

Radio and Television

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IF IT'S getting harder to tell the difference between a farm-dweller and a town-dweller, two of the reasons are radio and television.

The role of the Department of Agriculture in the development of agricultural communications through the broadcast mediums since the mid-1920's has been to encourage, cooperate, and supply timely, useful information to broadcasters. The cooperation had much to do with the progress and soundness of our agriculture.

Much of the agricultural information broadcast on radio and television originates with the officials, scientists, regulatory and service agencies, and market reporting services of the Department.

It reaches broadcasting stations, at their request, through the Associated Press and United Press International and other private news agencies and by direct mail and wire.

The majority of producers of farm products now can receive up-to-the-minute news of what commodities are bringing on the market and what the weather may be expected to be in the next hour, the next day, the next week.

AGRICULTURAL LEADERS have been heard to say, "If we didn't have radio now we'd just have to invent it."

Radio has become a workhorse of agricultural communications. It is the medium that brings news and information as soon as it is available on a day-in, day-out, work-a-day basis.

Probably no single group in the pop-

ulation has benefited more from the advances in radio broadcasting than people on the land.

Radio receivers in the beginning were big and complicated and had antennas outside the house. They have become smaller and so simple and easy to use that they no longer are the center of activity in the living room but are all over the house on desks, bedside tables, shelves in the kitchen, basement, workroom, barn, milkshed, pickup truck, automobile—sometimes in the tractor and shirt pockets.

The invention of the transistor, a tiny substitute for tubes, enabled manufacturers to reduce the size of receivers so that some battery-operated sets now fit snugly into pockets and handbags.

Partly because television emerged almost fullblown in the first decade after the Second World War (while it took radio 25 years to condition the public thoroughly to receiving broadcasts), radio has yielded the family gathering places to the television set and itself has become the more personal medium.

There were 4,142 radio broadcasting stations in January 1959 in the United States. Americans owned and used more than 98 million receiving sets in homes, 38 million in automobiles, and 10 million in public places, such as restaurants, barbershops, and garages.

We should note here that the broadcasting industry in the United States is commercially owned, except for stations owned and operated by educational institutions and a few State and municipal governments for educational and other purposes.

Of the stations that went on the air in the first years after the First World War, some still stand out, as they have through the years, for their contributions to agricultural advancement, their devotion to the informational needs of rural people, and their support of improved agricultural practices, community development, and homemaking.

Station WHA, operated by the University of Wisconsin, in Madison, and

KDKA, Pittsburgh, were among the first stations to offer market and weather reports on a regular basis. KDKA celebrated its 35th year of market news broadcasting in May 1956. WHA and the experimental station that preceded it in Madison had done some market newscasting before then.

Both stations have continued to serve farmers with daily broadcasts designed especially for the farmers of their area and have given the Nation some outstanding talent. Milton E. Bliss broadcast over WHA a long time before he became agricultural representative of the National Broadcasting Company network and producer of the 31-year-old National Farm and Home Hour. Frank E. Mullen, once a writer for farm magazines in Nebraska and Iowa, got the idea of a network farm program when he worked for KDKA and, after joining NBC, worked out arrangements with the Department of Agriculture, which launched this daily program as a joint effort of the Department and the network. KDKA included a farm program director on its regular staff until 1957, when its programs were revised.

Of the many stations that have done outstanding service to agriculture, I cite a few.

WLS, Chicago, in the early 1920's tuned itself in on the agriculture of its section and broadcast throughout the day with the needs and likes of its rural listeners in mind—programs of farm news from the area and from Washington, farm advice, foot-pattin' music, markets, weather, sermons, interviews with farmers, interviews with visiting brides and bridegrooms (and regularly they came, on their honeymoons in Chicago, to visit Arthur C. Page and his WLS Dinner Bell Hour every week-day noon).

Cincinnati's WLW boomed out market news and weather, farm advice, and results of experiments on its own farm on a powerful signal heard over most of the continent in those early days of broadcasting. It still does.

WHAS, Louisville; WHO, Des Moines; WCCO, Minneapolis; KVOO, Tulsa; KMBC, Kansas City; WOAI, San Antonio; WNAX, Yankton, S. Dak.; and WOC, Davenport, were among the early birds. So were WBAP, Fort Worth; WSM, Nashville; WKY, Oklahoma City; WEAF (now WRCA) New York; WCAU, Philadelphia; WGN, Chicago; WOW, Omaha; WWL, New Orleans; KNBC, San Francisco; KFI, Los Angeles; KJR, Seattle; WTAM, Cleveland; and others.

Now, in 1960, easily a thousand stations have some regular farm programs.

In 1958, 1,472 radio stations and 165 television stations were carrying market news information regularly, mostly on a daily basis or oftener.

Some who listen to these broadcasts may not realize that the information they receive was collected by Federal or Federal-State Market News services.

Nearly always are the radio market news reports adapted to the specific needs of the listeners. A city station may broadcast a report of local wholesale prices and prices received by shippers for nearby products. A station serving a producing area may report on local prices, prices paid in city markets, and shipments currently moving from the area.

These reports sometimes are written by a market news reporter or an employee of an area office of the Agricultural Marketing Service. Usually the reports are written by employees of the station on the basis of items furnished by the market wire service through one of the news services. Some radio stations have lines into the market news offices for direct on-the-air reports by market reporters of the Department.

Weather information comes principally from the United States Weather Bureau, although some stations employ their own meteorologists, who supplement Weather Bureau data with their own analyses. Many stations use private weather services.

The United States Weather Bureau,

with its forecasting and reporting services, was a part of the Department of Agriculture from 1891 until June 1940. It is now an agency of the Department of Commerce.

Farm broadcasters take a keen interest in the weather reports. Partly because of their urging, the Weather Bureau offered special agricultural weather forecasts, geared to seasonal activity on farms, and inaugurated a 30-day forecast. It also began studies of longer-range trends.

It was not always thus. In the early 1920's, when radio stations were less numerous, some landsmen learned to make their own predictions from more or less sketchy reports they picked up on distant stations.

I once got a letter from an old rancher in southern Texas telling of an experience in which he saved his herd because over a Kansas City station he heard a mass of cold air was moving down from Canada. In his Model-T and with the help of an ancient slab-sided steer, whose lofty horns he could see at the front of the herd when lightning flashed, he maneuvered his cattle to safety just in time.

ADVANCES in rural electrification and increased programming of farmer-interest material have put radio receivers in more than 98 percent of the Nation's farm homes. One big reason for the rise in the amount of farm broadcasting and the number of stations is the profit afforded by commercial broadcasting.

Manufacturers and sellers of equipment and goods bought by farm and ranch people found that radio offered an effective advertising channel. That made possible more broadcasting of all kinds than a tax-supported broadcasting system, without commercial participation could do.

Requests from radio stations to the Department for material to use in farm broadcasts led to the establishment of a radio service in the Office of Information in 1926. The National Broadcasting Company in cooperation

with the Department in 1928 inaugurated the daily National Farm and Home Hour on the network, with regular originations in Chicago and Washington and live features from other places. The Hour later became a weekly program and since 1945 has been sponsored by a manufacturer of farm equipment. The Department has cooperated with the American Broadcasting Company since 1945 in presenting a weekly network program, the American Farmer.

For several years, the Columbia Broadcasting System radio network carried the Columbia Country Journal on a weekly basis. More recently, CBS has covered agricultural news along with general news. The Mutual Broadcasting System radio network inaugurated a daily 10-minute program of farm news.

Meanwhile, more and more stations added specialists in farm broadcasting to their staffs.

Several of the farm broadcasters met in Columbus, Ohio, in 1943, and formed a professional organization, which shortly became national in membership and took the name of National Association of Radio Farm Directors. These men and women have become widely known as "RFD's," thus capitalizing on the happy coincidence of initials that already were identified with rural communication.

When farm programs became popular in television, the organization renamed itself National Association of Television and Radio Farm Directors.

The Department cooperates with NATRFD and its members and all broadcasters of farm programs. Membership in NATRFD in 1960 included more than 200 active and 160 associate members in the United States and Canada.

THE FARM BROADCASTER on both radio and television has become a new, refreshing character on the American scene—with some latter day counterparts abroad, especially since our technical assistance program began.

Usually he is a young man, who enjoys seeing and talking with people and talking about them. He is known personally by many of his listeners.

His services include more than regular programs. He may give special broadcasts from field events and special short courses on the air (on such subjects as livestock feeding). He may have organized tours of farmers to points of interest in North America and overseas. He may sponsor agricultural field events, such as land judging contests, usually in cooperation with the experiment stations or extension services.

Some stations offer scholarships in farm broadcasting to promising college students. A dozen or more farm broadcasters at one time were winners of scholarships offered by Ed Mason, John Merrifield, and their successors at WLW, Cincinnati, and Chuck Worcester and his successors at WMT, Cedar Rapids. Other young broadcasters got a start working with such pioneers as Art Page at WLS, Chicago; Herb Plambeck, WHO, Des Moines; Emerson Markham, WGY, Schenectady; and Sam Schneider, KVOO, Tulsa.

Several farm broadcasters were launched by George C. Biggar when he held administrative posts at WLS and WLW. Later Mr. Biggar became president and owner of WLBK, De Kalb, Ill., and producer of his own farm programs.

Some farm broadcasters have moved on to other posts of honor. Phil Alampi, once a poultry farmer and farm broadcaster over WABC and WRCA, New York, became Secretary of Agriculture of New Jersey. Two high officials in the National Grange once were presidents (as was Mr. Alampi) of the NATRFD. They are Roy Battles and C. W. (Jack) Jackson, who left WLW, Cincinnati, and KCMO, Kansas City, respectively, to serve the Grange in Washington. Jack Angell was a newscaster for NBC before he became director of radio and TV activities for the American Farm Bureau Federation.

LITTLE TELECASTING was done in the United States before the end of the Second World War, but the following decade saw forests of TV antennas grow on rooftops as new stations went on the air and cheaper receivers became available. In some American cities the number of television receivers exceeded the number of bathtubs.

Television, already well advanced technically, came to the broadcast-conscious public when restrictions on manufacture were relaxed after the war. At first programs were given only a few hours a day. Before long, the broadcast day of most stations extended from early morning until midnight seven days a week.

By January of 1959, there were 564 television stations on the air and 49 million receiving sets in 45 million homes. Among farm homes, 73 percent had television receivers.

Television made good use of weather maps for explaining weather forecasts—probably a reason for a new public understanding of meteorological terms and the eccentricities of weather. Even to a greater degree than radio, television stations employ meteorologists for this service. Others often present weather information by farm directors or other staff members. Like the radio stations, all draw upon the services of the Weather Bureau for data, although some supplement this with information from private forecasting agencies and their own observations.

Telecasting of farm programs on stations operated in conjunction with radio stations has been done mostly by the radio farm director.

Television is universally popular, but it seems to have a special appeal for persons on farms and in small communities.

Most stations provide news about livestock and produce markets and varying amounts of other kinds of information for farmers.

Farm telecasters make extensive use of the motion picture camera to bring outside scenes into the studio, although studio presentations of interviews,

how-to-do-it demonstrations, and studies of livestock, poultry, and plants, have been popular.

The use of the video-tape process for delayed telecast of programs has become popular since 1958.

A growing number of stations have been equipped to originate programs in color—a promising development for agricultural programs because the natural color of pastures, fields, crops, and animals adds a useful dimension in telecasting.

The Radio and Television Service participated in early color television research with the National Broadcasting Company.

Most of the early "farm" television programs dealt heavily with vegetable and flower gardening for the logical reason that most of the television receivers at the time were in urban homes. The earliest farm programs in color followed that pattern. One garden program in Washington switched to color in 1959, with enthusiastic approval by the sponsor, a commercial nurseryman. Video-tape in color was used by some stations in 1959.

An example of the value to farmers of television: A hog raiser in Arkansas saw a picture of a hog suffering from vesicular exanthema, a serious disease of swine. This picture had been sent out as a part of the Department's television package feature service for farm telecasters.

No case of vesicular exanthema was known to exist in Arkansas at that time, but the farmer recognized on the TV screen some of the symptoms he had noticed earlier in his own herd. He quickly called his veterinarian, who confirmed the symptoms, treated the hogs, and stopped what might have been a costly outbreak of the disease in Arkansas.

Many television programs showing "how-to-do-it" techniques are telecast, but the full potential has not been realized. Several telecasters originate live programs or filmed programs on farms. Live pickups pose production problems, but authenticity compen-

sates for the difficulties. Some of the most effective farm programs originate in studios, however; they present live animals, plants, and so on and such features as interviews with farmers and specialists who have something useful to say to farmers.

RADIO AND TELEVISION are important aids of field workers of the Department of Agriculture.

Many stations, whether they employ full-time farm program directors or not, make broadcasting facilities available to extension workers and to field representatives of agencies like the Forest Service, Farmers Home Administration, Soil Conservation Service, and Commodity Stabilization Service, who are frequent guests on programs and are consistent sources of information of significance to farmers and other people.

Federal, State, and county agricultural agents in 2,415 counties made 288,408 radio broadcasts in 1958. In 1,441 counties they made 18,584 telecasts. County home demonstration agents in 1,813 counties made 81,076 radio broadcasts and in 917 counties made 6,490 appearances on television.

These agricultural workers believe the effectiveness of their efforts is extended to more people than is possible on a person-to-person basis. Some of these agents broadcast "live" from their offices over facilities placed there by the radio station.

Every State agricultural service has its staff of information specialists, some of whom help extension specialists and county agents manage their broadcasts and often do radio or TV broadcasting over a station operated by a land-grant college.

Another outstanding development has been the rapid growth of educational television. The 44 educational TV stations on the air in 1960 mostly were on college and university campuses.

The first use of educational TV facilities was to extend classroom instruction, but most stations began to

offer evening programs for adults. Directors of ETV stations have indicated an interest in more service to agriculture by broadcasting to rural people or by broadcasting more information useful to consumers. Because ETV lacks the commercial obligations of other stations and offers longer features into which a subject can be probed to a greater depth, ETV may become an important factor in public understanding of agriculture.

The use of broadcasting by agricultural workers and by guest appearances of farmers has done much to increase the public knowledge of farm life, production of our food and fiber, marketing, and processing.

Many stations make direct inquiry to the Department for information of specific nature. Practically all are served by the wire services, which maintain representatives at the Department.

Regional, State, and national officials of the Department are interviewed frequently in Washington and during their travels through the country.

The Department's Office of Information prepares a weekly package—"Agri-Tape"—of recorded features, which are duplicated regionally and redistributed by land-grant colleges and farm organizations. About 350 stations used the recordings in 1960.

Other radio services of the Department reach other millions.

Three television feature packages are issued by the Radio and Television Service in cooperation with various agencies. They reach 10 million viewers each week. The services included still pictures with suggested scripts for the convenience of TV performers.

One service is for farm programs, one for consumer information programs, and one, Research Roundup, for general news programs. More than 200 stations used the services in 1960.

Most broadcasters receive Department news releases in the field of their special interest and daily summaries of all releases.

Farm broadcasters receive the weekly

RFD Letter from the Radio and Television Service, which alerts them to agricultural news and events and the services available to them. Many women broadcasters receive the weekly "Food and Home Notes," issued by the Press Service. Other Department publications—new bulletins, pamphlets, and books—are sent them on request.

Motion pictures are made by the Department especially for television use. They are notable experiments in low-cost filming. Most of the motion pictures on file have been cleared for television use and are available. Catalogs of the films are issued by the Motion Picture Service.

THE EFFECTIVENESS of radio broadcasting by professional farm broadcasters and agricultural workers has been enhanced by the use of the magnetic tape recorder.

Recordings of various kinds, especially the electrically transcribed disk, or platter, have been in use by radio stations almost since the beginning of commercial broadcasting. Farm broadcasters have utilized this facility for delayed broadcasts when duty or convenience required them or their broadcast guests to be away from the studios at the time of broadcast. The thrill, or disillusionment, at hearing one's own voice for the first time as others hear it is an experience never forgotten by thousands of broadcast guests.

Because the early equipment for making transcriptions away from the studio was not easily portable, recordings from farms and laboratories were not widely used until small, light recorders were developed about 1947. Every farm broadcaster now uses them for bringing the voices and sounds that otherwise are not conveniently transported physically to the studios. Many county agents and other agricultural workers who broadcast regularly use portable recorders in their offices and on field trips. Many recorders are battery operated and can be used far from electric lines.

Short-wave radio as a means of two-

way communication on some large farms and ranches adds to the efficiency of operations. Telephones in automobiles, used in many professions, serve farm broadcasters as well as operators of large landholdings as a means of staying in touch with headquarters and with the outside world while moving from place to place. An adaptation of the walkie-talkie has been used to direct the activities of work crews.

When sight is added to this use of sound, foremen and managers will be able to direct the work of employees by means of the television screen, just as closed-circuit television devices are used to check on the numbers of box-cars in freight yards, in banks to verify signatures, in railway ticket offices to confirm space reservations, and in hospitals to keep an eye on patients. It takes no strenuous exercise of imagination to predict the use of color television in various types of inspection in processing plants. Such activities were technically possible in 1960, as was two-way telephone vision.

The Role of a Free Press

L. E. Childers

MUCH of the credit for the transformation of agriculture from a horse-and-hand-labor occupation into a dynamic mechanized and scientific business must go to the vigorous support of our newspapers and magazines, including a strong and enterprising farm press. Recognition of the right of the people to know, written into our Constitution by the Founding Fathers, has served agriculture well.

More newspapers and periodicals are published in the United States than

in any other country of the world. A listing of daily papers in 1958 showed a total of 1,969, whose aggregate circulation was almost 57 million. In addition, almost 600 Sunday newspapers have a circulation of nearly 50 million. The United States, with 7 percent of the world's population, absorbs nearly 60 percent of the world output of newsprint. We have a highly developed system of news transmission, including two world news agencies—the Associated Press and United Press International.

Nearly 10 thousand weekly papers with circulation totaling many millions also help to keep people informed. Hundreds of trade publications have a special readership. More than 400 publications devoted primarily to agriculture have a circulation of more than 30 million.

About 85 percent of our total adult population read one or more newspapers, and 65 percent read one or more magazines more or less regularly. More than 80 percent of our rural farm families take a daily or weekly newspaper, and 70 percent receive at least one magazine. Farm people spend an average of 30 to 60 minutes daily in reading magazines and newspapers.

ALL THIS provides a favorable climate for the diffusion of useful and up-to-date information on developments relating to agriculture. The press is an important channel for the diffusion of new ideas and the findings of agricultural research among farmers.

Much of the agricultural research in the United States is done by Federal and State experiment stations. These agencies take the position that research is not completed until it has been fully reported to the people who need it and can use it.

The basis for this view is found in the Organic Act of the Department of Agriculture, which provided that one of its duties is "to acquire and diffuse among the people of the United