11-1946

Extension Service in Maine Reports Busy Year: Annual Report for the Year Ending June 30, 1946

Arthur L. Deering

Maine Extension
Bulletin 348

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Extension Service in Maine Reports Busy Year

Maine Farm House Built in 1780.

For the Year Ending June 30, 1946

ARTHUR L. DEERING, Director

EXTENSION SERVICE
UNIVERSITY OF MAINE - COLLEGE OF AGRICULTURE ORONO MAINE
UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING
ARTHUR L. DEERING DIRECTOR
Distributed in furtherance of the acts of Congress of May 8 and June 30 1914

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Maine Agricultural Extension Service
Annual Report of the Director
For the Year Ending June 30, 1946

GENERAL STATEMENT

Farmers of Maine have fought a good fight in the strenuous four-year campaign for the production of food. They heartily adopted the slogan heard so often early in the war: "Food Will Win the War and Write the Peace." Despite all sorts of wartime handicaps, they have maintained production at the highest possible level. They merit our warmest congratulations.

Members of the staff of the Maine Agricultural Extension Service are proud that they have had the privilege of working closely in the war effort with the patriotic people of rural Maine. They are happy in the expectation that our pleasant relationships will continue through the coming years of peace.

Our farmers did very well in meeting the goals set for them by the Production and Marketing Administration as the following brief table will show.

PRODUCTION GOALS AND PRODUCTION 1940-1945

	Production 1940 Census	Goals for 1945	Production 1945†
Number of milk cows	138,206	130,000	125,000
Milk produced (pounds)	555,000,000	660,000,000	645,000,000
Number laying hens	1,542,092	*2,505,000	2,667,000
Eggs laid (dozens)	16,044,548	*33,200,000	37,700,000
Chicks raised	3,792,527	*4,145,000	5,324,000
Commercial broilers raised	No figures	*1,210,000	1,700,000
Beans, dry (acres)	5,246	*5,000	4,000
Hay (acres)	788,892	860,000	857,000
Oats (acres)	101,995	110,000	92,000
Potatoes (acres)	143,221	200,000	207,000
Potatoes (bushels)	33,678,009	*53,868,000	52,785,000

* Production in 1944 for comparison.
† USDA estimates.

Not only did Maine farmers maintain commercial production at high levels, but they gave excellent support to the Extension Victory garden and food preservation projects. Reports indicate that farm women did somewhat less canning than in previous war years for two reasons—many gardens produced less than usual because of prolonged drought, and many housewives had a surplus of canned goods left over from the previous year.

The Extension Service continued to administer the National Farm Labor Program in Maine. Workers placed included older boys and girls and grownups from the cities and villages who worked during rush periods on nearby farms; members of the Women's Land Army, most of whom came from other states; Victory Farm Volunteers, city boys who worked on farms during their summer vacations; men from down state who went to Aroostook for the potato harvest; workers brought to Maine from Quebec, Newfoundland, Jamaica, and Kentucky; and more than two thousand German prisoners of war from Europe's battlefields. Total number of individuals placed was 16,323, and the total number of placements was 41,864. Practically no crops were lost for lack of labor at harvest time.

Our boys and girls have maintained their high standards of achievement in 4-H club work. They finished 19 out of 20 projects started and again led the nation in the percentage of projects completed. Total value of their projects in 1945 is estimated at $679,657. During the four war years they produced food valued at nearly three million dollars. They also engaged in many other war activities such as the collection of rubber, waste fats, scrap metal, papers, and magazines; selling and buying war bonds and stamps; working for the Red Cross; and distributing wartime information for neighborhood leaders. One Aroostook girl sold bonds valued at more than $180,000.

Extension has been busy for some time developing peacetime programs for Extension work in agriculture and home economics, and at the July Conference the Extension agents drew up their tentative projects for 1946. In so doing they kept in mind long-time objectives for the advancement of Maine agriculture and rural life. These plans were discussed with local farm and home leaders and later were adopted, as modified, by the county Extension organizations.

THE EXTENSION ORGANIZATION

Co-operating Partners

The Maine Agricultural Extension Service is a co-operative organization in which the Extension Service of the United States Department of Agriculture, the College of Agriculture of the Uni-

The Agricultural Advisory Council, University of Maine.

Front row: (left to right) Fred Griffee, director, Maine Agricultural Experiment Station; Clarence W. Parker, Sebec; Mrs. Dorothy Payson, Falmouth Foreside; Mrs. Marjorie Wilder, Norridgewock; Edward B. Denny, Damariscotta; Thomas Murray, Hampden. Second row: Seavey A. Piper, Troy; President Arthur A. Hauck, University of Maine; Harley A. Welch, Chapman; Arthur L. Deering, dean of Agriculture, University of Maine; Francis Buzzell, Fryeburg. Back row: George E. Lord, assistant director, Maine Agricultural Extension Service; Wilson M. Morse, Waterford; Frank W. Hussey, Presque Isle; Milton Smith, State Road; Albert K. Gardner, Maine Commissioner of Agriculture.

versity of Maine, and the various state, county, and local Farm Bureau groups are participating.

Agricultural Advisory Council

Reorganization in 1943 of the agricultural activities centering in the University of Maine has resulted in the appointment of Director Deering of the Extension Service as Dean of Agriculture. The College of Agriculture, the Agricultural Experiment Station, and the Agricultural Extension Service are now all responsible directly to the Dean of Agriculture, who in turn is responsible to the President and Board of Trustees of the University. The new administrative setup has resulted in better coordination of the activities of the three units.

An Agricultural Advisory Council has been formed consisting of the President of the University, the Dean of Agriculture, a member of the Board of Trustees, the Maine Commissioner of Agriculture, and ten men and women who represent the various agricultural and homemaking groups in the state. The Agricultural Advisory Council confers with the President of the University and the Dean of Agriculture on problems relating to the agricultural activities of the University.

The Farm Bureau

The Farm Bureau in Maine is recognized by the State law as an organization of men and women formed for the sole purpose of co-operating with the College of Agriculture in conducting Extension work in agriculture and home economics throughout Maine. In this state the Farm Bureau has no other function. Membership on June 30, 1946, was 18,221, the largest in the history of the organization.

The 14 county Farm Bureaus are members of the Maine Farm Bureau Federation. They are also divided into 447 local groups

SUMMARY OF ORGANIZED COMMUNITIES, PROJECT LEADERS, AND FARM BUREAU MEMBERSHIP, 1945-46

Counties	Organized Communities			Community Project Leaders				Farm Bureau Members	
	Agri-culture	Home Econ.	Different Communities	Agri-culture	Home Econ.	4-H Club*	Total	Men	Women
Androscoggin-Sagadahoc	21	26	33	142	136	40	318	655	662
Aroostook	31	22	44	273	110	24	407	1742	634
Cumberland	16	28	40	85	155	26	266	805	784
Franklin	16	23	29	82	126	34	242	387	550
Hancock	27	25	30	125	123	39	287	489	528
Kennebec	21	21	31	124	125	43	292	413	730
Knox-Lincoln	20	25	31	58	125	24	207	282	586
Oxford	17	32	34	122	187	48	357	707	1038
Penobscot	22	27	24	123	—	22	145	574	551
Piscataquis	20	22	27	88	119	41	248	417	490
Somerset	20	25	36	95	137	35	267	500	533
Waldo	16	23	26	94	115	33	242	515	519
Washington	17	23	28	85	120	18	223	434	390
York	26	34	34	148	166	24	338	1134	1172
Totals	290	356	447	1644	1744	451	3839	9054	9167

* Includes local leaders and assistant leaders.

which are actively co-operating with the Extension Service in programs for the communities which they serve. Besides its chairman, each local Farm Bureau has a project leader for each major Extension project in progress. Men and women have separate organizations but frequently meet in joint sessions. The following table shows the number of organized communities and number of project leaders on November 30, 1945, and the Farm Bureau membership by counties on June 30, 1946.

The Maine Farm Bureau News

Each county Farm Bureau has for the past 25 years published a four-page monthly "house organ" called the *(Blank) County Farm Bureau News.* For some time Farm Bureau leaders have been considering the advisability of combining the desirable features of the fourteen county papers in one state-wide paper that would go to all members and carry more news and subject matter of state-wide interest. During the past year all county executive committees have considered the advantages and disadvantages and decided in favor of the change. The Maine Farm Bureau Federation was authorized to negotiate satisfactory arrangements to publish one monthly state paper.

The Federation was able to place a contract for the publication of a new 40-page monthly paper, the *Maine Farm Bureau News,* at about half the combined cost of the 14 small county papers. Each county has nearly as much space in the new paper as it had in the little county house organ. All subscriptions are paid from Farm Bureau membership dues, and only Farm Bureau members receive copies. The first issue was that of March 1946.

County copy is prepared by the county Extension agents, and most of the State copy by the Extension specialists, although members of the faculty of the College of Agriculture and of the Experiment Station staff often contribute timely articles. The new paper permits Extension workers to reach 16,000 farm families with a large amount of subject matter and semi-news copy in which neither the daily nor the weekly press is interested.

Neighborhood Leaders and Victory Guides

Two new groups of rural leaders have been helping with the Extension war programs—neighborhood leaders and victory guides.

The neighborhood leaders, 7,000 strong, were most active during the earlier years of the war. They distributed information, sold bonds, collected waste fats, and took part in various drives. Much of their work was done in communities where Extension has had few previous contacts. Their patriotic service has been deeply appreciated.

Victory guides supplement the work of local 4-H club leaders in communities where no one is available who can give the time necessary to conduct a fully organized 4-H club. Club membership has increased threefold since the war began and many of the members live in communities where there are no regular 4-H clubs. Victory guides supervise the work of these unorganized members and encourage them to complete all projects started. They, too, have made a real contribution to the war effort.

Emergency Extension Workers

Emergency workers have been employed to assist the regular Extension agents in wartime activities. They have aided the home demonstration agents in the fields of health and nutrition, and have helped the county club agents in supervising the work of club leaders, victory guides, and the club members themselves. They have manned the Extension Farm Labor Program which made 41,864 placements of workers on Maine farms in 1945. The periods of service of the emergency workers have ranged from a few days to the full year.

Funds for the payment of the salaries and travel expenses of these workers have come mainly from Federal sources. However, the Governor and Executive Council of the State of Maine early in the war provided some money from the State Emergency Fund for necessary activities for which no other funds were available.

One of Extension's greatest difficulties has been to maintain a competent force of trained agents in the face of the persistent demands of Selective Service and war industries for more and ever more workers.

CO-OPERATION WITH OTHER AGENCIES

Extension activities in aiding rural people to meet their wartime obligations have required close co-operation with many other

groups working for like purposes. The same may be said for peacetime activities also. Relationships with these agencies, groups, and individuals have been excellent and a source of much satisfaction to members of the Extension staff.

Federal or semi-federal groups include the Production and Marketing Administration, State and County U.S.D.A. War Boards, U. S. Selective Service, U. S. Employment Service, U. S. Soil Conservation Service, Office of Price Administration, salvage organizations, war bond committees, and rationing committees.

State or semi-state agencies include the Governor and Council, Office of Civilian Defense, Women's Citizens' Service Corps, and Maine State Departments of Agriculture, Health and Welfare, Education, and Forestry.

Happy Kentucky workers waiting at Presque Isle for the train that will take them home after four weeks in the Aroostook potato fields.

Other groups include the Maine Public Health Association, poultry and livestock associations, the Maine Pomological Society, farmers co-operatives, fair associations, commercial organizations, banks, the daily, weekly, and monthly press, radio companies, chambers of commerce, and many other organizations and individuals. Extension workers sincerely hope that such co-operation has been mutually beneficial.

Special acknowledgement should be made of co-operation received from the College of Agriculture and other divisions of the University of Maine, from the Federal Extension Office, from different representatives and bureaus of the United States Department of Agriculture, and various special agencies engaged in war work.

FARM LABOR PROGRAM

Massachusetts, New York, Kentucky, Florida, Newfoundland, Canada, Jamaica, and the battlefields of western Europe all furnished workers for Maine farms in 1945. This was necessary because, even after the conquest of Japan, the need for food and the lack of hands for the harvest were as acute as at any time during the war.

Congress in 1943 assigned to the Agricultural Extension Service the recruitment, placement, and supervision of emergency farm labor. Smith C. McIntire, Extension economist, was appointed farm labor supervisor by the Director of Extension; the county agents were made responsible for the farm labor program in their respective counties; and farm labor assistants were appointed whenever and wherever needed. This form of organization is still maintained. The labor project is not one of the regular functions of the Extension Service, and was undertaken only because of the wartime emergency.

Principal labor needs of Maine farmers were for year-round help on dairy farms; for seasonal help in planting, hoeing, and harvesting market garden crops; for roguing potatoes; for harvesting peas, beans, and sweet corn for canning; and for gathering blueberries, apples, and potatoes. Labor was also needed in the canning factories and the potato storage houses during harvest.

In all, 16,323 different persons were placed on farms during 1945, some of them several times according to seasonal needs.

Total placements amounted to 41,864 as compared with 32,137 placements in 1944, and about 15,000 in 1943. The periods worked ranged from two or three days to the full year.

In spite of any assistance received, the fact remains that Maine farmers were able to maintain and sometimes increase production largely because they worked longer hours themselves, made greater use of family labor, and postponed such jobs as cutting bushes and making repairs. The best farm worker is the farm-bred boy, and the county agents rendered a most valuable service by securing the facts which enabled Selective Service Boards to decide who should be deferred for farm work. In some counties, notably Somerset and Waldo, nearly every farm registrant was involved.

Day-Haul Labor

The largest single source of labor was the day-haul groups who went out each day from cities and villages to work on nearby farms. Most of these workers were older boys and girls who were transported to and from work by bus and truck. In all, they accounted for more than 27,000 placements. Without them some of the food intended for canning must have gone to waste.

Women's Land Army

About 150 women and girls were recruited for work in central and southern Maine, chiefly in market gardens and in harvesting beans for canning. Most of the girls were college students. Rank and file of the Women's Land Army, however, were the mothers, wives, and daughters of farmers themselves, and local women who have been helping their neighbors. Unknown and unrecognized, these women deserve the utmost credit for their sacrifice of time and effort in the production of food.

Victory Farm Volunteers

The Victory Farm Volunteers were village and city boys between the ages of fourteen and seventeen inclusive. Nearly all were recruited, in co-operation with school officials, through the schools. They worked during the summer vacation on general and specialized farms in all parts of the state. Although they

could not do a grown man's work, they have proved a real help in time of need. In addition to the 443 boys who worked during the summer, about 1,000 boys worked in Aroostook in the potato harvest.

Placement of Victory Farm Volunteers continues in 1946, although fewer boys have been recruited.

Members of the Women's Land Army picked potatoes as one of their many farm activities.

Newfoundlanders

Maine dairy farms were hit hardest by the labor shortage, partly because dairying required special skills and partly because the need is for year-round labor as well as for extra labor at peak seasons. Newfoundlanders were first brought to Maine to work on dairy farms in 1944. Most of them remained during 1945, and some of them are still here in 1946. The men from Newfoundland, as a group, have been well liked by their employers, and have made a real contribution to dairy production.

Jamaicans

British citizens from Jamaica have also helped to fill the labor vacuum in Maine. Most of these workers boarded themselves in quarters provided by the employers. In Cumberland County they came early and stayed through the season in the Cape Elizabeth market garden area.

A camp for Jamaicans was opened in July at Dover-Foxcroft where about 130 men were employed in harvesting and processing peas. Later they went to Fryeburg to harvest sweet corn. They afterward came back to Dover-Foxcroft for the potato digging season.

Canadians

Aroostook potato growers have relied for many years on workers from outside the county for assistance in the potato harvest. The two major sources have been migrant workers from other states and Canadians from the Provinces of New Brunswick and Quebec. The war not only took large numbers of local workers for industry and the armed forces but also cut off both these sources of outside help.

Arrangements were made with the Canadian Government to recruit and release a large number of Canadian workers for the digging period. In all, 4,055 Canadians came into Maine through the entry ports of Jackman, Fort Kent, Madawaska, and Van Buren and remained from one to six weeks.

Kentuckians

For the third year officials of the Extension Farm Labor Program brought workers from Kentucky to Maine to help pick potatoes. This year Maine people had charge of both the recruitment and placement of these workers. Great credit is due the county agents and others of the Kentucky Extension Service for their splendid co-operation. In all, 1,516 Kentuckians helped in the potato harvest.

Prisoners of War

German prisoners of war, 2,144 of them, were also employed in harvesting Maine crops. One camp of about 250 men was located at Camp Keyes near Augusta. These men worked mainly on beans and sweet corn. Another camp of some 350 men was located at Dow Field near Bangor. The men here helped harvest canning crops and picked 419,235 bushels of potatoes.

Two camps were located in Aroostook, one at Presque Isle of about 650 men and the other at Houlton of about 1500 men. These men helped harvest beans and peas for canning, pulled tops for the early harvest of seed potatoes, and later picked 4,471,059 bushels of potatoes, or about one tenth of the total crop.

Emergency laborers were fairly satisfactory although of course they could not fully replace the trained farmers and farm laborers who were called to the colors. They did especially valuable work in the harvesting of canning crops and potatoes, neither of which could have been harvested completely without their assistance. The Extension Service appreciates their patriotic response to the call to produce food.

Farm Labor Program for 1946

Labor conditions in Maine in 1946 are much the same as in 1945, since fewer veterans have returned to the farms than was expected. The greatest need is for seasonal laborers to help harvest potatoes and canning crops.

The Extension Service has now had three years' experience in handling farm labor, and for that reason the program is expected to go more smoothly than in previous years.

WORKERS PLACED IN MAINE, SEASON OF 1945

Source	Number Placements	Type of Work	Location
Canada	4,055	Potato harvest	Aroostook and Central Maine
Kentucky	1,516	Potato harvest	Aroostook
Jamaica	241	Raising vegetables Harvesting potatoes, sweet corn, peas, beans	Cumberland Piscataquis and Oxford
Prisoners of War	2,144	Planting tuber unit seed potatoes Harvesting beans, peas, potatoes Harvesting beans, peas, potatoes, sweet corn	Aroostook Aroostook Central Maine
Newfoundland	100	Dairy farms	Mostly Central and Southern Maine
Victory Farm Volunteers	443	General farm work	Central and Southern Maine
Women's Land Army	150	Commercial vegetables and beans	Central and Southern Maine
Day-Haul Youth	7,143	Commercial vegetables Harvesting beans and potatoes	Whole state Whole state
Down State	531	Potato harvest	Aroostook
Total workers	16,323		
Total placements	41,864		
Total placements (1944)	32,137		

PUBLICITY

Film strips, moving pictures, posters, bulletins, circulars, circular letters, radio broadcasts, and news stories were all used to forward Extension programs and assist rural people in maintaining production during the war, and in making the transition from war to peace.

Bulletins and Circulars

Circulars and bulletins rank high in effectiveness in spreading information and securing the adoption of new practices. Short circulars describing single practices are becoming more popular year by year. Bulletins and circulars issued totaled 142,000 copies.

The wide range of subjects covered by Extension publications is shown by the table on page 48. Many of our Extension bulletins are often prepared by scientists connected with the Maine Agricultural Experiment Station in co-operation with the Extension specialists in their particular fields. Several bulletins have also been prepared and printed in co-operation with some of the other New England states. Where the subject matter applies equally to all states concerned, this method enables us to put out better bulletins at the same or less expense.

News Service

Extension relationships with the press have been excellent, and the newspapers have been of very great assistance in keeping the public informed. During the year the editor released 446 news stories to the one monthly, nine daily, and 47 weekly papers in the state. He has not only covered the regular Extension news, but has prepared and released stories for the Production and Marketing Administration, Soil Conservation Service, and other Federal agencies, as well as for the Maine State Nutrition Committee, the College of Agriculture, University of Maine, and the Maine Agricultural Experiment Station.

Most county Extension agents have regular columns in the local papers and all prepare copy for the press. Last year they gave 4,886 stories to the press, many of which appeared in several different papers.

Radio

The Extension editors give as much assistance as they can to the county Extension workers who have radio programs. They send releases to all the Maine stations and to certain stations in Massachusetts and New York which are heard here.

County Extension agents maintain regular broadcasts over nearly all the radio stations in Maine, one station in Canada, and another just over the line in New Hampshire. Oldest of these broadcasts is that of County Agent Rowe over WGAN in Portland three times a week.

None of the Maine stations has power enough to be of value in the St. John Valley in the northern tip of the state. Agents in

that area, however, maintain a regular weekly broadcast over CJEM, Edmundston, Canada, just across the border, and find it very effective in forwarding their Extension programs.

During the year the Maine Radio Network has established a Farm and Home Broadcast from 6:30 to 7:00 a.m. six days in the week. The stations in this network are WLBZ, Bangor; WRDO, Augusta, and WCSH, Portland. They cover the state quite well except Northern Aroostook. The director is most co-operative and uses practically everything we send him in the way of plugs, news, and subject matter, and gives one morning a week to speakers selected by the Extension Service. He also broadcasts special Extension programs as the need arises. This program has no commercial sponsor, and is an excellent outlet for Extension information.

FARM MANAGEMENT AND MARKETING

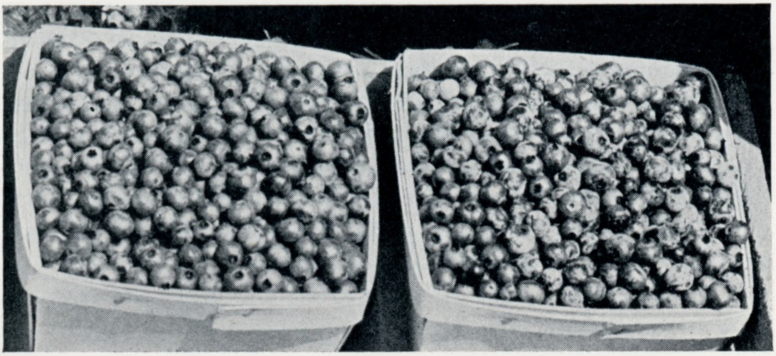
(Formerly Agricultural Economics)

Maine farmers have for their principal sources of income beans, peas, and sweet corn for canning; apples; blueberries; potatoes; and dairy and poultry products. Prices for all these products were reasonably satisfactory although costs of production mounted during the year. Emphasis, of course, was on all-out production both before and after the end of the war in Germany and in Japan.

Assistance in Marketing

Chief marketing problems of farmers and farm organizations were with price regulations and wartime restrictions. Both the marketing specialist and the county agents gave a great deal of time in assisting them to understand and comply with these regulations.

The marketing specialist assisted farmers in organizing two new co-operatives, the Central Maine Farm Labor Association, and the Katahdin Valley Seed Improvement Association. The former was formed to enable farmers to use prisoners of war as farm laborers; the latter is an organization which will try to develop the Katahdin Valley area in Southern Aroostook as an



Principal crop on many Maine farms "Down East" is blueberries. They are of the low-bush variety and seem to resent most forms of cultivation except burning over the fields every two or three years. Blueberry men now have an experimental farm devoted to blueberry problems.

intensive potato seed-producing section. The marketing specialist also gave assistance to 22 farmers' co-operatives in the fields of organization, finances, better business policies, and membership relations. Leaders of farm co-operatives were also aided in developing the uniform co-operative marketing law which was passed at the last regular session of the Maine Legislature.

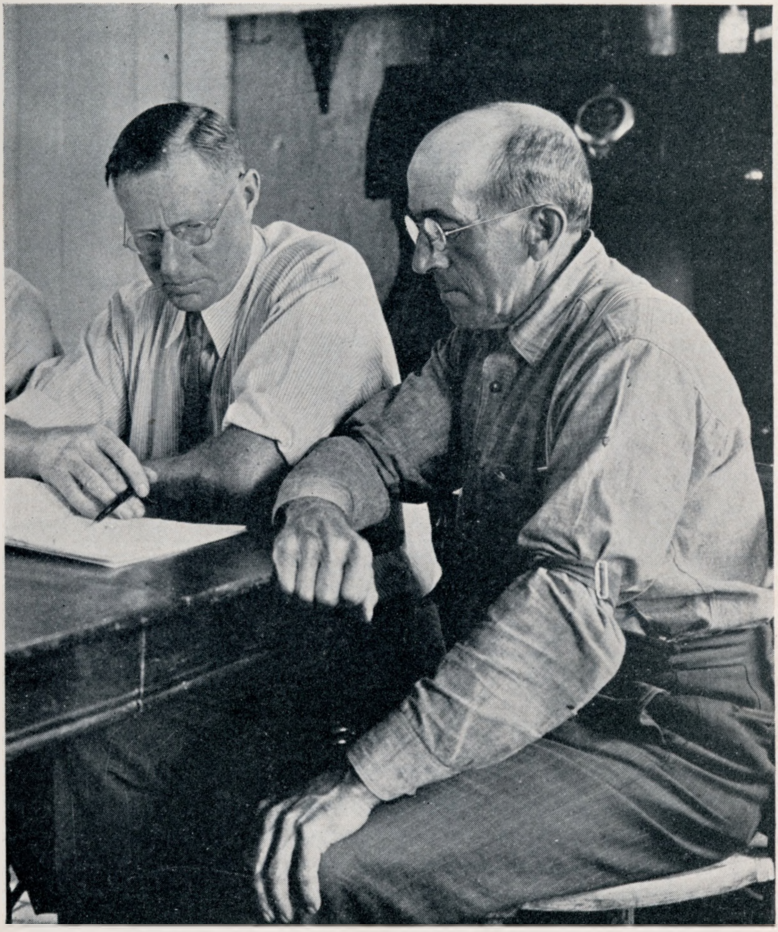
Blueberries

Maine blueberry growers received over $2,500,000 for their crop in 1943, their biggest year, and the crop is a major one in the "blueberry belt" along the coast from the Kennebec River to Passamaquoddy Bay.

Extension conducts a business management service for the five blueberry marketing co-operatives in the state, and also has a number of production projects to assist blueberry growers. Chief among the latter is the blueberry dust service in which 1,362 growers co-operated in 1945.

Blueberry growers are now facing stiffer competition from other areas and need to improve their methods in order to maintain their present position in the industry. Their chief problems in production are how to grow berries of better quality and how to get larger yields per acre and greater volume of product—in other

words, how to grow more and better blueberries. There are also problems in plant breeding and propagation, fertilization, and the control of weeds, insects, and plant diseases. Marketing problems include the development of grades and standards and how to supply consumers the year round with berries in some form—fresh, dried, frozen, or canned—at prices that will compete with other fruits.



County agent and farmer study the Extension system of keeping farm accounts. Farm accounting is one of the oldest Extension projects.

The solution of these problems concerns both the Agricultural Experiment Station and the Extension Service as well as the men who are active in the industry. Two years ago the Extension Service furnished the leadership in calling together groups who represented all phases of the industry to study their common problems and plan a course of action.

Next step was the appointment of a committee to represent the blueberry industry. This committee then secured the enactment by the Maine Legislature of a law providing funds for the purchase and equipment of an experimental farm, and another law taxing the industry to provide additional funds for research and Extension work.

The committee on purchase has bought a tract of blueberry land in the town of Jonesboro for the use of the Experiment Station, and the necessary buildings are being erected. Experimental plots have been laid out and preliminary research is in progress.

Meantime Extension workers have continued the popular blueberry dust service, and have assisted growers to secure labor at harvest time. Several trial plots with different kinds of fertilizer have also been started in each of the counties where blueberries are grown on a commercial scale.

Other Services

Other types of service in farm management and marketing have included a state-wide series of meetings on preparing farm income tax returns, a farm accounting service, a new bulletin on home freezing units, a campaign for more and better gardens as a war measure, co-operation with the Maine State Nutrition Committee to improve the nutrition standards of Maine people, and assistance given to veterans who are interested in agriculture.

Statistical Summary, Farm Management and Marketing

Number of farmers' co-operatives organized	2
Number of farmers' co-operatives assisted	22
Volume of business of above co-operatives (est.)	$20,000,000
Number of farm account books started	1,760
Number of blueberry dust co-operators	1,362

Cumberland County farmer exhibits his homemade manure loader. This is one of the many labor-saving devices that Maine farmers made for themselves during the war years.

FARM EQUIPMENT AND STRUCTURES

(Formerly Agricultural Engineering)

The major war problem in farm engineering was the care and repair of farm equipment—to make it do. The major peace problem in the next few years will be building repairs and new construction.

Wartime activities naturally centered around the care and repair of farm machinery and the introduction of new labor-saving devices. Mowing machines, trucks, tractors, and potato sprayers and planters have received special attention. During the war farm machinery repair demonstrations were held in almost every community of any size in the state that had an Extension group, and a potato machinery repair demonstration was held in nearly every potato-growing community of any size. The Extension Service also co-operated closely in the organization of the O.S.Y.A. machinery repair schools conducted by the agricultural teachers in high schools. The Extension Service has introduced the buck rake and encouraged the use of it.

Extension has also encouraged the use of new methods and machinery in handling potatoes. It is estimated that 80 per cent of the potatoes harvested in 1945 were loaded onto trucks with some sort of barrel hoist, new since the beginning of the war. Many farmers are now using machinery to put potatoes into storage bins, and a successful potato harvesting combine seems just around the corner.

Farmers are now looking forward to repairing and improving their farm buildings, and the Extension Service has new projects on foot to aid in this important procedure. Plans for both houses and barns are available, and many farm visits have been made on request.

The Extension Service is co-operating with the Soil Conservation Service in the establishment of soil conservation districts and in encouraging farmers to adopt better soil conservation methods. Assistance was given farmers who built improved potato storage houses, and who installed water supply systems.

Statistical Summary, Farm Equipment and Structures

Farm machinery meetings held	17
Attendance at above meetings	445
Buck rake building demonstrations held	38
Attendance at above demonstrations	1,171
New potato storages built	55
Capacity of above storages in bushels	2,201,855

CROP AND SOIL IMPROVEMENT PROJECTS

The demand for more food has brought about a large increase in the acreage of potatoes and canning crops. Acreage of potatoes, for example, has mounted from 143,000 acres in 1941 to 207,000 acres in 1945, with another increase in 1946.

Potatoes

Control of potato insects and diseases has always been the Number One problem of potato growers, especially of those who

raise certified seed. Principal insects have been the Colorado potato beetle, various aphids, flea beetles, and leaf hoppers. Principal diseases have been mosaic, leafroll, early and late blight, and ring rot.

Potato bugs are so well controlled that they are no longer considered serious. Aphids have been more difficult, but scientists have discovered efficient control measures. On the other hand farmers have failed to recognize the serious damage often caused by flea beetles and leaf hoppers and have done little to keep them in check. The widespread use of DDT on potatoes, however, has given excellent results with all these insects. Aphids are harder to kill than the others and more DDT must be used. Until research proved that DDT was not transferred in dangerous amounts to the tubers, Extension agents advised great caution in its use. They now advise using DDT in accordance with directions in Extension Circular 221, "The Use of DDT on Potatoes in Maine."

The Extension Service has conducted a vigorous campaign against leafroll and mosaic. Although the battle is not yet won, we have made good progress. Since both are spread by aphids, the same methods of control are used for both. These methods were worked out by the Maine Agricultural Experiment Station. They include spraying and dusting to control aphids, the destruction of host plants and weeds in and near potato fields, and the use of disease-free seed. In all, 3,001 farmers enrolled to receive the Extension Spray Service letters in 1945. These men planted 88,419 acres of potatoes, or about two out of every five acres planted in Maine that year. The spray service letters keep the growers up-to-date on spraying and dusting and other phases of the potato business.

More serious, possibly, to the growers of table stock than mosaic and leafroll, is late blight. Maine farmers have been spraying to control late blight for more than fifty years, but even now there are some seasons when many farmers lose a sizable part of their crop from this disease. New methods and materials for spraying and dusting have been developed, but the most important advance during the war has been the control of potato dumps.

Nearly every farmer and shipper has a potato dump pile somewhere on his farm or near his trackside storage where he dumps his waste and diseased potatoes after they are taken from

the bins. Studies made by scientists at the Maine Agricultural Experiment Station reveal that conditions on these dumps after the potato plants start to grow are ideal for the spread of disease, especially of late blight. They also found that most outbreaks of late blight in potato fields could be traced directly to some nearby potato dump. The nearer the dump the worse the disease, especially early in the season. Extension agents have been pushing the control of potato dumps now for several years. Controls recommended are to kill the waste potatoes by freezing before they sprout in the spring, or to destroy the sprouts and tops later by mowing, burning, or by killing them with chemicals before disease starts. Extension agents have warned growers of the dangers from dump piles at meetings, through news articles, circular letters, and by other means. They have even made a dump-to-dump canvass to see how well control measures are practiced and to point out to the owners the danger of losing a portion of their crop if the piles are not controlled.

Educational work of this sort of necessity takes time, but already promising results are being obtained.

Spray and Dust Service

Man must control plant diseases and insect pests in war as well as peace, and sprays and dusts get best results when they are applied at just the right time. Therefore, county agents remind growers of potatoes, apples, and blueberries of the proper times to dust or spray, and provide other current information about materials, weather, and cultural practices. Most of the leading growers of these three crops have been using this service for years.

Improving Seed Potatoes

Maine growers sell annually several million dollars worth of seed potatoes that have unusual freedom from degenerative diseases. They are able to do so largely because they follow field and storage methods based on research findings of the Maine Agricultural Experiment Station and recommended by the Extension Service.

Here is what Verne Beverly, county agent in Maine's leading potato county, reports: "Constant publicity at nearly every meeting


Forty years of progress in spraying potatoes. Left, the old; right, the new.

emphasizes the value of good seed. Local papers and the radio frequently carry items in this regard. Farmers are urged to secure their seed early so that they may be sure to get the best there is. Publicity is given the results of the Florida tests (of Maine seed) through radio, press, and project and neighborhood leaders.

"The Maine station continued its experimental work with aphids that infest potatoes, and Extension agents have followed developments closely. The seed areas at Dyer Brook, Siberia, Golden Ridge, and Oxbow were continued. The county agent held roguing meetings with Oxbow farmers for the fifth successive year. The agents also taught many other growers the art of roguing.

"The executive committee of the Aroostook County Farm Bureau called together representatives of state agencies, the experiment station, the Extension Service, and other groups to discuss how further to combat ring rot. The result was the formation of a committee to secure legislation centering around feeder farms to produce clean seed for foundation potato seed growers. The legislation provided for a State Potato Board and gave the board a revolving fund of $100,000 to develop projects which would strengthen the seed program of Aroostook farmers.

"More farmers than ever before pulled the tops for the early harvesting of their own seed, and many also sprayed to kill the tops of their certified seed stock to avoid virus disease infection. The Extension Service recommends both these practices.

"Several growers used DDT to control aphids and flea beetles, and most of them reported large increases in yield." (The Extension Service did not recommend the use of DDT for this purpose until the work of the experiment station showed that toxic material was not transferred to the tubers in quantities that would endanger the health of human beings.)

"Two new organizations were started to forward the certified seed program, the Katahdin Valley Seed Improvement Association, and the State Road Feeder Farm."

Statistical Summary of the Crop and Soil Improvement Projects

Number co-operators enrolled to improve seed potatoes	2,709
Number of acres planted by co-operators	98,449
Number of demonstrators reporting foundation seed plots	333
Number acres foundation seed grown by demonstrators	14,762
Number co-operators enrolled to treat potato seed	269
Number acres planted with treated seed (reported)	5,438
Number co-operators enrolled for potato spray service	3,001
Number acres planted by above co-operators	88,419
Number co-operators reporting use of green manure crops	1,003
Number acres above crops grown	13,305
Number co-operators using lime	8,752
Number tons lime bought	79,034
Number acres limed	150,798
Number co-operators enrolled to save value of barn manure	2,559
Number animal units involved	46,158

DAIRY IMPROVEMENT

The principal objective of all dairy Extension work in 1945 was to assist farmers in producing all the milk possible, knowing that the demand would exceed the supply. The state goal set for the year was 660,000,000 pounds of milk; production was 645,000,000 pounds.

Livestock Feed for Wartime Needs

Maine's project called "Livestock Feed for Wartime Needs" lined up closely with the National Dairy Production Program for securing greater milk production. Maine emphasized nine practices: The use of ladino clover for pasture, hay, and silage; improvement of pastures; better quality roughage; more homegrown grain; feeding balanced grain rations; feeding to conserve grains in the face of critical shortages; feeding each cow in accordance with her milk production; handling dry cows properly; and growing young stock properly.

Means used to forward the program included meetings, radio talks, news stories, circular letters, bulletins and circulars; the use of colored slides and movies at meetings; exhibits; and personal calls and instruction.

A special effort was made to secure more milk by teaching farmers better milking practices. Several dairymen who were efficient in their own methods of milking were hired to work with individual farmers and teach them the best approved methods. One of these farmers gave 96 barn demonstrations on proper milking at which 182 dairymen were present, and also assisted 50 individual farmers. As a result, during the next few weeks 20 dairymen reported that they had bought strip cups and were using them, and 25 dairymen said that they purchased carts for moving milking equipment easily and quickly about the stable.

Fall fertilization of pastures has been stressed for the past three years with encouraging results.

Dairy Herd Improvement Associations

Dairy herd improvement associations have had a rocky road to travel since the war began. Thirteen associations were going in 1941, but only three were active two years later. Reason? The

Good Jerseys at the Highmoor Show. This is a new kind of cattle show for Maine where all animals are judged on performance as well as conformation.

testers had gone to war. Later the associations were able to hire conscientious objectors as testers and fifteen associations were in operation in October 1945. The new men made excellent testers and soon had the work back on its feet.

Association work benefits not only the members but all dairymen who buy cattle of the members. Its value in getting more milk as a war measure is shown by the fact that, while the average butterfat production of all Maine cows is around two hundred pounds a year, average production of the herds on test was nearly 340 pounds per cow. General supervision of the associations is one of the duties of the Extension Service.

Co-operative Breeding Associations

Maine has two co-operative artificial breeding associations organized and to a large extent supervised by the Extension Service. The Central Maine Artificial Breeding Association was formed in 1939, and the Androscoggin Valley Artificial Breeding Association in 1940. The two associations cover quite well the leading dairy areas of the state.

Five new breeding units were established—at North Berwick, Scarboro, Lisbon, Waterville, and Island Falls. The North Berwick and Island Falls units are in new areas; the others were formed to meet an increased demand in sections already organized. The associations have increased their membership from 2,798 to 3,587 during the year. Many heifers of artificial breeding are now on test and show a gratifying increase over their dams in milk production. Figures given in a recent issue of the *Milk Pail*, house organ of the Maine dairy herd improvement associations, show that of the six cows that completed their lactation periods during that month with more than 500 pounds of milk each to their credit, five were daughters of bulls used by the co-operative breeding associations. Another proof of the value of the project is this: More than three quarters of the members have herds of less than ten cows. Very few of these men could afford to own even the lowest priced bull that he uses, let alone a three-thousand-dollar one.

Other Extension activities aimed at making more milk have been urging the use of better quality roughage, labor-saving machinery and methods of doing dairy work, better arranged dairy

barns, proving herd sires and the use of proved sires, testing cattle for mastitis, fertilizing hay fields and pastures, work with the New England Feed Conference Board, and the eradication of Bang's disease.

Statistical Summary of Dairy Improvement Projects

Number of dairy herd improvement associations	15
Number of members in above associations	
Beginning of the year	298
End of the year	344
Number of cows on test	
Beginning of the year	6,065
End of the year	6,872
Number of members co-operative breeding associations	
Beginning of the year	2,798
End of the year	3,587
Number of cows bred during year	16,182
Number of co-operators in wartime dairy program	1,850
Acres ladino clover grown	14,771
Acres pasture and hayland fertilized	27,288
Tons hay cut early (reported)	42,986
Acres grain grown for dairy feed (reported)	6,073
Number of meetings attended by dairy specialists	149
Attendance at above meetings	6,614

FOREST CONSERVATION

Farm Woodlot Management

Forest products rank second as a source of income on most Maine farms, and the normal Extension goal in farm forestry is to influence all woodlot owners to adopt good forestry practices—to look upon woodlot as a crop, not as a mine. The war goal, however, has been to cut every cord of wood and every board foot of timber consistent with good methods of selective cutting. Farmers have been urged to cut products for sale and to postpone such practices as weeding, thinning, and pruning until later.

The year 1945 was a good year to put the woodlot in order for future growth, to supply war needs, and at the same time to get good wages for farm labor. It was a good year to sell second or third grade lumber for which there is little or no market in normal times.

Three principal methods of pushing this program were through chain-saw demonstrations, meetings, and *Forestry Facts*. The chain-saw is a new piece of labor-saving equipment which has aroused a great deal of curiosity, and more people have come to see it work than have come to forestry demonstrations before for some years. They came to see the chain-saw work and remained to hear the speakers on good woodlot management. Attendance at 48 chain-saw demonstrations was 1,392. Demonstrations were held in every county in Maine.

Another method of forwarding the project is through the mimographed circular, *Forestry Facts*. This pamphlet is issued at timely intervals to the 2,967 woodlot owners who have requested it. Ceiling prices and changing markets have made *Forestry Facts* of especial value to woodlot men this year.

Maple Products

Maple products are not a large source of income for Maine farmers as a group, but they do provide a major source for many families. The state has five principal producing areas. They are farm areas in Penobscot, Somerset, Franklin, and Oxford counties, and a forest area in western Aroostook where Canadians come across the border and make 14 or 15 carloads of maple sirup each spring.

The Extension program for maple producers is aimed at better care of maple orchards and improved quality of the product. Operators are encouraged to remove from their orchards black growth such as spruce, fir, and hemlock, and infected and drying maples.

Extension workers held four county meetings to determine whether maple producers were interested in forming a state-wide organization for the advancement of the industry. The response was favorable and the organization has been completed.

Other Forestry Activities

Other types of forestry work have included the establishment of town forests in several parts of the state, securing data on insect infestation, the improvement of home grounds, and work with various war agencies.

Forest Production Commission

The Maine Legislature at its last regular session passed a resolve authorizing the Governor to appoint a commission of nine men to study means of increasing the productivity of Maine forests. Albert D. Nutting, Extension forestry specialist, was one of the men appointed. His appointment recognized the fact that he is an authority on the care and management of farm woodlands. This is the first time that the Extension Service has been so recognized and is a significant instance of the respect which is accorded members of the Extension staff for their technical knowledge in agriculture and allied fields.

Statistical Summary of the Forest Conservation Project

Number chain-saw demonstrations held	48
Attendance at above demonstrations	1,392
Number of woodlot management co-operators	651
Number of acres of woodlot improved (reported)	7,356
Number of woodlot meetings held	78
Attendance at above meetings	2,169
Number result demonstrations in forestry	226
Number co-operators better home grounds	457
Number receiving *Forestry Facts* regularly	2,967

Pulpwood is one of the products of well-managed farm woodlots.

ORCHARD AND SMALL FRUIT PRODUCTION

(Formerly reported under "Crops and Orchards")

Maine orchardists, without much question, harvested the smallest crop of apples in 1945 of any year since orcharding became a major farm industry in the state. Causes were a long-time trend in the industry, the "big freeze" of 1933/4, and unusual weather in the spring of 1945.

The number of apple trees in Maine decreased from about four millions in 1900 to two millions in 1930. Nearly half the trees in the state were killed or severely injured during the winter of 1933/4 so that the present number of bearing trees is estimated at 800,000.

Unusually warm weather in March 1945 was followed by a sudden cold spell in April that injured the blossom buds. And then in May, to cap the climax, wet snow fell to the depth of from eight to 12 inches in some places when McIntosh, the leading variety, was in full bloom. Result was a very light set of fruit.

Orchard Spray Service

Our orchard spray service is one of our oldest Extension projects, yet orchardists insist that we continue it year after year. County agents tell orchard men by mail, or sometimes by phone, the proper times to spray and dust. *Maine Fruit Notes* is used by the Extension specialist to help co-operators to keep themselves posted on what is going on in the orchard world. Co-operators in this project own about 200,000 bearing trees.

Maine has not had an orchard specialist during the year but has been able to "borrow" specialists from both Massachusetts and Connecticut for two series of meetings. Both our orchard men and the Extension staff appreciate the courtesy of our neighbors in giving this service to the orchard industry.

Young Orchard Development

If Maine is to remain in the orchard business, orchardists must plant young trees in increasing numbers to replace those that are growing too old to produce with profit. Extension is encourag-

This York County apple storage is one of the newer farm cold storages for Maine's most important fruit.

ing the planting of young trees in large blocks in two ways—through the purchase of trees from reliable nurseries and through the use of trees grown in this state on hardy stocks by a non-profit co-operative of the growers themselves. The hardy stock nursery is just getting under way, but, in 1945, thirteen orchardists purchased 1,785 trees.

Blueberry Dust Service

Most serious pest with which blueberry growers have to contend is the blueberry fruit fly, not so much because of the actual damage that it does as because it breaks the pure-food laws. Most of the growers dust regularly and secure good control, but they appreciate the Extension blueberry dust service which jogs their elbows when it is time to dust and keeps them informed of the latest developments in the industry. In 1945, a group of co-operators reported that they had raised 54,571 bushels of berries of which only 22 bushels were condemned because of fruit-fly infection.

Statistical Summary, Orchard and Small Fruits Projects

Number of co-operators in orchard spray service	792
Number of trees in above orchards	194,868
Number of co-operators setting young trees	74
Number of trees set	10,080
Number of blueberry dust co-operators	1,362

POULTRY PROJECTS

Maine poultrymen produced about 38 million dozen eggs in 1945 as compared with 16,044,548 dozen in 1939. The increase in commercial broilers has been from an annual average of 418,000 birds before the war to nearly two million birds in 1945. Extension poultry projects have been planned to assist poultrymen to produce as much food as possible and still maintain the quality of their products.

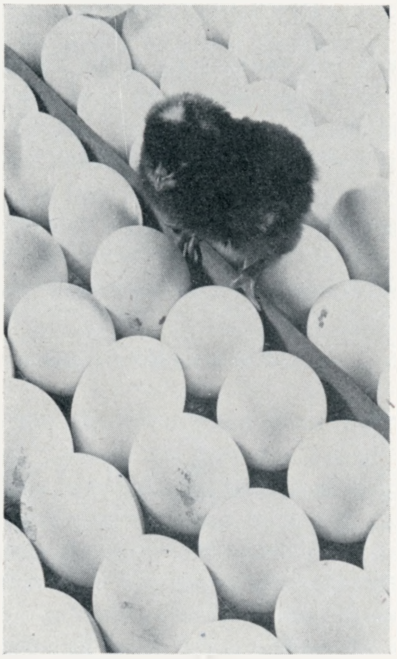
Wartime Poultry Management

Recommended practices in this project have been five: To operate the poultry plant to capacity, to do more work with the same or less labor and effort, to conserve feed by culling and proper feeding, to control poultry disease, and to keep posted on developments that affect the industry, such as feed prices and supply, price ceilings, rationing, and the like. Extension has also emphasized the fact that, while poultrymen needed to produce all they could as a war and war adjustment measure, this is no time to make large investments in an industry that faces sharp reductions in the probable near future.

Co-operators in this project were kept informed through meetings, calls, radio broadcasts, and the newspapers. Principal means of keeping them posted, however, has been the mimographed pamphlet, *Timely Topics for Poultrymen*, which the Extension poultry specialist prepares monthly and sends to all who are enrolled.

Enrollment in this project totaled 2,393, and included most of the larger poultrymen in Maine. Reports from 478 co-operators show that they raised 515,601 birds on 1,233 acres of range. This is an average of 418 birds per acre, very near the 400 birds that

Extension recommends. Maine poultrymen realize more and more the value of good ranges with plenty of green feed for growing birds. Progress in this respect has been marked during the past ten years.



Maine chicks are healthy chicks. Protection from disease is one of the planks in the Extension poultry management platform.

The Fight Against Pullorum Disease

Maine's fight against pullorum disease began in 1921. That year all of the 15 flocks tested were infected. However, since 1940 less than one bird in every thousand tested has reacted to the test. In 1945 one reactor was found in every 2,300 birds tested. That year we tested 485 flocks containing 605,548 birds. This is roughly 25 per cent of Maine's poultry population, and nearly 100 per cent of the birds that produce eggs for hatching.

This project is carried in co-operation with the Department of Bacteriology, College of Agriculture, University of Maine.

Breed Improvement

Combined with pullorum testing is the Extension "Approved Flocks" project in co-operation with both the Department of Bacteriology, and the National Poultry Improvement Plan. A little over half of the owners of tested flocks are co-operators in the breed improvement work. This project was started in 1939 and the following table indicates progress to date:

PROGRESS SUMMARY "APPROVED FLOCKS" PROJECT

Year	Number Flocks	Number Birds
1939-40	35	31,425
1940-41	39	41,718
1941-42	86	112,324
1942-43	133	170,016
1943-44	167	231,830
1944-45	235	320,261

Other types of poultry work have included the control of chick bronchitis, sectional poultry schools, assistance to the Maine Poultry Improvement Association and the Maine Poultry Co-operative, work with turkey growers, and work with various war agencies. Noteworthy among Extension publications during the year was the bulletin "So You Want to Own a Poultry Farm," designed especially to assist returned veterans to decide whether they wished to embark in the poultry business. This bulletin proved so popular that a second edition was printed.

Statistical Summary of Poultry Projects

Co-operators enrolled in wartime poultry management	2,393
Number of co-operators reporting	478
Birds ranged by above co-operators	515,601
Number of flocks tested for pullorum	485

Number of birds tested	605,548
Number of birds reacting	261
Number of approved flocks in breed improvement	235
Number of birds in above flocks	320,261
Number of flocks immunized for bronchitis	22
Number of birds in above flocks	90,394
Number of meetings attended by poultry specialist	61
Number of people at above meetings	1,648

CLOTHING PROJECTS

Emphasis in the clothing program has been placed on the care and use of sewing equipment, making clothes, and keeping homemakers posted on developments in clothing and textile fields.

Sewing Machine Clinics

Homemakers need to know more about the care and repair of sewing machines because the machines are getting both older and harder to replace, and because more sewing must be done at home due to war and postwar conditions. So clinics were held to which women brought their own machines and learned how to care for them. More than 300 clinics were held attended by more than 3,500 women. A Waldo County housewife said of the meeting of her group: "If we hadn't got anything else from our meetings this year we would be satisfied."

Clothing Kits

Clothing kits proved helpful to many women. The kits provided homemakers with patterns, illustrative material, and suggestions for making clothing for their families. Clothing kits were sent to communities that wanted them, and the material in the kits was loaned just as books are loaned by a public library. Meetings were also held in some communities to set up the kits and explain their use. Seventy-three communities used them and 33 communities held meetings at which 372 people were present.

Clothing meetings were popular in 1945. The home agent is teaching the group. Pleasant old lady at extreme left is eighty-eight and still keen to learn.

Caring for the Sick at Home

Because of the lack of trained nurses and physicians due to the war, many farm women wished to get more training than they had in caring for the sick in the home. They did not have time to take a full course in nursing but wished to learn such common practices as taking temperatures, making a bed with the patient in it, giving a bed bath, and giving treatments such as hot compresses and steam inhalations.

Co-operative arrangements were made with the Maine Public Health Association for a special two-day course to meet this demand. The Extension Service organized the classes, secured the meeting places, equipment, and supplies, and gave publicity to the meetings. The Maine Public Health Association secured nurses to teach the courses and paid their salaries. Classes were kept small so that there was plenty of opportunity for practice periods. The response of the women who attended was excellent. Said one homemaker: "Though I have had other courses in the home care of the sick, I learned more in those two days than ever before."

Other clothing work included meetings held by trained leaders on better dressmaking, reclaiming the family wardrobe, making

rugs, making slip covers, Christmas gift suggestions, and dress forms. The clothing specialist and home demonstration agents first taught the community clothing leaders the practices involved, and the leaders then taught their local groups what they had learned.

Statistical Summary of the Clothing Projects

Number of groups in Maine organized for clothing work	352
Number of sewing machine clinics held	301
Number of women taught at above clinics	3,554
Number of communities having clothing kits	73
Number of clothing kit meetings	33
Attendance at above meetings	372
Number of classes held on caring for the sick	
First meeting	61
Attendance	746
Second meeting	54
Attendance	579
Number of meetings held on better dressmaking	265
Attendance at above meetings	3,099
Number of other clothing meetings	144
Attendance at above meetings	2,018

FOODS PROJECTS

Good nutrition and health, whether in war or in peace, are the goals of the Extension foods program. This year we stressed the production and conservation for family use of home-grown food, and the selection of foods to gain and maintain good health through well-planned and properly prepared home meals, community meals, dinner boxes, and school lunches.

Minute Savers in Meal Preparation

Women attending this series of two all-day or four half-day meetings learned how to save time when preparing meals. Some of the ways are to plan ahead to save trips to the cellar, to prepare parts of dinner and supper together, to use casserole dishes as part of supper, and to serve dropped biscuits and raw salads at suppertime. They also learned how to make soya, pastry, biscuit, gingerbread, cornmeal, and other mixes. The agents had them

take part in planning, preparing, serving, and clearing away a meal by the use of labor-saving methods.

The Women's Citizens' Service Corps gave the homemakers who attended all the meetings in this series a 1945 nutrition certificate. Of the 4,420 persons who attended one or more meetings, 2,573 got certificates.

Food Preparation

Maine farm women deserve praise for their efforts to produce and conserve food. Extension workers conducted a food preservation campaign during each war year. Principal value of the '45 campaign was in keeping the public aware of the need for home-grown food that there might be no let down in this respect.

Extension agents held preservation meetings for both 4-H girls and adults. They also made home calls on request. They held a few canning equipment clinics and also checked and made adjustments on all pressure cookers and tin-can sealers that were sent them for that purpose. Three thousand and ninety-six people,

Canning food for the boys overseas was a popular foods project.

of whom 2,378 were 4-H club members, attended the 183 preservation meetings held.

School Lunches

The school-lunch project centers the attention of parents and teachers on the need that school children should have well-balanced and nutritious lunches whether they bring them from home or are served at school.

As one method of forwarding this project, the agents gave lunch box demonstrations in the grade schools. The demonstrators showed a good lunch and a poor lunch and explained the difference. They also gave circulars on well-packed lunches to the scholars to take home to their parents. A special agent, who worked in Northern Aroostook, gave 158 lunch-box demonstrations to 5,273 pupils.

The foods specialist and the home agents also gave talks and demonstrations to encourage the serving of adequate hot lunches in schools where that can be done. The Maine Department of Education, the Maine Nutrition Committee, and the War Food Administration co-operated with us in the school lunch project.

Foods Leader Meetings

Much of the instruction given to local Extension groups is given by local leaders chosen by the groups themselves. The Extension specialist (whether clothing, foods, or home management) prepares the subject matter to be taught and, aided by the home agents, teaches the local leaders and trains them in presenting the material to these groups. The leaders then hold the meetings and report results.

Foods leaders taught one or more of these subjects to their groups: Homemade mixes, table service, bread making, canning for the boys overseas, meat substitutes, canning and curing meat, and cheese making. The agents held 66 training classes which 549 leaders and others attended. The leaders in turn held 492 local meetings with an attendance of 6,360.

Other foods activities included the publication of the bulletins, "Every Day Table Service," "When You Buy a Freezing Cabinet," and the circular, "Food Guide for Maine School Children"; co-

operation with the Maine Nutrition Committee, special work with 4-H clubs, a "Square Meals for Health" contest, child health conferences, and the preparation of several mimeographed circulars for use in the school-lunch project.

Statistical Summary of the Foods Projects

Number taught at meetings on meal preparation	4,420
Number taught at meetings on homemade mixes	3,894
Number receiving Civilian Defense Certificates for completing course taught at above meetings	2,573
Number of food preservation meetings held	183
Number attending above meetings	3,096
Number lunch-box demonstrations held	260
Number at above demonstrations	8,051
Number communities in "Square Meals for Health" contest	231
Total communities receiving grand awards	19
Number people served	17,216

HOME MANAGEMENT PROJECTS

Maine farm women have often been forced to slight their housekeeping in order to help with necessary farm work and thus maintain the production of food. The home management program, therefore, has stressed the saving of time and energy in doing common household tasks. The standard projects have been "Minute Savers in Meal Preparation," and "Lighten the Laundry Load."

Minute Savers

This project was carried in co-operation with the Extension foods specialist, and the object has been to teach methods of doing work in the kitchen that would make every motion count. Special emphasis was placed on saving soap, air-drying dishes, organizing the work at the sink center, and arranging work centers at the proper working heights. In all, 266 meetings were held on this subject and 4,390 women attended.

Reports secured later showed that the women had put many of the suggestions made at these meetings into practice. For example, 784 women said they had started using trays, 301 were

using movable tables, 859 started air-drying dishes, 986 were using brushes or paper for scraping utensils, 928 measured the amount of soap used, 332 had changed their methods of washing dishes, and 580 had passed information along to their neighbors.

Lightening the Laundry Load

Here again Extension workers taught how to save time and energy. One part of this project concerned washing and the other ironing. At the meetings on washing clothes, home agents and local leaders taught how to test water for hardness, how to use water softeners, and how to remove stains. They stressed the saving of soap and taught how that could be done. They also talked about laundry equipment, the proper working heights, and labor-saving methods. Leaders reported 261 meetings held with 3,008 persons in attendance.

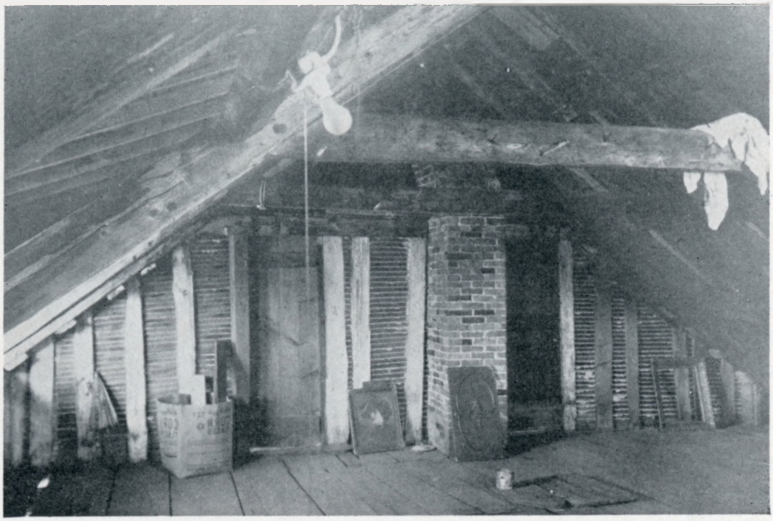
The ironing meetings included all-day sessions. The speakers discussed general subject matter and showed how to use the new wide ironing board that Extension advocates. They demonstrated the use of the board by ironing a man's shirt. After the demonstration the women had a chance to use the board under supervision.

Incomplete returns show that 269 meetings were held at which 3,372 women received instruction. "I ironed 11 shirts the next day and think the new method is wonderful," said a Somerset County homemaker.

Other home management meetings included these on postwar planning, "Care and Repair for Longer Wear," family accounts, caning chairs, and finishing furniture.

Statistical Summary of Home Management Projects

Number of "minute saver" meetings held	266
Attendance at above meetings	4,390
Number of laundry meetings held—washing	261
Attendance at above meetings	3,008
Number of laundry meetings held—ironing	269
Attendance at above meetings	3,372
Number of postwar planning meetings held	22
Attendance at above meetings	626



This old-time attic is about to have its face lifted as a part of the family project for improving the home. Johnny will have a snug room of his own where only attic grew before.

BOYS' AND GIRLS' 4-H CLUBS

The principal objective of 4-H club work in Maine during the war years was to make the greatest possible contribution to the war effort. This has meant, first of all, the greatest possible production and conservation of food. We now have a measure of that activity.

During the four war years, 1942 to 1945 inclusive, Maine club members produced an estimated 1,237,495 pounds of snap beans, 4,759 bushels of dry beans, 841,442 pounds and 203,748 dozen ears of sweet corn, 527,574 bushels of potatoes. They grew 1,113 acres of garden, and raised or cared for 300 beef animals, 7,718 dairy animals, 8,789 pigs, and 462,912 hens and chicks. They canned 756,306 pints of food, mostly products from club and family gardens. The total value of their products for the four years was an estimated $2,916,658.

Final project enrollment in 4-H clubs in 1945 was 15,685, of which 14,806 projects, or 94.3 per cent, were finished. This, says the state 4-H club leader, was probably the highest percentage of projects finished in the United States.

Most of the 4-H club enrollment in 1945 was secured through the schools. Co-operation on the part of the Maine Commissioner of Education and his assistants, the local superintendents of schools, and the teachers was excellent and insured the success of the campaign.

Federal emergency funds enabled Extension to employ special club agents to help the regular agents during the rush periods. Ten counties had the assistance of one or more special agents during the season.

Club members have been divided into two sections during the war. One section includes the boys and girls who are members of an organized club with a regular local leader as supervisor. The other includes club members who do not belong to a regular club but are in charge of victory guides. Reason is that people could not be found during the busy war years who had time to act as leaders in all the usual club activities. On the other hand 847 patriotic citizens agreed to supervise the work of 4-H youngsters in the production of food and to see that they completed their work and reported results to the county club agents at the end of the club year.

Seals of Achievement

Each year the United States Department of Agriculture awards a seal of achievement to the clubs that have completed the work required to earn a seal. In 1945, of the 324 organized clubs, 287 earned seals of achievement.

Clubs which have earned twenty or more annual seals are the Merry Hustlers' Club of Chapman, 20 seals; Just Us Girls, of Bridgton, 22 seals; Agricultural, of Scarboro, 23 seals; Go Getters, East Dixfield, 21; Young Yankees, North Belgrade, 22; Happy Hustlers, Fayette, 24; Re-ly-on-us, Monmouth, 20; Fort Halifax, Winslow, 21; Hill Climbers, Readfield, 20; Helping Hands, Charleston, 20; Over-the-Top, Dover-Foxcroft, 23; Jolly Worka Girls, Dover-Foxcroft, 24; Busy Bee, Madison, 21; and Mayflower, Monroe, 22.

During the year club leaders and others gave 749 subject-matter demonstrations and 453 lectures, trained 406 demonstration teams, held 362 judging contests, and held 246 victory exhibitions in which 309 clubs took part. Club leaders, assistant leaders, and

victory guides deserve the highest praise for their unselfish service to the 4-H club members under their care and to their country in time of war.

4-H CLUB ENROLLMENT AND REPORTING, BY PROJECTS AND SEX

Projects	Enrolled			Reporting		
	Total	Boys	Girls	Total	Boys	Girls
Beans	292	193	99	279	182	97
Canning	3,000	115	2,885	2,817	110	2,707
Chick Raising	1,738	1,084	654	1,649	1,030	619
C. & H.	822	21	801	756	21	735
Sweet Corn	221	171	50	211	163	48
Dairy	1,707	1,361	346	1,630	1,299	331
Garden	4,245	2,436	1,809	4,023	2,307	1,716
Pig	1,202	980	222	1,161	950	211
Potato	415	358	57	391	336	55
Poultry Mgt.	718	512	206	688	488	200
Room Improvement	115	25	90	96	21	75
Sewing	1,027	1	1,026	932	1	931
Miscellaneous	183	138	45	173	130	43
Totals	15,685	7,395	8,290	14,806	7,038	7,768

Club members keep tabs on one another through club visits and tours. Maine 4-H clubsters produced or conserved during the war years food valued at nearly three million dollars.

BRIEF STATISTICAL SUMMARY OF EXTENSION ACTIVITIES

The real value of Extension work, it is realized, cannot be measured by a statistical summary. Although we may list the number of meetings, demonstrations, practices adopted, etc., there is no way of determining the real value of such work. However, one measure of the service being rendered is the record of work performed, some of which is briefly summarized here for the year ending November 30, 1945.

Number of organized communities in which Extension work was conducted	447
Number of unpaid county and community project leaders, local club leaders, and others who helped forward the Extension program	3,979
Number of neighborhood leaders co-operating in war activities	6,953
Publications:	
Number of bulletins and circulars printed	30
Number of pages	471
Total copies printed	142,000
Number of boys' and girls' clubs organized	324
Number of projects started by club members	15,685
Number of projects completed by club members	14,806
Number of Extension meetings held	5,327
Attendance at these meetings	209,369
Number of calls by agents on official business	21,078
Number of calls on agents	18,611
Number of individual letters written	33,206
Number of circular letters written	3,910
Number copies of circular letters mailed	423,399
Number of press articles written	5,232

PUBLICATIONS

BULLETINS AND CIRCULARS ISSUED JULY 1, 1945–JUNE 30, 1946

Number	Title	Number Pages	Number Copies
Bulletins			
332	Sewing Time Savers	20	3,000
333	Weeds and Aphid-Leafroll Problem in Potatoes	20	5,000
334	Are You a Good Boss?	15	5,000
335	The Problem of Difficult Breeding in Dairy Cattle	16	5,000
336	Farmers and 1945 Income Taxes	12	4,500
337	Every Day Table Service	19	7,000
338	When You Buy a Freezing Cabinet	14	3,000
339	Annual Report, 1945	55	1,500
340	Farm Butter Making	12	4,000
341	Producing Potatoes in Maine	32	7,000
342	Food Preparation for 4-H Club Members Part I	24	5,000
	Food Preparation for 4-H Club Members Part II	24	5,000
345	The Conifers of Maine	20	5,000
346	Keeping Bees in Maine	28	5,000
278 Rep.	Homemade Poultry Equipment	8	3,000
285 Rep.	A 16 x 24 Brooder House for Maine	8	3,000
292 Rev.	Handbook for 4-H Dairy Club Members	20	4,000
306 Rev.	Poultry Handbook for 4-H Club Members	20	4,000
314 Rep.	Home Canning for 4-H Club Members	24	5,000
328 Rep.	So You Want to Own a Chicken Farm	12	3,000
Circulars			
219	Buck Rake Questions Answered	6	3,000
220	D.D.T. Prevents Flies in Dairy Barns	6	4,000
221	The Use of D.D.T. on Potatoes in Maine	8	6,000
222	Control Those Porcupines	8	4,000
223	D.D.T. Controls the Black Army Cutworm	6	4,000
224	Be a Victory Farm Volunteer	6	2,000
225	A Canned Tomato-Pepper Mixture	6	5,000
167 Rep.	Storing Vegetables for Winter Use	4	5,000
172 Rev.	Ladino Clover	12	2,000
217 Rep.	Food Guide for Maine School Children	6	20,000
Totals		471	142,000

PERSONNEL OF THE EXTENSION SERVICE

June 30, 1946

Administration

ARTHUR L. DEERING, B.S., D.Sc.	Director
GEORGE E. LORD, B.S.	Assistant Director
STACY R. MILLER, B.S.	Executive Secretary
CLARENCE A. DAY, M.S.	Extension Editor
JOHN W. MANCHESTER, B.A.	Assistant Extension Editor

County Agent Work

Richard C. Dolloff, B.S.	County Agent Leader
Charles L. Eastman, B.S.	Androscoggin-Sagadahoc Counties
Verne C. Beverly, B.S.	Aroostook County
Paul N. Mosher, B.S.	Aroostook County (Asst.)
Carl A. Worthley, B.S.	Aroostook County (Asst.)
Wilfred S. Rowe	Cumberland County
Norman R. Ness, B.S.	Franklin County
Carl A. Rogers, B.S.	Hancock County
Raymond F. Delano, B.S.	Kennebec County
Ralph C. Wentworth, B.S.	Knox-Lincoln Counties
Herbert A. Leonard, B.S.	Oxford County
Philip S. Parsons, B.S.	Penobscot County
Cecil R. Bradstreet, B.S.	Penobscot County (Asst.)
Lewis P. Roberts, B.S.	Piscataquis County
Orman P. Hunt, B.S.	Somerset County
Fred L. Webster	Waldo County
Fred E. Holt, B.S.	Washington County
Robert S. Pike, B.S.	York County (temporary)

Home Demonstration Work

Estelle Nason, B.S.	Home Demonstration Agent Leader
Beryl H. Barton, B.S.	Androscoggin-Sagadahoc Counties
Florence E. Teahan, B.S.	Aroostook County
Sarah W. Littlefield, B.S.	Cumberland County
_____ _____	Franklin County
_____ _____	Hancock County
_____ _____	Kennebec County
Priscilla M. Moore, B.S.	Knox-Lincoln Counties
Evelyn M. Lyman, B.S.	Oxford County
Marion L. Moran, B.S.	Penobscot County
_____ _____	Piscataquis County
Avis Anderson, B.S.	Somerset County
Dorothy Hodgkins, B.S.	Waldo County
_____ _____	Washington County
Olga M. Lemke, B.S.	York County

Boys' and Girls' Club Work

Kenneth C. Lovejoy, B.S.	State Club Leader
Sylvia Poor, B.S.	Asst. State Club Leader
Donald J. Johnson	Androscoggin-Sagadahoc Counties
_____ _____	Aroostook County
Allegra I. Black, B.S.	Cumberland County

H. THELMA KING, B.S.	Franklin County
MADELEINE STEPHENSON	Hancock County
BARBARA ROZELLE, B.S.	Kennebec County
_____ _____	Knox-Lincoln Counties
_____ _____	Oxford County
JUSTINA DONOVAN, B.S.	Penobscot County
DOROTHY J. GILMAN, B.S.	Piscataquis County
NOREEN A. RAY, B.S.	Somerset County
_____ _____	Waldo County
ELEANOR GATCOMB	Washington County
MIRIAM S. WALKER, B.S.	York County

Subject Matter Specialists

RAYMON N. ATHERTON, B.S.	Marketing Specialist
HENRY W. BRIGGS	Visual Aids Specialist
KATHRYN E. BRIWA, B.A., M.A., Ph.D.	Foods Specialist
CONSTANCE B. BURGESS, B.S., M.S.	Home Management Specialist
RALPH A. CORBETT, B.S.	Assistant Dairy Specialist
EDWARD W. FOSS, B.S.	Agricultural Engineer
JOSEPH C. HICKEY, B.S.	Vegetable and Canning Crops Specialist
CHESTER W. HITZ, B.S., M.S., Ph.D.	Horticultural Specialist
SMITH C. MCINTIRE, B.S.	State Farm Labor Supervisor
ALBERT D. NUTTING, B.S.	Forestry Specialist
FRANK D. REED, B.S.	Poultry Specialist
CHARLOTTE C. SMITH, B.S.	Clothing Specialist
RICHARD F. TALBOT, B.S.	Dairy Specialist
OSCAR L. WYMAN, B.S.	Crops Specialist

CHANGES IN PERSONNEL

The changes in personnel during the past year were as follows:

Transfers

Raymond Delano from assistant county agent in Penobscot County to county agent in Kennebec County — April 1, 1946

Resignations

State Agents

MARGARET P. DANFORTH	Dec. 18, 1945
GUSTAVUS A. MCLAUGHLIN	July 15, 1945

County Agents

Wesley S. Norton		March 31, 1946
Eugene Coffin		Oct. 15, 1945
W. Edwin Potter		Jan. 10, 1946
Leroy A. Brown		Nov. 30, 1945

Home Demonstration Agents

Ruth MacGregory	Androscoggin-Sagadahoc	Sept. 22, 1945
Elizabeth Sturtevant Gorvine	Aroostook	Oct. 31, 1945
Elizabeth S. Cobb	Cumberland	July 31, 1945
Ella T. McCullough	Franklin	Aug. 11, 1945
Elizabeth S. Frederic	Franklin	May 4, 1946
Dorothy G. Thyng	Hancock	April 30, 1946
Ruth Cluff	Kennebec	March 10, 1946
Joyce Johnson	Knox-Lincoln	July 31, 1945
Virginia Brown	Oxford	Nov. 30, 1945
Eleanor Currier	Piscataquis	Jan. 10, 1946
Lois White	Washington	Nov. 10, 1945

County Club Agents

Wayne S. Rich	Androscoggin-Sagadahoc	Feb. 14, 1946
Catherine P. Baird	Oxford	April 30, 1946
Lucy Sheive	Somerset	Nov. 15, 1945
Camilla D. Hurford	Waldo	July 27, 1945

Appointments

State Agents

Henry W. Briggs	Visual Aids Specialist	April 1, 1946
Joseph C. Hickey	Vegetable and Canning Crops Specialist	May 16, 1946
Chester W. Hitz	Horticultural Specialist	May 16, 1946
John W. Manchester	Assistant Editor	March 1, 1946

County Agents

Raymond Delano	Penobscot County (Asst.)	Nov. 16, 1945
Cecil Bradstreet	Penobscot County (Asst.)	April 1, 1946
Fred Holt	Washington	Feb. 1, 1946

Home Demonstration Agents

Beryl H. Barton	Androscoggin-Sagadahoc	Nov. 1, 1945
Florence Teahan	Aroostook	Nov. 1, 1945
Sarah Littlefield	Cumberland	Sept. 1, 1945
Elizabeth S. Frederic	Franklin	Sept. 1, 1945
Priscilla Moore	Knox-Lincoln	July 1, 1945
Evelyn Lyman	Oxford	Dec. 1, 1945
Marion Moran	Penobscot	Sept. 1, 1945

County Club Agents

DONALD J. JOHNSON	Androscoggin-Sagadahoc	Feb. 25, 1946
H. THELMA KING	Franklin	Aug. 20, 1945
MADELEINE STEPHENSON	Hancock	Jan. 7, 1946
BARBARA ROZELLE	Kennebec	Aug. 1, 1945
LOANA SHIBLES	Knox-Lincoln	July 16, 1945
JUSTINA DONOVAN	Penobscot	Oct. 1, 1945
NOREEN A. RAY	Somerset	June 17, 1946

SUMMARY STATEMENT OF EXPENDITURES BY CLASSES OF EXPENSE AND SOURCES OF FUNDS

	Total	Federal	State	County	Other
Salaries and Labor	213,632.81	133,759.66	55,776.52	18,023.60	6,073.03
Supplies and Materials	18,489.59	2,182.48	1,885.32	6,481.27	7,940.52
Postage and Telephone	8,679.80	771.23	885.86	4,167.97	2,854.74
Travel Expense	48,691.18	40,233.32	7,486.64		971.22
Freight and Express	388.02	49.27	48.55	97.86	192.34
Publications	3,711.48	3,618.96			92.52
Rent, Heat and Light	1,695.90			1,105.97	589.93
Equipment	7,162.45	251.16	769.36	3,861.51	2,280.42
Miscellaneous	473.07	149.50	244.16		79.41
Totals	302,924.30	181,015.58	67,096.41	33,738.18	21,074.13

SUMMARY STATEMENT OF EXPENDITURES BY PROJECTS AND SOURCES OF FUNDS

	Total	Federal	State	County	Other
Administration	30,362.33	11,536.16	10,612.83		8,213.34
Publications	11,624.04	10,694.69	929.35		
County Agent Work	74,010.38	56,616.18		11,517.09	5,877.11
Home Demonstration Work	85,673.84	42,756.40	17,930.97	19,109.37	5,877.10
Foods	4,072.65		4,072.65		
Clothing	3,816.53		3,816.53		
Home Management	3,421.11		3,421.11		
Poultry	5,466.72	5,466.72			
Dairy	11,503.51		11,503.51		
Farm Management	1,162.50	1,162.50			
Marketing	7,206.07	7,206.07			
Boys' and Girls' Clubs	46,924.27	34,961.98	8,850.57	3,111.72	
Crops	9,526.89	7,523.97	2,002.92		
Forestry	3,522.55		2,415.97		1,106.58
Agr'l Engineering	4,630.91	3,090.91	1,540.00		
Totals	302,924.30	181,015.58	67,096.41	33,738.18	21,074.13