for 4-H demonstrations.

4-H members enjoy planning and constructing exhibits on food buying and marketing principles. Many clubs can include these exhibits in their booths at the county fairs.

Another possibility is a special project on food buying. 4-H Club members can learn the basic principles of food buying by making shopping lists according to the needs of their families and doing the food buying for the family.

4-H Club members can learn much from tours to local markets, wholesale houses, retail stores, and processing plants.

Participation on radio and television shows adds interest and provides excellent experience for the members. Arrangements can often be made with television stations for 4-H Club members to give demonstrations; perhaps demonstration contest winners could be used.

The same type of program can be included in the home economics programs of high schools. Home economics teachers include some food buying information in their classroom teaching.

These are only a few of the many ways in which MIC can be included in the overall extension program. Information must be presented in terms of the consumer's interest, if the consumer is to have confidence in the program and accept the information. For those not eagerly waiting to be educated, we must "dress up" our information if it is to be effective.



Cooperation and
Understanding come from

TALKING IT OVER

Extension in Oregon has worked diligently and successfully to bring together the people concerned in one basic product, such as meat or wheat, to improve their understanding of the problems found in all stages, from producing it to selling it to the consumer. In State and county meetings, the public has had an opportunity to ask questions and exchange ideas.

by DOROTHY M. SHERRILL, Consumer Marketing Specialist, Oregon

A consumer and industry meeting on meats was being held in Baker County, Oreg. A man in the audience stood up and said, "We think the price of meat is too high. Looks as if there might be too many people in the meat industry. I'm not sure but what we could get meat at a lower price if a few of you weren't making such a big profit." The faces of the 350 persons in the audience indicated that they, too, would like to know the answers to this question of high meat prices.

A panel of speakers was ready to reply. This was a meeting on meat and included representatives of local producers, first sellers, packers, labor groups, locker operators, retailers, and consumers.

One by one, starting with the producer, the panel members discussed their part of the job in getting a 1,000-pound steer to market. They explained the costs of producing the animal, prices to wholesalers and retailers, and wages for labor. It wasn't long until the audience began to understand that no one was making a fat profit, that all steer is not



John Landers, Extension specialist in animal husbandry, and Dorothy Sherrill, consumer marketing specialist, Oregon, cooperate in a demonstration of meat cutting, meat identification, and use and care of meat.

steak, and that the price of meat is not unreasonably high.

This was one of many countywide meetings held in Oregon to build understanding between producers, marketing groups, and consumers. Getting food from farm to table is no simple matter. Extension teachers have a real job in explaining both sides of the farm and marketing picture to a dwindling farm population and an ever-expanding consumer group.

This problem came to a head in Oregon about 2 years ago when meat producers, processors, retailers, and homemakers met with extension specialists to explore advantages of cooperation. Many months of organizational work was done before the January 1954 conference. Committees of producers, first sellers, packers, organized labor, retailers, and consumers discussed practical ways of getting wider understanding of the task of converting livestock into meat for the table. Finally, they were ready to pool their experiences.

Over 500 people met in January 1954 at Oregon State College to throw light on "who does what" in the meat industry. Such a healthy interchange of ideas took place at the State meeting that the group recommended unanimously to encourage

county meetings of a similar nature. Extension was asked to plan such meetings.

Gaining community interest was the first step. Extension agents found both farmers, marketing groups, and homemakers enthusiastic and cooperative. Making sure that representatives from all interested groups were invited to the planning meeting, extension agents laid the problem before them.

Local problems are best defined by local people. The key to the success of county meetings is that each county arranges its own program to meet local needs. Panel members and program speakers were largely county persons.

Naming these conferences County Livestock and Meat Marketing meetings had no appeal for the general public we hoped to attract. Better titles such as Meet the People Behind Your Meat and More Meat for Your Money did the trick in getting interest from people in every phase of livestock production, meat marketing, and meat consumption.

These county meetings were very well attended. After the local people completed their share of the program, John Landers, animal hus-

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Talking It Over

(Continued from page 233)

bandry specialist, and the author presented a demonstration of meat cutting, meat identification, and use and care of meat. Many questions were answered and a summary made to pull together any loose ends that were left from earlier discussions.

The total result in Oregon was 37 meetings in 33 of Oregon's 36 counties. Attendance totaled 4,920, including 550 high school students. Publicity in newspapers, on radio and TV, through posters and letters, and by word of mouth carried the message even further. It also created interest among other agricultural groups in using this approach to their problems.

Oregon is planning another conference at the college on another basic crop—wheat. When the wheat industry conference gets underway in February 1957, the Extension Service will again be participating in Oregon in an organized effort to to help farmers, industry, and consumers.

Quality Grain

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In an effort to assist grain marketing organizations to operate more nearly at maximum efficiency, a school for cooperative elevator bookkeepers is held each year in Enid, near the center of the grain area of the State. There have been three such schools in as many years. The training session is a joint program of the Extension Service, Farmer Cooperative Service, Farmers Co-op Grain Dealers, Wichita Bank for Cooperatives, and accounting firms interested in elevator auditing. A complete accounting problem resembling entries of a local grain organization was provided to those taking part in the 5-day school. Reports are that many local elevator organizations now have adequate records and employees who can maintain them as a result of attending the schools.

Auditors report that considerable savings to the organizations are being made as a result of reduced auditing services, which firms with inadequate records are sometimes required to have.

Storage

Grain storage, while now less critical from the standpoint of expanding facilities, continues to require attention. Oklahoma now has a grainstorage capacity of approximately 168 million bushels. This consists of 71 million bushels in terminal elevators, 62 million bushels in country elevators, and 35 million bushels capacity on the farm.

County Blueprint

(Continued from page 230)

tire marketing staff met with the county workers and the committees. After a general session to discuss the overall purpose of the work, the committees for the various commodities met with the marketing specialist working in that area and one of the county workers.

Most of one afternoon was spent presenting facts, discussing the marketing situation with the committee members, reviewing questionnaires, locating marketing firms, and crystallizing the group's thinking about the purpose of the work. The second, third, and fourth days were used to accurately inventory the marketing system for each commodity. This inventory included facilities, volume, source of products, planned improvements in facilities, possibilities for handling additional volume, quality and grade desired, problems of supply, and related matters. The nights were reserved for tabulation of data, conferences with the county personnel, and a continuing evaluation of the progress made.

On the afternoon of the fifth day the entire group met to receive a report from the specialists and to discuss the findings. Then the specialists returned to their headquarters to prepare a more detailed report combining the background information with the facts uncovered during the week. With this information on hand, it was possible to construct a section on suggested or possible improvements in the marketing of the various commodities and for the consumer education work.

This report was returned to the county workers who, in turn, presented it to the various committees.

After the committees had digested the report, the marketing specialists met with them to clear all points and complete the manuscript. These reports are the marketing blueprints for the county. The local producers, marketing people, and consumers can use them to do something in marketing, under the leadership of the county extension personnel.

Our cattle producer did develop an individual marketing program, and it was more effective because he was working with other producers and the marketing men.

We realize that each county cannot have a marketing program which is independent of other counties. It is obvious that natural market areas must be the basic unit. However, it is equally obvious that aggressive, effective programs in the counties that make up the marketing area will speed the improvements which are the objectives of our extension marketing work.

What Extension Help Do Women Want?

The extension staff in Stanislaus County, Calif., redesigned the home demonstration program after making a countywide study of the women who had participated in it the previous year. Women of all ages placed first an interest in foods and nutrition; second, needs and interests in clothing information; a close third, home furnishing subject matter.

The manner of reaching people is important. A big all-day meeting with producer, merchant, and consumer participating attracts a good percentage of the town and country women. Training in skills or special-interest material is usually provided in smaller neighborhood groups with local leaders.

More than half of our homemakers are over 46 years of age, so we include the project, Foods as We Grow Older, emphasizing the role of optimum nutrition in adding life to years.

For the younger women with small children we circulate 2 or 3 times a year a two-page newsletter announcing the availability of printed information on such subjects as feeding the family and selection of fabrics.

Special agents for a special job:



George England, Extension marketing agent in New York region, talks with a retail store operator about the effects of the Cornell egg display case on egg sales.

Two years ago, M. C. Bond, Director of Extension in New York, appointed a committee to find out how Extension could better serve the public in the field of marketing.

Nine months later in Buffalo, George M. England, special marketing agent, walked into a supermarket and asked to see the manager. At first, it was a question of what George was trying to sell and what did it cost. George explained he was a special marketing agent performing a free educational service, working with retailers and wholesalers who are interested in efficient marketing.

That was in August. In November, George England wrote the following in his monthly narrative report: "The grapevine method of getting information from one store to another is very fast. After I talked with a store manager on a certain type of display which was successful in a group of stores, I was asked about this display 2 days later by a produce manager several miles away."

Eight months later, England had this to say in his July report: "During the month, I visited several large independent retail stores not affiliated with the company with which I have done a great deal of work. Upon introducing myself in one of these

stores, I was greeted like a real friend and told that they had been waiting for my visit . . . The manager knew about the work I was doing and told me that any cooperation I needed was mine for the asking."

Serving 4 counties and 1,327,000 people, George England is fulfilling one-half of the plan recommended by the committee. The other half is being carried out by Ronald Martin, a special marketing agent in Rochester who is serving six counties and 744,000 people.

The county executive committees delegate the development of the marketing program to a special regional committee made up of food handlers, extension representatives, and area farmers in the cooperating counties. These marketing committees assist England, Martin, and extension specialists to understand local food marketing problems. They study research results from the college of agriculture and the United States Department of Agriculture and determine how local industry may utilize these results; they tell research workers about the problems of industry so further research can be planned; and they interpret the marketing program to farmers and food handlers.

Let's look at a few of the specific jobs that Martin and England have done, or are doing. Last spring, retailers complained to Martin that local field tomatoes were too watery and not suitable for slicing. So Martin contacted the Plant Breeding Department at Cornell University and learned that some varieties have been developed which seem to be more firm than most common varieties.

Seed of these varieties was obtained and Ed Motsenbocker, associate county agent, arranged with a local tomato grower to start the seedlings. These tomatoes were given the same treatment as the farmer's other tomatoes, and when they were ripe the old and new were compared for firmness. The firm tomatoes were sold in food stores in addition to normal varieties and efforts are now being made to determine if the firm-ripe variety is actually preferred to the other varieties.

Martin has been working with retail packaging of tomatoes, too, along with sweet corn in a refrigerated display, an egg display case, and an egg-vending machine.

Trade People on Panel

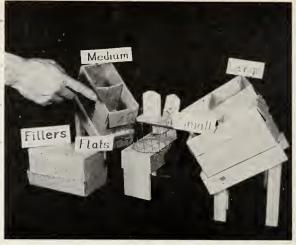
The Rochester agent reports that a step toward better understanding between the trade and local producers was taken at a combined meeting of the growers and retailers. "I arranged for trade people to speak on a panel," he said. "They told how they would like to buy local produce. They indicated whether they preferred all produce to be in new packages or good used ones; what their feelings were on the need for uniform grading, how important is quality, and other basic questions the producers wished answered."

Seventy-five miles away in Buffalo, England was covering just as much ground. One month he visited four counties to give talks on central packing; gave a radio talk on the same subject; attended a county agents' meeting; three meetings with growers arranged by local agents on

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Timesavers in Sizing and Packing EGGS

by KERMIT BIRTH, Extension Agricultural Economist, Pennsylvania



Models for demonstrating efficient packing of eggs.

ow I can do the job of grading and packing eggs alone. Formerly it took two of us just about as long as it now takes me. That means money in the bank." This was the comment of an egg producer after adopting efficient methods of sizing and packing eggs.

The work we have been doing in Pennsylvania on efficient sizing and packing eggs is part of an overall extension program to improve egg marketing. In addition to reducing the cost of grading and packing eggs, it should result in a more uniform pack of eggs for market.

Research on the subject revealed the tremendous variation in time required to size and pack eggs. To determine the savings in time which could be achieved through the use of more efficient methods, time and motion studies were made. In many instances, it was possible to reduce the amount of man hours of labor by one-half, which is important to Pennsylvania producers since about 85 percent of the eggs marketed are graded for size on the farm. This would mean that the time saved could contribute materially toward reducing costs of marketing eggs.

An educational program, using publications, models, exhibits, radio and television, meetings, and demonstrations, was developed. Some of the techniques tried were more successful than others.

The first step was to design two efficient packing arrangements based on time and motion principles. The first one was planned for use with a mechanical grader. The second arrangement was for use with hand scales. These were used with an article on principles of time and motion economy for the Pennsylvania Farm Economics and the Poultry Marketing Letter. This was done so that producers could adjust the information to their particular situation.

Drawings were made to illustrate the advantages and disadvantages of the three packing arrangements used by Pennsylvania poultrymen. These were considered more effective than photographs.

Models of each of these arrangements were constructed for use in meetings, on television, and in exhibits; and these have been the most effective method of telling the story. The use of the models in exhibits set up by the county workers has stimulated much interest in meetings and demonstrations.

The models show where to place the flats and fillers, egg basket, and cases to obtain maximum efficiency. Charts were used in conjunction with the models at meetings to help illustrate the principles of time and motion economy.

Another part of the program is the demonstration held in egg rooms. These, too, have been arranged by the county agents. An agent in central Pennsylvania, for example, following a request for this type of meeting, worked with a producer who had an egg room large enough to hold 20 to 25 people. The flexibility of this room permitted us to demonstrate three methods of packing eggs and compare differences in time required. The demonstration also showed the differences in effort made by the operators.

First the operator worked with the grader in front of him and the packing case behind him. This meant that the operator had to turn around to pack the eggs in the case. This method, although inefficient, has been used a great deal. The second method was to place the cases to the right of the operator, at the end of the grader. The final and most efficient arrangement was to place the cases underneath the grading table. All those in attendance agreed that this was the quickest and most efficient way of packing eggs.

Models for Many Uses

When facilities such as these are not available for a demonstration of this kind, the models serve a similar purpose, although not quite as realistically. In addition to cooperating with county agents in conducting the

(Continued on next page)

program, we have enlisted the cooperation of marketing agencies and others allied to the poultry industry. Whenever possible, egg dealers are invited to the meeting. They have helped carry the story to the producers.

If it were possible to single out the most effective technique for reaching the greatest number of producers, probably the models would be number one. They are versatile and can be used in many ways.

The success of the program has been largely due to the cooperation of the county agents. They are the ones who have distributed the published material, arranged for the meetings and demonstrations, and encouraged marketing agencies to participate.

The marketing specialist has also helped marketing agencies reduce labor requirements in their plants by cooperation with personnel from the Pennsylvania Bureau of Markets; Pennsylvania Egg Marketing Association; and Transportation and Facilities Branch of the Agricultural Marketing Service, USDA.

Many producers have adopted the improved methods which have helped to reduce the cost of marketing eggs.



Special Agents

(Continued from page 235)

packaging tomatoes, peaches, and corn; two meetings with box company people; the State Fair to help the county home demonstration department set up an egg-marketing exhibit; and made final arrangements for an all-day marketing program for the western New York vocational agriculture teachers.

In addition to those varied tasks, England has done some significant work with flowers. "The difficulty of handling flowers for the first time in supermarkets is about the same as handling any new perishable commodity," George said. "If the store manager does not see that these flowers are handled with care and interest by the produce manager, the

product will not sell. They often fail to take the small amount of time necessary to build an attractive display."

So what did England do? "I was able to obtain an old hospital supply cart for \$1.95," he said. "After I dismantled all unnecessary attachments and built a pan with a wire top to hold 50 bouquets of flowers, I placed this experimental holder in a retail market. The store doubled its sales of cut roses, and the holding capacity of the roses was lengthened to 3 or 4 days."

Besides flowers, England has done considerable work with potatoes, apples, eggs, onions, and milk.

The latest undertaking for these marketing agents is to help retailers improve merchandising and efficiency in handling meat and produce. To do this they are holding meat and produce clinics. For these clinics the marketing agents bring in speakers from the college and industry. In Buffalo, both the meat and produce clinics will feature one session a week for 10 weeks. Advance interest is so high that the program has to be repeated twice. In Rochester, there will be a produce clinic which will also run for 10 weeks.

These are just a few of the things that George England and Roland Martin are doing in this new, exploratory marketing program. They have used many types of demonstrations and teaching techniques that can be duplicated in other areas by other county agents. Already plans are being made for a marketing program with handlers in the capital district and the Hudson Valley areas of New York State.

First-Class Fare

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are now testing the new cooling method.

Test cars of honeydew melons shipped from California were checked at New York. One of the problems found was the variability in the ripeness of the melons. Bruises occurred on honeydews from tight packing, resulting often in the appearance of decayed spots before the melon reached an edible stage. This information has gone to producers, research men, and shipping groups.

California fall tomatoes on the New York market were studied by extension workers in the autumn of 1955. Variations among individual fruits on arrival and during subsequent ripening were reported as one of the major problems. The amount of decay, while in most cases nominal, had important influence on the price received.

Sweetpotatoes sold in the Portland-Seattle area were a subject for study this past spring. One of the challenges met was the lack of uniformity of quality and grade of sweetpotatoes sold in markets. Careless handling and chilling seemed to be responsible for many of the defects. Better packaging was recommended as a remedy.

Deciduous fruits and berries shipped to the New York market from California received close attention during the fall of 1955. A trend toward repackaging by the retail stores is developing. New container types being tried have proved satisfactory.

The studies have pointed out the need for a close tie-in between the division of agricultural sciences and various shipping organizations so that fruit arriving in the terminal market would get a more critical examination.

Those who have worked in the New York market have suggested that an agricultural extension person be headquartered there to work constantly with the broker-handling trade and with State extension staff members who come into the market.

Home Projects in Wood

The title of a 96-page booklet designed for the not-too-expert do-ityourselfer is 71 Home Projects in Wood published by the National Lumber Manufacturers Association, 1319 Eighteenth Street NW., Washington 6, D. C. Copies are available at 35 cents a copy from the association or probably from your local lumber yard. This bulletin covers the common homemaking jobs from paneling a basement rumpus room to making an extra attic room. Among other items are hi-fi cabinet, picnic table, bunk bed, lawn chair, doghouse, fishline dryer and even an outboard motor rack.

Better Marketing Practices Through



A COOPERATIVE

by DAVID B. BARROW, Extension Retail Marketing Specialist, Boston, Mass.

Thas always been said that our New England farmers are the most independent breed in the human species. Even so, some of our New England market gardeners are proving that they can work together and still remain quite independent.

This is the story of a cooperative which was helped from the beginning by Bristol County, Mass., agents. They believed such an organization would help the county's farmers and consumers.

Bristol County has a well developed concentrated market garden area. The trellis tomato is the specialty with county growers. They raise about one-half of the trellis tomatoes grown in the State. The continuing expansion of this specialized tomato production is typical of several market garden crops in the area.

The most important factor in this growth was probably the development of out-of-State markets, particularly New York. Once their outlets were thus broadened, growers no longer had to depend on one market in which the price might be "broken" by a few hundred boxes or the decisions of relatively few buyers.

With the market expansion came problems of transportation. The largest growers who owned suitable long-haul trucks and whose "pick" was big enough to fill them daily, naturally shipped for themselves. But few of the growers in the county were big enough to do this. A semiretired Boston marketman, brother of one of the growers, started arranging for a type of load-pooling and joint selling in the out-of-State markets. This was especially helpful to the smaller grower, and it was felt that even more formal pooling and direct sales to chain stores were needed.

The Southern Massachusetts Growers Cooperative, Inc. was conceived November 6, 1953, when three local growers met with the county agent to discuss the possibilities of forming a cooperative marketing organization. They invited all of the county's market gardeners to a meeting at the Extension office to further discuss the organization of such a cooperative.

From among the many growers who came, a group of five were named to accomplish the actual organization of the cooperative. The county agent worked continuously with this group, providing them with information concerning other established marketing cooperatives, market conditions, and the advantages and disadvantages of cooperative marketing.

In February 1954, the cooperative was officially formed. A sales manager was hired and immediately started contacting buyers. During the marketing season, the members sold close to \$100,000 worth of produce through their cooperative. Their average price was higher than that which was received for sales through other market channels.

The cooperative had a 30-percent increase in growth during the second year; and still another volume increase is indicated for this marketing season. To the county's market gardeners, it has become a vital factor in the marketing picture, not only directly affecting members but aiding nonmembers indirectly by broadening the market demand for their produce.

Throughout the organizational period and the three marketing seasons since, the county agents have worked closely with the cooperative. At one time when the board of directors was "split down the middle" on a policy question which seemed vital to both sides, the county agent invited the two opposition leaders to a session in his office which ultimately led to a solution and the cooperative lived on.

On many occasions, the agent served as a consultant to committees working on specific problems. For example, last year a decision had to be made concerning the adoption of a standard type of package for the tomato crop. The county marketing agent was asked to provide information concerning the past history of both the basket and lug types of pack, prices received, and the preference of different types of buyers for one or the other. The agent was able to get both background and trend information, which played an important part in the decision by the co-op's board of directors to emphasize the lug pack, particularly for distant markets.

Editor's Note — Bristol County is one of the two counties in Massachusetts that have initiated extension marketing programs with a fultime agent specializing in marketing in all commodity fields. This was made possible through the use of Federal funds authorized by the Agricultural Marketing Act.

Quality Control

Expands the market for Maryland foods



by BERNARD A. TWIGG, Extension Processing Specialist, and ANDREW A. DUNCAN, Extension Vegetable Specialist, Maryland.

UR extension job is hardly complete if we only help farmers to produce a high yield. The farmer must also harvest and market his crop profitably.

processors improve products.

In Maryland, 3,000 farmers depend on vegetable crops to provide all or part of their incomes. About 75 percent of the vegetables are sold to food processors for canning, freezing, and pickling, and are then sold in all parts of the United States and to some foreign countries.

Recognizing the need to help processors improve the quality of their products, the Maryland Extension Service has established a project which calls on the cooperative efforts of specialists from three departments of the university. They are the departments of agricultural economics and marketing, agricultural engineering, and horticulture.

An objective of this project is to promote the expansion of markets for Maryland-grown foods for processing by adopting new quality control methods, improving raw-product handling, changing processing plant layout for increased efficiency, and standardizing merchandising techniques among Maryland food processors.

As one service, a quality control laboratory and a mobile quality control lab are maintained. All processing plants should have a qualitycontrol program, yet many plants do not have the necessary equipment. know-how, or personnel to establish and operate their own laboratory. The use of a quality control lab is being stressed regularly through publications and at workshops and trade meetings held for the processors.

While this phase of extension work with processors is important and necessary, it is only one part of the job to be done with the processing industry. All county extension personnel can help growers and processors solve some of the problems involved in building a larger market for their products.

The processing industry, like the grower, operates on a small profit margin. The processor must package a commodity as cheaply as possible and at the same time maintain a quality that will increase the market value of the commodity and get repeat business. Obviously, friendly understanding and good working relationships between the growers and processors is necessary for their success. Where this attitude does not

exist, the county agent can be of greatest service.

The knowledge and influence of county extension personnel can be used very effectively between these interdependent parts of our economy. Lack of familiarity with the crops and the people involved sometimes contributes to a reluctance to act. Following are some suggestions on why, where, and how to begin a program of work at the county level to benefit growers and processors of horticultural crops. County agents can help improve processor-farmer relations in several of the following ways.

Know the Processor And His Problems

Visit the processor in his office and factory. Invite processors to all fruit and vegetable growers' meetings. These contacts may develop into lasting friendships and are certain to advance the overall extension program.

Many familiar problems are common to both farmers and processors. For example, plowing under old cornstalks to reduce the infestation of corn borer and corn earworm in next year's crop will reduce the cost of production for the farmer and reduce the cost of cleaning the corn in the factory. Proper selection and timing of application of pesticides to insure residues below the tolerances set by the Food and Drug Administration will help the farmer and processor avoid conflict with the provisions of the Pesticide Chemical Amendment to the Food Drug and Cosmetic Act. This information is stock-in-trade with county agents. Growers and processors want to be constantly reminded of the fundamentals of plant husbandry.

Another common problem is when to harvest. Some farmers are of the opinion that seed-type crops, such as peas, beans, and corn increase in yield as they increase in maturity. Consequently, the uninformed farmer does not harvest until the product is so mature that the processor cannot use it. The processor cannot afford to buy a crop he may not be able to sell. He must have the crop at a relatively immature stage in

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Quality Control—(Continued from page 239)

order to produce high quality food for human consumption. Actually, seed-type crops allowed to mature beyond the Grade B level of quality may produce a lower yield than those harvested at higher quality (less mature) levels. Because of his impartial position and intimate contact with farmers, the county agent is often in a better position to advance this type of information than is the processor.

Use of Seasonal Labor

Farmers generally would like to grow larger acreages of vegetables for the processors, but, because of the shortages of labor to help with harvesting, growers are reluctant to expand their acreages. The processor on the other hand is in a better position to get and keep seasonal labor.

County agents familiar with the operation of labor pools or camps might advise processors on ways to relieve this most annoying production problem. One Maryland county agent helped to arrange labor-pick-up-points in one of the big cities. With police department cooperation, farm laborers were permitted to congregate in several convenient locations at specified times so that farmers could come into the city with their buses and trucks to get the help they needed for the day. The labor problem is different in every county, and the agricultural agent has the best overall picture and very often the best ideas for solutions.

Successful Relationships

By calling the attention of agricultural editors of local papers and the agricultural directors of local radio and television stations to outstanding cooperative enterprises involving growers and processors, much can be done to encourage other growers and processors to try closer working agreements. Nothing succeeds like success. We can accentuate the positive if the county agent will take the initiative and serve as "Mr. Go-between." Along this same line the county agent may help the processor get needed contract acreage by suggesting farmers who would be interested in growing certain commodities or making changes in their cropping systems.

Share Extension Activities

The National Canners Association endorses and supports work with young people in rural areas. Within the framework of the 4-H organiza-

tion and the National Junior Vegetable Growers Association, processors want to give every encouragement to youngsters interested in growing vegetables. Processors welcome an opportunity to work closely with 4-H Club leaders and county agents. The processing industry needs trained personnel in the plants as well as in the field. When suggesting careers in agriculture to young people, food processing should be near the top of the list. Tours of processing establishments by 4-H'ers and talks to clubs by owners of canneries and freezing plants are two ways to add new interest to club work.

Besides being conscientious users of new ideas, the food processors are a latent source of help and goodwill for the Extension Service. Many would welcome an invitation to participate in the extension program.



County Agent Stanley Day examines new and improved sweetpotato variety for processing. Maryland processes one-half of all the processed sweetpotatoes consumed in America.