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REPORT

DOCUMENTS
DEPT.

OF THE

NEW YORK STATE FOOD SUPPLY COMMISSION

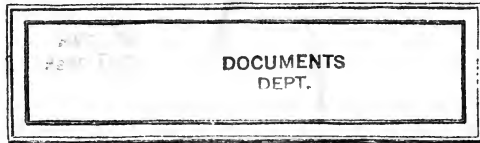
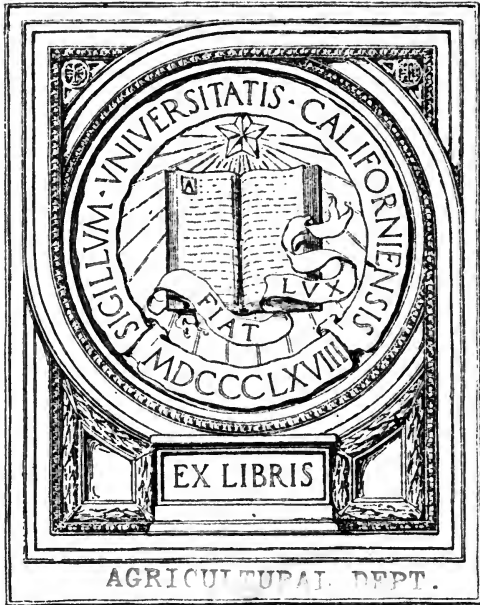
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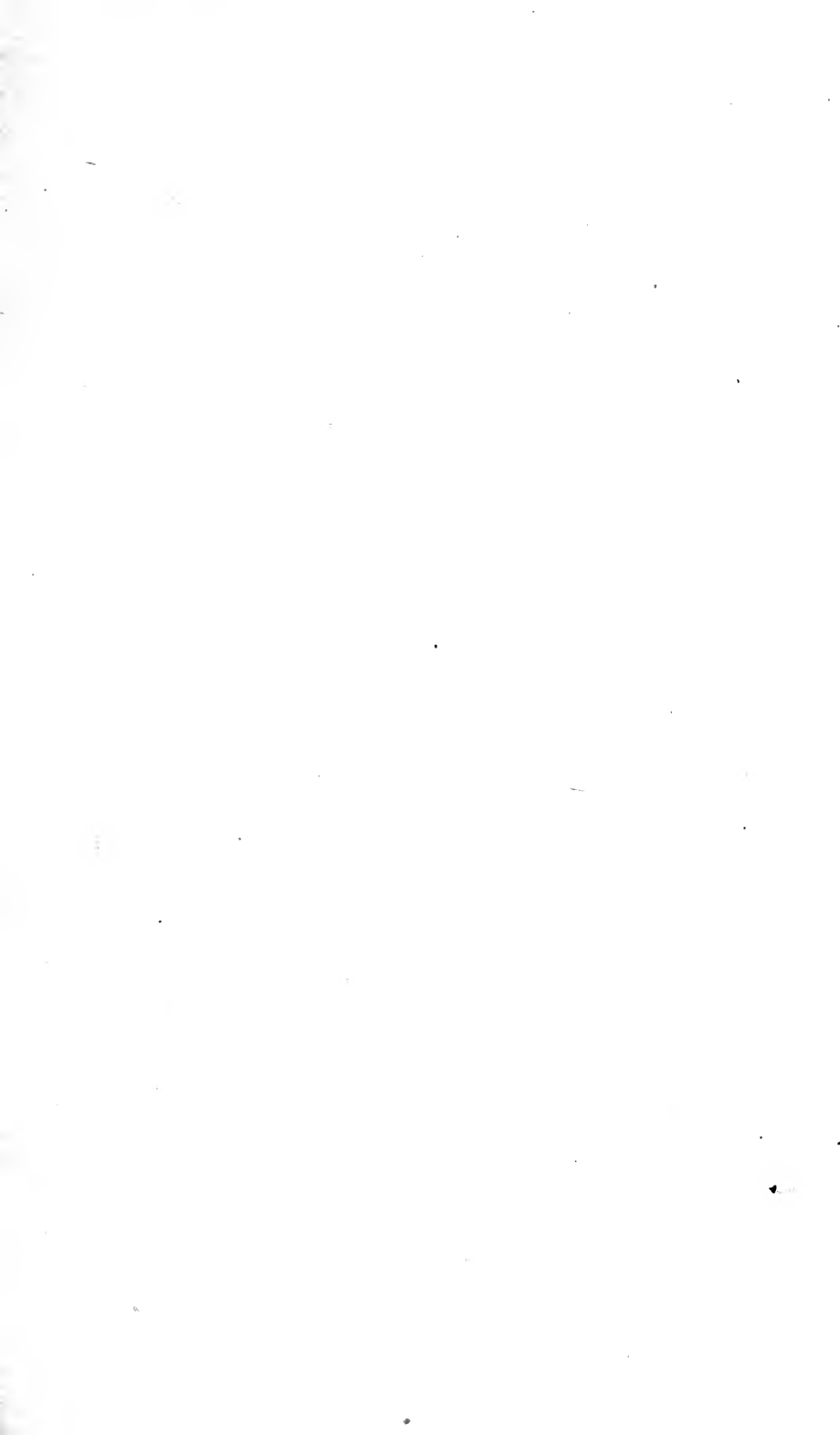


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Organized April 17, 1917, Under Chapter 205,
Laws of 1917

ALBANY
J. B. LYON COMPANY, PRINTERS
1918





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OF THE

NEW YORK STATE FOOD SUPPLY COMMISSION

Organized April 17, 1917, Under Chapter 205,
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UNIV. OF
CALIFORNIA

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Agrie. Dept.

TO THE
AGRICULTURE

NEW YORK STATE FOOD SUPPLY COMMISSION

Charles S. Wilson, Albany, Chairman,

In charge of Division of Administration.

A. R. Mann, Ithaca, Secretary,

In charge of Division of Food Conservation, including
Insect and Plant Disease Control Service.

M. C. Burritt, Ithaca,

In charge of Division of County Organization.

J. H. Finley, Albany,

In charge of Division of Schools and Colleges.

J. J. Dillon, New York City,

In charge of Division of Distribution, Storage, and
Marketing.

S. J. Lowell, Fredonia,

In charge of Division of Loans and Farm Lands.

F. W. Sessions, Utica,

In charge of Division of Farm Labor.

R. D. Cooper, Little Falls,

In charge of Division of Seeds, Fertilizers, and Live Stock.

S. J. T. Bush, Morton,

In charge of Division of Transportation and Machinery.

Dwight Sanderson, Albany, Assistant Secretary.

Charles Scott, Albany, Accountant.

NEW YORK STATE TOGNIBRLE WOTR BELL

- 1. Charles S. Wilson, New York City, in charge of Division of Administration
- 2. A. H. Glenn, Albany, in charge of Division of Finance
- 3. J. H. Smith, Albany, in charge of Division of General Services
- 4. J. J. Miller, New York City, in charge of Division of Health
- 5. J. J. Lowell, Albany, in charge of Division of Labor
- 6. H. W. Sessions, Albany, in charge of Division of Law
- 7. H. A. Cooper, Albany, in charge of Division of Public Safety
- 8. S. A. T. Bush, Albany, in charge of Division of State Affairs
- 9. Dwight Patterson, Albany, in charge of Division of State Affairs
- 10. Charles Scott, Albany, in charge of Division of State Affairs

SOME OF THE MORE SIGNIFICANT WORK OF THE COMMISSION

1. In response to the proclamation of Governor Whitman for Agricultural Mobilization Day on Saturday, April 21, the Commission arranged for meetings which were held in 1089 communities with an attendance of 85,075 persons.

2. A complete census of the agricultural resources of the State was made through the cooperation of the state school system and the county farm bureaus, and was published within a month. This was made at a minimum cost and furnished a basis for the work and recommendations of the Commission.

3. Local offices with representatives in charge were established in fifty-six counties; thirty-seven of these offices had assistant representatives.

4. These representatives held 2436 farmers' meetings with an attendance of 112,378, visited 19,361 farmers, and had 48,317 office calls.

5. The county offices received 5940 applications for farm help, of which 4452 were supplied.

6. Through the circulation of lists of seeds and live stock for sale by farmers, as shown by the agricultural census, sales amounting to hundreds of thousands of dollars were effected by direct purchase between farmers.

7. Over 1000 farm laborers were sent out from the New York City and Albany labor offices of the Commission.

8. The number of boys and girls released from school for service as farm cadets under the supervision of the State Department of Education was 18,627.

9. Fifteen farm cadet camps were established to determine the practicability of such a system of supplying farm labor. Valuable data on the organization and conduct of such camps in future were obtained.

10. Women have been placed as food conservation agents in forty-three counties and ten cities of the State; these women give demonstrations, make personal visits, and organize community effort in the preparation, preservation, and conservation of food in the home. This work is done in cooperation with the United States Department of Agriculture under a recent congressional appropriation, and is supported also by local funds and organizations.

11. Thirty teachers of home economics from high schools, normal schools, and colleges, have done similar work in their respective communities.

12. A field service for the control of insect pests and plant diseases was established in the principal potato, fruit, and truck regions. These agents made 3359 farm calls.

13. These field agents effected organizations for cooperative spraying of potatoes in twenty-one communities involving 1092 acres, and secured spraying of more than 4000 acres by 500 growers who had not been spraying properly; also, they gave many spraying demonstrations. An increase of from 25 to 50 bushels an acre over normal yields in unsprayed fields may be expected on the 5100 acres thus sprayed.

14. Inspection of potatoes for seed was applied for by 523 growers, of whom only 187 had fields sufficiently free from disease and varietal mixtures to warrant a second inspection, which will involve approximately 1870 acres. This inspection will increase the available stock of high-grade seed for use in 1918.

15. Fruit growers were warned of possible outbreaks of insect pests and plant diseases, and systems of telephone service by relays were established so that the growers were notified whenever weather conditions made immediate spraying necessary for the control of plant diseases.

16. An information service for reporting outbreaks of insect pests was established, and weekly reports from over one hundred correspondents were circulated for fifteen weeks.

17. The Commission investigated the processes for dehydrating fruits and vegetables, and published this information.

18. Assistance has been given to several cities in the establishment of curb markets.

19. Food clubs for the purchase of produce directly by small groups of consumers have been organized in New York City.

20. Cooperative organizations of potato growers for the better marketing of their crop have been effected in several counties, and others are being formed.

21. Farm loan committees have been appointed in 939 local granges, on whose recommendations the Patriotic Farmers' Fund placed loans to farmers aggregating \$300,000.

22. Interest in better credit facilities for New York farmers has been stimulated by conference with the Federal and State Land Banks and the State Bankers' Association.

23. Hundreds of transportation complaints made by farmers have been adjusted through the cordial cooperation of the railroads, and embargoes on agricultural machinery and supplies

have been raised at the request of the Commission to the American Railway Association.

24. Forty-two tractors have been lent to as many communities in twenty-three counties of the State, and will plow from 2500 to 3000 acres of grain land this fall.

25. Three tractor ditchers have been lent to farmers' organizations which have contracts for 12,000 rods of ditching for tile drainage.

26. The Commission, or its representatives, distributed 84,735 bushels of seed potatoes and 39,352 bushels of buckwheat seed.

27. The Commission placed in the potato counties of the State twelve traction power potato sprayers which have sprayed 776 acres from one to four times, on 141 farms.

28. Campaigns have been conducted for the elimination of nonproductive hens in fourteen counties of the State, and are now in progress in other counties. This selection will result in saving thousands of dollars' worth of grain feeds, and in greatly increasing production at lower cost in the selected flocks during the coming year.

29. The Commission supervised the first campaign in New York State for obtaining housewives' pledges to the Federal Food Administration.

30. A Food Training Camp exhibit, one of the most valuable features of the State Fair at Syracuse, demonstrated the recommendations of the Federal Food Administration.

The Inception of the Commission

On Friday, April 6, 1917, the State Commissioner of Agriculture, Charles S. Wilson, called into conference at Syracuse representatives of the farmers and the farm interests of the State, to consider what steps should be taken to bring crop production to its maximum and to meet the demands of the war crisis.

This conference adopted resolutions (see Appendix A, page 131) which were transmitted to the Governor of the State of New York, to the Federal Secretaries of Agriculture, War, and the Navy, and to the chairmen of the Committees on Agriculture and Military Affairs in the National Congress.

On Monday, April 9, at the call of the Secretary of Agriculture, Honorable D. F. Houston, there assembled at St. Louis, Missouri, a conference of representatives of State Departments of Agriculture, of the agricultural colleges from thirty-two States, and of the United States Department of Agriculture, "to discuss the agricultural situation in the present national crisis." Among

other recommendations made by this conference was one that there be established "a small central agricultural body in each State representing various agricultural interests, including agricultural officials, representatives of agricultural colleges, bankers, business, farmers', and women's organizations, etc., concerned in the production, distribution, and utilization of food supplies and agricultural raw materials. This body should be designated by the governor and, if the State has a central council of safety or defense, should be coordinated with it."

The New York delegates to this conference reported its recommendations to the officers of the agricultural organizations of the State, who at once brought them to the attention of Governor Whitman, from whom they received a most cordial response.

Organization of the Commission

On the afternoon of April 13, 1917, Governor Charles S. Whitman appointed the following persons to constitute a Patriotic Agricultural Service Committee:

C. S. Wilson, Chairman..	Commissioner of Agriculture.
J. H. Finley.....	Commissioner of Education.
A. R. Mann.....	Acting Dean, New York State College of Agriculture.
J. J. Dillon.....	State Commissioner of Foods and Markets.
M. C. Burritt.....	State Director of Farm Bureaus.
S. J. T. Bush.....	President, Western New York Horticultural Society.
S. J. Lowell.....	Master, State Grange, Patrons of Husbandry.
F. W. Sessions.....	President, New York State Agricultural Society.
R. D. Cooper.....	President, Dairyemen's League.

Governor Whitman stated that he would recommend to the Legislature that an appropriation be placed at the disposal of this Committee to take such steps as might be necessary to insure an adequate food supply during the stress of war.

The Committee held its first meeting on the same day, and made preliminary arrangements for taking an agricultural census of the State, and also arranged for a state-wide conference of representatives of the agricultural interests of the State to be held at Ithaca on Monday, April 16. On April 14 Governor Whitman issued the following proclamation:



PROCLAMATION

State of New York

Executive Chamber

To the People of the State of New York:

Whereas, The maintenance of an adequate food supply is absolutely essential to National preparedness; and

Whereas, The people of this State and of the United States have cause for grave concern, owing to the serious depletion of the food reserves of the world through the past year's shortage of crops, increased demands from warring countries, and the fact that there is little promise of abundant winter grain crops; and

Whereas, It is clearly recognized that the man who tills the soil and produces the food for the soldier in the field and his family at home is rendering a patriotic service, as truly as is the man who bears the brunt of battle, and that, therefore, in the present crisis, a peculiar responsibility rests upon the American farmer; and

Whereas, There is imperative need that the farmers of New York State shall fully realize the necessity for the largest possible production of farm products during the present year,

Now, Therefore, I, Charles S. Whitman, Governor of the State of New York, do hereby set aside Saturday, April twenty-first, in all the farming communities of the State, as

Agricultural Mobilization Day

On this day farmers are urged to assemble in their respective communities, through their organizations, to hear reports on the present situation and to make definite plans for meeting, locally, the greatest food production problems that they have ever been called upon to solve; and I do hereby appeal to the farmers of New York to recognize their responsibility and their duty to safeguard the welfare of the Nation in this crisis, and I urge all agricultural organizations, societies and institutions to lend their aid in assembling farmers for these purposes on the above-designated day.

In Witness Whereof, I have hereto signed my name and affixed the Privy Seal of the State at the Capitol in the city of Albany this fourteenth day of April in the year of our Lord one thousand nine hundred and seventeen.

(Signed) CHARLES S. WHITMAN.

By the Governor:

WILLIAM A. ORR,

Secretary to the Governor.

Commissioner Lowell at once telegraphed the Master of every subordinate grange in the State, requesting that meetings be arranged for the evening of Saturday, April 21, to discuss the food situation; and, through the county farm bureau managers, other community meetings were arranged for that day in accordance with the Governor's proclamation. Patriotic meetings were held in 1089 communities on Saturday, April 21, attended by 85,075 persons.

As a result of the conference of representatives of the agricultural interests of fifty-eight counties of the State held at Ithaca on April 16, the Committee prepared and published a statement of policy with regard to crop production, which was issued as a bulletin and given wide circulation. As this bulletin outlined the general policy which the Committee had pursued, it is reprinted in this report as Appendix B (page 133).

The Committee met at Ithaca on April 16 and 17, and formally organized by adopting as its name "The Patriotic Agricultural Service Committee," and by electing Acting Dean A. R. Mann, of the State College of Agriculture, as Secretary. Forms for taking the agricultural census of the State were approved and their printing was authorized (see Appendix C, page —). At this meeting various members of the Committee were authorized to proceed with different phases of its work, which were subsequently organized as separate divisions. Further details of the organization appear in the reports of the respective divisions.

On April 17, at the request of Governor Whitman, an Act creating the Food Supply Commission was introduced and passed by both Houses of the Legislature and was approved by the Governor. This Act was subsequently amended by Chapter 506, Laws of 1917, approved by the Governor on May 16, which amended Section 3 so that the Commission might establish a revolving fund under the funds appropriated to it. The Act follows:

THE ACT CREATING THE NEW YORK STATE FOOD SUPPLY COMMISSION

Chapter 205, Laws 1917

(Approved by the Governor, April 17, 1917)

AN ACT to provide for assuring an adequate food supply and for promoting the production thereof, and making an appropriation therefor.

Section 1. A commission is hereby created, for the purposes of this act, to consist of the commissioner of agriculture, the commissioner of education, the dean of the New York State College of Agriculture, the state director of farm

bureaus, the commissioner of foods and markets, and four other members, who shall be appointed by the governor. The commissioner of agriculture shall be chairman of the commission. The members of such commission shall receive no compensation for the performance of their duties under this act, but shall be paid their actual and necessary expenses incurred in connection therewith.

The commission shall have the power, and it shall be the object and purpose of the commission, to adopt all necessary measures to assure an adequate food supply in the state and to promote the production of such supply, by co-operating with the state department of agriculture, the state department of education, other state departments and commissions, the State College of Agriculture and other state institutions, and the various farm bureaus and official and unofficial organizations. Moneys used in aiding the functions of a state department, commission or institution, shall be applied in accordance with laws governing the exercise of such functions. Within the amount of moneys appropriated, the commission may employ such assistants as may be necessary, and, if so directed by the commission with the approval of the governor, additional assistants may be employed by any state department, commission or institution for carrying out the provisions of this act. By reason of the emergency which occasions the enactment of this statute, all assistants employed under this act shall be exempt from civil service examinations, rules and regulations.

§ 2. The commission may, if in its judgment the public interest requires, buy and distribute at cost seed for staple productions in any section of the state and may accept loans from private corporations or individuals for the same purpose. It may also act as the agent for any voluntary organization to distribute seed or otherwise stimulate agricultural production or co-operate with such organization or organizations for that purpose.

§ 3. [As amended by Chapter 506, Laws 1917. Approved by the Governor, May 16, 1917.] The sum of five hundred thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any moneys in the state treasury not otherwise appropriated, to carry out the provisions of this act. Such money shall be paid to the commission or to its order by the state treasurer from time to time on the warrant of the comptroller, upon requisition signed by the chairman of such commission and the governor.

The comptroller is hereby authorized and directed to advance to said commission for use in making purchases for sale and distribution, as provided in section two hereof, such sum of money as said commission may require and request, not to exceed one-fifth of the amount appropriated herein. The said commission is hereby authorized to use such money in making such purchases and to use the money received from sales of goods so purchased in making further purchases of the kind provided in section two for resale, but such purchases shall be approved by the comptroller. The provisions of section thirty-seven of the finance law requiring the payment of moneys into the state treasury on or before the fifth day of each month shall not apply to money received by the commission from the sales of goods purchased as provided herein.

On or before September first and December thirty-first, each year, until the close of the present war, the commission shall make a verified report to the comptroller of the disbursements made by it to such date. The commission shall expire at the close of such war or at such earlier time as the legislature shall determine.

§ 4. This act shall take effect immediately.

The Committee held its first meeting, under the provisions of this act, at the State Department of Agriculture at Albany on April 23, and continued in session through April 25. The Commission organized its work by establishing nine divisions, as

follows, in charge of the respective Commissioners, and established its central office at the Department of Agriculture in Albany:

- Division of Administration, in charge of Commissioner C. S. Wilson.
- Division of Food Conservation, including Insect and Plant Disease Control Service, in charge of Commissioner A. R. Mann.
- Division of County Organization, in charge of Commissioner M. C. Burritt.
- Division of Schools and Colleges, in charge of Commissioner J. H. Finley.
- Division of Distribution, Storage, and Marketing, in charge of Commissioner J. J. Dillon.
- Division of Loans and Farm Lands, in charge of Commissioner S. J. Lowell.
- Division of Farm Labor, in charge of Commissioner F. W. Sessions.
- Division of Seeds, Fertilizers, and Live Stock, in charge of Commissioner R. D. Cooper.
- Division of Transportation and Machinery, in charge of Commissioner S. J. T. Bush.

Subsequently Dwight Sanderson, formerly Dean of the West Virginia College of Agriculture, was engaged as assistant secretary and acting executive secretary of the Commission. In this position he showed large capacity, and he was painstaking and tireless in the work of the Commission.

Arrangements had previously been made whereby the managers of the county farm bureaus in the forty-one counties then organized should act as the county representatives of the Commission, and special representatives of the Commission, in charge of Director Burritt, should be placed in each of the other fifteen agricultural counties of the State.

After a thorough consideration of numerous plans proposed to it by representatives of various agricultural and commercial interests with regard to the organization of a supply of farm labor, the Commission prepared the following statement with regard to farm labor, which was given out for publication to the press of the State:

In view of the many efforts being made by organizations of all sorts to enlist persons for farm labor, the Patriotic Agricultural Service Committee announces that the present situation does not call for the immediate employment of women as farm hands, nor considerable numbers of men and boys from the cities without farm experience. Farming is an occupation requiring special skill. The immediate need of farmers is for boys and men who have had farm experience and who can be immediately useful on the farms. Such help must be found largely among schools, colleges, and industrial or other pursuits in which persons who have recently come from the farms are engaged, among retired farmers, and in various occupations in country towns.

The Committee feels warranted, in view of the food interests of the nation in this crisis, in making an urgent appeal to boys and men everywhere who have had farm experience to volunteer for farm work. Industrial and commercial concerns employing such help are urged to make possible and to encourage the release of all such persons.

There will be need later for untrained boys, men, and women in the harvesting of crops, and the mobilization of city labor for the farms should be

directed toward this end. The Patriotic Agricultural Service Committee urges all organizations attempting to mobilize farm labor to work through the Committee, so as to avoid duplication and wasted effort.

The Committee further calls attention to the great need for reliable women for work in the farmhouses. Many farmers will be unable to engage more help on the farm unless, at the same time, they can engage additional help in the home.

The Commission also voted to accept the cooperation of the Military Training Commission, and to authorize the employment of an executive secretary in each of the six zones established by it, through which the sources of supply of boy labor might be brought into touch with the county representatives of the Commission, who would arrange for its distribution.

A poster setting forth the work of the Commission was approved and ordered distributed as widely as possible.

In order to better articulate its work with the county home defense committees, the Commission recommended to them that the executive committees of the county farm bureau association, where organized, be the agricultural committees of the county home defense committees in charge of plans for increasing and conserving the food supply. It was suggested that in counties not having organized farm bureaus, the agricultural committees be appointed in cooperation with the grange.

The Pomona Grange in each county was asked to designate one of its number to act on the Advisory Council to the Patriotic Agricultural Service Committee, in order that the Committee might keep in close touch with the farmers in the State and get their suggestions and experience as to the best means of increasing and conserving the food supply. Various matters of policy have been submitted by mail to a referendum vote of this council, which has thus served the purposes for which it was organized.

At its meeting on April 25, the Commission called on Governor Whitman and outlined to him its plans of work. The Commission recommended, and the Governor approved, that the name be changed to "The New York State Food Supply Commission," with the subtitle "for Patriotic Agricultural Service."

At this meeting the Commission authorized the purchase of seed potatoes, for distribution at cost through its county representatives and through other agricultural organizations. It also voted to purchase farm tractors, to be lent to county farm bureaus and other responsible organizations of farmers under suitable contracts, for the purpose of increasing the acreage of plowing and planting and to determine the feasibility of such aid by the State.

The question having arisen as to the relation of the Commission to various state institutions and departments with which the law authorized it to cooperate in regard to the payment of expenses incurred, the Commission defined its policy by the following resolution: "*Resolved*, That it is the judgment of the members of the Commission that it is authorized to employ the organizations of state departments and institutions to execute the work devised by the Commission for the production, conservation, and distribution of food, and to repay the departments and institutions for the expenses incurred in the service rendered in the execution of such work; but that the Commission has not the authority to convert any of its appropriation to defray other expenses of state departments or institutions."

PROCEEDINGS OF THE COMMISSION

The following summary records the more important proceedings and minutes of the Commission, exclusive of routine business, which consisted largely of reports from each Commissioner as to the work of his division, and of general discussions. These discussions involved the consideration of the projects of work of the various divisions of the Commission, the results of which are more fully described below under their respective headings.

ORGANIZING FARM LABOR, MAY 3

The meeting held by the Commission at Albany on May 3 was devoted to its policy as to the best method of organizing its efforts for helping to supply farm labor. Various plans which had been proposed to it, particularly that of requesting manufacturers to release their labor for a short period for farm work and to encourage their employees to spend their vacations in working on farms, were carefully considered in the light of opinions which had been obtained from members of the Advisory Council through a referendum letter. The Commission was advised concerning the plans for mobilization of farm labor recommended by the United States Department of Agriculture through Mr. E. H. Thompson, of the Office of Farm Management of that Department, who submitted to the Commission a carefully prepared plan for the distribution of farm labor. As a result the Commission adopted the following statement of its policy on this matter:

THE FARM LABOR PROBLEM

The New York State Food Supply Commission, in recognizing the farm labor problem as one of immediate importance, desires to point out that it has two distinct phases: (1) Supply, (2) Demand. The solution depends

upon bringing the two together quickly and intelligently. As a means of doing this the Commission submits the following labor program:

The farm labor needs. The Commission has already available complete and accurate information concerning the individual needs of farmers throughout the State. Any duplication of this work would be both unnecessary and confusing.

Organization for placing labor. Organization has been established by the Commission in every county, and this organization is being extended to the local communities in each county, to place the available competent help on the farms needing it.

Sources of labor supply. There is in every rural community a reserve source of experienced farm help which provides the most available, economical, and efficient supply of farm labor. The Commission will utilize this primary source to the fullest possible extent on the neighboring farms.

When the local supply of farm labor is fully employed, the Commission will draw on the reserves of properly qualified labor in the larger communities.

If the local demands cannot be fully supplied from these sources, the Commission will draw upon the available qualified labor in the cities.

It is believed that this plan of utilizing the nearest and local sources of supply first, and drawing on the more distant and less qualified sources only when the local reserves are exhausted, will give the maximum efficiency.

Cooperation with other agencies. The New York State Food Supply Commission is working in conjunction with the New York State Industrial Commission, and it is desirable that all local state committees and organizations coordinate their activities with that of the State Commission under its plan and in cooperation with its organization. This plan has been developed with a view to the greatest economy and efficiency in the movement and use of labor—employing men locally where their experience and familiarity with local work makes them most helpful.

The Commission invites and welcomes the cooperation of all agencies, in city and country, which are seeking to mobilize farm labor. It cannot be too strongly emphasized that the labor situation is one of the most serious problems confronting the nation. At the same time it is to be recognized that farming is an occupation requiring skill and that only a limited amount of unskilled help can be used. Such help will be most serviceable in harvest time, especially in such work as gathering berries and other small fruits. The best interests of the State will be served if all voluntary bodies endeavoring to mobilize farm labor will cooperate with the New York State Food Supply Commission appointed for this and other purposes.

Voluntary agencies can render their chief service by discovering sources of qualified labor and making a complete index of persons offering themselves for employment on farms. The New York State Food Supply Commission will furnish uniform farm labor enrollment blanks to any cooperative organization for this purpose.

As the matter of the relation of the county representatives of the Commission to the county home defense committees, and the relation of the work of the Commission to other organizations working for the same ends, seemed to require clearer definition, the Commission adopted the following resolution defining its attitude:

The New York State Food Supply Commission interprets the law under which it has been created, to imply that no previous organization existed with sufficient scope and authority to effect the adequate promotion of the production, conservation, and economic distribution of food products in the State under the present emergency conditions, and that it was created with a view

of utilizing and coordinating the official and unofficial organizations of the State able to render service in this field under one recognized directing authority.

The Commission interprets the law to mean that it may and should employ the organizations of the different state departments, state institutions, and volunteer bodies in the State, to further and promote the purposes for which the Commission has been created. Therefore it invites the cooperation and assistance of all the official and volunteer organizations of the State to further the work of increasing and conserving and distributing food products.

When any state department or institution consents to undertake a piece of work in its field for the Commission, it places itself under the jurisdiction of the Commission in so far as this particular work is concerned, and to that extent it subjects itself to the general direction of the Commission.

The Commission has provided state, county, and local organizations for executing this work, and it invites other county and local organizations and committees to contribute their quota of work to the general cause through this organization.

Before the adjournment of the Commission on May 4, it was advised of the passage of Chapter 369, Laws of 1917, creating the State Council of Defense, which assumed supervision of the work of the Food Supply Commission under the terms of the Act. The Commission voted that the Governor be requested to appoint one of its members as a member of the State Council of Defense, and subsequently he named the chairman of the Commission as one of its members.

POULTRY CAMPAIGN AND OTHER MATTERS, MAY 10

At the meeting of the Commission held at Albany on May 10, the New York State Federation of Poultry Associations presented a plan for an educational campaign on the conservation of the poultry industry. This plan was approved at a subsequent meeting.

The Commission authorized the purchase of buckwheat and other seed, to be distributed at cost in the same manner in which the potato seed had been sold through its county representatives, and authorized an investigation of the sources of supply of feeds for live stock to determine what steps might be taken to secure an adequate supply at a lower cost.

Detailed plans for the employment of field agents for insect and disease control, and for employing women as food conservation agents in the counties and cities of the State in cooperation with the States Relations Service of the United States Department of Agriculture, were presented by Dean Mann, and the budget for these purposes was approved.

It was also voted that the Commission purchase two traction ditchers (later increased to three) for use in tiling wet lands, this

work being undertaken as a demonstration of the possibility of increasing the amount of land available for farm crops by tile drainage.

AGRICULTURAL CENSUS, MAY 21

At its meeting held in Albany on May 21, the Commission approved the manuscript of the agricultural census which had been compiled under the direction of Commissioner Burritt and Professor G. F. Warren, of the New York State College of Agriculture, and its publication was authorized. (This was published as Bulletin 2, *A Preliminary Report of the Census of the Agricultural Resources of New York State*, in an edition of 250,000 copies, and was distributed to all farmers throughout the State through the public schools and the county farm bureaus.)

It was also voted that the Commission should pay for the leadership of farm cadet camps, and should undertake an investigation of the practicability and the economic value of such camps as a source of farm labor.

STATE CONFERENCE, JUNE 12

At the meeting held at Albany on June 12, the Commission arranged to hold its next meeting at Syracuse on July 5 and 6, and at that time to call a conference of the agricultural interests of the State similar to that held at Ithaca on April 16 to outline a definite program for guiding its work in encouraging the greater production and the more successful distribution of goods. It was voted that the following arrangement should be made for this conference:

1. That the central office of farm bureaus be requested to ascertain from its agents and county executive committees the most pressing production, transportation, marketing, and other food problems to be met during the present season and in preparation for next year's work.

2. That similar information be gathered by letter from members of the Commission's Advisory Committee, experiment stations, agricultural school and college workers, and the chairmen of the agricultural committees of the county home defense councils.

3. That the chairman and the assistant secretary analyze the replies and classify and list the problems reported, and that they arrange for their consideration by small committees at the Syracuse conference, the questions to be considered by each committee to be sent to the members of that committee in advance of the conference.

Arrangements were also approved for the purchase and distribution of a limited number of traction potato sprayers, for use under the supervision of representatives of the Commission in localities

where other sprayers were not available, to demonstrate to neighborhood groups of potato growers the practicability of cooperative spraying and thus increase the potato crop.

CONFERENCE MEETING, JULY 5 AND 6

The Commission met at the Onondaga Hotel, Syracuse, on July 5 and 6, in conjunction with the conference which it had called. The report of this conference, with its recommendations as approved by the Commission, has been published as Bulletin 4 (issued under date of July 30).

At this meeting, representatives of the Million Acre Wheat Committee presented to the Commission its plan of work and organization, and asked for the Commission's indorsement. In view of the efforts which its county representatives had already made for the increased production of grain, and in view of the recommendation of the Committee on Farm Crops of the conference then in session, the Commission adopted the following resolution concerning its relation to the work of the Million Acre Wheat Committee: "To meet the unquestioned need of our men in the field, the New York State Food Supply Commission encourages the production of wheat and rye in the State of New York as far as it can be done in harmony with good farm practice, and it urges its county representatives to cooperate with the Million Acre Wheat Committee or other agencies working for this end."

At this meeting the Commission, on the recommendation of the Commissioner in charge of Marketing, indorsed the principle of public markets, and approved the establishment of cooperative farm produce associations and authorized expenditures for this work.

MARKETING AND DISTRIBUTION, JULY 10 AND 11

The Commission met in Albany on July 10 and 11 for the consideration of the recommendations of the conference held at Syracuse the previous week, which were approved and adopted as published in Bulletin 4.

The Commission authorized the assistant secretary to supervise the work of getting membership pledges of the housewives of the State in the Federal Food Administration, as requested by Herbert Hoover through the National and State Councils of Defense, and directed that this work should be conducted through the county home defense committees.

The discussion developed that one of the chief interests of the recent conference was in the problems of marketing and distribution. Plans for meeting these needs were discussed at length, and a committee was appointed to confer with the Federal Food Administrator and the Bureau of Markets of the United States Department of Agriculture as to their plans, and to secure their cooperation in this line of work. The Commission voted to establish a Market News Service in New York State, if possible with the cooperation of the Bureau of Markets of the United States Department of Agriculture. It was also voted "that this Commission desires to take every possible precaution and measure to preserve and economically distribute food products within the State and to prevent waste of tender food products, and the Commission requests Mr. Dillon to take up the subject of waste and loss of food through refusal of shipments and held shipments and condemnations with railroads, transportation companies, commission dealers, and the Board of Health of the city of New York, with a view to correcting the abuses of distribution in the State of New York, and to report his progress at the next meeting."

It was voted to cooperate with the New York State Federation of Poultry Associations in the educational campaign for the elimination of low-producing birds, the plan of campaign to include press notices, circulars, an organized movement for conducting field meetings, and the formation of local associations in poultry centers. Expenditures for this purpose were approved.

It was voted that an effort should be made to obtain reliable information concerning the extent, value, and effect of the home garden movement throughout the State, through the enlistment of voluntary aid for this purpose.

FARM LABOR, AUGUST 3

At its meeting in Albany on August 3, the Commission authorized an exhibit to be made at the New York State Fair at Syracuse, representing its work in conjunction with that of other state institutions.

The attention of the Commission was called to the need of farm labor for harvesting the fruit crop in western New York, and it was voted to pay for the leadership of additional farm cadet camps for that purpose. It was also voted:

That the State Food Supply Commission, in view of the absolute necessity of an adequate supply of farm help to harvest the season's crops without serious losses, and because of the known scarcity of labor, urgently requests

the Commissioner of Education of the State of New York to instruct the school authorities to urge upon the teachers and pupils under their jurisdiction the necessity of making available under the Brown Act and in cooperation with the Farm Cadet Bureau of the State Military Training Commission as large a supply of boy labor as possible for harvesting the crops. The Commission specially calls attention to the need of this labor for the harvesting of peaches in the western New York peach belt, of grapes in the Chautauqua grape belt, of potatoes on Long Island and in Steuben County, and in other sections where special needs appear.

The committee sent to Washington to confer on marketing problems with the Federal Food Administrator and the Bureau of Markets, made a report and recommended a plan for organizing the potato growers of the State for marketing their crops. It was voted:

That the New York State Food Supply Commission approves of the plan of the organization of potato growers into local exchanges in the different potato-growing communities for the purpose of assembling, grading, sorting, and marketing the potato crop for the year 1917-18.

That the Commission also approves of the plan of federating the local exchanges into one general sales agency for the State, with the recommendation that the potatoes of all of the members of the local exchanges and all of the potatoes controlled by such local exchanges be marketed and distributed through this one centralized state selling agency.

REPORT OF THE DIVISION OF ADMINISTRATION

CHARLES S. WILSON, *Commissioner in Charge*

The work of the Division of Administration has been under the general supervision of the Chairman of the Commission and in immediate charge of the Assistant Secretary, Dwight Sanderson, with one assistant, an accountant, a bookkeeper, clerks, and stenographers. The work of this division has involved the general supervision and business administration.

Until midsummer a large amount of time was devoted to preparing the budget for the approval of the State Defense Council, several revisions of which were made before its final approval.

All the publications and the printing of the Commission have been supervised. The editing of publications and printed forms has been in charge of Misses Cosgrave and Munsell, of the Department of Agriculture, who have devoted a large part of their time to the work of this Commission without extra compensation. Without their unselfish assistance this work would have been seriously delayed. Two posters with a total edition of 21,000, four circulars with a total of 32,000, five bulletins with a total of 280,000, and seven numbers of the *Announcer* with a total of 100,000, have been issued; in addition there have been printed 327,000 copies of the census blanks; 100,000 bulletin envelopes, 234,000 correspondence envelopes, 289,000 letterheads, and 818,000 miscellaneous blanks, cards, and printed forms, making a total of over 2,200,000 pieces of printed matter, involving seventy-five printings.

One hundred and seventy-five letters, press notices, contracts, and other mimeograph forms have been issued, with a total edition of approximately 150,000.

The accounting of the Commission has involved the approval of the appointments of all employees, and the securing of their approval by the State Council of Defense. A report of the Auditor of the State Council of Defense covering the accounts of the Commission is given at the end of the report.

The publicity work of the Commission has been in charge of Mr. Walter C. Green, of the Department of Agriculture. The success of Mr. Green's work is evidenced by the generous response of the press throughout the State in furthering the activities of the Commission.

The Department of Home Economics at the New York State College of Agriculture furnished material concerning methods of canning and preparation of foods. This material was sent out each week to three hundred dailies and seven hundred weeklies.

To insure the prompt mailing of its publications, the Commission installed mailing machinery and had stencils made for lists of the leading agricultural organizations and interests of the State, totaling nearly 15,000 names.

During the month of August a considerable amount of time was given to a campaign for pledging the housewives of the State to the work of the Federal Food Administration, and to the preparation of an exhibit at the State Fair. A description of this work follows:

FOOD CONSERVATION PLEDGE CAMPAIGN

At the request of the Federal Food Administrator, made through the National and State Councils of Defense, the Commission undertook the management of the first state-wide campaign to enlist the householders of New York in the movement for food conservation by obtaining signatures to the following pledge:

TO THE FOOD ADMINISTRATOR,
WASHINGTON, D. C.

I AM GLAD TO JOIN YOU IN THE SERVICE OF FOOD CONSERVATION FOR OUR NATION AND I HEREBY ACCEPT MEMBERSHIP IN THE UNITED STATES FOOD ADMINISTRATION, PLEDGING MYSELF TO CARRY OUT THE DIRECTIONS AND ADVICE OF THE FOOD ADMINISTRATOR IN THE CONDUCT OF MY HOUSEHOLD, IN SO FAR AS MY CIRCUMSTANCES PERMIT.

Name

Address

Number in household..... Do you employ a cook?

Occupation of breadwinner

Will you take part in authorized neighborhood movements for food conservation?

There are no fees or dues to be paid. The Food Administration wishes to have as members all of those actually handling food in the home.

DIRECTIONS

Mail your pledge card to the Food Administrator, Washington, D. C., and you will receive FREE your first instructions and a household tag to be hung in your window.

Upon receipt of ten cents with your pledge card and a return addressed envelope the official button of the Administration, and, if desired, the shield insignia of the Food Administration, will also be sent you.

As a forerunner of the active work of the pledge campaign the Commission undertook the management of the movement to enlist the support of the clergy and the churches of the State in the observance of the first Sunday of July as Food-saving Sunday. Some 7000 circular letters and a suggested program urged the

churches to emphasize the serious nature of the food situation and to secure as much active support and cooperation from individuals and organizations of their congregations as possible.

The pledge campaign proper was launched on July 17 by sending circular letters to the chairmen of the home defense committees of all the counties of the State, outlining the plan of campaign and asking each Home Defense Committee to handle the campaign in its county with the fullest possible cooperation of all the women's organizations. The pledge was also sent to these committees, in stereotyped form, in order that it might be printed in the daily and weekly papers of the county. Six hundred of these stereotypes were distributed and the pledge was very generally published in the papers of the State.

In general, the home defense committees undertook the campaign and handled it most efficiently. Active cooperation was given by Mrs. William Grant Brown, Chairman of the New York State Division of the Women's Committee of the National Council of Defense and of the Women's Division of the State Council of Defense, and by the chairmen of the county units of this committee.

Special mention should be made of two campaigns, one in Fulton County and one in New York City. In Fulton County the committee, headed by the local county representative of the Commission, made a thorough systematic door-to-door canvass of the entire county and apparently obtained the signatures of considerably more than half of the householders of the county. In New York City the work was in charge of the Mayor's Committee of Women on National Defense, and 400,000 pledges were distributed.

One result of the pledge campaign, which should not be overlooked and which, while it is too intangible to be summarized in figures, is nevertheless of the greatest value, is its educational effect. Much was accomplished in stimulating interest in the whole food-conservation and food-saving movement, and in organizing the women's clubs to an active cooperation in the work and to a keen realization of its importance.

THE STATE FAIR EXHIBIT

The Food Training Camp exhibit at the State Fair, at Syracuse, New York, was arranged under the joint authorization of the New York State Fair Commission and the New York State

Food Supply Commission, at the request of the State Fair Commission, to meet the suggestions of the Federal Food Administration.

The idea of a Food Training Camp was new, but the Food Supply Commission agreed to be responsible for the preparation and installation of such an exhibit, the aim of which was to cover the work done to increase food production, to decrease food waste, and to increase efficiency of food use in New York State. The preparation of the exhibit was placed in immediate charge of Mr. A. M. Loomis, of the office staff of this Commission, and Professor R. H. Wheeler, of the New York State College of Agriculture.

A detailed description of this exhibit is given here because it is believed that its conception, organization, and general plan offer suggestions for making future state fair and other large exhibits of this character both attractive and truly educational.

Four general types of exhibits were decided upon: first, graphic representation, both of the fact of a world shortage of food and of the cause for such shortage; second, the activities of the State Food Supply Commission, the State College of Agriculture, the county farm bureaus, the state agricultural schools, and other cooperating agencies, in increasing the amount of food material actually produced; third, exhibits showing more direct and less wasteful methods of handling and transporting food materials; and fourth, exhibits showing the economic methods of preparing foods, eliminating waste, and conserving wheat; meat, sugar, and fats needed particularly at this time for export.

The central exhibit, which served as a key to the entire food training camp, was a booth approximately forty feet in length, in the center of which were shown the reasons for the world's food shortage, flanked on either side by illustrations of the remedies — on one side by an exhibit entitled *Make Every Acre Productive*, and on the other side by an exhibit entitled *Make Every Pound Effective*. The reasons for the world's food shortage were shown by statistics indicating the large decrease in the number of agricultural workers in the world, the large increase in the number of armed men in the armies and navies of the world, and the decrease in the world's staple food crops, wheat, sugar, and potatoes, and in the visible supply of meat. A map showed the large agricultural area of Europe that has been devastated by the war, and other panels showed the tremendous increase in exports of

foodstuffs from the United States. An exhibit which attracted special attention was one showing the daily ration of the American soldier.

At the entrance to the exhibit a large chart and map illustrated the state-wide organization of the New York State Food Supply Commission, its coordination with the State College of Agriculture, the office of the New York City Food and Market Commissioner, and the farm bureaus, county home defense committees, and women's organizations in each county. A series of smaller mounted maps and exhibits of printed matter represented the activities of the Commission and its various divisions.

Special assistance in preparing the exhibit was given by the New York State College of Agriculture at Cornell University, which supplied a large part of the material and installation; also by the New York City Health Department, Bureau of Foods and Drugs; by the state schools of agriculture at Alfred, Morrisville, and Delhi; by the Wyoming County Farm Bureau and the New York State Bean Laboratory at Perry; and by the New York State Department of Agriculture.

The potato exhibit, where in one section, working in cooperation, were several of the departments of the State College of Agriculture and one division of the Food Supply Commission, showed the entire detail of the work of improving the New York State crop of potatoes. This included methods of improving seed potatoes by hill selection; methods of growing and handling seed potatoes; the care of the crop while growing; the various potato diseases, remedial measures, spray pumps, spray materials, and types of nozzles; potato types, getting away from the old idea of an exhibition of named varieties; potato-grading machinery; models of potato storage houses; packages for marketing; and suggested methods of organization for cooperative marketing agencies, now being worked out in New York State under the direction of the Food Supply Commission.

This was supplemented by special material in the food conservation section arranged by the State School of Agriculture at Alfred University. In this section the value of the potato as a food was shown, and the methods of preparing potatoes as a food, to save their entire food value, was demonstrated by a competent instructor.

Across the aisle from the potato exhibit was one on the production and care of milk. The breeding and selection of the dairy

cow was shown in detail, also efficient feeding and dairy farm management, the best methods to be used in the milk barn, and the careful and cleanly methods required to transmit the product to the consumer.

Adjoining this was an exhibit dealing with the elimination of bovine tuberculosis, in which the subject was treated as a factor in the food-conservation problem looking toward the increased production of both meat and milk in New York State by still further control of this disease.

A back-yard poultry plant was in the next section, the material including a Cornell poultry house occupied by a small, well-selected flock. It showed how household waste can be turned into food when used as poultry feed, and gave illustrations of the best types of fowls and best methods of feeding and of preventing disease.

Farm and general drainage had a large place because it is generally believed that lack of drainage is a limiting factor in the productivity of the farms of the State, and because there are more than 600,000 acres of swamp land in the State capable of being brought into a high state of productivity by drainage. Working models and pictures, maps and charts, showed how farm drainage systems are to be installed, and showed also a simple and practical method of swamp drainage. Various types of farm products grown on reclaimed land, including hay, oats, corn, celery, cabbage, onions, and carrots, were shown.

Waste due to improper methods of packing and handling food for transportation was shown by the New York City Health Department. Photographs illustrated the large item of waste, due to broken packages and damaged products, found in the carloads of produce as they reach the city markets. These photographs were supplemented by charts estimating the money value of this loss, and these again by packages, barrels, crates, and hampers recommended as safe and substantial containers in which to ship produce of the New York State farms to the New York City markets.

A section devoted to the preparation of foods and the conservation of food products occupied nearly one-third of the entire space, including an auditorium for motion pictures and demonstrations of making wheat-saving breads, of meat and vegetable canning, and of jelly making and preserving. This section included an exhibit of milk as a food, made by the State School of Agriculture

at Delhi, emphasizing the value of milk in cookery and showing its various manufactured forms; an exhibit of "meat savers," using legumes and other vegetables in place of all or part of the meat ordinarily used in the diet; an exhibit of preserves and jellies, showing the various methods of extending the use of the fruit crop throughout the year; and an extensive exhibit of the various methods of bread making, designed to show methods of utilizing cereals other than wheat to cut down the amount of wheat used in the daily diet.

Supplementing the exhibit of the wheat-saving methods, small loaves of bread baked from various recipes calling for the utilization of rye, oatmeal, buckwheat, and other cereals in place of wheat, were sold at cost to all who wished to sample them. One oven belonging to the United States Army Camp on the fair grounds was used for this purpose, and its entire capacity during the time of the fair was too small to supply the demand.

Drying and canning exhibits showed various types of driers, together with a large display of dried foods, and also of pressure canning outfits of sufficient size to take care of a large truck farm or a small community. The New York State School of Agriculture at Morrisville showed methods of saving and utilizing fat. This exhibit included charts showing the waste of fats, and gave samples of various types and kinds of soap that can be readily made at home from the fats saved.

There was available, in each one of the food-conservation exhibits, printed matter giving recipes and directions for carrying out the recommended practices. Nearly 100,000 copies of this printed matter was distributed during the six days of the fair.

New York's high production of beans was recognized by a special exhibit showing the work of the New York State Bean Laboratory at Perry, Wyoming County, where studies have been made of remedial measures for the various diseases that have attacked this crop in New York and elsewhere; by a study of the commercial varieties of beans grown in this State; and by an exhibit illustrating the food value of beans and the methods of utilizing them.

The back-yard garden movement was shown in a plan for next year's garden. This occupied the center of the main entrance to the Food Training Camp, and included a complete representation of a back-yard garden, showing the garden vegetables actually growing, properly labeled to indicate successions of planting to grow two or more crops from the same ground in one season.

Supplementing this was a model of a pit for the storage of winter vegetables and an exhibit of new and comparatively little-known vegetables.

A tractor demonstration was given on Wednesday and Thursday of Fair Week, the details of which were arranged by and in charge of Mr. F. G. Behrends, Assistant to Commissioner S. J. T. Bush. A field at the northwest corner of the grounds was used for this demonstration, in which five tractors participated on Wednesday and seven on Thursday.

REPORT OF THE DIVISION OF FOOD CONSERVATION

A. R. MANN, *Commissioner in Charge*; D. J. CROSBY, *Assisting*

The purpose of the Division of Food Conservation was to increase the food supply by reducing, and so far as possible preventing, losses — first at the point of production, and second at the point of consumption.

I. The prevention of losses at the point of production was promoted by the following lines of work :

1. Potato insect and disease control.
2. Seed-potato inspection.
3. Fruit insect and disease control.
4. Vegetable insect control.
5. Insect pest survey and information service.
6. Plant disease survey and information service.

II. In accomplishing the conservation of food at the point of consumption, two lines of work were developed :

1. Appointment of county or rural food conservation agents supported by county executive committees.
2. Appointment of city food conservation agents supported by city executive committees.

Detailed reports of these several lines of work follow.

I. INSECT AND PLANT DISEASE CONTROL SERVICE

H. H. WHETZEL and J. G. NEEDHAM, *Leaders in Charge*

In the organization of the insect and plant disease control service, the New York State Food Supply Commission had the advantage of the advice of the following committee :

Professors F. C. Stewart and P. J. Parrott, of the New York State Experiment Station at Geneva ;

Dr. E. P. Felt, State Entomologist, Albany ;

Mr. G. G. Atwood, Horticulturist of the State Department of Agriculture, Albany ;

Professors H. H. Whetzel and J. G. Needham, of the New York State College of Agriculture at Ithaca.

The staff engaged in the work of this service consisted of: (1) leaders in their respective lines of work, who maintained headquarters at the State College of Agriculture but who spent much time in the field helping in perfecting local organization and

advising field assistants; (2) an expert on fruit pests who spent his entire time in the field advising field assistants; (3) a force of seven field assistants in potato spraying, five field assistants in fruit work, and two assistants in vegetable pest work, who had headquarters in the region of their work and dealt directly with growers. In most cases the field assistants had office headquarters with the county representatives of the Commission and were supplied from local funds with stenographic assistance and automobile. The field assistants have devoted all their time to potato seed inspection work.

The reports of the several lines of work in this division follow:

Potato Insect and Disease Control

W. H. RANKIN, *Leader-in Charge*

Potatoes are one of the most important staple crops of the State. The yield depends largely on weather conditions, which influence the amount of injury due to flea beetles, Colorado potato beetles, tipburn, early blight, and, above all, the disastrous late blight. Spraying with bordeaux mixture and some insect poison insures protection from these injuries, which, when combined, oftentimes mean total loss or greatly reduced yields and poor storage qualities. The procedure to be followed in potato spraying has been so thoroughly proved a successful farm operation that it should be universally adopted. Yet in some sections of this State potato spraying is not practiced by more than five per cent of the growers. It was therefore decided that one of the most useful and immediately beneficial projects for insuring crop yields this summer was a systematic campaign to get a greater acreage under spray. Field assistants were appointed and assigned to work in cooperation with farm bureaus or Food Supply Commission representatives in the counties growing the largest number of acres. This work was carried on in Cortland, Erie, Genesee, Oneida, Steuben, Livingston, Wyoming, and Allegany Counties.

Preliminary work. The seven field assistants, working full time and under the immediate direction of the project leader in potato spraying, began work on June 1 in these counties. During June their time was taken with the following lines of work:

1. Preparing mailing lists of potato growers having more than four acres. Information was obtained from the census taken by the Food Supply Commission in April.

2. Mailing circular information concerning their work in the county and giving general directions on potato spraying.

3. Making personal visits to farms in potato districts to stimulate more growers to spray and to arouse sentiment in favor of community spraying.

4. Special potato-spraying meetings called in the evenings in communities where cooperative spraying seemed possible.

5. Keeping in touch with the local and wholesale market of spray materials and stimulating cooperative purchase of copper sulfate.

During July, the work of further organizing and supervising spraying communities and aiding individual growers in preparing for spraying operations was continued. The following figures summarize the field work of these two months:

	June	July	Total
Telephone calls answered	178	214	392
Copies of circular matter mailed.....	6,987	932	7,919
Personal letters written	164	219	383
News items written	17	10	27
Newspapers carrying such news.....	104	55	159
Office calls received	86	135	221
Farm calls made	851	1,381	2,232
Meetings held (night)	48	14	62
Attendance at meetings	<u>1,056</u>	<u>202</u>	<u>1,258</u>

During August and the first week of September the amount of field work necessary to satisfy demands for diagnosing potato troubles, to supervise the community spraying, and to advise with individual growers, developed to the extent that much of the time of the assistants was taken in making farm calls. The following figures show the number of farm calls during this period:

Cortland County	138
Erie County	207
Genesee County	146
Oneida County	183
Steuben County	} 334
Livingston County	
Wyoming County	} 119
Allegany County	
Total	<u>1,127</u>

The two preceding tables taken together show 3359 individual farm calls made by these representatives of the Commission.

Community spraying. By the first of August actual spraying operations were begun in most of the counties, and the assistants

were busy aiding the sprayers in charge of community spraying in organizing the rotation spraying. At the same time they were aiding large numbers of individual growers who had never sprayed before. This work necessitated constant traveling from farm to farm, and in many counties the assistant was unable to see all the men asking for aid.

Cooperative community organizations are in operation as follows:

County	Number of organizations	Number of acres
Cortland	1	16
Erie	5	300
Oneida	4	126
Steuben	8	500
Livingston	1	30
Wyoming	1	70
Allegany	1	50
Total	<u>21</u>	<u>1,092</u>

Individual spraying. Of more importance than the acreage under community spraying, is the acreage being sprayed correctly for blight for the first time by many individual growers. The following list of such acreages indicates the effectiveness of this work. These growers have purchased equipment and it is to be expected that in the future they will regularly spray their crops, having learned the value of the protection:

County	Number of growers	Number of acres
Cortland	74	565
Erie	100 approx.	950
Genesee	76	900
Oneida	132	537
Livingston	50	393
Wyoming	85	665
Allegany		
Total	<u>517</u>	<u>4,010</u>

Demonstration sprayings. As a further development, it was attempted to place demonstration sprayings in all natural potato communities so that the actual results of potato spraying might be available to those communities. It is intended that these demonstration plots shall be dug and the yield weighed and compared with that of unsprayed check fields. Meetings will be called at digging time to view the results. In this way the vast importance of proper spraying will be driven home.

Potato diseases and insect pests. Late blight has been rather generally prevalent and destructive, and other diseases rank in importance as follows: rhizoctoniose, mosaic, early blight, scab. The insect pests commonly met with this year are the Colorado beetle, the flea beetle, the green leaf hopper, and the potato aphid.

Results. In most of the counties where this work was carried on, considerable loss has already resulted from late blight. All the assistants report little or no blight in properly sprayed fields, while in adjoining unsprayed fields the tops have often been completely killed. They also report uniform satisfaction on the part of the growers spraying for the first time. Many growers have changed during the season from prepared spraying compounds to homemade bordeaux mixture, which they have prepared on advice given by the field assistants.

The work can be summarized thus:

Potato spraying was urged on practically all of the potato growers having four or more acres in the important potato districts covered by the seven field assistants. This was done by evening meetings and personal farm visits.

The response to this field work was 21 community spraying organizations with 1092 acres represented, and approximately 500 individual growers spraying correctly for blight for the first time, representing more than 4000 acres of potatoes. In all, therefore, about 5100 more acres of potatoes are this year insured against loss, and an increased yield is expected of from 25 to 50 bushels, or more, over and above normal yields in unsprayed fields.

Many growers not included in the records kept have been aided directly or indirectly. It is impossible to measure the aid given through newspaper articles, circular letters, public meetings, and example. Furthermore, the above figures are not taken as a full measure of the success of the work, because with the interest that has been aroused, and the large increase in the number of growers spraying this year, there will no doubt be a further independent increase in the acreage next year.

Besides the generally good results achieved by community efforts, a number of specific instances are of interest. In buying spray materials in Wyoming County, 26,000 pounds of copper sulfate were bought cooperatively at a saving to the growers of from 4 to 8 cents a pound; in Allegany County considerable

saving was made on the cooperative purchase of 10,000 pounds of copper sulfate. The field agents of the Commission arranged these purchases. One piece of excellent cooperation was in Genesee County, where land owners were persuaded to furnish spray materials for their tenants and in some cases helped in getting sprayers.

In Oneida County check rows were left unsprayed as object lessons. In one field 24 sprayed hills yielded 5.7 pounds to the hill, while 24 adjoining unsprayed hills gave an average of only 2.9 pounds to the hill. In the sprayed hills no rot was present; in the unsprayed there were 25 rotted tubers. This was convincing as to the value of correct spraying. In Steuben County the agent reported that by September 1 the greater part of the unsprayed vines in the county were dead. Rot was prevalent in the unsprayed fields. The increased yield in sprayed fields in the county was from 50 to 150 bushels an acre, and many of the unsprayed fields will not return the seed.

General educational meetings. In addition to the personal calls, which were everywhere considered most productive of results, and in addition to various called meetings and demonstrations in making and applying bordeaux, the Oneida County agent held a two-days demonstration and exhibit at the Paris Hill fair, with lectures. Many of the 3100 visitors to the fair attended the exhibit and lectures, and took away the literature. Potato-disease exhibits were made at the Steuben County and Livingston County fairs. A similar exhibit, with lectures, at the Wyoming County fair was visited by 383 persons, and exhibits were made also at two fairs in Allegany County.

Importance of September work. The urgent need for continued work in September was everywhere apparent, because weather conditions strongly favored late blight. In several of the counties farmers were inclined to quit spraying after four or five applications. In Oneida County blight struck very heavily at the end of August, yet many growers thought they had sprayed enough. Had they not been persuaded to continue, the work of the preceding months would have been largely undone. Where spraying was not continued the results in heavily reduced yields sadly proved what should have been done. Blight appeared about September 1 in Livingston County, and here again eternal vigilance up to the end of the month was the price of the crop. In Steuben

County the sprayed vines were still growing, and the taking away of supervision would have meant partial, if not entire, failure of the spraying project.

Seed-potato inspection

The purpose of the seed-potato inspection was to locate in the important potato-growing sections of the State just as many fields of potatoes as possible which were sufficiently free from disease and varietal mixtures to make them especially valuable for seed. After such fields were located they were to be listed, and the names of the owners, with their addresses, were to be made available to the county agricultural agents and other persons interested in locating seed for the 1918 crop.

Two inspections were to be made. The first was to begin about the time the potatoes were in full bloom, or a little later, when they would best show the field symptoms of the various diseases and when the varietal mixtures could be detected; the second was to be conducted at digging time in all the fields that qualified at the first inspection. Arrangements to carry out plans for locating the fields to be inspected were made with the county agents and the New York State Food Supply Commission's representatives in the most important potato-growing counties of the State, as follows: Allegany, Cortland, Erie, Genesee, Livingston, Monroe, Onondaga, Ontario, Rensselaer, Steuben, Washington, Wayne, Wyoming. Announcements of the plan and character of the inspections were sent out through the county representatives of the Food Supply Commission to farmers having five acres or more of potatoes. Farmers desiring the inspection replied on postcards provided for the purpose.

The two inspectors, Mr. Rands and Mr. Peacock, then divided the territory between them and proceeded with the first inspection, beginning in those localities where the potatoes were farthest advanced. The actual inspection of the potatoes began the latter part of July. Practically all of the month of July was employed in making the preliminary arrangements in cooperation with the county representatives of the Food Supply Commission.

A very large number of growers asked for these inspections, so that the two inspectors were not able to complete all of the first inspection by the 1st of October, although one of them began the second inspection about the 15th of September in those counties where potato digging was then begun.

Owing to the extreme shortage of the potato crop last year,

more diseased potatoes than usual were planted this year. This, together with the wet weather throughout the summer, resulted in serious outbreaks of blight and other diseases in fields not properly sprayed. On this account it is of vital importance to the potato crop of next year that an abundance of disease-free seed potatoes should be located and listed. Furthermore, last spring there was an extreme shortage of potato seed in the State, and the Commission was under the necessity of bringing into the State fifty-four carloads of seed to meet the demands of growers. It is to be remembered also that the scarcity of seed was accompanied by an almost prohibitive price. As many of the diseases develop in the tubers and cannot be detected until after the potatoes are dug, it is impossible to make a satisfactory list of inspected fields unless both inspections are made.

SUMMARIZED DATA ON POTATO INSPECTION

County	Number of fields with five or more acres of potatoes	Number of applications for inspection	Number qualified at first inspection to be given second inspection
1. Allegany	Data not available	18	2
2. Cortland	330	50	26
3. Erie	1,000	44	20
4. Genesee	366	40	8
5. Livingston	650	30	10
6. Monroe	1,300	80	Incomplete
7. Onondaga	38*	19	12
8. Ontario	776	28	11
9. Rensselaer	343	22	9
10. Steuben	2,000	67	22
11. Washington	881	57	30
12. Wayne	425	30	16
13. Wyoming	Data not available	38	21
Total		<u>523</u>	<u>187</u>

* Letter issued only to members of local potato growers' association.

Of the 523 growers who applied for the first inspection and most of whose fields were inspected, only about 187 growers had fields sufficiently free from symptoms of disease or varietal mixtures to qualify for the second and final inspection. The fields average about 10 acres, so that approximately 1870 acres was covered by the second inspection.

Fruit Insect and Disease Control

L. R. HESLER, *Leader in Charge*

The aim of the work in the control of insects and diseases attacking fruits was to prevent losses by keeping growers informed on the opportune times for spraying and on the most efficient control

measures. The work was mainly concentrated in the counties of Ontario, Orleans, Oswego, Ulster, Wayne, and Yates. Special agents of the Commission were in charge of the work, which was done in cooperation with the farm bureaus or the county representatives of the Commission.

The work of the field assistants may be summarized as follows:

1. Gathering local facts regarding the most prevalent diseases and insect pests — the most important insects and diseases attacking fruit in the county, the weather in its relation to outbreaks; and arranging for the keeping of permanent records of all such data as might prove of value in later seasons.

2. Visiting and advising with farmers concerning insect pest and disease control measures.

3. Discovering the needs of the growers in the way of spray materials and machinery, and keeping them informed as to the sources, cost, and available supplies of these necessities.

4. Providing timely news items on control measures, for county and farm bureau papers.

5. Giving advice by telephone, personal letters, circular letters, and personal conferences. Field demonstrations and meetings were conducted as needed.

The following is a partial statistical summary of such work performed by the field assistants:

News items, 78; telephone calls, 510; personal letters, 213; circular letters, 5, total copies, 1250; calls at office, 214; farm calls, 1719; meetings held, 28, total attendance, 1304.

These figures do not by any means give a complete measure of the work done. In some counties, for example, an extensive telephone relay system was in vogue throughout the summer. By this system, at the proper time for the dissemination of timely information the field assistant was able on short notice to reach large numbers of growers. For example, it is necessary in the control of all fungous diseases to spray before a rain. Farmers as a rule do not follow the weather forecasts, and so fail to get their spray on before a rain. The field agent in Wayne County arranged to get the weather forecasts by telegraph, so that he had twelve hours gain on the published reports. Two days before the evidence indicated a rain period would set in, the agent sent out over the telephone relay system the recommendation that the spray of lime-sulfur and arsenate of lead should go on. He telephoned each of ten committeemen in various parts of the county. Each of these

by prearrangement called by telephone a certain number of growers, each in turn to call others, until every grower within the circuit was advised concerning steps to be taken immediately. In this work timeliness is of such great importance that the value of this method is immeasurable.

When time would permit the use of slower means of communication, circulars, personal letters, and postcards were employed in reaching growers. More effective than any of these means of communication was personal contact with farmers, through meetings attended by over 1300 men and women and through more than 1900 office and farm calls. Each field assistant had an automobile to enable him to get over his territory rapidly, and in most cases the cars were furnished by the county organizations.

In a season that was very unusual as to rainfall and other climatic conditions, the field assistants were able to get many farmers to spray effectively where the fruit prospects warranted spraying, and they did not hesitate to advise against spraying where the crop was too light to make the work of sufficient value.

The field assistants were appointed too late to employ effective measures against the peach-leaf-curl fungus, but they called attention to the seriousness of the conditions and suggested means for preventing the recurrence of such outbreaks in future years.

In many cases the ravages of unfamiliar insects and diseases were brought to the attention of growers and preventive measures were taught.

While giving particular attention to fruit affections, all the field assistants kept a sharp outlook on potatoes, beans, wheat, and other important crops, and were in several instances able to check serious depredations on these crops. This was particularly true of potato diseases and insects.

One of the greatest benefits that have been accomplished has been the development of methods of organizing and cooperating for the control of diseases and insects affecting fruits, methods that can be applied effectively next year if the war emergency continues.

Vegetable insect control

C. R. CROSBY, *Leader in Charge*

The work under this project was similar to that conducted in connection with the control of fruit insects and diseases. It was planned with the same object in view and the procedure was

similar. Only two field assistants were employed for this work — one in Nassau County, and the other also in southeastern New York but mainly in Orange County.

The assistant in southeastern New York had his headquarters at Middletown and worked in cooperation with the Orange County Farm Bureau, the manager of which is the local representative of the New York State Food Supply Commission. The work of this assistant was confined largely to the specialized vegetable-growing region on the banks of the Wallkill River. This region is devoted to the growing of onions, lettuce, and celery. The assistant devoted his efforts to the control of onion maggot and onion thrips by methods which have been found successful in other parts of the country but which had not been adopted by the growers of this region. It was found necessary to adapt these methods of control so as to increase their effectiveness under New York conditions. In addition to this work the assistant was able to give advice in regard to the control of other vegetable pests in that region, and also to assist in demonstrating methods of controlling the potato aphid, an outbreak of which occurred in Orange and Rockland Counties. Here also it was necessary to modify the spraying machinery, as that in use was not adapted to do effective work against this pest.

The field assistant in Nassau County was employed through the early part of the summer in giving advice in regard to miscellaneous vegetable insects, such as cabbage maggot, potato lice, tomato lice, and many others. Had the assistant been in the field earlier, much loss by the cabbage root maggot could have been avoided. In addition to this work during the latter part of the summer, the assistant conducted an extensive series of demonstrations in the control of the corn-ear worm by means of an arsenical dust applied to the silk. He devised an attachment to the dusting machine, which is a great advance over the method heretofore employed. The assistant has received the hearty cooperation of the vegetable growers of Nassau County, and the work should be continued another year.

The following is a brief statistical summary of the work of these two field assistants in vegetable insect control work: telephone calls, 171; circular letters, 6, total copies, 1228; personal letters, 365; news items, 6; office calls, 68; farm calls, 556; meetings held, 5, total attendance, 968; demonstrations, 19, total attendance, 112.

Insect Pest Survey and Information Service

E. P. FELT, *Leader in Charge*

The main purpose of this survey was to get prompt and accurate reports from all over the State, summarize the information thus obtained, distribute it promptly, and thus promote the checking or prevention in large measure of the numerous losses annually inflicted by insect pests. Particular emphasis was laid on the initial signs of injury in order that the insects might be controlled before material damage had been inflicted. This work was closely articulated with the control work in the field described in the preceding pages. Insects infesting the more important crops received first attention, especially the insect enemies of potatoes, fruits — such as apples, pears, peaches, and cherries — cereal and forage crops, and truck and garden crops. The importance of this work may be gauged somewhat by an estimate made in 1913 which placed the approximate loss caused by insects in this State to all farm crops at \$20,000,000.

This service, since its organization on May 17 and up to September 1, sent out 729 letters, 4769 copies of circulars, 1729 copies of the fifteen weekly digests prepared, 1754 report blanks, and 12,174 pages of circular matter. It received 606 reports from over 100 correspondents located in all parts of the State, mostly representatives of the New York State Food Supply Commission.

The organization outlined above, with one or more active agents in practically every county of the State, has made feasible a closer watch on insect developments than has heretofore been possible. The developments of the past season have repeatedly shown that insect outbreaks in the southern part of the State, especially the lower Hudson Valley and Long Island, were likely to be repeated later in the more northern sections, and that hence the conditions in one region could be used to indicate probabilities in others. The fifteen weekly digests not only recorded conditions in various sections of the State and outlined preventive or remedial measures, but also appraised the possibility of subsequent damage by various insects.

Particular attention was paid to the possibilities of preventive or early remedial work, and in carrying this out several circulars were issued — especially one on fruit insects and crop pests, mailed on May 30, another discussing the destructive redbug and pear psylla, mailed on June 2, and a third on spraying fruit trees, with a special reference to the control of the codling moth,

mailed on June 7. A circular calling attention to the work of the extraordinarily abundant May and June beetles was issued on June 11; one discussing the seed-corn maggot so destructive in the bean-growing regions was prepared on June 18; and the day on which outbreaks of the army worm on Long Island were reported, was marked by the preparation of a circular calling attention to the early indications of attack by this greatly feared pest, and giving in summarized form the more approved control and remedial measures. The wheat midge, injuring rye and wheat, the midsummer leaf feeders of the apple orchard, the insect pests of domestic animals, and the Hessian fly, were likewise discussed in timely circulars.

A special effort was made to bring about a satisfactory control of the more serious insect pests of fruit trees, especially the codling moth, or apple worm, the apple redbug, and the pear psylla. The county agents and other correspondents were repeatedly urged to make every reasonable effort to bring about timely and thorough treatment for these and other pests, and in many localities the results were most gratifying since the fruit growers as a whole are alive to the importance of the work. The need of spraying for the codling moth was greatly emphasized by the short crop of the present season, which means a larger percentage of wormy apples and apparently greater injury by an insect which can be readily controlled, as has been repeatedly demonstrated by the work of earlier years.

The Insect Pest Survey and Information Service was able to make what is practically a June-beetle survey of the State, and it brought together a mass of data which can be used to great practical advantage in indicating areas where serious injury by the destructive white grub is likely to occur next year. This knowledge can and should be used by farmers in such a way as to enable them to largely escape losses through the white grub next summer.

The wheat midge was somewhat injurious to heading rye in various parts of the State, and later was found in many wheat fields. It was estimated that the loss in southern Niagara and northern Erie Counties caused by this insect would approximate 20 per cent in shrunken wheat. The actual loss in other wheat-growing counties appears to be considerably less, that in Orleans

County being placed at from 3 to 5 per cent. This damage, comparatively rare during recent years in New York State, was due largely to unusual climatic conditions at the time the grain was heading.

The work of the seed-corn maggot in bean fields came to notice the last of June and was very serious, the loss on seed alone in one 9-acre field in Genesee County amounting to \$70, while from 50 to 75 per cent of 16 acres was destroyed. One Monroe County grower lost over \$300 on seed alone. The damage for Erie County was put at 40 per cent, and it was estimated that one-fourth of \$96,000 worth of seed was destroyed in Orleans County. Untoward weather conditions and deep planting on the wetter land appear to have greatly augmented losses, while the total damage was increased by the work of snails, millepedes, and disease. The experience of the past season indicates that bean growers should exercise great care in planting the heavier moist land, especially during wet seasons, and furthermore that deep planting is likely to result in increased injuries.

The grasshopper situation was closely watched in various sections of the State, and preparedness measures were adopted which made practically impossible the large and mostly unanticipated losses of 1914 and 1915. The earlier work on these pests made it comparatively easy to secure the ready cooperation of individuals in handling pests in restricted areas.

The possibility of serious damage by the Hessian fly — which caused a loss to wheat in New York State estimated at \$3,000,000 in 1901 — led to the issuing of a circular advocating the strict observance of certain precautions in order to promote a vigorous growth of the grain and prevent any such untoward development this fall and next spring.

Potato aphid appeared in July on Long Island, and became very abundant, and in many counties very injurious outbreaks were reported in some fields, Lewis County being one of the last to report infestation. This insect breeds very rapidly and under certain conditions is most destructive. It is usually checked by parasites, and this appears to have been the case in many localities, though severe losses were reported for individual fields. The estimated loss in Dutchess County was placed at 5 per cent. The

aphis was ranked as a plague in Orleans County. It caused serious loss for some large growers in Ulster County and was very injurious in gardens, the estimated decrease in the crop ranging from 10 to 75 per cent, with total loss in isolated cases. It is very difficult to obtain exact figures as to losses. Growers agree as to the beneficial results following early and thorough spraying with a tobacco-soap preparation.

In addition to the above-mentioned somewhat special lines of effort, the Insect Pest Survey and Information Service was called upon to advise as to the best method of controlling many of the commoner farm and crop insects, as well as pests occurring in the house and annoying domestic animals. The correspondence reported above was largely with county representatives of the New York State Food Supply Commission, and a special effort was made to keep these parties thoroughly posted as to the latest developments and the best methods of dealing with various perplexing insect problems. These in turn passed the information along to their numerous clients, and the effort cannot fail to have greatly increased interest in the problem of insect control as well as promoting greater efficiency along these lines.

SUMMARY OF ACTIVITIES OF THE INSECT PEST SURVEY AND INFORMATION SERVICE FROM MAY 17, 1917, TO SEPTEMBER 1, 1917, INCLUSIVE

Week ending	Letters mailed	Circulars mailed	Digests mailed	Report blanks mailed	Reports received	Pages of circular matter mailed
May 24.....	16	402	79	135	30	1,074
May 31.....	75	87	90	90	43	522
June 7.....	67	422	98	98	45	566
June 14.....	45	468	142	112	43	692
June 21.....	59	334	112	111	43	669
June 28.....	68	825	117	117	54	1,432
July 5.....	52	484	117	117	42	952
July 12.....	67	244	121	121	37	853
July 19.....	63	529	121	121	39	1,134
July 26.....	57	632	122	122	42	1,242
August 2.....	37	.....	122	122	68	488
August 9.....	44	12	122	122	47	756
August 16.....	45	.....	122	122	33	488
August 23.....	20	.....	122	122	22	610
August 30.....	14	330	122	122	18	696
	729	4,769	1,729	1,754	606	12,174

Parallel to this Insect Pest Survey and Information Service there was maintained a Plant Disease Survey and Information Service, a condensed report of which follows.

Plant Disease Survey and Information Service

H. H. WHETZEL, *Leader in Charge*

The purpose of the disease survey was to obtain as prompt and extensive information as possible on the appearance and severity of diseases affecting our chief crops, so that we might intelligently undertake and direct work on their control. The disease survey constituted an active intelligence service for the assistance of all the agencies interested in crop conservation, both state and federal.

Procedure. The work was conducted through a cooperative arrangement between the New York State Food Supply Commission, the Bureau of Plant Industry of the Federal Department of Agriculture, and the Department of Plant Pathology of the New York State College of Agriculture. It constituted one of the authorized projects of the Food Supply Commission, which furnished part of the stenographic help required and a small quantity of stationery, cards, and equipment. The Bureau of Plant Industry furnished franked stationery, including letterheads, envelopes, shipping cards, etc., and paid the salary of one assistant on the work. The College of Agriculture provided office space, the time of the leader of the project, and one man in charge of the office and clerical work, besides half the time of another stenographer. The College provided also all printed circular matter on the common diseases, for distribution in connection with the work.

Results. Eighty-four field reporters, representing every section in the State except The Bronx, Kings County, and New York County, were enlisted and these made reports as called for on the diseases of the chief crops grown in their respective sections.

Blanks for about twenty-two special reports on the most common and destructive diseases of staple crops were sent out to these reporters, these crops including apples, peaches, and other orchard fruits, wheat, potatoes, and garden crops.

Tabulations and summaries of as many of these reports as have been completed to date have been made and distributed to all the disease reporters, to county agents, and to the Federal Government.

We have also made special reports to the Federal Bureau, on special blanks furnished by it, on the diseases of the following crops: wheat, corn, oats, tomato, cabbage, potato, buckwheat, cauliflower, and grape.

We have received from the disease reporters over five hundred specimens of diseases which we have identified and regarding which we have written the reporters personal information letters.

II. COUNTY AND CITY FOOD CONSERVATION

MARTHA VAN RENSSELAER, FLORA ROSE, and FLORENCE FREER, *Leaders in Charge*

The county and city food conservation work of the Commission consisted in undertaking the immediate completion of the organization of all the counties in the State with home demonstration, or food conservation, agents. This movement was inaugurated by the State some years ago in cooperation with the United States Department of Agriculture, and under normal conditions would have taken many years more for full development. When the Commission began its work, five counties had been organized and agents established; on October 1 there were forty organized counties in the State, and, in addition, work had been established in nine of the larger cities. Most of the States in the Union have undertaken similar organization work on war emergency funds, but New York State had an advantage in the early appropriation of funds for the New York State Food Supply Commission. In the first federal food production bill, passed on August 10, nearly four and one-half million dollars was appropriated for the extension of the county agent system as a war measure in cooperation with the States.

The State was charted into five districts, and the food conservation agents in the counties of each district were under the direction of a district leader. A sixth district leader at large was chosen to go from county to county to aid in community organization.

The six district leaders were under the direction of a Central Food Conservation Committee of three persons who had their headquarters at the New York State College of Agriculture. Two of these persons represented the Department of Home Economics of the College, and the third the county farm bureau. The organization, direction, and development of the work of the food conservation agents and of the district leaders was under this central committee. The subject-matter specialists and six demonstrators assisted the central committee in preparing and presenting the material used by the agents in their county and city work.

Up to August 15 this work was maintained on the funds of the New York State Food Supply Commission and on funds and facilities provided locally. Beginning August 16 the salaries of the agents were divided equally between the State of New York and the United States Department of Agriculture on the special war emergency appropriation made for cooperation with the States. The federal appropriation was a very great aid in the larger development of the work.

In planning this work the Commission had the advice of the following committee:

Dr. W. H. Jordan, Director, New York State Agricultural Experiment Station.

Miss Elizabeth Lange, Buffalo State Normal School.

Director Edward Van Alstyne and Mrs. Ida M. Harrington, Bureau of Farmers' Institutes of the State Department of Agriculture.

Miss Isabel Ely Lord, Pratt Institute.

Professor L. S. Hawkins, State Department of Education.

Miss Marion Van Liew, Albany State Normal School.

Miss Mae Benedict, Mechanics Institute.

Miss Angeline Wood, New York State School of Agriculture, Alfred University.

Professors Van Rensselaer, Rose, Burritt, Babcock, and D. J. Crosby, of the New York State College of Agriculture.

The organization of a county or a city

The agents' expenses. The food conservation agents placed in the counties and cities were selected by the central committee and

their salaries were paid from the state and federal emergency funds. The counties and cities having agents raised the money to meet all local expenses of the agents, such as travel, office equipment, stenographer, etc. These expenses were required to be guaranteed before the agent was appointed.

First step in organization. In counties where there was a farm bureau, the work was introduced through the executive committee of the bureau. A county-wide meeting was called by the president of the bureau, attended by a member of the Central Food Conservation Committee and a representative of the executive committee of the farm bureau, to determine the possibility of raising funds to support a food conservation agent. Representatives of the larger county organizations were invited to be present at the meeting. The Board of Supervisors was urged to aid in providing the money. If the county did not have a farm bureau or if the farm bureau was not able to cooperate, the Central Food Conservation Committee perfected an organization in the county and arranged for raising the needed funds.

The county executive committee. When the funds were appropriated, a county food conservation executive committee was chosen to aid in the direction and organization of the work of the county food conservation agent. This committee was usually chosen as follows: The central committee invited the farm bureau treasurer to act as the treasurer of the county food conservation committee. A representative of the farm bureau, a representative of the county home defense council, and a representative of the grange, were selected as members of the executive committee. The remaining members were chosen according to the organization or needs of the county. A meeting was then called at which the district leader, and the county agent, if possible, were present. At this meeting the county executive committee and the district leader charted the county into centers and determined the order in which centers should be visited by the county agent. When these centers had been determined, the county executive committee and the district leader appointed temporary local or community committees to aid in organizing community meetings in the chosen centers.

In much the same way, except for the cooperation with the farm bureau, executive committees were established in the organized cities for the local direction of the work.

The preparation of the food conservation agent to assume her responsibility

All the county agents chosen were graduates of home economics courses in recognized institutions, who had been personally interviewed by some member of the central committee and who had received training in one of the special emergency training courses given by the Department of Home Economics of the New York State College of Agriculture under the direction of the central committee. Three of these emergency schools were held, the first in June, the second in July, and the third in August. About 150 women attended these courses, and from these were selected the 50 women who represented the counties and most of the cities in the food conservation work.

The following institutions were represented by young women attending these courses: University of Chicago, Stout Institute, Mechanics Institute, Teachers College of Columbia University, Syracuse University, Albany State Normal School, Simmons College, Ontario Agricultural College, Drexel Institute, Smith College, Oswego Normal School, Salem College, Michigan State Normal College, Colorado College.

Progress of the food conservation work

The statistical tables that follow, while incomplete, present the tangible results attained in a few weeks in perfecting the organization and in getting concrete food conservation methods in operation; but such results are not a complete measure of the work accomplished or of the aims in view. Food conservation agents, leaders, demonstrators, committees, and community kitchens are but means to an end; the ultimate aim is to create public sentiment and to stimulate individual initiative in conservation. The organization of the work has been the largest problem up to this time, and it has been fraught with many complications. The finding of adequately prepared food conservation agents has been extremely difficult. The organization is now nearly completed, and

these agents should be a powerful force in meeting the food situation during the continuance of the war and in the period of stress that will immediately follow. They aim to make every community in the State efficient and to the largest possible degree self-sustaining.

In reading the following tables it should be kept in mind that the work is yet in its barest beginnings.

SUMMARY REPORT ON FOOD CONSERVATION WORK IN THE NEWLY ORGANIZED COUNTIES TO OCTOBER 1

County	Agent	Work begun	Local funds contributed	Source of funds	Other local contributions	Demonstrations given		Other meetings		Fairs or picnics attended		Telephone calls	Office calls	Calls at homes	Circular letters		Individual letters
						Number	Attendance	Number	Attendance	Number	Number of persons met				Number	Total	
Albany	Alta J. Emerson Mrs. E. G. Perkins	8/16-8/18 8/20	\$225	Subscriptions	Office, stenographer, auto- equipment, auto- mobile	10	380	2	170	1	400	21	9	8	.....	.....	30
Allegany	E. Masters	8/13	250	Subscriptions	Stenographer, office	17	670	.....	.....	1	800	5	1	14	9	79	20
Broome	H. Estabrook	6/28	300	Board of supervisors	Office, stenographer, auto- equipment, auto- mobile	32	1,033	3	121	2	1,200	63	28	14	4	25	211
Cattaraugus	E. Conover	7/9	300	Board of supervisors	Office, stenographer	38	1,217	8	235	3	1,800	98	30	18	8	94	146
Cayuga	M. Bowen	7/2	350	Home defense com- mittee	Office, stenographer, equip- ment, automobile	24	1,016	12	692	1 (4 days)	2,000	123	70	53	3	41	144
Chautauque	F. Boone	7/19	300	Board of supervisors	Office, automobile	29	2,949	4	1,400	2	1,000	46	3	9	8	80	117
Chemung	Lara Ware	9/1	300	Board of supervisors	Office, stenographer	5	123	5	16	.....	.....	16	14	11	4	53	46
Chemango	Alice Blinn	6/28	750	Board of supervisors	Office, stenographer,	49	1,434	7	431	1	300	126	30	51	22	144	163
Delaware	L. F. Clark	7/1	350	County organiza- tions and local committees	Office, clerk, auto- mobile	48	1,393	14	996	1	600	112	31	6	14	152	171
Franklin	W. Nash	7/5	300	Farm bureau	Office, stenographer,	38	1,206	.....	.....	1	700	59	44	36	4	60	170
Fulton	R. Durso	7/28	300	Home defense coun- cil	Office, stenographer, high school kitchen	23	729	.....	.....	.....	.....	198	86	.....	.....	.....	92
Genesee	Anna Harlow	8/15	300	Board of supervisors	Office	11	920	3	17	2	1,200	33	15	.....	.....	.....	53
Herkimer	V. McCre C. Fonda	8/15-8/31 9/1	500	Home defense coun- cil	Office, stenographer, school automobile, school kitchen	17	386	2	153	.....	.....	72	12	15	.....	.....	82
Monroe	Frances Grimes	8/24	300	Board of supervisors	Office, stenographer	4	150	.....	.....	1	1,000	20	4	1	1	9	51
Montgomery	Mrs. D. B. Hemstreet	7/27	300	Farm bureau	Office, stenographer,	24	603	1	40	3	3,800	99	15	26	.....	.....	111
Niagara	Edna Darling Bertha Yerke	7/3-8/20 8/20	300	.....	Office, stenographer automobile	23	686	.....	.....	.....	.....	76	34	49	8	70	144

Onesida	Marian Hess	7/0	300 Home defense league	Stenographer, office, kitchen, transportation	31	1,571	.....	3	1,920	19	48	26	.....	174		
Onondaga	G. Bower	7/2	300 Farm bureau	Office, stenographer, transportation	32	1,291	15	844	1	1,200	202	118	31	5	290	218
Ontario	E. Usher	7/26	250 Board of supervisors and home defense	Office, telephone, stenographer	19	1,115	.....	.....	.....	61	33	30	2	37	81	
Orleans	Elizabeth Abbuhl	9/5	200 Farm bureau	Office, telephone, stenographer	.....	.....	1	25	2	725	28	2	.....	1	78	20
Oswego	G. Chapman	8/13	500 Home defense league	Office, stenographer, transportation, telephone	15	519	4	395	1 (2 days)	1,200	45	13	10	6	91	93
Rensselaer	Mrs. H. C. Campbell Alice J. Bunce	8/1—9/30 10/1	350 Subscriptions	Office, stenographer, automobile, school kitchen	21	538	2	180	.....	.....	45	6	13	.....	88	
Rockland	E. Simpson	7/5	300 Home defense	Office, stenographer, automobile, school kitchen	55	2,773	4	64	1	150	503	77	25	12	149	189
St. Lawrence	H. Whittaker	7/12	500 Farm bureau and home defense committee	Office, stenographer, automobile, laboratory	27	822	3	270	2	625	58	9	21	.....	205	
Saratoga	A. Emerson	8/18	250 Subscriptions	Office, stenographer, automobile, school kitchen	19	688	1	175	1	50	52	5	4	.....	80	
Seneca	Anna Kerr	7/6	400 Board of supervisors and anonymous contributions	Office, stenographer, automobile, equipment, traveling expenses	37	1,575	1	6	1 (fair week)	2,000	58	10	25	9	226	148
Steuben	K. Roy	7/27	300 Board of supervisors	Office, stenographer	22	773	2	800	1	500	44	34	24	8	309	69
Sullivan	L. F. Cooper	7/26	250 Organizations and committees	Stenographer	21	1,606	21	567	1	1,000	108	92	74	10	119	117
Tioga	E. Becker	7/16	420 Nine townships	Office, stenographer, automobile	36	1,112	5	387	.....	.....	74	59	16	25	129	82
Tompkins	F. Thurston	8/20	.....	Office, stenographer, automobile	4	50	2	75	4	1,000	25	20	5	.....	35	
Ulster	L. Stuart	9/1	300 Board of supervisors	Office, expenses provided by Home Economics Department	3	142	5	100	.....	.....	20	2	6	6	195	74
Warren	L. Backus	7/1	500 Subscriptions	Office, stenographer, stenographer, transportation	34	933	4	350	1	1,600	45	39	11	4	199	198
Wayne	H. DuBois	9/21	200 Board of supervisors	Office, stenographer	.....	.....	1	50	1 (4 days)	800	1	2	3	1	20	7
Westchester	B. Cold	8/19	500 Thrift committee	Office	34	1,358	2	210	1	400	47	8	14	3	29	48
Wyoming	H. Comstock	7/12	300 Board of supervisors and farm bureau	Office, stenographer	22	877	.....	.....	1	500	61	6	15	2	23	66
			\$11,545		824	82,693	134	8,772	43	30,130	2,725	1,003	664	179	2,703	3,741

In addition to the foregoing newly organized counties for the food conservation work, the following counties had previously established home economics departments in connection with their farm bureaus. The agents in charge of these departments were appointed as special representatives of the Food Supply Commission in the latter part of July, and they have cooperated in carrying out the food conservation program of the Commission:

County	Agent	Demonstrations given		Other meetings		Telephone calls	Calls at homes	Circular letters		Individuals
		Number	Attendance	Number	Attendance			Number	Total	
Cortland.	Miss E. Beardsley.	21	340	10	10,272	265	15	8	224	145
Erie.....	Miss C. Smith....	17	669	8	222	97	7	6	404	238
Jefferson.	Mrs. V. Godfrey...	14	379	25	1,292	225	17	1	22	248
Nassau...	Miss O. Goehler...	38	1,826	19	284	303	19	4	398	322
Otsego...	Miss L. Hale.....	49	1,170	5	776	.....	9	2	411	249
		139	4,384	67	12,846	890	67	21	1,459	1,202

To sum up the conservation work of the New York State Food Supply Commission in rigid facts and figures is like trying to define the outer limit of the ripples on a lake when a stone is cast into it. Definite, tangible achievements have resulted, but the influence spreads far beyond actual achievement, and other activities have been set in motion as a result of the efforts of the Commission. Figures and facts, therefore, do not tell the whole story. In Onondaga County, for instance, where community kitchens have been the outgrowth of the county conservation work, the difficulty of buying the surplus products in the local markets at low prices led to the establishment of a curb market in Syracuse, which is bringing the farmer into immediate touch with the housewife.

As evidence of tangible achievement, thirty-five county conservation agents have been established, five counties having already established home demonstration agents in connection with their farm bureaus. Nine agents have been placed in the cities of New York, Rochester, Albany, Syracuse, Buffalo, Utica, Auburn, and Rome, and, for the summer, in Saratoga Springs.

Through these forty-nine definite links between the housewife and the State and Federal Governments, 963 food demonstrations have been given to audiences aggregating 37,000

women. Twenty thousand women have been reached through other meetings in churches, clubs, and homes, and 30,000 more through fairs and picnics. In addition, nearly 16,000 mimeographed sheets containing last-word information on food questions have been issued from the conservation headquarters of the New York State Food Supply Commission.

Scope of agent's work

The scope of the county or city conservation agent's work is bounded only by the needs of the community. She reaches the housewives of the county by a series of demonstrations on all phases of food conservation — drying, canning, salting of vegetables, canning of meat and fish, preserving, jelly making, meat substitutes, wheat-saving breads, planning of meals, uses of milk, etc. She forms neighborhood study clubs, encourages the forming of community canning kitchens, and opens up channels of information through clubs and other organizations and through the churches and the newspapers, thus binding the individual woman to the state and national food campaigns. She is a source of reference in the community, and a medium for the exchange of experience.

She follows a program that helps apply the efforts of the housewife to the immediate problem of conservation: in June, July, and August, encouraging and directing preservation by the canning, drying, and salting of vegetables and fruits in seasonal rotation; in September, October, and November, demonstrating varied methods of preserving the orchard fruits and stimulating the quick utilization of those that are perishable, and presenting a program on canning poultry and meat, on the storing of winter vegetables, on food values, on meal planning, and on the value of milk as a food and ways of using it. The latter more general subjects will be developed and followed through the winter.

City work

Each city met its conservation problem according to its own community needs. The various methods were as follows:

New York. In New York City, the work of the conservation agent was chiefly in connection with the community canning kitchen, a vast undertaking in itself. The organization was effected on July 12. The work was done in cooperation with the Mayor's Committee of Women on National Defense and other local organizations.

In the New York canning and drying kitchen, the actual work of canning was in charge of the city conservation agent, with a small group of workers paid by the Commission and the Federal Government, and from thirty to forty volunteer workers a day. The kitchen opened the middle of July and closed the 1st of October, when the building lent by the school authorities had to be taken over for school use. The work of conservation, however, is going on, under the supervision of the city agent, in smaller centers throughout the city. The New York kitchen put up more than 8000 quart jars of vegetables and preserves, and gave employment to 375 volunteers whose work was paid for in fresh or canned foods. In addition to salting, drying, and canning, fresh foods were sold to the people at low prices. An average of 3000 pounds of potatoes a day were salvaged and sold to the poor at one cent a pound. Through the kitchen ten tons of food which otherwise would have been dumped into the river have been saved. This has helped to create the public demand that transportation of food in New York City shall be so improved that the farmer will not be subjected to such heavy wastage and the consumer will have a larger proportion of the foodstuffs arriving at terminals.

Buffalo. In Buffalo, where headquarters were established on July 30, two main lines of effort were through the public school system and through a thrift kitchen with an agent and ten volunteer workers in charge. Demonstrations were given in the schools during the summer, and, through cooperation with the Board of Education, extension work in food conservation is planned for two nights a week throughout the winter. The thrift kitchen, opened the 17th of September, has had 1000 visitors, has enrolled 94 volunteer workers, has dried 84 bushels of raw material which otherwise would have been wasted, and has preserved 227 quarts of fruit which will go to feed our soldiers; it has sent out 5000 church announcements and 2150 dodgers announcing the work.

Rochester. The city of Rochester was organized into five districts, with a committee of five in each district. Weekly demonstrations and lectures were given in each district, and general public demonstrations were given at Mechanics Institute.

Utica. In Utica a similar districting plan was adopted, with the city and suburbs charted in nineteen districts, to some extent

according to nationality where that was possible. In each district there is a committee of fifteen working under a central advisory committee of four. The district committees make house-to-house canvasses to win the cooperation of the housewives in the food campaign. Demonstrations on practical subjects are held at regular intervals in various districts.

Albany. The conservation work in Albany will crystallize during the winter months in a lunch room, where model dishes conforming to thrift ideas will be served, the work of the lunch room to be done by seniors from the State Normal College under the supervision of the conservation agent. In addition to this, the headquarters of the agent will be made a center of information on all food questions, as well as an exchange for the selling of home products. Books, pamphlets, charts, and exhibits on food and household problems, will be gathered there for use and reference. Women from outside the city, as well as Albany housewives, will be encouraged to bring their canned and dried fruits and vegetables and put them on sale in the agent's headquarters. Throughout the summer the city food conservation agent supervised community kitchens established in the schoolhouses, gave regular demonstrations to groups of women, and mailed instruction sheets to women who were unable to attend the demonstrations and lectures.

Other cities. In Syracuse, Auburn, and Rome, similar programs of conservation were outlined for the winter. In Saratoga Springs the agent worked in connection with a community kitchen, to be mentioned later.

Community kitchens

No work in the State conservation campaign has been more fruitful of results than the community canning kitchens, where women have gathered to can the surplus of their own gardens and near-by farms. More than a hundred of these kitchens have been established in response to the need for quick preservation of the crops raised in response to an appeal to patriotism. Westchester County alone had eighteen kitchens, with an aggregate output of 30,000 quarts. Not all of these have been definitely linked with the State Commission, even though they may have resulted from the stimulus by state and government work and received help from the conservation agents and the farm bureaus. In many kitchens

the women can their own products under careful supervision; in others, the canning is done on shares, the kitchen receiving part, the donor of the material the remainder. Most of the output will go to the needy at home or abroad, thus lessening the drain on the food supply and helping to avert hunger. Some of these kitchens will continue during the winter, and many of them will doubtless be permanent summer undertakings in the future.

The plans and organization of the kitchens differ slightly, but the one fact common to all is that a large part of the material canned would otherwise have gone to waste; and beyond the actual conserving of food is the educative effect of tying various elements of a community together in a cooperative food-saving plan.

In Onondaga County, a group of three kitchens were started during the summer and were operated under the immediate supervision of the county conservation agent. These were located at Solvay, Fayetteville, and Skaneateles.

Solvay. The Solvay kitchen, in operation from the last of May, had up to the 1st of October put up 7000 cans of fruit and vegetables. It worked in cooperation with the local school organization, the domestic science teachers being employed through the summer to help with the work. It used the products of the school gardens, and had the assistance of the school children in harvesting and preparing materials. The kitchen was started by a local organization of women, the Solvay Guild, the Commission's agent aiding in its operation during the summer.

Fayetteville. The Fayetteville kitchen, also started in May, put up during the summer 600 cans of fruits and vegetables and dried 50 pounds of material, all of which was donated. The labor of this kitchen was all voluntary, welding together old and young, using groups of Boy Scouts and schoolgirls. It was operated by a club of young women with the backing of the Men's Community Club, and was directed by the Commission's agent.

Skaneateles. The Skaneateles kitchen, established the last of August and closing the 1st of October, canned 300 jars of fruits and vegetables, all the produce for which was donated from near-by gardens. The labor was all voluntary. The kitchen was located in the home of a resident.

Saratoga Springs. Under the supervision of the county agent of the Commission, a community canning kitchen was organized

at Saratoga Springs on August 25. Because of the summer visitors in Saratoga, the kitchen was a center of information for people from places as far separated as California, Georgia, and Massachusetts. Of the foods canned for outsiders, the output was 409 quarts of vegetables and 238 glasses of jelly, and on community days the women canned 459 quarts of vegetables and 31 glasses of jam and conserve for themselves. Many of the farmers near by sent in vegetables and fruits to be preserved on shares.

Binghamton and other kitchens.— In Binghamton, where the county agent helped launch a community kitchen, 1200 cans of perishable food were saved. In White Plains, at the Westchester kitchen, the conservation agent lent her services part of the time and the kitchen conserved 10,000 quarts of products. In the Hicksville, Long Island, canning kitchen, started by two philanthropic women partly in cooperation with the farm bureau, between 12,000 and 15,000 quarts of canned goods were put up, all of which it is intended shall go to the soldiers and to women and children in France and Belgium.

Other group activities

In addition to the canning kitchens, women have gathered in groups for many kinds of food activities. Study clubs have been formed and housewives have been brought together for exchange of experience so that energies and effort, as well as food, might be conserved. In Chenango County three women bought a pressure canner and started doing their own canning together, later offering to help with their neighbors' canning, all of which was done under the supervision and direction of the food conservation agent. In the same county the agent helped to construct a homemade drier for one family, which served as a model for adoption by others in the neighborhood. In Mottville, Onondaga County, a factory town, the owner of one of the factories, after seeing a demonstration by the county agent, offered to his employees the use of two steam retorts in his factory for canning on Saturday afternoons and Sundays, with a man on hand to keep up the steam pressure, and kettles of boiling water in which to blanch the vegetables.

In Seneca County, a farm woman who had been shipping her cherries to the Philadelphia market found them spoiling because of rain. Word was sent to the conservation agent, and she

assembled a group of women who went to the farm and by their joint efforts established a home cannery and preserved for winter use the crop that was about to go to waste.

In other places groups of women went into the fruit orchards and did their canning there, in order to save transportation and avoid spoilage.

In Rockland County the agent found certain communities facing a scarcity of vegetables while others had a surplus. Telephone clubs were organized to establish a quick chain of communication between demand and supply. At Tompkins Cove, Rockland County, one day was set aside for community canning. Twenty-five men and women assisted the agent, and during one forenoon twenty-five gallons of lima beans and corn were canned, the afternoon being given over to a demonstration on preserving plums, peaches, tomatoes, and crab apples.

Groups of factory girls in Onondaga County have agreed to give part of their luncheon hour to food work under the conservation agent.

Conservation through the thrift train, fairs, and other means

The thrift train. One of the important and effective instruments in the food conservation campaign was the "Thrift Special," which went through the heart of New York State on the New York Central lines, with demonstrators furnished by the New York State Food Supply Commission in cooperation with the Department of Home Economics of the State College of Agriculture.

This itinerant school of food conservation, through graphic exhibits of canned and dried products and practical equipment for use in preservation of food, through distribution of state and federal bulletins on food questions, through daily demonstrations on canning, and through the interchange that comes by actual contact, drove home the lesson of national thrift. Twenty points were touched, with audiences averaging 150 persons a day. The country through which the car passed was placarded with word of the demonstrations and a call to enlist in the cause of food saving.

County fairs. At twenty-three fairs in the State, county food conservation agents have either had exhibits or have given demonstrations, reaching an audience of about 20,000 women, in addi-

tion to the great numbers who received the message at the State Fair at Syracuse. At each of these assemblages exhibits told vividly the need of saving the products that are scarce, how to substitute other foods, and how to dry and salt perishable foods.

The State Fair. At the State Fair at Syracuse, the whole story of conservation was told in exhibits of canned and preserved foods, of dried products and equipment for home drying, of wheat-saving breads, of meat savers, of milk, of the many varieties of beans and their uses, and of ways of saving and utilizing fats. Demonstrations on these subjects were given to large audiences. The story of bread making was told in motion pictures. Copies of recipes and directions bearing upon conservation of food were distributed in large quantities. At the bread exhibit small loaves of several kinds of wheat-substitute breads were baked in the army oven and sold for two cents apiece with the recipes for making. The lesson of wheat saving was markedly vivid and effective; the bread made its own plea.

Window exhibits. Shop windows and department stores have been used to tell the story of conservation in the state campaign, thus reaching persons who could not be assembled in a formal demonstration or meeting of any kind. In Delaware County the First National Bank of Walton gave the use of one of its front windows for an exhibit of canned products, canning utensils, and literature. One of the local hardware stores lent the utensils. The exhibit attracted a great deal of attention and brought many requests for information and literature, from both the town and the visiting country people. The county agent was in the bank for ten days to respond to the questions and explain the exhibit. Another bank in the same county offered its window for a similar exhibit later.

Indications of the increase in food preserved

It is too early for a complete record of canned foods in comparison with the supply of former years. From an early survey, however, there is little doubt that there is an enormous increase of food laid away against the lean months. One community kitchen has a sum total of 10,000 cans of food that would have gone to waste, another of 8000, and another of 12,000. Families who never before have done anything toward food preservation have one or two hundred jars on their shelves this year. The Government has estimated for 33 States in the Union 300 per cent

more canned and dried goods than in 1916. We may expect that New York will not fall behind the other States in the final total.

"A decided increase is given in number of filled cans in every household," writes one agent. Another writes: "In three families I know there has been an increase of a hundred quarts of vegetables each, due to the work of food conservation in the county." A third writes: "There has been a 200-per-cent increase in the amount of vegetables preserved—due almost entirely to the demonstrations."

Increase in the canning of vegetables

Women have always preserved and made jellies, but the canning of vegetables has been introduced into hundreds of families who never before have attempted it. Canning vegetables is difficult; there is great chance of failure. The method whereby there is least risk has been broadly taught through the agents, and the probability of waste from spoilage has been very greatly reduced. "Many women are canning vegetables this year who never did before," reports the food conservation agent in Franklin County. In Ontario County the agent in one month came in contact with at least a hundred women who are canning vegetables this year for the first time. "At least a hundred women," reports the Erie County agent, "are canning chicken and fowls as well as ham in addition to their vegetable canning."

A report credited to the National Emergency Food Garden Commission states that during the past season more than 500,000,000 quart jars of fruits and vegetables have been put up in the homes in the United States, or nearly three times the normal amount.

The educational leaven

One woman came twenty miles to learn from a demonstration agent why sixteen jars of chicken she had canned the year before had spoiled. She found out and went back to can by a better method. In large numbers, women whose canning has had a large proportion of spoilage have been set right as to the reasons. Through the food meetings they have asked questions, they have learned that there is a reason for waste and spoilage, and the leaven of education has accomplished as much toward conservation as the actual increase in canning efforts. A Saratoga County woman exhibited to the conservation agent fifty-five different products canned, dried, and salted, every one of which was raised in her own back yard.

Another valuable lesson of the conservation work has been the introduction of new and untried vegetables and foods in the dietary of many families. Through the demonstrations and the exhibiting of new foods, kohlrabi, swiss chard, okra, and vegetable marrow have been popularized where before they were hardly more than a name. Prejudices are being broken down and conservative food habits are becoming more elastic and flexible.

Class and kind of people reached

The seed of food conservation has been widely scattered. In many of the canning kitchens, the very wealthy have worked side by side with the very poor, mistresses elbow to elbow with their maids. In the delivery of the products of the New York canning kitchen to the volunteer workers, many of the products went to single women living in top-floor tenements who never before had had canned goods except those bought from the corner store; while women whose names are in the "Social Register" have been their companions over the canning kettle. That democratizing, socializing influence has been one of the largest gains of the whole campaign.

Reaching the housewife from foreign lands

Special efforts were made to reach the women from foreign lands. Signs bearing on the food situation were translated into their native languages. In the New York canning kitchen, an effort was made to learn from the foreign women their native dishes, so that the approach to their cooperation might be in line with their own food habits and traditions, and that the American housewife, in turn, might learn something of their methods of thrift. The cosmopolitan scope of a city agent's work may be gathered from one week's report of the Buffalo agent, which gives the type of people attending demonstrations under the varied headings, *mixed, wealthy, German, Italian, poor American, Polish, German and American, Jewish, well-to-do, poor, Irish*. In Gloversville, the center of the glove industry, the agent was put to a test as to how to reach the people. The glove makers work in their homes to a great extent, and consequently the agent went to them instead of trying to bring them to a meeting.

Significant facts

An agent writes: "Wednesday I drove 72 miles to call on three people. The personal call is the only way to reach some of the

people. I had a cordial reception in each place." Another says: "Two women walked three miles to a demonstration but reached there too late. They were so disappointed that I went through it again."

The manager of a tea room in a town where an agent was holding demonstrations, after attending one, asked the agent's advice as to how to save the large quantities of fats left from frying and broiling. The agent gave practical directions and the tea-room manager later came in to show the evidence of her thrift.

In one small town where there was a community kitchen, the women in charge went to a local grocer and asked him to donate the fruits and vegetables he was unable to sell. The merchant's cooperation was completely won when he was offered one-third of the product back in canned goods to sell at his own price. One woman, whose vegetables were spoiling because of slow shipping, got the cooperation of her neighbors and of the conservation agent and saved all her crop through a home cannery. To date she has sold \$200 worth of canned goods.

In Buffalo the agent began the salvage of the outside leaves of celery thrown away by the market men, by drying them in the thrift kitchen. Now the housewife demands of her dealer that he leave the outside stalks on for use in soups or for drying.

"Many women," reports an agent, "had never before used dark flours for anything but one or two varieties of bread. Now cakes, fried cakes, quick breads, are being made from rye, corn, entire wheat, barley, oats. We are making an effort to have these products ground fresh in local mills."

Two truck-garden owners brought a thousand ears of corn to a community kitchen to be canned on shares. When they saw the perfect result they paid for the canning and took the whole lot home, with recipes of the method to be given to their wives. This is one of the innumerable incidents showing the interest that men took in the food conservation work.

Mailing cards issued

Mailing cards were prepared by members of the staff of the State College of Agriculture, and issued under frank of the Director of Extension in cooperation with the New York State Food Supply Commission. The following were the subjects treated, together with the number of copies issued in each case:

Use of rhubarb.....	75,000
Canning meat	75,000
Dandelions as food.....	75,000
Dandelion recipes	75,000
Multiple hitches	50,000
Preservation of eggs in water glass.....	75,000
Some ways of getting along without the hired man	50,000
The productive soil.....	40,000
Apple spray schedule.....	5,000
A homemade fireless cooker.....	30,000
Salting vegetables	30,000
Equipment for canning.....	30,000
Directions for canning fruit by the cold-pack method	30,000
Emergency crops and rotations.....	25,000
Buckwheat and rye.....	25,000
Winter rye and winter wheat on sod land.....	25,000
Rye and clover — a two-years' rotation.....	25,000
Directions for canning vegetables by the cold-pack method	25,000
Conserve the manure.....	25,000
Drying fruits and vegetables in the home.....	100,000
How to dry fruits and vegetables.....	25,000
A simple fruit and vegetable drier.....	25,000
Jelly	150,000
Ways of preserving beans and peas.....	100,000
How to make an iceless refrigerator.....	150,000
Suggestions to vegetable growers on marketing...	25,000
Ways of preserving tomatoes.....	150,000
Fruit juices	150,000
Save the fats — Part I	150,000
Save the fats — Part II	150,000
Rejuvenation of old worn meadows and plowable run-out pastures	25,000
Ways of preserving peaches.....	200,000
Making kraut for home use or market.....	50,000
Fall spraying for peach leaf curl.....	15,000
A dozen kinds of bread.....	150,000
 Total cards	 2,405,000

REPORT OF THE DIVISION OF COUNTY ORGANIZATION

M. C. BURRITT, *Commissioner in Charge*

The Division of County Organization was created by resolution of the Commission at its meeting on April 24.

PURPOSES OF THE DIVISION

The two main purposes of the Division of County Organization were:

1. The Commission desired to develop the local organization and machinery for meeting farmers individually and personally. By getting into immediate touch with their conditions and needs it aimed to place itself in a position to render the most acceptable and efficient service.

2. To provide the means of carrying out in every county the work planned by other divisions of the Commission, it was necessary to have in every county a local office properly equipped and manned with the necessary means of reaching the largest number of individual farmers. This meant a local clearing house, meeting local needs and aiming to extend this work to every community in the county.

HOW THE DIVISION WAS ORGANIZED

From the beginning of its work, the Commission planned to utilize agricultural agencies already in the field, as far as this was consistent with the continued efficiency of these agencies and of the Commission itself. With this in mind, the Commission turned to the farm bureau organization, with centrally located county offices and an already well-developed organization in forty-one counties of the State. These county farm bureaus are cooperatively organized and supported by the State and Federal Governments, through their respective departments of agriculture and the State College of Agriculture, and by the farmers of the respective counties, through county-wide farmers' organizations known as farm bureau associations. The bureaus are therefore a partnership organization between public agricultural institutions, represented by a State Leader of Farm Bureaus at Ithaca, and the farmers of the counties, represented by their executive committees of from seven to nine men elected by their respective county associations.

These executive committees and the State Leader of Farm Bureaus, together select and employ a county agent, or farm bureau manager, to have active charge of the work in the county. A further feature of the organization is an advisory committee system which extends into each community in the county, where the bureau is represented by a committee consisting of from one to five leading farmers. All the work of the bureaus in the various communities is carried on through these local advisory committeemen. Thus an organization extending to nearly every agricultural community in the forty-one organized counties was available. Following the conference with the presidents and representatives of the Farm Bureau Association, held at Ithaca on April 17, arrangements were made by the Commission to utilize this organization in carrying out its plans for work.

The farm bureau offices are usually located in the county seats. These offices are, as a rule, furnished with the necessary personnel, equipment, and supplies to carry on their regular work. Each manager is provided with an automobile for getting about the county. In some cases, assistants also are available. The Commission therefore appointed each county agricultural agent, or farm bureau manager, its special representative. In order not to interfere too seriously with the regular work of the farm bureaus, special assistants, who were called assistant representatives of the Commission, were assigned to most of the counties. The maximum number of assistants placed at any one time was 37; the number averaged about 30 during the summer. On September 1 only 27 assistants remained at work. These assistants were placed under the general direction of the county agents. Their salaries and expenses were paid by the Commission and they were expected to give first attention to the Commission's work. However, to offset the time, attention, and service given by the regular county agents to the Commission's work, the assistants were expected to help the county agent with his regular work whenever possible.

In some cases the extra work which devolved upon the county organization was so great that the Commission was obliged to furnish additional stenographic help; in all cases the Commission agreed to assume a fair proportion of the additional expenses thrown upon the local farm bureau organization as a result of the emergency work. In spite of this, however, heavy inroads were made on the reserve funds of all the bureaus. Some of them

had to go to the boards of supervisors for additional appropriations, while others will finish the season's work with serious financial deficits, as a result of the emergency work which the Commission did not pay for.

The counties having this organization, with the location of their offices and the names of the representatives (regular county agricultural agents) and assistant representatives in each county, follow:

County	Name of representative and of assistant	Address
Albany	H. E. Crouch	93 Court House, Albany
	R. C. Van Horn	93 Court House, Albany
Allegany	R. Q. Smith	Belmont
	G. E. LeWorthy	Belmont
Broome	J. F. Eastman	Binghamton
	H. J. Rood	Binghamton
Cattaraugus	H. K. Crofoot	Olean
	H. J. Metzgar	Olean
Cayuga	E. C. Weatherby	Auburn
	W. E. Knapp	Auburn
Chautauqua	H. B. Rogers	Jamestown
	R. F. Fricke	Jamestown
Chemung	T. W. Vann	Elmira
	A. S. Burchard	Elmira
Chenango	E. P. Smith	Norwich
	T. W. Billings	Norwich
Clinton	C. B. Tillson	Plattsburgh
Cortland	A. S. Merchant	Cortland
	W. T. Merrick	Cortland
Delaware	Earl G. Brougham	Walton
	O. H. Chapin	Walton
Dutchess	F. H. Lacy	Poughkeepsie
	G. N. Hammond	Poughkeepsie
Erie	W. L. Markham	Buffalo
	R. W. Pease	Buffalo
Essex	H. J. Tillson	Essex
	P. B. Woodford	Essex
Franklin	C. M. Austin	Malone
	J. M. Hurley	Malone
Greene	C. W. Gilbert	Catskill
	G. C. Porter	Catskill
Herkimer	C. A. Taylor	Herkimer
	C. F. Cochrane	Herkimer
Jefferson	F. E. Robertson	Watertown
	E. S. Stone	Watertown
Madison	D. F. Putnam	Cazenovia
	J. L. Finneran	Cazenovia
Monroe	L. A. Toan	Rochester
	J. L. Laycock	Rochester
Montgomery	W. J. Hagar	Canajoharie
	B. A. Allen	Canajoharie
Nassau	T. M. Avery	Mineola
	M. G. Briggs	Mineola
Niagara	N. R. Peet	Lockport
	J. W. Robson	Lockport

County	Name of representative and of assistant	Address
Oneida	O. F. Ross	Utica
	A. D. Davies	Utica
Onondaga	J. R. Teall	Syracuse
	E. G. Bucknell	Syracuse
Orange	T. E. Milliman	Middletown
	J. C. Crissey	Middletown
Orleans	L. J. Steele	Albion
	H. G. Chapin	Albion
Oswego	E. V. Underwood	Oswego
	F. A. Wangler	Oswego
Otsego	F. S. Barlow	Cooperstown
	D. T. Johnson	Cooperstown
Rensselaer	N. G. Farber	Troy
	P. W. Carter	Troy
Rockland	L. A. Muckle	Spring Valley
	A. P. Burroughs	Spring Valley
St. Lawrence	E. S. Bird	Canton
	C. L. Allen	Canton
Saratoga	C. S. Phelps	Saratoga Springs
	R. R. Jansen	Saratoga Springs
Schoharie	R. F. Pollard	Cobleskill
	G. W. Gilbert	Cobleskill
Suffolk	R. C. Parker	Riverhead
	C. W. Creighton	Riverhead
Sullivan	C. W. Wille*	Liberty
Tioga	E. R. Zimmer	Owego
	G. L. Kathan	Owego
Tompkins	V. B. Blatchley	Ithaca
	R. C. Beach	Ithaca
Ulster	W. H. Hook	Kingston
	John Lennox	Kingston
Warren	E. W. Cleeves	Warrensburg
Wayne	F. E. Rogers	Sodus
	E. S. Warner	Sodus
Westchester	J. G. Curtis	White Plains
Wyoming	H. M. Bowen	Warsaw
	H. S. Brower	Warsaw

* Temporarily acting.

A local office in each agricultural county in the State seemed necessary for carrying out the plans of the Commission. In fifteen of the agricultural counties there existed no farm bureau organization. Extension specialists from the State College were temporarily assigned to supervise the census enumeration in these counties. Within about ten days most of these men gave place to others from the graduating class at the College, who assumed the duties of county representatives.

First, an office and equipment had to be provided. Usually a

room in the courthouse was donated by the county through the influence of the Home Defense Council or the Board of Supervisors, on the request of the county representative or of a representative from the central office. In two counties, Seneca and Putnam, desk room and equipment were donated by individuals. In two other counties, office room was rented. In all cases the Food Supply Commission furnished filing equipment and other supplies.

Each chairman of a county home defense committee was asked by the Chairman of the Food Supply Commission, through the Adjutant General, to appoint a subcommittee on agriculture. This was to establish contact between the county office of the Commission and the farmers of the county. The subcommittee was composed of leading farmers acting in an advisory capacity with the county representatives of the Commission, through whom all county-wide movements pertaining to agriculture could be handled. In the counties already having farm bureau associations, the executive committee of that organization was appointed in this capacity; in the non-bureau counties actual farmers, in most cases, were appointed to these positions. Frequent meetings of these committeemen at the county office, and personal calls on them by the county representative, served to keep the Commission's agents informed of the needs and opinions of the crop producers. The committeemen also provided the county office with a number of representatives throughout the county.

The counties having this special organization, with the names of the representatives and their locations, follow:

County	Name of representative	Address
Columbia.....	W. I. Roe.....	Hudson
Fulton.....	N. E. Beers.....	Gloversville
Genesee.....	F. P. Cullinan.....	Batavia
Greene.....	N. C. Rogers.....	Catskill
Lewis.....	H. N. Young.....	Lowville
Livingston.....	H. N. Humphrey.....	Mount Morris
Ontario.....	O. W. Dynes.....	Canandaigua
Putnam.....	G. J. Wright.....	
Rockland.....	L. A. Muckle.....	Spring Valley
Schenectady.....	S. G. Judd.....	Schenectady
Schuyler.....	H. G. Chapin.....	Watkins
Seneca.....	H. E. Haslett.....	Ovid
Steuben.....	Jay Gelder.....	Bath
Washington.....	F. A. Roper.....	Hudson Falls
Yates.....	A. F. Lockwood.....	Penn Yan

On July 1 the office in Putnam County was closed because there was not sufficient demand on it to warrant its continuance. On July 15 the office in Schenectady County was closed for the same reason. On September 1, the offices in Fulton, Yates, and Seneca Counties were closed because of the resignations of the special representatives. The usual farm bureau organizations were completed and regular county agents were installed in Rockland County on July 1 and in Greene County on August 15.

SUPERVISION

These county representatives and their assistants were under the supervision of the Commissioner in Charge and one assistant, Professor Montgomery Robinson, a member of the extension staff of the New York State College of Agriculture. All the Commission's representatives furnished weekly reports of their work. The regular county agents reported as usual to the State Leader's office.

During the early part of the season, the farm bureau supervisory force gave a large part of its time and attention to the supervision of the emergency work of the Commission; in fact, there was serious interference with the regular work of the State Leader's office. During the latter part of the summer the work became better organized, and less special attention was necessary; but supervision by the State Leader's office and his regular force has continued.

A record of such of the work of the county offices as can be reduced to tabular form is here appended, and shows the amount of work done in each of the counties. An examination of the table will suggest the varying methods of local office organization and management. In some cases the farm bureau agent did all the field work, regular and emergency, while the Commission's representative handled the office work; in other cases nearly the reverse was true; and there were all gradations between.

Oneida.....	223	155	191	69	220	2	136	647	5,500	577½	39,253½	156	8,315	500	42	2,100	289
Onondaga.....	1,035	859	789	.....	64	10	4,394	708	600	.....	.....	.....	.....	.....	.....	.....	.....
Ontario.....	114	39	31	352	725	10	4,394	537	920	.....	.....	.....	.....	.....	.....	.....	.....
Orange.....	153	249	280	536	140	4	1,681	647	920	.....	.....	.....	.....	.....	.....	.....	.....
Orleans.....	31	20	27	54	265	8	2,212	1	170	.....	.....	.....	.....	.....	.....	.....	.....
Oswego.....	93	53	65	34	396	.....	.....	747	2,260½	21½	321	.....	.....	.....	.....	.....	.....
Otsego.....	88	9	38	.....	101	1	67	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Penn Yan.....	11	1	8	107	34	4	472	71	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rutsselaer.....	180	271	123	104	3	6	3,467	555	502	.....	.....	.....	.....	1	129	.....	.....
Rockland.....	25	8	21	1,186	99	12	1,326	217	234	25	.....	.....	.....	.....	.....	.....	.....
St. Lawrence.....	55	19	9	143	81	10	572	102	1,263	.....	.....	10	.....	.....	.....	.....	.....
Saratoga.....	20	8	15	404	83	4	406	25	.....	.....	.....	.....	.....	.....	.....	.....	.....
Schenectady.....	14	12	9	77	11	2	235	338	.....	.....	.....	.....	.....	.....	.....	.....	.....
Schoharie.....	94	10	47	299	92	9	1,671	121	.....	.....	.....	.....	.....	.....	.....	.....	.....
Schoyler.....	49	18	13	61	104	7	3,015	339	21	18	.....	.....	.....	.....	.....	.....	.....
Seneca.....	46	18	10	205	32	7	876	144	.....	.....	.....	.....	.....	.....	.....	.....	.....
Steuben.....	38	23	7	2,323	679	10	6,126	259	7,534	28	1,047	.....	.....	.....	.....	.....	.....
Suffolk.....	88	5	80	312	145	24	3,908	223	500	100	1,000	.....	.....	.....	.....	.....	.....
Sullivan.....	44	19	12	1,066	88	2	80	117	2,438	130	525	.....	.....	.....	.....	.....	.....
Tioga.....	47	6	45	290	58	13	2,594	117	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tompkins.....	127	43	29	44	99	12	747	191	1,000	25	500	.....	.....	.....	.....	.....	.....
Ulster.....	30	5	1	389	131	10	406	434	1,443	.....	.....	.....	.....	.....	.....	.....	.....
Warren.....	12	2	1	.....	5	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington.....	106	64	49	589	88	6	1,334	345	85	3	55	.....	.....	.....	.....	.....	.....
Wayne.....	85	46	170	37	94	6	3,895	140	1,827	18	280	.....	.....	.....	.....	.....	.....
Westchester.....	35	.....	.....	.....	.....	6	1,232	150	600	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming.....	33	9	14	329	179	8	.....	288	.....	.....	.....	.....	.....	.....	.....	.....	.....
Yates.....	116	56	34	418	210	8	818	451	65	10	834	.....	.....	.....	.....	.....	.....
Total.....	5,940	4,170	4,419	21,955	7,087	470	84,886	17,770	81,026	677½	39,253½	156	8,315	500	42	2,100	289

¹ Records incomplete.

² One camp of fifty boys established not included.

³ No commission assistant.

⁴ Eighty cans inoculation.

⁵ Also ten pigs.

Another table shows as follows, in parallel columns, partial summaries of the usual farm bureau activity and the extra work handled by the emergency organization:

PARTIAL SUMMARY OF ACTIVITIES OF REGULARLY ORGANIZED
FARM BUREAUS AND EMERGENCY AGENCIES
(April to August, inclusive, 1917)

	Farm bureau	Emer- gency	Total
Meetings held ¹	1,950	486	2,436
Attendance at meetings.....	90,423	21,955	112,378
Farmers visited.....	12,274	7,087	19,361
Letters written.....	38,940	18,752	57,692
Circular letters written.....	1,269	470	1,739
Circulation of circular letters.....	80,325	84,886	165,211
Office calls.....	30,547	17,770	48,317
Applications for help.....		5,940	5,940
Help supplied.....		4,452	4,452
Seed supplied:			
Potatoes, bushels.....		81,026	81,026
Buckwheat, bushels.....		39,252½	39,252½
Other crops, bushels.....		9,148½	9,148½
Copper sulfate supplied, pounds.....		11,225	11,225
Tractors:			
Number placed.....		42	42
Acres worked ²		2,100	2,100

¹ Does not include 1039 patriotic meetings held on Agricultural Mobilization Day, April 21, attended by 85,000 persons.

² Records incomplete.

PROGRAM

The main lines of work carried on through the county office may be grouped under nine heads, discussion of which follows.

1. The census

How the census was organized and conducted is described in detail in Bulletin 2. The New York State Food Supply Commission was appointed by Governor Whitman on April 13. Its first step was to order a survey of the agricultural resources of the State and of the requirements for increased production. This census was ordered on April 17, the work being placed under the general direction of the Commissioner in Charge of County Organization, M. C. Burritt, who was also State Director of Farm Bureaus.

How the census was taken. A state-wide conference of all county agricultural agents, the presidents of farm bureau associations in the forty-one organized counties, and delegates from

the other agricultural counties of the State, was called at the State College of Agriculture at Ithaca on April 16. At this conference, details of the general plan for taking the census were worked out and the instructions were given. On the 18th and 19th, county-wide conferences of farmers were held. In accordance with the proclamation of Governor Whitman, community meetings were held in 1089 communities of the State on Saturday, April 21, attended by 85,075 persons.

At all of these meetings the census was explained and the cooperation was solicited. By the 19th of April, 250,000 census blanks had been printed and shipped to all the counties. About forty additional helpers, mostly drafted from the senior class of the State College of Agriculture, had been assigned as assistants and all preliminary arrangements were completed for taking the census.

The county farm bureau agents were appointed county enumerators and were made responsible for the results in their counties. In the fifteen counties not having farm bureaus, extension specialists of the State College of Agriculture were assigned as county enumerators, and temporary offices of the Commission were opened. The following telegram of instruction was sent to the fifty-six county enumerators:

Commissioner of Education has sent telegrams instructing superintendents of schools and teachers to report to you as official census taker in your county. Call superintendents together immediately. Assistant will be sent as soon as it can be arranged. You are hereby authorized to employ such additional clerical, stenographic, and other assistance as may be necessary to properly and rapidly tabulate. Superintendents' and teachers' expenses in connection with census to be paid by Commission through Department of Education.

The district superintendents of schools were made responsible for the results in all the schools in their respective districts, and each school teacher was made responsible for results in her school district. The Commissioner of Education, John H. Finley, also a member of this Commission, sent the following telegram to school superintendents:

State Food Supply Commission is to make survey of agricultural resources. District superintendents, teachers, and pupils to gather data. County enumerator will get in touch with you. It is expected that each one will do his part promptly. Expenses will be met by Commission.

The census was made possible by this cooperation of the State Department of Education. Mr. Layton S. Hawkins had immediate charge of the Department's part in the work, and gave great assistance.

To immediately benefit the farmers and to save expense, the Commission utilized, as far as possible, all the existing educational organizations of the State which were equipped to do the work. Around the organizations already specified, it was necessary merely to gather additional help. This was done with the cooperation of the state schools of agriculture at Canton, Alfred, Morrisville, Cobleskill, Delhi, and Farmingdale, and the Joseph Slocum College of Agriculture at Syracuse University, all of which rendered valuable assistance. High school principals and teachers of agriculture throughout the State furnished aid and equipment. The State Bankers Association banks, business firms, chambers of commerce, and individuals, rendered material aid, and greatly facilitated the tabulations by lending their clerks and other expert employees, and their adding machines.

Thus the Commission was able to gather the necessary facts rapidly, and in just ten days after the copy for the census blanks was delivered to the printer a preliminary announcement of the results of the census was made. In addition to taking the census in record time, it probably was taken at less expense to the State than any other had been. The regularly paid employees of the State were utilized, and much assistance was given by public-spirited organizations, and it was necessary to employ comparatively little help.

The actual work of taking the census was begun in most of the counties on Monday, April 23, the records being practically all obtained by Wednesday, April 25. Tabulations were made in the counties on April 26 and 27, and complete tabulations from thirty-four counties had been sent to the central census office on April 28. The teachers and pupils in each district, assisted by other persons where necessary, obtained the original facts from farmers and made out the summaries for their school districts. The county enumerators, with their assistants, and the district superintendents, made the summaries for the counties. Dr. G. F. Warren, of the State College of Agriculture, had charge of the summarizing and tabulating of the records for the entire State.

2. Follow-up of the census

To follow up the census, the first consideration was to remedy the poor distribution of seed and the state shortage of potatoes, corn, and buckwheat. Lists of seeds for sale within the counties were compiled from the census schedules and sent to those who had

indicated wants. Exchange was further facilitated by newspaper advertising and by means of the telephone, the county offices being used as clearing houses. By exchange of these lists between the county offices some inter-county transactions were also made practicable.

To meet the state-wide shortage, the Commission purchased potatoes, corn, and buckwheat from outside the State. The county offices helped to place 81,026 bushels of potatoes, 677 bushels of beans, 39,252 bushels of buckwheat, and 8471 bushels of miscellaneous crops. In handling seed purchased from outside the State, the general practice at first was to have the county representatives get definite orders from farmers, who were asked to make a deposit with their orders. When a sufficient number of orders had been placed with a local county office, the Albany office of the Commission was notified by wire. The seed was then shipped, with a sight draft attached to the bill of lading, arrangements having been made with a local bank, individual, or association to finance the shipment without charge. Full payment was made with delivery at the car, a sufficient *pro rata* margin being added to pay freight, demurrage, unloading, and other costs, not including profit. Seed was sold only on condition that it be used as seed.

Farmers ordered, through the county offices, 289 tons of fertilizers, 11,725 pounds of spray material, and some machinery. Complaints of delays in transportation were received, investigated, and reported to the proper railroad authorities, by whom they were usually given prompt and effective attention.

3. Labor

The census showed that farmers were facing a serious and general labor shortage, although local conditions varied considerably. The situation was apparently most acute in those agricultural counties in which manufacturing cities, such as Utica, Syracuse, Elmira, and Buffalo, are located.

Two main sources of labor were developed to meet the demand: city labor obtained through the state employment bureaus in New York, Albany, Syracuse, Auburn, Rochester, Buffalo, and Oswego; and boys released from the rural and city schools by the Department of Education.

In addition, the county representatives, through personal interview with manufacturers and other employers of large groups of

labor, helped to arrange for the temporary release, for haying and harvesting, of such employees as had had previous farm experience and were willing to go on farms. The Endicott-Johnson factory at Binghamton, and some of the paper manufacturing plants around Glens Falls, Hudson Falls, and Ballston Spa, furnished such help. One railroad company contributed through the release of section hands for short periods. The usefulness of these classes of laborers depended very largely on the ability of the county representatives to "handle the traffic" and equalize the supply and demand.

The methods first tried were the standard methods used in employment bureaus. Printed slips, with blanks for the number of men wanted, the type of labor required, the period and probable duration of the job, the wages offered, and some other data, were sent from the county offices to farmers who had indicated on their census blanks a need for help. Applications for positions through the labor bureaus were sorted, classified, and filed, and applicants meeting the specifications were referred to the farmer wanting the help. It developed, however, that because of the peculiar and exacting qualifications demanded of farm labor, the only really satisfactory method was a personal interview between the employee and the employer or his agent. Some of the county representatives then began to make periodical trips to the nearest employment office, sorting over the available material and bringing the men back, sometimes even placing the laborers. In other cases meetings of farmers and laborers were arranged at the county office of the Commission. The latter method proved to be successful in the majority of cases.

Boy labor was useful in sections of specialized farming, as trucking, fruit growing, and the like. About thirty camps were organized in Niagara County alone for picking peaches. Berry picking offered opportunity for such help, and camps were organized for picking grapes in Chautauqua and Yates Counties.

In a few strictly rural counties, such as Seneca and Tioga, the early release of schoolboys from the district and high schools went far toward meeting the emergency.

Household help was requested to the number of 7573. Much of this was supplied by schoolgirls. Probably never before have so many women been seen working in the fields in New York State as was the case this year.

4. Tractors and ditchers

Tractors, ditchers, and other farm machinery were, of necessity, placed through the county offices. Two options were offered by the Commission: individuals or groups might purchase machines at wholesale cost; or they might rent them at a charge calculated to cover depreciation, paying their own costs of operation.

The first step was to find the best location for such machines. The county representatives got individuals or groups to pledge a definite number of acres for plowing or cultivation by the Commission's machines. Forty-two tractors were placed in twenty-two counties. The next step was to form a committee of responsible farmers, or make arrangements for the farm bureau association itself, to assume the responsibility for such machines and to supervise the work in the county. Competent operators were found and a careful itinerary was worked out. In addition to the preliminary local organization, it was generally necessary for the county representative, as the usual agent of the tractor committee, to make collections from farmers for work done, to supervise the work, to order repairs when necessary, and to make adjustments.

Three power ditching machines purchased by the Commission have been placed in Ontario, Orleans, and Tompkins Counties, respectively. The disposition of these machines was made on the basis of demand from farmers expressed in definite terms of rods of drainage ditches. The county representatives explained the proposition by means of circular letters, newspaper advertisements, and talks before farmers' meetings, followed by a canvass for orders. The machines were placed and ready for business by September 1. They will be handled under the local direction of the county offices.

5. Insect and disease control

This phase of the emergency work was handled as five projects—potato spraying, seed-potato inspection, fruit insect and disease control, plant disease survey, vegetable insect control. In general the county was the unit of operation, and in about seventy-five per cent of the counties the county representative and his assistants handled the work with supervision from the leaders in charge of the specific field of endeavor. In a number of counties, however, where there are highly specialized types of farming,

special agents were placed. These persons received the cooperation of the county representative and his assistants, and had the use of offices, office facilities, and automobiles.

While the seed-potato inspection was in the hands of two district leaders, a preliminary inspection was made in some counties by representatives of the county offices, who selected a limited number of fields for final inspection by the leaders.

On their own initiative many of the county agents are in a similar manner locating sources of wheat and rye seed, with a view to establishing both an intra-county and an inter-county exchange.

6. Food conservation

In organizing the food conservation work, the sentiment of the farmers themselves was first definitely sounded. During the month of June, representatives from the central office met the executive committees and advisory councils of the farm bureau organization in forty-one counties. The plan was explained and a definite expression from the leading farmers was obtained. In seventy-five per cent of the counties, ready response was given to the proposal. The county agreed to furnish an office and office facilities, including stenographer and traveling expenses. Salaries were paid from the state and federal war emergency funds.

Following an indorsement by the Executive Committee of the Farm Bureau Association, a county-wide meeting was arranged by the county representatives. This meeting, to which were invited representatives of all existing organizations in the county and especially of the women's organizations, was addressed by some one representing the central office executive committee in charge of this branch of the work. Plans were perfected for finances, and a committee of local women was appointed to advise with the conservation agent and cooperate with her in arranging work. The launching of the program, and especially the preliminary organization preceding the arrival of the conservation agent, were in the hands of the county representatives.

7. Loans, vacant lands, gardens

In organizing the committee for passing upon farm loans, in spreading information about the system, and in referring prospective borrowers to the proper authorities, the county representatives played a rôle in handling the patriotic farm loan.

By means of circular letters, personal inspection, and other methods, the county officers gathered data for reports to the Commission covering the extent, area, and quality of vacant lands in the State.

Near some cities, groups of boys and factory employees were organized for cultivation of commercial gardens. Supervision of the soil, preparation, planting, cultivation, spraying, and harvesting, and inspection for award of prizes offered by municipal, charitable, or other organizations, were in many instances the work of the county representatives.

8. Marketing

The work of distribution, storage, and marketing has centered chiefly around the potato crop, which a partial survey of crop conditions indicated would be an unusually large one. During August a series of ten meetings was arranged through the county representatives in the principal potato-growing sections of the State. These meetings were addressed by representatives of the Federal Bureau of Markets and the State Department of Foods and Markets. Plans were outlined for the storage and marketing of the crop. Following these meetings, specialists in organization furnished by the Commission and the Federal Bureau of Markets assisted the county representatives in developing local selling and storage associations.

Further plans of the Commission contemplate a comprehensive market news service. This will depend for its local operation on distribution through the county offices. The county offices will further act as local clearing houses, and will attempt to move the crop in the most efficient way and prevent market gluts and shortages.

9. Gathering information

No small part of the work of the county representatives has been the collecting and assembling of information on many subjects. Much of this was accomplished by sorting and tabulating data from the census returns, such as compiling lists of dairy-men, poultrymen, stallion owners, potato growers, and fruit growers.

These lists were used to furnish special circular information to small interested groups, and as nuclei for the formation of breeding associations, milk testing associations, potato growers'

associations, and other associations for special interests; they were useful also in bringing together groups for community operations, such as spraying and cooperative buying.

Other information required special surveys, such as the weekly insect and disease report to Dr. Felt, the wheat and rye questionnaire, the market milk situation, and the potato crop survey. The following summary of the wheat and rye survey shows the nature and extent of one of these special surveys:

Prospective increase in wheat and rye acreage

During the first week of July a questionnaire was sent to all farm bureau agents and all representatives of the Food Supply Commission. This questionnaire was sent to a representative farmer in each section, with the request that he fill it out for himself and four neighbors.

The questionnaire asked for the present acreage of wheat and rye, and the acreage it was expected to sow in the fall; also the prospective price necessary in order to increase the maximum production. For convenience in summing up, the State is divided into four sections, as follows:

1. Wheat section — Cayuga, Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates Counties.

2. Southern counties — Allegany, Broome, Cattaraugus, Chautauqua, Chemung, Steuben, and Tioga Counties.

3. Hudson Valley — Albany, Columbia, Dutchess, Greene, Orange, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Ulster, Warren, Washington, and Westchester Counties.

4. Central and northern counties — Chemung, Clinton, Cortland, Essex, Franklin, Fulton, Herkimer, Lewis, Madison, Montgomery, Nassau, Onondaga, Oswego, Otsego, St. Lawrence, Schoharies, Schuyler, Suffolk, and Tompkins Counties.

The report by sections is summarized as follows:

	Total number reporting	Acres of wheat			Acres of rye		
		1916-17	1917-18	Percentage of gain or loss	1916-17	1917-18	Percentage of gain or loss
Section 1	526	7,415.00	9,055.0	22	506.00	487.0	—4
Section 2	309	702.75	1,047.0	49	349.00	601.0	72
Section 3	457	487.00	854.0	75	2,002.00	2,791.5	39
Section 4	726	1,780.16	2,338.5	31	289.25	406.5	41

Regarding price to stimulate maximum acreage

	Prospective price satisfactory	Number of answers	Wheat			
			\$1.50 to \$2	\$2 to \$2.50	\$2.50 to \$3	\$3 or more
Section 1.....	56	16	1	18	18	7
Section 2.....	35	23	1	5	2	2
Section 3.....	72	38	.....	.....	.....	2
Section 4.....	72	77	3	8	2	3

Altogether 2018 answers were received from forty-eight counties, or an average of 42 per county. The most important data are for the wheat region, where a prospective gain of 22 per cent is contemplated. About 90 per cent of the wheat is raised in this section. Most of the rye is raised in the Hudson Valley, and this section shows a prospective gain of 39 per cent. The figures indicate a prospective gain of about 100,000 acres in wheat and 50,000 acres in rye.

	Acreage 1916-17	Prospective acreage 1917-18
Wheat	420,000	520,000
Rye	120,000	170,000
	<u>540,000</u>	<u>690,000</u>

REPORT OF THE DIVISION OF SCHOOLS AND COLLEGES

J. H. FINLEY, *Commissioner in charge*

The general direction of the work of the Division of Schools and Colleges was placed by Commissioner J. H. Finley in the hands of L. S. Hawkins, of the State Department of Education. The purpose of this division of the work of the State Food Supply Commission was to procure aid in the work of food production and conservation through the medium of the schools and colleges. In order to accomplish this purpose, four lines of work were established and developed: first, the farm census; secondly, work with farm cadets; thirdly, farm camps; fourthly, work with food conservation agents.

THE FARM CENSUS

Because of the acute food situation in this country due to the war, a census of the agricultural conditions of the State was ordered on April 17. The immediate object was that facts regarding crop products might be made available before the spring planting.

Through the cooperation of the State Department of Education, and through the utilization so far as possible of all existing educational organizations throughout the State which were equipped to do the work, including district superintendents, high school principals, teachers of agriculture, farm bureau managers, and others, the census-taking was finally launched, and was actually begun in most of the counties on Monday, April 23. Teachers and their pupils in each supervisory district, assisted by other persons enumerated, obtained the original facts from the farmers and made out summaries for their school districts. Buttons were distributed to the children for this work. Records were practically all obtained by April 25, or within two days after the census started.

During the census-taking, the district superintendents instructed the teachers and the older pupils under their jurisdiction to suspend all school work and get the data needed at once. Thus the entire rural school system of the State was utilized to get the facts at first hand from the farmers.

All teachers' and superintendents' expenses were paid by the Commission through the State Department of Education.

FARM CADETS

Preliminary steps

On April 15 a conference for the purpose of discussing plans for meeting the national emergency need for increased food production was called by Dr. Charles F. Wheelock, Assistant Commissioner for Secondary Education. Following this conference, representatives of the Department were dispatched to various parts of the State to present the national need, and plans were made for meeting this need at county meetings of the district, city, and village superintendents and principals. At this time enrollment blanks, entitled "Volunteer for Farm Cadet Service," were placed in the hands of these superintendents and principals. These blanks were to be filled out, signed by the parents or guardians of the pupils, and returned to the Education Department within three days after the meeting, or before May 1. This launched the plan of farm cadet service.

Release from school

In order that there might be no injustice to the pupils, all those entering farm cadet service were credited with a passing rating, provided their school work was up to standard at the time they were released, and provided, further, that they rendered satisfactory agricultural service. In accordance with this, pupils were released from the June regents examinations. Regents credentials were granted on the certificate of the superintendent, which was accepted in lieu of the regular examinations.

Supervision of farm cadets

Pupils were almost immediately released from school for farm service. This demanded at once some means of supervision in order that reports could be obtained by the principals, on which credits for school work might be rated. It was at once evident that proper supervision could best be managed by regular school officials. Those best qualified through training and experience to do this were the 207 district superintendents and the 70 teachers of agriculture in the State. Accordingly, as the district superintendents are official representatives of the State Department of Education, it was deemed advisable to work directly through them.

A circular letter was sent to each superintendent designating

him as the school representative of the Food Supply Commission in his district. Accompanying this letter were blanks and directions for recording the number of pupils in farm service and their work. Reports showed at an early date that a supervision of pupils as to the place of employment was at once needed. While many pupils worked at home, others went to outlying districts, in some cases entering districts outside of the jurisdiction of the regular superintendent. Records of transfers were therefore necessary in order to properly follow up these pupils. Blank forms, cards, and circular letters were issued by the Commission for this purpose. In most cases, where a teacher of agriculture was employed, the district superintendent left the matter entirely with him, though the superintendent acted as the official representative of the Food Supply Commission.

Financing the work of farm cadets

Only the expenses of these representatives of the Food Supply Commission were paid by the Commission. At first, \$100 was allotted to them as a sum which they were not to exceed. This was later reduced to a sum based on the number of pupils in their charge at home and away from home. The expenses of these representatives were paid only to the close of school, at which time the supervision was given up.

The farm cadets

The farm cadets consisted of boys and girls from the cities as well as from the country. The "Brown Law," passed by the Legislature to meet the emergency, permitted pupils below the compulsory school-attendance age to serve as farm cadets, provided they were physically fit for the work they were to undertake. The total number of boys and girls recorded as working at home is 14,406. The total number of boys and girls recorded as being away from home and in cadet service is 4221. The total number of farm cadets, therefore, is 18,627.

Release from farm cadet service

Word received through letters, through personal contact with the Commission's representatives, and through other officials, indicates that the farm cadet service plan has been successful and has met a definite state need. Up to the close of school, the work

of the pupils was of distinct value to the farmer, though in some cases a number of days of instruction was needed in order to properly fit the boy or the girl for the work in hand. Reports show that the pupils were quick to learn and ready and willing to serve their employers. As soon as supervision was eliminated, at the close of school, many pupils were inclined to leave their work. For this reason, later reports seem to indicate that there was some dissatisfaction among the farmers. Had adequate supervision been continued through the summer, there is no question as to the value of this type of service or as to its success.

FARM CAMPS

In addition to individual farm cadet service, farm camps were organized throughout the State. These camps consisted of groups of boys gathered together, under the direction of a camp leader, in a community where much help was needed. A study of these camps, which were organized principally for city boys as a means of supplying farm labor, and which started about the middle of June, was placed under the general supervision of Professor George A. Works, of Cornell University. His investigation included at least one visit to each camp established in the State. In addition, trips were made into Massachusetts, New Jersey, and Pennsylvania, to visit camps in those States.

As soon as the Food Supply Commission voted to use some of its funds to pay for leadership of the camps, blanks were prepared calling for information regarding the conditions under which the camps were established; in addition, weekly reports showed the extent to which farmers were employing the boys, and also gave facts as to the boys' earnings. The Long Island camps have not reported as yet, so that no summary can be made at this time.

The efforts to establish camps have revealed certain facts that should be of value in the future, as follows:

Selection

It is very important that there should be some agency that will carefully select the boys. The work of the Military Training Commission has been especially valuable in this regard. In fact it would have been impossible to get so many boys for the camps without the help of this agency. In some instances, the school

has proved a very good means of selecting the boys. States that do not have some agency to look after this work are evidently at a disadvantage.

In general, the boys should be at least sixteen years of age and well developed. The boys selected by the Military Training Commission were given a physical examination before they were permitted to enter the camps. There are two objections to the younger boys: first, usually they are not capable of doing the work desired by the farmers; secondly, they are not likely to be so easy to direct when at work or in the camps.

The supply of boys has not equaled the demand. The demand for boys in industrial service has been so great that the desired camps could not be established.

Location of camps

Before camps are established, it is desirable to canvass the farmers to determine their demands for labor as well as their attitude toward the employment of boys. In most cases when the boys have been strong and capable, the farmers have been glad to have their services in spite of their inexperience. The farm bureau organization has proved the best means of getting at the labor demands. The manager is in close touch with the farmers in all sections of his county, and he, with his committeemen, can determine the labor demands in a relatively short time and make the necessary adjustments with the farmers. A well-worked-out plan was that of the Farm Bureau of Niagara County. Its partial failure was due to a shortage in the supply of boys.

Usually, when a community has been selected for the location of a camp, the site has been carefully chosen. It is extremely desirable to have this feature carefully looked after. In Massachusetts the local health authorities were required to inspect the camp quarters. This feature was adopted in New York later in the season, and was looked after by the Military Training Commission.

Leaders

It was evident from the start that it would be unwise to place boys in camps without supervision. If it had been attempted, practically no boys would have been available, because relatively few homes would let the boys go to camps without supervision. Leaders have been drawn from various sources, the largest single

group having been teachers, though in some cases Y. M. C. A. and Boy Scout workers have been used. In Niagara County several leaders were obtained from a camp made up of University of Pennsylvania students who had gone there early in the spring.

The leaders have had supervision of the camp life of the boys, but usually have not had supervision of the boys during working hours, though they have been a means of adjusting differences of opinion between employer and employee.

Camp facilities

The quarters in which the boys have lived have varied greatly in different sections of the State. All the Long Island camps were under canvas. In the fruit sections of the State the quarters were usually berry houses or labor shacks. A building provides the more economical quarters, though tents may make a strong appeal to the boys.

Experience has shown that the farmers are willing to furnish quarters, cots, telephone, cooking utensils, and fuel, if the boys bring their tableware and bedding.

The money expended by the Food Supply Commission on farm camps has helped to relieve the labor situation in a few communities, and has given experience that may be valuable in the future, because it is evident that the farm camp is not a temporary proposition.

The following camps were assisted in the matter of leadership by the Food Supply Commission:

Camp	Leader
Trumansburg, Tompkins County.....	G. W. Jeffrey
Highland, Ulster County.....	F. J. Keller
Highland, Ulster County.....	F. N. Westphal
Highland, Ulster County.....	H. W. Millsbaugh
Highland, Ulster County.....	Geo. H. Beal
South Lima, Livingston County.....	J. A. G. Moore
Wolcott, Wayne County.....	C. S. Ramsay
Germantown, Columbia County.....	W. G. Bauer
Mount Morris, Livingston County.....	R. P. Conners
Sheridan, Chautauqua County.....	E. M. Shields
Jericho, Nassau County.....	P. J. Moore
Jericho, Nassau County.....	J. F. McKeehan
Hempstead, Nassau County.....	G. A. Smith
Sodus, Wayne County.....	J. M. Wallace
Middle Hope, Orange County.....	G. W. Lemon
Cedarcliff, Orange County.....	Russell Stryker

Besides these camps, there were nine camps at Newburgh, Orange County, which were established by the Board of Education of New York City. There were also four camps at Highland

besides those which received aid from the Food Supply Commission. Of the six camps on Long Island only two were aided.

The Bureau of Educational Experiments ran an especially successful camp near Seneca Castle. The boys were from New York and were under the direction of C. E. Artman. During a part of the summer a camp was in operation at Nichols, Tioga County, and a small group of boys were in a camp at Suffern, Rockland County, without a leader.

TEACHERS AS FOOD CONSERVATION AGENTS

Near the end of April, Dr. Arthur D. Dean, then Director of the Division of Agricultural and Industrial Education, by means of a circular letter to the manual training and household arts teachers of the State, urged that the schools do all in their power to contribute to the war service. He suggested to the manual training teachers that they direct their efforts along the lines of school, community, and home gardens, and turn the manual arts activities over to those concerning food production. He suggested that the cooking teachers be thinking during the spring, summer, and early fall in terms of "preserving," and during the late fall and winter in terms of "conserving." He suggested also that ways should be found to continue the services of the household arts teachers during the summer, when their services in the community were most important.

Just before the close of school, a letter was sent by L. S. Hawkins, Director of the Division of Agricultural and Industrial Education, to all the home economics teachers in the State, inquiring whether their services would be available as food demonstrators in their respective communities or elsewhere. Favorable replies were received from forty-two persons. Some teachers accepted positions offered them as county agents; this necessitated resigning from their regular school work. The work of the agents in the Division of Schools and Colleges was for the summer only, though it was assumed that it would be carried on by local boards of education before the close of school in the spring and after school opened in the fall. The total number of teachers finally appointed for the work was thirty. The type of work carried on included the following:

1. Talks on foods, food preparation, food conservation, food purchasing, transportation, and distribution.
2. Food demonstration in classes, using the public-school domestic-science room or a private house.

3. Talks with individuals during given office hours.
4. Preparation of press notices for the daily papers.
5. Preparation of bulletins, cards, and typewritten matter on advertising the demonstration classes and food preparation and preservation.

Food demonstration work included bread making, egg preservation and egg uses, cheaper cakes, meat substitutes, uses of the soy bean, uses of left-overs, canning vegetables and fruits, jelly making, drying of fruits and vegetables, and the preparation and serving of simple meals and course dinners.

The teachers worked from three to five days a week in different communities, using the schoolhouses for demonstration rooms. They worked from half past eight in the morning until six or half-past six in the evening. Much time had to be spent in carefully planning talks and lessons, and in preparing for the demonstration, buying materials, looking after transportation, and taking care of the products. The persons in attendance were constantly encouraged to use their own materials, such as simple home garden supplies and wild fruits and berries which they might be able to gather; they were constantly cautioned not to use expensive fruits, and were shown many ways of reducing expenses by making use of left-overs, cheaper cuts of meat, and less expensive vegetables. In some instances a house was used in place of the school, while in one case a community canning kitchen was demonstrated. The attendance ranged from an average of 5 persons up to 85 or more, and included foreigners, so-called middle-class people, and members of granges and other clubs. The work is being continued and is paid for by the local communities.

CONCLUSION

It has been clearly demonstrated that pupils of the schools and colleges are indispensable in an emergency of this kind. In fact, word has come from some farmers that they would much prefer student help to the "Saturday night toppers" of the old days. The boys and girls have comported themselves with great credit. Teachers have given their services patriotically and unselfishly, and principals and superintendents have with willingness and loyalty extended their assistance to the State.

REPORT OF THE DIVISION OF DISTRIBUTION, STORAGE, AND MARKETING

J. J. DILLON, *Commissioner in Charge*

The work for the New York State Food Supply Commission in reference to the storage and marketing of farm products coincides with the regular functions of the State Department of Foods and Markets, and therefore the work for one naturally included that for the other. The work in which the Commission bore the expense in whole or in part included:

1. A canvass of the canning factories of New York and the adjoining States to discover their requirements of farm products for the season. By this means the Division ascertained the kinds and quantities of products in demand. This information was tabulated and then distributed to farm associations, exchanges, granges, and farm bureaus. In some cases sales were negotiated, among these being one of 200 tons of currants for the growers of the Hudson River Valley.

2. A study of drying and dehydrating systems for preserving fruits and vegetables, and of the possibilities of drying as a means of preserving food, together with the marketing outlook for the dried foods. A bulletin (Bulletin 5, *Drying of Food Products, or the Dehydrating System*) describing the principal methods of drying fruits and vegetables, was published and distributed. Heretofore little information on the subject had been available. Apples have furnished a large proportion of the dried products of the State, and the drying plants are located in the apple region of the western part of the State. This year, however, the apple crop is almost an entire failure. The plants are available for drying vegetables but no market for dried vegetables has been established in this country, and growers have been hesitant about taking the chances of drying vegetables and finding a market. In the Army and the Navy the authorities have refused to consider dried vegetables for commissary departments. Several dehydrating plants have been established in the State, and it is thought that this system of conserving fruit and vegetables will grow in favor; but in the meantime the fostering of the industry seems to be a legitimate enterprise for state encouragement, by helping to develop a demand. When this is secured, the farmers will do the rest.

3. A survey of the available cold-storage space in the State. The space in New York City was about fully occupied, but considerable space is available elsewhere in the State. The failure of the apple crop in the commercial apple-growing sections of western New York has left cold-storage space available for other products.

4. The appeal for an increase in the food supply this year resulted in a large supply of perishable products. On some of these the wholesale price was so low as to discourage shipment. To save this from waste, appeals were made to the cities of the State to establish markets where producers could meet consumers, so that the farmer could find sale for his produce and the consumer could get fresh food products at first cost. Many open curb markets were established, and there is opportunity for greatly extending this work. Plans for establishing these markets have been distributed to the officials of the cities and villages of the State.

5. Food clubs in New York City. Request was made to city officials for the use of vacant spaces for the sale of surplus products, but the privilege of using such vacant spaces was not allowed. As an alternative, food clubs were organized in various parts of the city, and through them considerable quantities of these surplus products have been distributed. These clubs, like curb markets, are merely expedients. They are no solution of the food-distribution problem. To solve that will require carefully supervised terminal wholesale markets, and regulated retail distribution through local stores; but the clubs serve a temporary purpose, and the enthusiasm of the people for them indicates the need of economic distribution.

6. Organization of the potato growers of the State. In this work the Commission had the cooperation of the State Department of Foods and Markets, the farm bureaus, and the Federal Department of Agriculture. Several men were placed in the field to organize this work. The purpose was to assemble, grade, and store potatoes and sell them as the demand warranted. Some canvass was made of the retail trade, and the indications were favorable for an outlet of the potatoes through these channels. Connections were also established for the sale of potatoes grown in the State in markets outside the State.

REPORT OF THE DIVISION OF LOANS AND FARM LANDS

S. J. LOWELL, *Commissioner in Charge*

The Division of Loans and Farm Lands of the New York State Food Supply Commission was placed in charge of Commissioner S. J. Lowell, Master of the New York State Grange. Mr. Lowell named as his secretary, A. M. Loomis, of Jamestown, New York, who took charge of the office details of the work on May 1, 1917.

COOPERATION OF THE GRANGE

At the time of the formal organization of this Commission, the New York State Grange was committed to the work of increased food production by the action of the State Master, who sent a call to each subordinate grange master to hold a meeting of his grange on April 19 for the mobilization of the agricultural resources of the State. All members of the grange, and other persons interested in agriculture, were invited to attend these meetings, and the reports received indicated wide interest and large attendance in more than seven hundred grange gatherings.

Carrying this cooperation further, the Master of the New York State Grange issued a circular letter, which was sent to each grange master with the request that it be read at least once in every grange in the State. This letter follows:

Fredonia, New York, May 21, 1917

Dear Brothers and Sisters:

The question of our responsibility as farmers in the great strife we are now engaged in should be considered by us immediately, and should receive our most careful attention.

NECESSITY Thorough investigation of agricultural conditions in our State as well as in the whole world indicates a great shortage of foodstuffs. Unusual efforts are recognized as being necessary.

RESPONSIBILITY No reasonable opportunity to increase crop production and food in all forms should be neglected. If this is neglected the blame will be laid at the door of the farmers. Effort to raise and garner all possible crops should be our aim.

OBLIGATION We must do this in all sincerity, not because "it will pay," but because it is the spirit and obligation of our order, and the expression of our love and honor for our country. We can show our patriotism best by meeting the demand of our countrymen and our allies for more food. Our members should consider it a privilege to render this necessary and patriotic service.

PATRIOTISM The Grange must stand out as a willing worker for national life not less than for farm life. Our country calls for food. Our brethren across the water are in distress. The future of our Nation, perhaps of the democracy of the world, depends on our response.

LOYALTY If our boys and our girls remain on our farms and perform this service to our country, in this emergency, we want them to feel that they are performing a patriotic service no less than the patriotic service others may be called on to perform on the battlefield; less arduous, perhaps, less dangerous, but not less necessary. To secure the approval of our countrymen and of our Government for this service it must be loyal and complete.

HUMANITY We are not yet called to sacrifice, but we are called to serve. The payment we are to get will not be wholly dollars and cents; far above that must be what our country means to us in peace, protection, and prosperity — not only now, but in the years that are to come; not only to us, but to those who are dear to us, and to those who are to follow after us.

Fraternally yours,

S. J. LOWELL,

Master, New York State Grange.

LOAN COMMITTEES NAMED

The first work after the Commission was legally organized was that of naming the loan committee to act in cooperation with the Patriotic Farmers' Fund. Telegrams were sent to the masters of each grange, Patrons of Husbandry in New York State, instructing each grange master to appoint a loan committee of three persons. A large proportion of the grange masters acted promptly and the committees were named. This telegram was followed by letters to each master urging those who had not already named committees in response to the telegram to do so at once, and calling on the members to act promptly, efficiently, and patriotically in taking steps to increase their food-production activities. As a result of this work, 939 loan committees were appointed.

The trustees of the Patriotic Farmers' Fund report that nearly \$300,000 has been loaned for definite work on the farms of the State, to be used in increasing food production this year.

Correspondence in connection with this project was voluminous through the months of May and June, and many hundreds of inquirers were told definitely how to obtain assistance from this source.

WORK ON VACANT LANDS

The second task was that of increasing the utilization of vacant lands in the State. These vacant lands fell into four classifications: first, those farms the title to which had been acquired by the State of New York under mortgage foreclosures; secondly, abandoned farms, the cultivation of which had been given up in the past because of lack of satisfactory return to the owners; thirdly, abandoned farms, the cultivation of which had been given

up because of personal considerations on the part of the owners; and fourthly, swamp lands.

State-owned lands

Of the 126 parcels of land the title to which is listed in the State of New York, and which at the beginning of the year were reported as not under lease, 38 parcels, aggregating 3868 acres, were held as forest preserves. Under the law all real estate that comes into possession of the State of New York within the limits fixed for the Adirondack and Catskill parks, and certain other lands, are automatically removed from agricultural use.

Of the remaining 88 parcels, aggregating 6918 acres, very little was in condition to warrant cultivation this year. A question was raised as to the State's title to 10 parcels, aggregating over 1000 acres, found to be occupied by persons claiming title from various sources. Lessees, willing to pay a nominal rental, were found for three farms only.

The problem presented by this situation is one which deserves more study and definite action if the State desires to sell this property and get it into private ownership and use.

Vacant farms, privately owned

As the result of the publicity given the work of this Commission, a large number of idle farms, privately owned, were listed with this Division during the month of May and earlier. The Commission decided, in view of the date, that it would be both too late and too expensive to make detailed investigations, but that the farms would be listed as offered, the names of near-by farmers obtained, and an effort made to get one or more of them to take over part or all of the vacant land and plant food crops on it.

This plan was successful in some cases. In others no results were reported, but there is reason to believe that the plan stimulated interest and helped to increase the acreage of food crops.

A study of the three hundred and odd parcels of property offered this Commission for agricultural service showed that they fell into two definite classes: first, a large number of farms that had been abandoned because of lack of fertility or lack of accessibility to markets, rendering their operation uneconomic and inadvisable under conditions prevailing up to the present year; secondly, farms that were idle this year because of personal

consideration on the part of the owners — farms of fair to good fertility and location, but whose owners, for various reasons disassociated with the economic value of the farms, did not put the land into crops.

Personal inspection of the farms offered for service, and of those reported as "idle" by the representatives and advisory councilmen of this Commission, was not possible, but from the reports made it was apparent that there was considerable acreage of such land, constituting an undeveloped and unworked resource worthy of attention.

A vacant-land survey is contemplated. Preliminary plans have been made, and some preliminary results have been obtained in Albany, Herkimer, and Chautauqua Counties, designated to show just how such a survey could be conducted to cover the State and get the most effective results. This is to be made by the farm bureau managers, who are to follow up the information contained in their farm census blanks. They will list and investigate the vacant farms in each county, and file the records for analysis and further work. This survey is strongly recommended.

The abandoned farms

The farms of the State which have become idle and abandoned because of the conditions of soil or markets, making further working of such lands unprofitable and uneconomic under conditions prevailing prior to the war, afford further opportunity for study. Much of this land should be forested; much needs drainage; some, perhaps, can be brought into agricultural use through increase in financial and technical assistance, and through improvement in crop prices and marketing facilities.

Swamp lands

Large areas of swamp lands constitute another vital factor of the vacant-land problem. Drainage of these lands would largely increase crop production. Activities of this character, which involve engineering operations, have not been considered wise during this year, when emergency work has been uppermost. Work is progressing on some drainage projects which have been greatly embarrassed by war-time financial conditions; on others, preliminary work has been done and plans have been laid out, but it has been impossible to finance the work; still other large areas stand idle, without even the preliminary work done.

This swamp land is one of the most valuable undeveloped resources of the State. General supervision of development work to bring these areas into use is found to be divided under present conditions. The State Conservation Commission has certain legal authority to do drainage work; individual property owners have authority under another law to form drainage districts. Sincere cooperation has been offered, both for farm drainage and for general drainage projects, by the State College of Agriculture at Ithaca.

It is recommended that all available data on the subject be collected, and that those projects on which it is found that effort can be translated into increased crops in 1918 or 1919 be made the subject of definite assistance from this Commission or its successors.

FINANCIAL ASSISTANCE TO FARMERS

In addition to the cooperation with the Patriotic Farmers' Fund, this Division has cooperated, in the project of financial assistance for the farmers of the State, with the Land Bank of the State of New York, the Federal Farm Loan Bank, and the local banks of the State. The project is the result of the following resolution, passed unanimously by the conference called by the New York State Food Supply Commission at Syracuse, July 5 and 6; the resolution was introduced by A. M. Loomis as the result of an informal conference of representatives of banking interests and of members of the Executive Committee of the State Grange:

WHEREAS, Many recommendations have been made at this conference looking to increased food production, many of which involve farm readjustments and increased cost for labor, equipment, and storage; and

WHEREAS, This entire program of advanced agricultural procedure involves increased use of money, both investment and fluid capital;

Resolved, That this Conference recommend to the New York State Food Supply Commission that active steps be taken by the Commission to assist in the work of extending the operations of the Federal Land Bank and of the Land Bank of the State of New York; and in cooperating with the Patriotic Farmers' Fund and with the regularly organized banks and bankers of the State of New York in extending credit under the best possible terms to every farmer who can use such credit to increase the food supply.

At the meeting of the Commission held on July 10, a recommendation for future work on this project was approved.

This work includes: the instruction of all agents, representatives, and employees of this Commission in the work of the Land

Bank of the State of New York and of the Federal Land Bank; the request that all county representatives carry out the purpose of the resolution of giving the information outlined to all farm bureau members and community organizations, by means of circular letters and other publicity; the offer of the facilities of this Commission to the Agricultural Committee of the New York State Bankers' Association for the preparation and distribution of literature and other publicity in the interest of extending banking credits to farmers; and a subproject for holding group meetings of bankers and farmers in every county of the State for the purpose of bringing about closer and better understanding of needed farm credits. Special work on this project by all county representatives has been ordered by the Commission, and the project awaits only the close of the harvest season to be put into effect.

No plan for the increase in food production and the elimination of present losses in marketing methods can succeed which does not include the most complete and perfect system of handling the financial and credit features involved, and in this work the cooperation of the banks is essential.

RECOMMENDATIONS

1. **The Patriotic Farmers' Fund.** The trustees of the Patriotic Farmers' Fund advise this Division that its activities are to be continued for another year. It is recommended that the loan committees named this year be continued to aid in the proper administration of this fund, to the end that the money thus offered may be placed where it will do the most good.

2. **State-owned lands.** A complete record on the agricultural value of state-owned lands, covering their location and present condition, should be prepared, and legislative action sought, in cooperation with the Comptroller's Office and the State Land Board, looking to the working-out of a method by which these lands may be put into immediate productive use so far as possible.

3. **The abandoned farms.** A vacant-lot survey should be carried out. Undoubtedly some state assistance is needed to get some areas of this land into efficient ownership; other areas are probably unfit for agricultural use, and should be definitely turned to other uses.

4. Drainage. The more than 600,000 acres of swamp land need immediate attention. This is a food-supply problem, and definite cooperation with the Conservation Commission, now charged by law with the work of swamp reclamation, should be worked out, and needed legislative action should be urged, to get drainage projects under way where large possibilities exist for increasing food production.

5. Financial assistance. Cooperation should be sought whereby the New York State Land Bank, the Federal Land Bank, and the Agricultural Committee of the New York State Bankers' Association, may furnish the food producers of the State with the benefit of every source of financial and credit assistance.

REPORT OF THE DIVISION OF FARM LABOR

F. W. SESSIONS, *Commissioner in Charge*

As one of its activities the New York State Food Supply Commission instituted a Division of Farm Labor. The Commissioner designated to conduct this Division proceeded at once to get in touch with (1) a hundred men prominent in agriculture and its allied interests in every part of the State, (2) the heads of all educational institutions, (3) county officials, (4) county councils of defense, (5) chambers of commerce, and (6) manufacturers,—seeking an expression of their opinions, and also their cooperation in getting farm laborers from new sources, in securing the increased tillage of county farms, and in obtaining information along many lines which might assist in solving the labor problem. Many helpful responses were received. From private sources came assurances of cooperation, and county officers told of their efforts to utilize dependents and convicts in producing sufficient food for their own sustenance.

The census survey undertaken by the Commission on its establishment, showed, among other things, a shortage of more than 50,000 farm laborers. At once the county representatives of the Commission sent blanks to each farmer in his district asking for immediate information as to the number of laborers wanted, and as to the type of work, wages, hours, and nationality preferred. The replies received by the county representatives were not at all in consonance with the survey-census reports as to the number of men needed. Indeed, the county representatives informed the Division that not more than one-tenth of the farmers originally reporting their need of labor responded to specific requests regarding their needs. There were several explanations offered for this: one was that when the farmers were first canvassed, many of them believed the State intended to furnish laborers free, but when it became known to them that the State was to act merely as an agency to procure men and that the farmer was to pay the wages, no further intimation, in most cases, was given of any need of help; another explanation was that the wages demanded by laborers was so much in excess of amounts paid in previous years, that many farmers were deterred from employing men, preferring to plow and plant only the acreage they were able to take care of with the accustomed help to be obtained locally.

Notwithstanding this greatly lessened call for laborers, there was a real demand for men; the need was great, and but for a late spring it would have been far greater. Commissioner Wilson, Chairman of the State Food Supply Commission, lent to the Labor Division the services of Charles W. Larmon, of the Department of Agriculture, a gentleman of long service and wide experience, to assist in establishing in New York City bureaus for the employment of farm laborers. These bureaus were established at No. 15 Pearl Street and No. 8 West 17th Street, New York City, and advertisements for farm hands were inserted in the daily press. Nearly one thousand men were sent out to the farms of the State from these bureaus before their discontinuance on July 15.

At the same time the Commissioner in charge of this division held a number of conferences in New York City with various agencies that had been established for the purpose of procuring farm help. It was sought to coordinate the work of these organizations, and in a measure this was accomplished.

Hundreds of letters were received from persons in the city and outlying territory, tendering their services for farm labor. Many of these persons were farm-born and farm-bred. The Labor Division received, through the United States Department of Agriculture, nearly a thousand letters written by New York State citizens who were desirous to engage in agriculture to help in the cause of crop production. All such persons were referred to the employment bureaus in New York, and those applying were registered if found fit. Some of these men are now employed on farms and are doing good work.

The Commissioner in charge of this Division personally visited thirty-six counties of the State during the months of April, May, June, and July, calling on the Commission's representatives, members of county defense committees, leading farmers, and others, seeking and offering information as to labor conditions.

Wages paid during the present year have had considerable bearing on the farm-labor problem. Early in April it was apparent that the wages for farm hands must be increased if any help was to be secured. The wage of \$20 a month and board, was a price of the past, and \$25 a month no longer tempted. Word had gone out that \$30 could be had almost anywhere, and by May 1 few men with experience could be found willing to accept less than \$35 a month and board. In July came the demand for \$40 a month, and then appeared the farm worker, experienced, who wanted from \$2 to

\$2.50 a day and board, for harvest work alone, and "no milking." The Labor Division, during the continuance of its bureaus in New York up to July 15, found men to satisfy most of the demands made upon it; and there were farmers in many parts of the State willing to pay the high wages demanded. A few men were placed in jobs paying \$50 a month with board and laundry, and these men were not foremen, but good, working farm hands. Most of the men sent from New York City to work on the farms have made good, and this result was accomplished through a system of inspection, by experienced and trained men in charge of the bureaus, of all applicants appearing for employment. It is true that some of the men sent out were failures — round pegs in square holes — and some men refused to remain on the farms to which they were sent. But this is the usual story to be gleaned from the State Agricultural Department's records during the years it maintained a similar service, and the same tale is told by all employment bureaus. However, once again is demonstrated the truth that only by careful, individual, and sympathetic inspection, by determined endeavor to secure the right man for the right job, can satisfactory farm-labor service be performed. In one instance Mr. Larmon inspected more than three hundred applicants for farm work, and from the lot selected but eight men who in his opinion would be useful on a farm.

After the closing of the Commission's New York City employment bureaus on July 15, the county representatives were directed to refer all calls for farm labor, not to be supplied from local sources, to the state employment bureau, the Farm Labor Committee of the City and State of New York, the New York City Employment Bureau, and other agencies. Representatives near New York City were authorized to go to New York to make personal inspection of applicants, and wherever this has been possible good results have followed.

Early in the life of the Commission the suggestion was made that manufacturers in many of the cities of the State might be willing at certain periods during the summer to release those of its employees who had had farm experience, to assist in harvest work. Plans were worked out for the payment of such men. Chambers of commerce, members of county defense committees, and county representatives of this Commission, canvassed the factories of the State seeking the cooperation of employers. At first the response seemed to be all that could be desired, but when the

time came for using the services of farm-bred men from the factory the actual workers obtained fell far short of the number indicated as available. Many who had expressed a willingness to assist at farm work demurred when called upon, and in the end the result was almost negligible. However, there were some notable instances in which both the manufacturers and their men lived up to their agreements.

The agencies cooperating with the Labor Division have rendered important assistance in obtaining farm hands. Their work is not completed and will doubtless go on. The Labor Division cannot but express its regret at the discontinuance of its bureaus in New York City at a time when they were coming to their fullest period of activity. The experiment stage has been passed, and the men and methods employed were at their best to carry forward the work for which they were instituted.

The total results of the work of the Labor Division have been satisfactory. In the first place, the quickened impulse for farm service on the part of many who would ordinarily not have responded, is immeasurable; secondly, the spurring of men with a knowledge of farm work to accept the wages now paid, has been considerable; thirdly, the more than one thousand men sent directly to farm jobs by this Division of the Commission, has aided materially in securing the desired end for which the Commission was instituted — an increased crop production.

At the inception of the work it was decided that the emergency need of supplying laborers to the farms justified the expenditure of money for the transportation of prospective workers from the cities without waiting for employers to advance railroad fares. It was felt that the correspondence involved in most instances would occasion the loss of from a week to ten days of valuable time. In all cases it was the understanding that the employer would reimburse the State for the fares advanced, provided the employees remained for a definite period. Under this arrangement several groups of men were sent to up-state and western counties, and the transportation was in the main satisfactory. The State has not as yet been fully reimbursed for the fares advanced for many of the men sent singly, but payments are being made on such accounts. There will be some loss because some men did not remain with their employers, but this was foreseen and accepted as a necessary part of the work. Many of the men who failed to remain with their first employers took work with other farmers. Thus the desired object, the furnishing of farm labor, was accomplished, even though it entailed a small loss to the State.

REPORT OF THE DIVISION OF SEEDS, FERTILIZERS, AND LIVE STOCK

R. D. COOPER, *Commissioner in Charge*

The work of the Division of Seeds, Fertilizers, and Live Stock has been carried out, as far as possible, to conform to the general plan outlined by the New York State Food Supply Commission.

POTATOES

At the time when the New York State Food Supply Commission was created, the scarcity of potatoes, and the consequently high prices, brought before the Commission the urgent and immediate need for an adequate supply of seed potatoes. To insure an increased acreage of potatoes in this State in 1917, it became incumbent on the Commission to find a source of supply at a reasonable cost to meet this demand. The Commission immediately sent two representatives, supplied by the State Department of Agriculture, to Maine, to find and purchase seed potatoes which could be furnished to the farmers at cost.

These potatoes were distributed through the offices of the several farm bureaus and county home defense committees, and were available at prices ranging from \$2.90 to \$3.10 a bushel, delivered at Albany points. Most of the potatoes were No. 1 Green Mountain. A few cars of No. 2 Green Mountain, delivered at the same points, were supplied at an average price of \$2 a bushel. The tubers were of good quality and in nearly every case were satisfactory. Local prices for seed potatoes were from \$4 to \$4.50 a bushel.

The total value of the seed potatoes distributed by the Commission was approximately \$115,400. Without the aid of the Commission, or a similar agency, the farmers would have been unable to get enough seed potatoes at any price. The lower prices enabled many farmers to procure potatoes locally at the same price.

Aside from supplying seed potatoes direct, the Commission furnished its county representatives with exchange lists, put them in touch with other supplies, and cooperated with the Mayor Mitchel Food Committee in helping to distribute the seed potatoes furnished by that Committee.

A tabular statement of the seed potatoes distributed through this Commission is here given:

County	Potatoes bought through the Commission (bushels)	Potatoes bought by county representatives (bushels)
Albany	1,979 $\frac{3}{4}$	300
Alleghany	674	4,224
Broome	1,210	290
Cattaraugus	3,743	.....
Cayuga . . . . .	.....	200
Chautauqua	605	1,815
Chenango . . . . .	.....	800
Delaware	1,224	100
Dutchess	625	.....
Erie	1,253	4,254 $\frac{1}{2}$
Essex . . . . .	.....	4,200
Franklin . . . . .	.....	2,000
Fulton	835	85
Genesee . . . . .	.....	600
Herkimer	2,061	200
Jefferson	7,859 $\frac{1}{2}$	.....
Lewis	1,220	.....
Livingston	893	.....
Montgomery . . . . .	.....	755
Nassau . . . . .	.....	1,815
Niagara	1,815	.....
Oneida	3,802 $\frac{1}{2}$	.....
Orange . . . . .	.....	6,900
Oswego	2,034	600
Otsego . . . . .	.....	2,250
Putnam . . . . .	.....	150
Rensselaer	1,893	.....
Rockland . . . . .	.....	129
St. Lawrence	2,024 $\frac{1}{2}$	425
Saratoga	600	.....
Schenectady	688	.....
Seneca . . . . .	.....	88
Steuben	626	6,908
Sullivan	1,288	.....
Tioga	605 $\frac{1}{2}$	200
Tompkins . . . . .	.....	500
Ulster	1,220	700
Warren	605	.....
Wayne . . . . .	.....	1,815
Westchester	700	.....
Wyoming . . . . .	.....	288
Yates . . . . .	.....	60
Total	<u>42,083$\frac{3}{4}$</u>	<u>42,651$\frac{1}{2}$</u>

GRAIN

Through the cooperation of the State Department of Agriculture, the Commission procured a list of the sources of supply of grains for seed. This was reduplicated and copies were for-

warded to the county representatives. By this means the farmers were able to get spring wheat, seed oats, corn, ensilage corn, barley, beans, alfalfa, and other required grains for seeds. The Commission was unable to supply field peas and soy beans because of their scarcity.

Buckwheat

The great shortage of seed buckwheat and the very high prices asked for this seed, caused the Commission to purchase several thousand bushels and supply it to the farmers at cost. This seed was distributed through the same channels as were seed potatoes, at prices ranging from \$3.90 to \$4.25 a hundred pounds. The prices asked for this seed locally ranged from about \$4.35 to \$6.50 a hundred pounds. Thus a large quantity of buckwheat was made available at a lower price than could have been secured otherwise.

Many thousand bushels of buckwheat seed were also supplied to the farmers indirectly through the Commission, which referred the farmers to sources of supply and enabled them to procure this seed at the same price as was paid by the Commission.

A tabular statement of the buckwheat handled by the Commission is here given:

County	Number of pounds
Albany	9,800
Broome	2,000
Chautauqua	97,800
Columbia	53,200
Delaware	9,700
Dutchess	3,200
Erie	41,000
Fulton	500
Greene	5,500
Herkimer	3,500
Jefferson	4,600
Livingston	500
Madison	44,360
Monroe	200
Nassau	600
Niagara	1,200
Onondaga	2,000
Ontario	1,200
Orange	4,600
Orleans	5,300
Rensselaer	3,500
Rockland	6,100
Saratoga	8,100
Schenectady	5,600
Seneca	500
Steuben	5,200

County	Number of pounds	
Suffolk	1,700	
Sullivan	600	
Tompkins	2,000	
Ulster	50,200	
Washington	2,400	
Westchester	100	
Yates	600	
Total	377,360	= (6289 $\frac{1}{3}$ bushels)

Winter wheat

To meet the demand for winter wheat seed, the county representatives inspected the crop in the fields and furnished exchange lists of farmers who had fields the wheat from which was suitable for seed. These lists are available to those looking for seed wheat this fall.

The Commission also compiled and circulated among its county representatives a list of dealers having available seed for winter wheat.

Spring wheat

Some of the county representatives of the Commission inspected many fields of spring wheat, and some of the better fields should be reserved for seed purposes.

FERTILIZERS

After investigating the sources of fertilizer supplies the Commission found that it was unable to procure fertilizers for a lower price than that quoted to local agents. Under the present situation, it did not seem advisable for the Commission to handle fertilizers. The Commission urged the farmers in each community to organize locally to purchase their fertilizers in carloads, either directly or through local agents, as might be found best.

The county representatives have been given the names of manufacturers of fertilizers, and their quotations, and have been instructed by the Commission to assist in every way possible in forming local organizations, emphasizing the need of utilizing all car space to the maximum capacity. It is doubtful whether the demand for fertilizers can be met, because of car shortage and inability of the manufacturers to procure raw materials.

BINDER TWINE

There are indications that many cordage companies are not manufacturing hard twine this year, because of the shortage of the supply of fiber from Mexico and other sections producing the raw material. The price of binder twine is unusually high, but the manufacturers will probably be able to supply it.

The Commission did not think it advisable to purchase binder twine, but it has furnished the names of companies from whom the twine can be obtained.

SILOS

A questionnaire on silos was sent to county representatives and advisory councilmen. The replies indicated that the demand for materials could be filled through the regular channels, and that the silo situation was well taken care of in the dairy sections.

MILK SUPPLY

It is desirable to maintain at least the usual milk supply of the State, and the Commission has gone on record that it cannot too strongly recommend that every farmer should consider the practicability of breaking up more hay and pasture land in the coming season to increase the acreage of non-perishable products, should raise those crops that are best adapted to his land, equipment, and system of farming, and should maintain his present milk supply.

The high prices of grain feeds during the past spring has tended to make the production of milk unprofitable. Because of the lateness of the season the high point in the milk flow was not reached until later than usual, but due to the frequent rains this flow was kept up later than usual. Indications are that the supply of ensilage and corn in this State will be very short, and unquestionably this will affect the supply of milk this winter.

The shortage of the ensilage crop must be supplemented by the use of high-concentrate feeds if the milk supply is to be maintained. Because of the high cost of feed, the Commission deemed it advisable to investigate the supply of, and the market for, feed for dairy cattle. Accordingly it sent to Washington representatives to ascertain the Government's plans and to gather information. These representatives then went to Chicago and took up the matter with representatives of the American Feed Manufacturers' Association.

After the New York State Food Supply Commission's conference in Syracuse on July 5 and 6, the matter of cooperative purchasing of dairy feed was taken up with the Dairymen's League. As a result of this, the Dairymen's League, through its board of directors, voted to put into operation a plan to supply fuel to the farmers at as low a price as possible. A copy of the plan which was adopted by the Dairymen's League follows, because of its interest in this connection:

1. The Dairymen's League shall establish and maintain a central feed office in connection with its central office in New York City. It shall immediately arrange for the manufacture and sale of feeds according to the formulas approved by the New York State College of Agriculture.

The indorsement of the Dairymen's League shall appear upon all the bags of all manufacturers authorized by the League.

All orders for feed shall be approved and recorded in this central office.

The central office shall assist in handling transportation difficulties and see to it that there are no delays in delivery.

2. Feed shall be distributed by local purchasing agents recommended by the local branches, acceptable to the manufacturers, and approved by the executive committee of the Dairymen's League.

The local purchasing agent shall solicit orders, make up the car, send in orders, collect money, pay for the car, notify members when car arrives, check out car, and adjust local difficulties, etc.

The maximum price for feed shall be three dollars (\$3.00) per ton above the wholesale price at the time purchase is made.

A member of the Dairymen's League in good standing shall receive the following discounts:

If he takes an entire carload for his own consumption, pays cash, and takes the feed from the car, two dollars and fifty cents (\$2.50) per ton discount.

The reason for thus placing orders for carloads through the local purchasing agent is to secure disinterested checking of quality and quantity of feed, taking care of complaints, and other usual services rendered by retail dealers.

If he orders in less than carload lots, pays cash, and takes feed from the car, two dollars (\$2.00) per ton discount.

If he pays cash and takes feed from storage house within five days after notification of arrival of car, one dollar (\$1.00) per ton discount.

No discounts shall be allowed on Dairymen's League feeds sold to farmers who are not members of the League or to members who are not in good standing.

The executive committee of the Dairymen's League shall furnish to each local purchasing agent, a list of League members who are in good standing in that locality.

3. The local purchasing agent shall solicit standing orders to make up cars to maximum capacity. In case it is not possible to make a full car at convenient intervals, he should have storage space to order enough to make up the balance of the car. This extra feed will enable him to carry a feeder from one car to the next in case the feeder should run short of feed before the next car arrives.

4. Where possible, it is advisable for each local branch of the Dairymen's League to recommend a local feed dealer to act as its purchasing agent under a contract which will accord with the plan as outlined in Paragraph 2. Where this is not possible a branch shall recommend one of its members as purchasing agent who is in a position and qualified to handle the business in a business-like way.

5. The feed shall come directly from the manufacturer put up in one

hundred (100) pound net weight bags with the guarantee that the contents of the bag are satisfactory as to quality.

6. If the feed is not satisfactory, a committee composed of the local purchasing agent, a representative of the manufacturer, and the member or members receiving such feed, is authorized to make due allowance for the difference. In case no satisfactory agreement can be reached by this committee, the executive committee of the Dairymen's League shall appoint a committee who shall have full power to legislate on such matter.

7. All manufacturers in accepting an order must send the feed guaranteed in accordance with Paragraphs 5 and 6.

8. A regular wholesale price sheet shall be sent weekly to authorized local agents and the central office of the Dairymen's League by the manufacturers. A special price sheet shall be issued when there is a change of fifty (50) cents per ton in any feed listed.

9. All the business carried on throughout this system shall be done on a cash basis. This will insure all parties concerned against any liability from any source. This not only insures all parties involved but reduces the cost of the feed which would be increased if any element of chance or failure were to enter into the plan. Cars are to be shipped draft attached to bill of lading.

10. Farmers will find it to their advantage to buy feed through this system, not only because of better prices, but also because of the guarantee which they are able to get.

These plans are subject to change and modification by the executive committee of the Dairymen's League.

This plan has already been made public and circulated throughout the State. It has met with approval, and the League has been assured of the hearty cooperation of the feed dealers generally. The plan will be put into effect as soon as the necessary machinery for its operation can be put in motion.

In formulating this plan it was deemed inadvisable on the part of the Dairymen's League to disturb the present channels. The placing on the market of a first-class feed, manufactured according to the formula submitted by the New York State College of Agriculture and guaranteed by the Dairymen's League, at a price consistent with its quality, will assure the farmers of an available supply.

The already established State Grange Purchasing Agency affords another channel for buying first-class feeds at prices as low as are possible for feeds of this quality.

Reports of the slaughter of dairy cattle from sections of the country supplying milk to the large cities give cause for grave concern. This extraordinary slaughter of the dairy cow has been, and is, due to the very attractive prices paid for beef cattle, the scarcity of labor on dairy farms, the high cost of feeds, and the low returns for milk, which are not adequate to meet the cost of production.

The demand for products manufactured from milk has already made inroads upon the normal supply of raw milk for the large

cities. This is particularly true as to condensed milk, and it has been shown that manufacturers of condensed milk have been able to pay prices sufficiently high to draw raw milk from its usual channels. As a result, this has a tendency to raise the prices for milk going to the liquid milk market and to decrease the amount of butter manufactured.

To foster the dairy industry and put it on a more intelligent and efficient basis, the Commission has been able, through the State College of Agriculture, to secure the services of a competent man to stimulate the present agencies already in the field.

POULTRY

Through the committee of the New York State Federation of Poultry Associations, the Commission has planned to carry on several educational campaigns, each one emphasizing an important method to be followed in the efficient management of poultry flocks, with the object of enabling poultry keepers to produce eggs and poultry flesh in spite of abnormally high-priced feed, labor, and equipment. These educational campaigns are conducted as single units, and during the special season when the methods advocated can be most advantageously and effectively applied.

The first campaign, and the only one that has been carried forward, is that emphasizing the importance of culling the poultry flocks. Since the culling of unproductive fowls, when they cease to lay, can be done most effectively from July 1 to November 1, the campaign is not yet completed. By practicing the methods advocated, farmers can select, by means of external characters, the fowls that have become unproductive, and thus retain the desirable and market the unproductive fowls. By this means six distinct and important results are accomplished:

1. The unprofitable fowls are discarded and financial loss is thus avoided.
2. The food that the unprofitable fowls would have consumed is released for profitable use.
3. A large quantity of poultry food becomes available for human food early in the season instead of late in the fall.
4. A congestion of the late fall market is avoided, with its consequent depression of price to the producer.
5. The reduced flock which is retained can be handled more efficiently and more profitably.

6. Superior results are obtained by breeding from the most profitable birds only, instead of from the average of the flock. This has a value which cannot be estimated because it will extend for generations. By the methods of selection advocated, the consumer and the producer both gain.

In the accompanying table is given an estimate based on actual results obtained in similar campaigns in other years. These results might reasonably be expected if a stock selection could be extended to include all counties of the State. In this table two sets of estimates are shown, one based on the possibility of reaching 100 per cent of the poultry, the other based on reaching only 8 per cent — the latter proportion being conservative, and considerably less than has been reached in some counties. It is seen, from the figures submitted, that if only 8 per cent of the poultry should be selected, there would result a saving of 2121 tons of feed, worth \$127,260. In addition to this, the increase in egg production next year, due to the fact that only the profitable fowls are retained instead of the average of the flock, would be 431,600 dozen eggs, worth \$129,480.

ESTIMATES BY COUNTIES OF THE RESULTS OF A STATE-WIDE POULTRY SELECTION CAMPAIGN IN NEW YORK

County	Number of hens	Percentage of total hens in State	8 per cent of hens in county (number)	Feed saved			Increased egg production next year due to selection				
				Feed reaching 100 per cent of the hens (tons)	Value at \$60 a ton	Feed reaching 8 per cent of the hens (tons)	Value at \$60 a ton	Reaching 100 per cent of the hens (dozens)	Value at 30 cents a dozen	Reaching 8 per cent of the hens (dozens)	Value at 30 cents a dozen
Albany.....	170,688	1.58	13,650	418.9	\$25,134	33.5	\$2,010	85,249	\$25,572	6,819	\$2,046
Allegany.....	194,144	1.79	15,530	474.5	28,470	38.0	2,280	96,570	29,971	7,726	2,318
Broome.....	166,913	1.55	13,350	411.0	24,660	32.9	1,974	83,620	25,086	6,600	2,007
Cattaraugus.....	234,090	2.17	18,725	575.4	34,524	46.0	2,760	117,070	35,121	9,366	2,810
Cayuga.....	283,593	2.63	22,685	697.4	41,844	52.0	3,120	141,880	42,704	11,350	3,405
Chautauqua.....	350,193	3.24	28,015	859.0	51,540	68.7	4,122	174,790	52,437	13,983	4,165
Chemung.....	180,068	1.67	14,405	442.7	26,562	35.4	2,124	90,090	27,027	7,207	2,162
Chenango.....	278,547	2.58	22,285	684.0	41,040	54.7	3,282	139,280	41,784	11,142	3,343
Clinton.....	102,350	0.95	8,190	251.9	15,114	20.2	1,212	51,250	15,375	4,100	1,230
Columbia.....	122,407	1.13	9,795	289.6	17,976	24.0	1,440	60,960	18,558	4,877	1,463
Corland.....	144,976	1.34	11,595	355.3	21,318	28.4	1,704	73,295	21,688	5,784	1,735
Delaware.....	276,328	2.56	22,105	678.7	40,722	54.3	3,258	138,100	41,430	11,048	3,314
Dutchess.....	244,789	2.27	19,580	601.8	36,108	48.1	2,886	122,460	36,738	9,797	2,939
Erie.....	378,852	3.51	30,310	930.7	55,842	74.4	4,404	189,380	56,814	15,150	4,545
Essex.....	63,815	0.59	5,105	156.4	9,384	12.5	750	31,880	9,549	2,546	764
Franklin.....	99,753	0.92	7,980	243.9	14,634	19.5	1,170	49,630	14,889	3,970	1,191
Fulton.....	63,354	0.59	5,068	156.4	9,384	12.5	750	31,830	9,549	2,546	764
Genesee.....	132,108	1.23	10,570	323.5	19,410	25.9	1,554	65,820	19,746	5,266	1,580
Greene.....	175,994	1.63	14,080	432.1	25,926	34.6	2,076	87,940	26,382	7,035	2,111
Herkimer.....	127,746	1.18	10,220	312.8	18,768	25.0	1,500	63,660	19,098	5,093	1,528
Jefferson.....	228,622	2.12	18,290	562.0	33,720	45.0	2,700	114,370	34,311	9,150	2,745
Lewis.....	115,900	1.07	9,270	283.7	17,022	22.2	1,362	57,730	17,319	4,618	1,385
Livingston.....	164,321	1.52	13,140	403.0	24,180	32.2	1,932	82,000	24,600	6,560	1,968
Madison.....	209,071	1.94	16,725	514.4	30,864	41.2	2,472	104,650	31,365	8,372	2,512
Monroe.....	257,349	2.38	20,585	631.0	37,860	50.5	3,030	128,400	38,520	10,272	3,082
Montgomery.....	114,953	1.07	9,195	283.7	17,022	22.7	1,362	57,730	17,319	4,618	1,385
Nassau.....	78,743	0.73	6,300	193.5	11,610	15.5	930	38,380	11,814	3,151	945
Niagara.....	247,054	2.29	19,765	607.2	36,432	48.6	2,916	123,540	37,062	9,883	2,965
Oneida.....	249,638	2.31	19,970	612.5	36,750	49.0	2,940	124,620	37,386	9,970	2,991
Onondaga.....	223,173	2.07	18,580	548.8	32,928	43.9	2,634	111,670	33,501	8,934	2,680
Ontario.....	169,914	1.57	13,530	416.3	24,978	33.3	1,998	84,700	25,410	6,776	2,033
Orange.....	253,837	2.35	20,305	623.1	37,386	49.8	2,988	126,780	38,034	10,142	3,043

Orleans.....	122,987	1.14	9,835	302.2	18,132	24.2	1,452	61,500	18,450	4,920	1,476
Owego.....	243,325	2.25	19,450	596.6	35,796	47.7	2,862	121,380	36,414	9,710	2,913
Putnam.....	363,969	3.37	29,110	892.8	53,568	71.4	4,284	181,800	54,540	14,544	4,363
Rensselaer.....	83,225	0.31	2,655	82.2	4,932	6.4	1,384	16,720	5,016	1,338	4,401
Rockland.....	100,446	1.43	12,835	392.4	23,544	31.4	1,884	79,845	23,953	6,388	1,916
St. Lawrence.....	53,276	0.49	4,262	129.9	7,794	10.4	624	26,435	7,930	2,115	635
Saratoga.....	268,586	2.49	21,485	660.2	39,612	52.8	3,168	134,340	40,302	10,747	3,224
Schenectady.....	158,036	1.46	12,640	337.1	23,225	31.0	1,860	78,760	23,628	6,301	1,890
Schoharie.....	53,293	0.49	4,266	129.9	7,794	10.4	624	26,435	7,930	2,115	635
Schuyler.....	181,121	1.68	14,490	445.5	26,730	35.6	2,136	90,640	27,192	7,251	2,175
Seneca.....	88,776	0.82	7,100	217.4	13,044	17.4	1,044	44,240	13,272	3,530	1,082
Steuben.....	102,815	0.95	8,225	251.9	15,114	20.2	1,212	51,250	15,375	4,100	1,230
Suffolk.....	255,416	2.37	20,430	628.4	37,704	50.3	3,018	127,860	38,358	9,829	2,949
Sullivan.....	198,612	1.84	15,890	487.9	29,274	39.0	2,340	99,260	29,778	7,941	2,352
Tioga.....	740,113	6.86	59,200	1,818.7	109,122	145.4	8,724	370,080	111,024	29,606	8,882
Tompkins.....	223,728	2.17	17,895	575.4	34,524	46.0	2,760	117,070	35,121	9,366	2,810
Ulster.....	164,047	1.52	13,120	403.0	24,180	32.2	1,932	82,000	24,600	6,560	1,968
Warren.....	321,447	2.98	25,700	790.2	47,412	63.2	3,792	160,770	48,231	12,862	3,859
Washington.....	52,885	0.49	4,180	129.9	7,794	10.4	624	26,435	7,930	2,115	635
Wayne.....	167,563	1.55	13,400	411.0	24,660	32.0	1,974	83,620	25,086	6,690	2,007
Westchester.....	335,496	3.11	26,825	824.6	49,476	66.0	3,960	167,780	50,334	13,422	4,027
Wyoming.....	134,119	1.24	10,739	328.8	19,728	26.3	1,378	66,900	20,070	5,352	1,606
Yates.....	153,333	1.42	12,265	376.5	22,590	31.7	1,902	76,610	22,983	6,129	1,839
Yates.....	110,080	1.02	8,806	270.4	16,224	21.6	1,296	55,030	16,509	4,402	1,321
Totals for State.....	10,790,000	100.00	863,000	26,511.0	\$1,590,660	2,121.0	\$127,260	5,395,000	\$1,618,500	431,600	\$129,480

Among other campaigns to be waged during the year are:

1. To emphasize the importance of hatching chickens at the right time in order to secure the most profitable production. This would result in vastly increasing the number of eggs produced in periods of greatest scarcity, namely, the fall and winter months.

2. To rear chickens in large flocks by less expensive and more efficient methods. This would result in making it possible for persons to rear many more fowls than they do at the present time.

3. To increase the keeping of purebred poultry, bred for uniformity and superiority in type of body and egg and in productiveness.

4. To advocate the remodeling of poultry buildings and plants on an efficiency basis. This would decrease labor and first cost of construction, and reduce mortality because of better ventilation and more sanitary conditions.

In the campaign conducted, the staffs of the Department of Poultry Husbandry of the New York State College of Agriculture and the secondary agricultural schools have furnished all the men without extra compensation. Frequently the lecturers and demonstrators have volunteered for this service during their regular vacation periods. The farm bureau managers and the officers of poultry associations have given freely of their time and money in advertising meetings and in providing free transportation.

Up to September 1, work had been done in fourteen counties. Seven persons had been engaged for part or all of their time, and sixty-eight days had been devoted to the work.

SUMMARY OF SELECTION CAMPAIGN TO SEPTEMBER 1, 1917

Representative	Place	Days	Fowls pledged
F. D. Brooks.....	Chenango County.....	2	1, 660
H. E. Botsford.....	Rockland County.....	5	17, 394
W. G. Krum.....	Ulster County.....	4	.....
W. G. Krum.....	Cortland County.....	4	.....
W. G. Krum.....	Bath, Steuben County.....	1	.....
W. G. Krum.....	Dutchess County.....	5	21, 795
W. G. Krum.....	Wayne County.....	6	.....
J. E. Rice.....	Congers, Rockland County.....	1	.....
J. E. Rice.....	Black River, Jefferson County..	1	.....
E. W. Benjamin.....	Yates County.....	2	.....
L. M. Hurd.....	Allegany County.....	6	7, 149
L. M. Hurd.....	Delaware County.....	6	.....
L. M. Hurd.....	Broome County.....	6	.....
L. M. Hurd.....	Chenango County.....	6	.....
J. M. Hurd.....	Otsego County.....	6	.....
O. C. Krum.....	Saratoga County.....	6	.....
O. C. Krum.....	Bath, Steuben County.....	1	.....

Demonstrations have been scheduled for the following counties after September 1:

Westchester	Madison	Albany
Chemung	Schoharie	Jefferson
Orange	Orleans	Nassau
Tompkins	Chautauqua	Suffolk
Tioga	Sullivan	Greene
St. Lawrence	Warren	

Poultry farm survey

A survey sheet has been extensively circulated in order to ascertain the poultry situation in the State. About 400 of the surveys have been returned.

REPORT OF THE DIVISION OF TRANSPORTATION AND MACHINERY

S. J. T. BUSH, *Commissioner in Charge*

The Division of Transportation and Machinery of the New York State Food Supply Commission was placed in charge of Commissioner Seth J. T. Bush, President of the Western New York Horticultural Society. Mr. F. G. Behrends, of Ithaca, New York, was appointed assistant to Commissioner Bush, and took charge of the management of the various machines and of the office details of the work on May 15, 1917.

TRANSPORTATION

The nation-wide call for increased production, and the enormous demands put upon the railroads, were bound to result in congestion of freight, embargoes, lack of equipment, and delays in transit. The Commission, therefore, decided to organize a division of transportation, to aid the farmers of the State in obtaining prompt deliveries of agricultural commodities and supplies.

On April 26 the following letter was sent to each of the important railroads operating in New York State:

This Commission is very anxious to expedite in every way possible the delivery of seed, feed, fertilizer, spraying material, agricultural machinery, lime, and drain tile, all of which are urgently needed for increased production of foodstuffs in this State. Will you kindly have your Company write me the assurance that the above commodities will be given preferential delivery by your road? Energetic action will be necessary if we are to secure a normal production, to say nothing of increasing it. Be sure to advise me to whom all complaints should be addressed by mail and wire, to secure the most prompt attention.

The replies to the letter were prompt, each road expressing its desire to cooperate. A list of the officials to whom complaints should be addressed was incorporated in a circular letter and sent to each county representative. Many complaints were received of delay in delivery of agricultural supplies, notably seeds, fertilizer, and machinery, and the county representatives were advised that it would be well for them to handle such complaints as directly as possible in order that delay might be obviated. Complaints relating to delay in delivery of shipments originating without the State were to be reported to the Commission of Car Service, No. 710 13th Street, Washington, D. C., and complaints relating to shipments originating within the State were to be

referred to the officials of the road on which the shipment originated. These complaints were to state: (1) commodity shipped; (2) name and address of shipper; (3) name and address of consignee; (4) name of railroad on which shipment originated; (5) point of shipment; (6) car number, and initial in which shipment was made. The information was also to include the routing of the car.

A copy of each complaint was to be sent at once to the Albany office, in order that the matter might be followed up and given vigorous attention. Hundreds of complaints were handled directly through the county representatives without going through the Albany office, thus saving considerable time and assuring the quickest possible delivery of shipments. Blank forms supplied to the representatives, when properly filled out and sent to the railroad, gave all necessary data for locating a shipment.

About May 1 the first poster of this Division was issued, containing this notice: "Are your shipments of seeds, fertilizer, and machinery being held up? Can you get what you need?" This was sent broadcast over the State, and brought the matter to the attention of thousands of farmers.

More than 200 complaints of delay in transportation of important agricultural products were handled by the Albany office in addition to those handled directly at the local county offices. The number of complaints, however, is really no fair indication of the volume of business, for the reason that some complaints involved a large number of shipments and in some cases a general condition. The complaints handled may be divided into four groups: embargoes, insufficient equipment, lost shipments, and delayed shipments.

Complaints of embargoes were mostly of a general nature, and not of single specific shipments. They involved farm machinery, lumber for silos, drain tile, clay from which drain tile are made, fruit baskets, and packages. In each case the embargo either was raised or was modified to allow the movement of these commodities.

Complaints of insufficient equipment arose from the railroads' not supplying sufficient rolling stock to move certain products. The railroads have done all within their power to relieve this situation and have supplied the needed equipment.

Lost and delayed shipments were traced, and most of them were located and delivered. In the case of those which could not be located, the shippers were advised as to the proper official with whom they should take up the matter of settlement.

Nearly one-half of the complaints involved the shipment of seeds. Fertilizers and machinery came next.

MACHINERY

Tractors

Believing that through the use of farm tractors and tillage implements the agricultural products of New York State could be largely increased, the Commission purchased forty-two tractors of the following makes and power: Case 9-18 with two-bottom plow; Case 10-20 with three-bottom plow; Mogul 8-16 with two-bottom plow, disk harrow, tandem cutaway harrow, and 60-tooth-peg harrow; Titan 10-20 with three-bottom plow, disk harrow, tandem cutaway harrow, and 70-tooth-peg harrow. The aim in purchasing these machines was threefold: first, to increase the number of acres plowed and tilled during the season of 1917; secondly, to demonstrate the feasibility of such aid by the State; and thirdly, to test the practicability of the tractor under New York conditions.

During the month of May, sixteen tractors were placed in various counties of the State; during the months of June and July, sixteen additional tractors were placed; and during the months of August and September, ten more were placed. These tractors were lent to a county farm bureau association, to a county home defense committee, or to a group of responsible farmers who organized. The contract was executed in each case between one of the above organizations and this Commission. The organization receiving a machine paid to this Commission a depreciation charge to partly cover the mechanical wear on the machine. This charge varied with the size of the machine borrowed and with the length of the season available for its use. The tractors and equipment thus turned over to the organization by this Commission remained the property of the State and under its control and supervision.

The organization guaranteed to plow at least a minimum number of acres, this minimum varying with the size of the machine and the length of the season available for its use. It further agreed to hire an operator, purchase all fuel and oils necessary for operation, make all necessary repairs, and charge the farmers of its particular community so much per hour or per acre, just enough to cover all expenses of operation. The local supervision of the machines was placed in the hands of the county farm bureau manager or the county representative of the Commission. A com-

petent tractor engineer was hired by the State, whose duties consisted in visiting the various state-owned machines, inspecting them, aiding in repairing them, and training men for operators.

The season was unusually wet and a number of tractors could not be used to their utmost capacity. Many reports show that some of these machines were compelled to be idle for more than half the time because of weather conditions. Reports for the past month show a great increase in the amount of work done by each machine, and the prospects are that these state-owned machines will yet plow between 2500 and 3000 acres of land for wheat, rye, and other fall plowing. Results must be judged in the light of the unusual season and the fact that many of these tractors were not placed until late in August.

The state tractors have plowed more than 3000 acres, harrowed more than 4000 acres, and worked on at least 150 farms. In most cases the farmers were well satisfied, and in one county the fields to be plowed totaled several hundred acres. At the present time all tractors are placed and there are demands for several more which cannot be filled. During those times of the year when there is little demand for plowing, the machines have been used for such work as drilling, mowing, hauling in hay, and filling silos. There has been little idleness, therefore, for some machines.

Ditching machines

The drainage problem is one of the largest problems facing the farmers of New York State. Recognizing this, the Commission purchased, during the late summer, three large power ditching machines, capable of excavating 75 rods or more in a ten-hour day.

The demand for these machines by the various counties of the State far exceeded the supply. One of the machines started work on August 24, was idle seven days for repairs, and excavated approximately 1100 rods to September 15. Another machine was started on August 13, was idle because of rain two days and because of repairs one day, and excavated approximately 600 rods of ditch to September 15. The third machine began work on September 4, was idle eight days for repairs, and excavated approximately 80 rods of ditch. So far the machines have dug approximately 1800 rods of ditch.

These machines were lent to farm bureau associations, the contract embodying the following agreements: the organization

was to pay this Commission a depreciation charge of ten cents a rod for the mechanical wear on the machine; it was to hire an operator and his helper, purchase all oil, fuel, and supplies, make all necessary repairs, and charge the farmer fifty cents a rod for a 3-foot ditch, the price increasing according to scale up to a 5-foot ditch. The Commission furnished the services of two expert drainage engineers to lay out the land ahead of these machines. More than 12,000 rods are contracted ahead of the machines, and this is much more than they will be able to do this fall.

Prices on various sizes of clay and concrete tile were obtained from many manufacturers. These prices were incorporated in a circular letter and sent to all representatives interested in tile drainage. Data referring to the advisability, cost, and procedure in the manufacture of concrete tile were collected for another circular letter.

Sprayers

During the spring an increased potato acreage was urged. Appreciating that much of the benefit of this increased acreage would be lost should the potato blight attack the crop, the Commission purchased a limited number of potato sprayers. These machines were lent through county representatives to a community, to a county farm bureau association, to a county home defense committee, or to an organized group of responsible farmers. In the contract the organization guaranteed to the Commission that at least 50 acres, and not more than 100 acres, would be sprayed; that a depreciation charge of \$25 would be paid to the Commission; and that the applications would be properly made under the guidance of an expert. It was the policy of the Commission not to lend these machines to a group of farmers who organized themselves for the purpose of borrowing one of these sprayers, but only to those groups of farmers who found it impossible to get a potato sprayer for themselves through some local agency.

These machines have sprayed 49 acres four times, 311 acres three times, 208 acres two times, and 208 acres one time, making a total of 776 acres. They have worked on 141 farms.

Many gratifying results have come from the potato spray work. Aside from the direct value of the potato crop saved by these machines, they have demonstrated to farmers the importance of spraying.

FINANCIAL STATEMENT

October 20, 1917.

DEAR SIR.—Transmitted herewith is the financial report of the New York State Food Supply Commission; the activities of this Commission being terminated by the provisions of Chapter 813 of the Laws of 1917.

Very truly yours,

JOSEPH H. WILSON,

Auditor, State Defense Council.

To

HONORABLE CHARLES S. WILSON,

Member, State Defense Council,

Albany, New York.

FINANCIAL REPORT OF THE NEW YORK STATE FOOD SUPPLY COMMISSION

Under the terms of Chapter 369 of the Laws of 1917, the State Defense Council assumed control of the incurrence of liabilities and the approval of expenditures of the New York State Food Supply Commission as created by Chapter 205 of the Laws of 1917. The New York State Food Supply Commission having been in operation from April 17, 1917, liabilities were contracted prior to the advent of the State Defense Council. A statement was rendered to the State Defense Council, presumably setting forth all liabilities incurred to May 4, but subsequently many accounts proved this statement to be incorrect, for under the conditions of compilation, latitude had to be given to the formation of the Commission and extensive operations that were begun—for example, the formation of the county organization offices and the taking of the agricultural census; so that in order that the files of the State Defense Council would be complete, and that the system of authorizations as required by Chapter 369 of the Laws of 1917 would entail a completed cycle of operation, it was decided that all liabilities that were incurred prior to May 4 were to be set forth upon authorization blanks with the letter

“ X ” as a distinctive mark. These authorizations were at no time to be considered State Defense Council authorizations, but were merely for the purpose of recording and charging liabilities incurred or expenditures made. Therefore this report will contain the two conditions, the designated “ X ” authorizations to May 4 and the authorizations by the State Defense Council from May 4 to the present date; but, due to the fact that the entire expenditure is controlled by the authorizations as issued, the report can be considered as a single condition. The total amount entered upon the books under the designated “ X ” authorizations was \$38,849.27, and under authorizations as provided by chapter 369 of the Laws of 1917 was \$185,722.38, making a total carried by both classes of authorizations \$224,571.65. The expenditures liquidating liabilities incurred prior to May 4, were by terms of chapter 205 to be approved by the Governor. The expenditures subsequent to May 4, were to be approved by the State Defense Council. Until the advent of the State Defense Council in the activities of the New York State Food Supply Commission, no schedule of expenditures had been presented to the Comptroller for payment and it was therefore necessary for consideration of both conditions when schedules of expenditures were presented, therefore the control of liquidation of authorizations under the two conditions as above stated was in the hands of the auditor of the State Defense Council. The schedules were approved by the Governor for that portion prior to May 4, and by the State Defense Council for that portion after May 4, therefore the report of expenditures as presented here are expenditures that were audited by the auditor of the State Defense Council, either for the approval of the Governor, or for the approval of the Council, and being embodied in this report as a statement of expenditures in whole against the appropriation under the terms of Chapter 205, 506, and 369 of the Laws of 1917.

The activities of the State Food Supply Commission were divided into nine subdivisions: Administration; Food Conservation; County Organization; Schools and Colleges; Distribution, Storage, and Marketing; Loans and Farm Lands; Farm Labor; Seeds, Fertilizers, and Live Stock; Transportation and Machinery. These subdivisions were again divided with a specific purpose for each under the supervision of one of the commissioners appointed by the Governor. The total expenditures to

the present date for all divisions are \$212,188.51. Attached to and made part of this report is a statement of the expenditures of each of these divisions and subdivisions segregated in a manner in compliance with the Governor's established budget system. It therefore is possible to determine the exact expenditure for each of the activities undertaken by the New York State Food Supply Commission. The total authorizations recorded upon the books of the State Defense Council under the conditions previously explained was \$224,571.65. The total amount passed upon abstract for liquidation of the above authorizations was \$212,188.51, leaving a balance of outstanding authorizations of \$12,383.14.

The New York State Food Supply Commission presented to the State Defense Council a budget covering all the activities of the Commission, which budget, after due consideration by the Council, was accepted, and the Council authorized the contraction of liabilities to the amount stated in the revised budget, but with the limitation that the incurrence of a specified liability was to be authorized in detail upon the presentation of facts supporting the incurrence of the liability.

At subsequent meetings of the Defense Council, this budget was supplemented by requests for additional authorizations to carry on an activity in excess of the budget authorization, or to enable the Commission to take up some new activity, which at the time of the preparation of the budget could not be foreseen. These authorizations, by resolution, were also to be controlled by direct Council authorizations when the items of expenditure or the items of liability to be incurred were presented to the Council. This condition would allow the continuance of all activities by the Food Supply Commission to their termination, or by the Food Control Commission, if the latter Commission so desired, within the appropriation provided by Chapter 205. The distribution of expenditure as presented in this report is a record of the distribution upon the books of the State Defense Council, taken from the schedule of accounts forwarded to this office for the Council's approval by the New York State Food Supply Commission, upon which the designated division to which the expense was to be charged was set forth. It may be possible, through the lack of proper information transmitted either to the Audit Bureau of the New York State Food Supply Commission or to the State Defense Council, that certain items may not be properly distributed, but I

consider that, due to the manner in which many of these expenditures were reported, the segregation is as proper as could be possibly determined.

By the provisions of Chapter 506 of the Laws of 1917, the Food Supply Commission was empowered to create a Capital Fund to carry on certain activities. The Commission therefore applied to the State Defense Council for the authorization of a Capital Fund in the sum of \$20,000 for the purpose of purchasing seeds to be sold in the farming districts. At a later date, the Commission applied to the State Defense Council for an authorization of a Capital Fund in the sum of \$10,000 for the purpose of distributing farm labor. Prior to the authorization of \$20,000 for seeds, there was expended the sum of \$1,714 for the purchase of buckwheat seed. The proceeds from the sale of this buckwheat was applied by the Commission to the Capital Fund established for this purpose, therefore making the total Capital Fund, under the Division of Seeds, Fertilizers, and Live Stock, \$21,714. The State Defense Council, having no jurisdiction or any faculty of keeping record of the various transactions under the latter Capital Funds, therefore records the amounts withdrawn from the general fund in totals.

Appropriation by Chapter 205, Laws of 1917.....	\$500,000 00
Total expenditures	212,188 51
<hr/>	
Cash balance	\$287,811 49
<hr/>	
Appropriation by Chapter 205, Laws of 1917.....	\$500,000 00
Authorized by State Defense Council.....	224,571 65
<hr/>	
Unauthorized balance	\$275,428 35
<hr/>	

NEW YORK STATE FOOD SUPPLY COMMISSION

Total Expenditures

Personal service	\$63,955 46
Printing	12,770 95
Advertising	17 53
Equipment	59,091 72
Supplies	7,299 24
Traveling expenses	26,493 16
Communication	12,431 45

General plant service	\$ 15 00
Rent	114 00
Farm labor (capital).....	10,000 00
Seeds, fertilizers, and live stock (capital).....	20,000 00
	<hr/>
	\$212,188 51
	<hr/> <hr/>

Administration

Personal service	\$7,747 88
Printing	3,789 99
Equipment	4,374 84
Supplies	1,878 21
Traveling expenses	847 23
Communication	5,341 75
	<hr/>
	\$23,979 90
	<hr/> <hr/>

FOOD CONSERVATION

Expenditures

	Total expendi- tures	Administra- tion	Rural food conserva- tion	City food conserva- tion	Insect and plant control
Personal service.....	\$20,662 87	\$1,707 17	\$10,536 50	\$2,687 05	\$5,732 15
Printing.....	1,279 07	953 37	294 00	.....	31 70
Equipment.....	24 49	24 49	.....	.....	.....
Supplies.....	1,220 97	809 42	14 22	.....	397 33
Traveling expenses.....	6,158 31	234 36	1,096 98	44 47	4,782 50
Communication.....	754 01	519 75	37 00	5 15	192 11
Total.....	\$30,099 72	\$4,248 56	\$11,978 70	\$2,736 67	\$11,135 79

COUNTY ORGANIZATION

Expenditures

	Total expendi- tures	Administra- tion	County organiza- tions	Agri- cultural census
Personal service.....	\$18,652 39	\$ 101 89	\$16,393 55	\$2,247 04
Printing.....	6,150 16	3,856 71	1,588 03	705 42
Equipment.....	462 91	115 00	259 93	87 98
Supplies.....	1,925 03	116 10	1,137 46	671 47
Traveling expenses.....	5,195 53	312 89	3,579 79	1,302 85
Communication.....	3,926 64	497 40	2,445 64	983 60
General plant.....	15 00	.....	.....	15 00
Rent.....	14 00	.....	14 00	.....
Total.....	\$36,341 66	\$4,999 90	\$25,323 40	\$6,013 36

SCHOOLS AND COLLEGES

Expenditures

	Total expenditures	Administration	Agricultural census	Farm cadet supervision	Military training commission	Farm cadet camp
Personal service.....	\$ 5,778 93	\$675 49	\$ 602 87	\$ 133 59	\$2,258 52	\$2,108 46
Printing.....	194 08	69 85	51 87	72 36	.....	.....
Advertising.....	6 00	.....	.....	.....	6 00	.....
Equipment.....	83 03	.....	.....	.....	83 03	.....
Supplies.....	467 62	.....	44 48	78 78	344 36	.....
Traveling expenses.....	11,258 30	153 13	8,175 50	2,078 37	441 25	410 05
Communication.....	1,443 54	7 70	866 90	330 46	229 92	8 56
Total.....	\$19,231 50	\$906 17	\$9,741 62	\$2,693 56	\$3,363 08	\$2,527 07

DISTRIBUTION, STORAGE, AND MARKETING

Expenditures

	Total expenditures	Administration	Storage and marketing
Personal service.....	\$2,782 44	\$2,407 44	\$375 00
Printing.....	212 54	212 54	.....
Equipment.....	378 03	378 03	.....
Supplies.....	32 85	32 85	.....
Traveling expenses.....	171 95	171 95	.....
Communication.....	8 37	8 37	.....
Total.....	\$3,586 18	\$3,211 18	\$375 00

LOANS AND FARM LANDS

*Expenditures**Administration*

Personal service	\$1,788 83
Printing	31 75
Supplies	1 00
Traveling expenses	444 15
Communication	16 88
Total	\$2,282 61

FARM LABOR
Expenditures

	Total expenditures	Administration Albany	Administration New York	Distribution of farm labor
Personal service.....	\$ 4,196 19	\$ 3,775 67	\$ 379 27	\$ 41 25
Printing.....	988 27	988 27		
Advertising.....	11 53			11 53
Equipment.....	246 50		246 50	
Supplies.....	58 46	24 99	29 97	3 50
Traveling expenses.....	707 37	360 28	26 39	320 70
Communication.....	686 77	141 21	441 51	104 05
Total.....	\$6,895 09	\$5,290 42	\$1,123 64	\$481 03

Capital Fund (Cash)..... \$10,000 00

SEEDS, FERTILIZERS, AND LIVE STOCK

Expenditures

	Total expenditures	Administration	Seeds, fertilizers, and live stock
Personal service.....	\$866 14	\$866 14	
Printing.....	66 15	66 15	
Supplies.....	0 55	0 55	
Traveling expenses.....	494 24	375 40	\$118 84
Communication.....	35 23	34 05	1 18
Total.....	\$1,462 31	\$1,342 29	\$120 02

Capital Fund (Cash)..... \$20,000 00

Capital Fund (Supplies)..... 1,714 00

TRANSPORTATION AND MACHINERY

Expenditures

Administration

Personal service	\$ 1,479 79
Printing	58 94
Equipment	53,520 92
Supplies	1 55
Traveling expenses	1,216 08
Communication	218 26
Rent	100 00
Total.....	\$56,595 54

REPORT OF AUTHORIZATIONS OUTSTANDING

The Following Authorizations Canceled in Part

Authorization number	Amount authorized	Warrant number	Amount paid	Amount outstanding
X-241.....	\$ 35 00	72	\$ 27 81	\$ 7 19
X-272.....	60 00	72	55 00	5 00
X-273.....	45 00	72	30 00	15 00
X-274.....	210 00	39	184 75	25 25
X-279.....	280 00	344	225 00	55 00
X-7.....	99 33	614	99 18	15
X-14-29.....	344 44	614	340 34	4 10
X-293.....	669 25	1 725	667 75	1 50
X-295.....	893 00	1 628	863 00	30 00
53.....	50 00	72	38 53	11 47
56.....	5 00	72	3 47	1 53
58.....	36 00	72	31 30	4 70
68.....	22 50	39	20 00	2 50
69.....	30 00	72	27 37	2 63
2.....	2,000 00	39	789 70	1,210 30
		153		
3.....	18,456 78	33	17,435 24	1,021 54
		340		
		153		
4.....	2,173 65	33	94 30	2,079 35
		244		
14.....	4 75	72	3 95	80
16.....	3 00	72	2 34	66
17.....	5 50	72	3 08	2 42
18.....	25 00	72	22 51	2 49
26.....	185 44	16		
35.....	18 00	33	131 13	54 31
84.....	7 00	344	16 25	1 75
86.....	6 08	344	6 66	34
101.....	4 50	479	6 07	01
110.....	25 00	344	3 48	1 02
111.....	20 00	344	22 08	2 92
112.....	16 50	515	14 42	5 58
113.....	2 50	344	16 05	45
116.....	2 50	344	2 08	42
117.....	7 00	344	2 07	43
118.....	45 00	344	6 50	50
121.....	3 25	344	40 00	5 00
123.....	29 90			*3 25
140.....	815 40			*29 90
152.....	97 50	1 725	814 60	80
165.....	4 00	344	75 00	22 50
167.....	35 00	344	3 15	85
168.....	5 00	344	27 19	7 81
169.....	15 00	344	2 50	2 50
187.....	5 00	344	13 00	2 00
188.....	3 00	344	3 36	1 64
189.....	7 50	344	1 10	1 90
190.....	2,437 70	344	6 31	1 19
301.....	1,308 79	1 756	2,399 59	38 11
303.....	3,452 61	26	1,280 94	27 85
304.....	65 00	53	3,450 14	2 47
378.....	4 00	344	35 88	29 12
411.....	1,505 90	515	3 25	75
461.....	813 49	69	1,505 89	10
462.....	580 79	69	812 49	1 00
463.....	1,305 03	71	542 03	38 76
464.....	12 60	71	1,204 93	100 10
488.....	6 00	340	11 70	90
509.....	5 50	515	5 65	35
512.....	6 00	515	5 25	25
513.....	15 00	515	4 48	1 52
538.....	15 00	515	13 69	1 31
652.....	5 50	515	13 86	1 14
653.....	9 50	515	5 25	25
654.....	304 00	515	3 60	5 90
656.....	45 00	515	144 00	160 00
657.....	5 50	515	42 45	2 55
665.....	42 00	515	5 25	25
678.....	42 30	479	32 00	10 00
688.....		479	41 95	35

REPORT OF AUTHORIZATIONS OUTSTANDING — *Concluded*

Authorization number	Amount authorized	Warrant number	Amount paid	Amount outstanding
583.....	\$ 159 98	153	\$ 158 98	\$ 1 00
784.....	76 14	479	75 89	25
707.....	665 00	344	657 00	8 00
747.....	4,044 12	243	3,965 66	78 46
761.....	25 00	515	24 45	55
765.....	225 00	515	200 00	25 00
766.....	25 00	515	24 45	55
770.....	5 00	.....	.....	5 00
798.....	5,000 00	.....	100 00	4,900 00
817.....	45 00	515	44 45	55
818.....	12 00	515	10 95	1 05
838.....	24 40	344	19 75	4 65
884.....	540 80	344	539 15	1 65
850.....	2,462 29	348	2,459 85	2 44
851.....	2,164 36	329	2,158 95	5 41
1059.....	1,552 78	507	1,549 40	3 38
1071.....	1,145 42	527	1,114 40	31 02
Total.....	\$56,967 77	.....	\$46,845 13	\$10,122 64

The Following Authorizations are Uncanceled

Authorization Number	Amount of Authorization
15	\$ 35 00
89	22 00
91	150 00
97	8 50
98	18 60
104	47 75
178	200 00
180	21 50
196	180 00
197	20 00
384	79 00
410	40 00
415	6 00
435	150 00
456	160 00
489	8 50
507	60 00
508	40 00
515	58 34
534	3 00
536	4 75
537	3 50
540	3 00
554	7 50
647	18 00
651	34 00
655	7 00
675	7 50
676	8 00
679	40 80
680	8 55
763	87 50
785	2 00
787	1 70

<i>Authorization Number</i>	<i>Amount of Authorization</i>
812	\$ 5 00
813	5 00
815	20 00
816	10 00
819	75 00
843	250 00
864	7 00
865	4 50
866	165 00
870	20 89
871	13 20
878	3 00
909	3 00
927	75
936	1 7
941	1 50
942	1 70
957	18 75
958	3 20
959	1 80
960	46 38
963	4 80
964	12 80
973	13 8
984	5 00
1042	1 25
1057	13 00
1097	10 50
Total	<u>\$2,260 51</u>

APPENDIX A

REPORT OF AGRICULTURAL CONFERENCE HELD AT SYRACUSE, APRIL 6

On Friday, April 6, Commissioner of Agriculture Charles S. Wilson called into conference, at Syracuse, representatives of the farmers and farm interests of the State, to consider what steps should be taken to bring our crop production to its maximum to meet the demands of the present crisis.

At this meeting, the following resolutions on plans for increasing agricultural production in New York State were adopted:

1. It seems certain that the United States will be called upon to furnish an unusually large proportion of the food supply of Europe during the next two years, and it is imperative that our home supply be adequate. Our farmers, therefore, in common with other citizens, have a patriotic duty to perform in meeting this situation.

2. There will be a largely increased demand at favorable prices for all staple products that are non-perishable, such as the grains and beans. Farmers can safely break up a portion of the grass lands, provided such practice does not injure an adequate forage supply. There will also be an increased demand for perishable products, especially potatoes.

3. Serious losses that are preventable occur annually to our crops from insect pests and plant diseases. Agricultural and commercial agencies should cooperate with farmers in providing an adequate supply of fungicides and insecticides and accomplishing their effective application.

4. The labor question is a serious one and under existing conditions farmers are apparently justified in paying a high wage for labor. So far as possible, animal power and machinery should be substituted for hand labor. As aiding in this direction, an increased cooperative neighborhood use of expensive machinery is suggested.

5. Since considerable hay land will probably be broken up this year, and as hay is now cheap, farmers are justified in holding over all the surplus hay crops.

6. In view of the high cost of commercial feeds for the next two years, it is desirable to increase the home-grown supply of grain and cultivated forage crops.

7. Large quantities of grain are now used in the manufacture of malt and spirituous liquors. If the food situation becomes serious, the Government should take steps to restrict the amount used in this way.

8. Since the distribution of food products has an important bearing on the food problem, the necessary steps should be taken to provide farmers with proper facilities for the storage of food products at convenient points.

9. In view of the fact that the whole grain products have as high or higher nutritive value than the refined cereal products, which cost several times as much as those made from the whole kernel, and in addition involve some waste, housewives should be encouraged to use the whole cereal products of the farm.

10. The fact being recognized that milk, eggs, or meat are essential to a normal human dietary, and that milk is the cheapest of these foods, consumers are urged to increase their use of milk and its products, including skim milk.

11. Recognizing the fact that vegetables are an all-important factor of a good diet, the planting of a good home garden should be encouraged on farms and in villages alike, as a matter of health and economy.

12. Measures should be taken which will encourage housekeepers to increase the home preservation and storage of foods, such as eggs, vegetables, fruits, and meats.

13. Efforts should be made to aid the housekeeper to decrease the serious waste which occurs in the average household.

14. In the interests of the Nation, this conference urges upon the executive

heads of the railroads of the United States the imperative necessity for facilitating by every possible means the prompt transportation and delivery of farm seeds, fertilizers, feeding stuffs, farm machinery, and such other commodities as are indispensable to the conduct of farming.

15. In the event that conditions shall demand it, be it resolved that the responsible educational authorities of the State be asked to consider the feasibility of releasing, without prejudice, from the high schools, such students as may be available for farm work.

16. That it is the judgment of this conference that the proposed physical and military training law, in its operation, should not be allowed to interfere with the service of young men and women needed on the farm during the crop-growing season, and that this opinion shall be communicated to the proper officers of the state government.

17. In view of the necessity of maintaining an adequate supply of farm products, and the fact that farm labor is already wholly inadequate for the normal needs of production in preparing this Nation for the present crisis, due consideration should be given to the necessity of maintaining an adequate supply of skilled labor on the farm, and that, in case conditions warrant it, labor on the farm should be considered as of equal import with military service, and enlistment for agricultural service should be recognized as service for the Government.

Further resolved, that this resolution be sent to the Governor of the State of New York and to the Secretaries of Agriculture, War, and Navy, and to the Chairmen of the Committees on Agriculture and Military Affairs in the National Congress.

APPENDIX B

PATRIOTIC AGRICULTURAL SERVICE COMMITTEE
STATE OF NEW YORK

Factors to be considered in increasing crop production

This statement is issued to provide a basis for discussion in farmers' meetings to be held on Saturday, April 21, in accordance with the proclamation of the Governor of the State of New York. This bulletin attempts to set forth what are considered to be essential factors involved in any attempt to increase crop production, and it proposes certain questions for definite discussion.

Use of land

About one-half of New York State is classed as improved land. According to the latest census this land is used for the following purposes:

Cultivated crops	3,350,000 acres	23 per cent
Hay and forage.....	5,050,000 acres	34 per cent
Improved pasture (estimated)	6,400,000 acres	43 per cent
	14,800,000	100

It is evident that of the so-called improved land in the State, about one-fourth is in cultivated crops and about three-fourths in grass.

Milk supply. It is probable that the immediate interest of New York farmers is to maintain at least the present milk supply. A large percentage of the land in New York State is used now to produce the milk for the great cities within her borders. Before we consider breaking up hay or pasture land, we must first see whether this can be done without endangering the milk supply. New York farms as a whole produce a large surplus of hay. This is partly the result of having a fairly good hay market in the past, but also is due to the fact that in the past grains have been produced in the Western States cheaper than they could be grown in this State, and farmers have been justified in growing hay rather than grain. However, the present low price of hay and high price of grain justifies farmers in again taking up grain, and **WE CANNOT TOO STRONGLY RECOMMEND THAT EVERY FARMER consider the practicability of breaking up more or less hay land or pasture land the coming season and increasing his acreage of non-perishable products, such as oats, barley, wheat, rye, beans, buckwheat, and corn; the crop or crops to be grown in each case depending on the adaptation to his land, his equipment, and his system of farming. Attention, however, should be called to the fact that the amount of hay land to be broken up will vary in different sections. In some counties there is little or no surplus hay at present, while in other parts of the State it is estimated that as high as 25 per cent of hay or pasture land can be safely broken up and put to grain crops.**

Silage corn. In the culture of corn silage it is more important than ever, in view of the high price of grains, to grow only such varieties of corn as will develop a fairly mature ear under normal conditions. This has long been advocated, but was not of so much importance so long as grain foods were relatively cheap.

Perishable products. This country normally produces about as large an acreage of perishable products as home consumption will justify. In fact, New York has decreased about 25 per cent in the acreage of potatoes in the last seven years, largely due to over-production. While the high price of other products and the possibility of some exportation may increase the



NEW YORK STATE FOOD SUPPLY COMMISSION FOR PATRIOTIC AGRICULTURAL SERVICE

WANTED

AT ONCE, MEN AND BOYS WHO HAVE HAD ACTUAL FARM EXPERIENCE FOR WORK ON FARMS. ALSO, WOMEN FOR WORK IN FARM HOMES. SHOW YOUR PATRIOTISM BY HELPING TO INCREASE YOUR COUNTRY'S FOOD SUPPLY

FARMERS

Do you need additional labor on the farm?

Are your shipments of seeds, fertilizers or machinery held up?

Can you get what you need?

Do you want help in the control of insect pests or plant diseases?

Do you have difficulty with storage and shipping facilities, containers, or marketing problems?

Do you need a short-time loan for financing your farm operations?

Do you want information on the home preservation of foods?

To Enroll for Farm Work or to Obtain Help on Any of the Foregoing or Other Matters,

Apply to the Commission's County Representative.

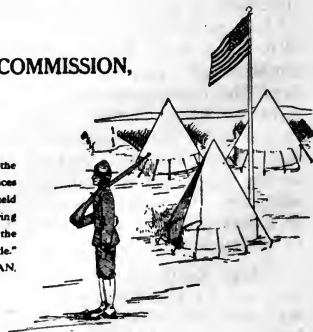
NEW YORK STATE FOOD SUPPLY COMMISSION,

ALBANY, N. Y.



"It is clearly recognized that the man who tills the soil and produces the food for the soldier in the field and his family at home is rendering a patriotic service, as truly as is the man who bears the brunt of battle."

—CHARLES S. WHITMAN.



demand for perishable products, the Committee is not prepared to recommend an increase in acreage with the possible exception of the potato crop. Our opinion, however, on the acreage of potatoes must be more or less tentative, as it may easily develop between now and planting time that the acreage should be largely increased. And if so, such information will be given out later.

Methods of increasing production. Attention has already been called to the possibility of breaking up more or less grass land for cultivated crops. From 3 to 10 acres more cultivated crop could be handled on the majority of farms without requiring help or new equipment. However, on a large number of farms it would be far more practicable to improve the cultural methods on the land already under cultivation than to try to increase the acreage of cultivated land. On farms where the land under cultivation is producing small yields due to poor cultural methods, it would probably be advisable for such farmers to improve their cultural methods on the land under cultivation rather than to increase acreage. They should not only improve cultural methods, but there is more reason than ever for the intelligent use of fertilizers, and for spraying to protect against insects and fungous diseases as a means of increasing the yield. As a general rule, increased acreage of cultivated land is only justified in cases where the farmer is already growing good crops on land under cultivation.

Questions for local discussion

In order to give direction to discussion, it is suggested that the following questions be discussed in local meetings:

1. Milk supply.

How much hay land or pasture land could be safely broken up as a temporary measure, without decreasing the milk supply?

Would it be advisable to hold over the present surplus hay?

Would it be practicable to break up hay or pasture land, and increase acreage of corn silage?

In view of the high price of grain, would it not be practicable to grow a silage corn, early enough to develop a fairly mature ear?

2. Increasing production.

Assuming that labor supply and equipment cannot be materially increased the coming season:

A. Are we justified in increasing the acreage now under cultivation?

B. Would it be better to rather intensify culture on the acreage already under cultivation, by

- (a) better culture and tillage;
- (b) control of diseases;
- (c) control of insect pests?

3. Non-perishable products.

How much increase would be practicable of the following crops?

- Corn,
- Oats or barley,
- Winter wheat or winter rye,
- Beans.

Are there any good reasons why these crops should not be increased to the limit of ability to care for them?

4. Perishable products.

How much are we justified in increasing acreage of the following products?

- Potatoes,
- Cabbage,
- Canning crops,
- Other truck or garden crops.

5. Equipment.

Is there any new equipment, much needed, as fertilizer, spraying machinery, other machinery, or chemicals?

How can this best be provided?

Committee for Patriotic Agricultural Service.

C. S. Wilson, *Chairman.*

J. H. Finley.

J. J. Dillon.

S. J. Lowell.

F. W. Sessions.

Seth J. T. Bush.

R. D. Cooper.

M. C. Burritt.

A. R. Mann, *Secretary.*

APPENDIX C

DO NOT FOLD! District Superintendent Will Collect and Deliver to County Enumerator



PATRIOTIC AGRICULTURAL SERVICE COMMITTEE STATE OF NEW YORK

A CENSUS OF THE AGRICULTURAL RESOURCES OF NEW YORK STATE

April 21, 1917

Fill out the following blank for all places of over three acres on which agricultural operations are conducted. Fill out the blank for smaller places if the agricultural operations require the time of one person.

If part of the land lies in one school district and part in another district include all the land as if it were in the district in which the farmer lives.

If the farmer owns part of the land that he operates and rents additional land, include all of it in the report.

The aim is to have all farm land in the State reported and yet have none of it reported twice. (In case of doubt consult the district superintendent).

Name of person who runs the farm.....

Post Office..... R. D..... Telephone.....

School District..... Township..... County.....

Does the person who runs the farm own any part of it?.....

Answer Yes or No

1. LABOR

How many hired men did you have last year at this time?.....

How many have you now?.....

IF YOU HAVE NOT CONTRACTED FOR ENOUGH LABOR, FILL OUT THE FOLLOWING:

Number of additional help needed for farm work..... Dates needed.....

Could you use inexperienced school boys? If so, how many?..... Number of additional

help needed for household work..... Dates needed.....

Could you use school girls?.....

2. SEED WANTED AND FOR SALE

KIND OF SEED	Amount you now wish to buy	Amount you now have for sale
	<i>Bushels</i>	<i>Bushels</i>
Alfalfa		
Potatoes		
Field beans		
Buckwheat		
Corn		
Spring wheat		

3. SPRAY MATERIALS WANTED

Give kind and amount

4. FERTILIZER WANTED

If you are unable to get fertilizer that you need, how much and what kind do you want?.....

5. MACHINERY

If you are unable to get machinery that you need, what do you lack?.....

6. LIVESTOCK WANTED AND FOR SALE

	Number you wish to buy	Number you have for sale
Dairy cows.....		
Heifer calves.....		
Breeding ewes.....		
Work horses.....		
Brood sows.....		
Pigs.....		

7. HAY

How many tons of hay have you above the amount necessary to carry your stock until new hay comes?.....

8. NUMBER OF LIVE STOCK ON HAND

Mares, 3 years old and older.....	Heifers under 1 year old (to be raised for dairy cows).....
Geldings, 3 years old and older.....	Breeding ewes.....
Stallions.....	Spring lambs.....
Colts, under 3 years old.....	All other sheep.....
Mules, 3 years old and older.....	Brood sows.....
Mule colts under 3 years old.....	All other hogs and pigs.....
Calves to be vealed.....	Hens.....
Bulls.....	Roosters.....
Steers and beef cattle.....	Turkeys.....
Dairy cows, 2 years old and older.....	Ducks.....
Heifers 1 and under 2 years old (to be raised for dairy cows).....	Geese.....
	Bees.....

How many dairy cows 2 years old or older were there on this farm a year ago?.....

How many heifer calves under 1 year old to be raised for dairy cows were there on this farm a year ago?.....

How many eggs did you set or incubate last year?.....

How many eggs do you expect to set or incubate this year?.....

9. TRANSPORTATION

Are you having trouble to get seed, machinery or fertilizer and other supplies delivered by the railroads? If so, give particulars.....

10. FERTILIZER

KIND	Tons used on this farm last year	Tons expected to be used this year
Commercial fertilizer.....		
Lime.....		

11. CROPS

CROP	Acres grown on this farm in 1916	Acres you expect to have in 1917
Corn to be husked for grain.....		
Corn for the silo.....		
Oats.....		
Barley.....		
Buckwheat.....		
Winter wheat.....		
Spring wheat.....		
Rye.....		
Field beans.....		
Alfalfa.....		
Other hay.....		
Cabbage.....		
Potatoes.....		
Canning factory crops.....		
Other vegetables and garden.....		
Other crops — give kind.....		

Apples.....acres	Small fruit.....acres
Peaches.....acres	Woods not pastured.....acres
Pears.....acres	Woods pastured.....acres
Plums.....acres	Tillable pastures.....acres
Cherries.....acres	Other pasture not included above.....acres
Vineyard.....acres	Total area farmed.....acres

12. FARM POPULATION

Number of your sons who have left the farm for work other than farm labor? _____

Number of your daughters who have left the farm to live in villages or cities? _____

Do not include these in the table below.

Persons Living or Working on This Farm

If members of the family are away at school, or otherwise temporarily away, but will be home for work this summer, include their names.

The desire is to have all persons living on farms enumerated but have no persons listed twice.

NAMES	Age	Sex	Married or unmarried
Farmer and his family			
.....			
.....			
.....			
.....			
.....			
.....			
.....			
Hired help and their families			
.....			
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A blank printed on yellow paper was used for the summary of each school district, exactly similar to the preceding with the exception of the heading, which read as follows:

DO NOT FOLD! District Superintendent Will Collect and Deliver to County Enumerator



**PATRIOTIC AGRICULTURAL SERVICE COMMITTEE
STATE OF NEW YORK**

A CENSUS OF THE AGRICULTURAL RESOURCES OF NEW YORK STATE

April 21, 1917

SUMMARY FOR SCHOOL DISTRICT NO. _____

County..... Town.....
Teacher..... Dist. Supt.....

The teacher, with the aid of her pupils and others, is to add the records for the different farms and make out this summary sheet. Each addition should be made twice. It is best to have one person add the results and have another person add them again for a check.

Number of farms in school district.....
Number of farmers who own part or all of their farms.....

A blank printed on pink paper was used for the summary of each county, similar to the preceding, but with the following head:



**PATRIOTIC AGRICULTURAL SERVICE COMMITTEE
STATE OF NEW YORK**

A CENSUS OF THE AGRICULTURAL RESOURCES OF NEW YORK STATE

April 21, 1917

SUMMARY FOR _____ COUNTY

Agent..... Town.....
Number of school districts reporting.....
Number of farms in county.....
Number of farmers who own part or all of their farms.....

APPENDIX D

REPRINTS OF "THE ANNOUNCER," A WEEKLY POSTER BULLETIN

(PLEASE POST)

May 8, 1917

No. 1

THE ANNOUNCER

OF THE

NEW YORK STATE FOOD SUPPLY COMMISSION

FOR PATRIOTIC AGRICULTURAL SERVICE

Agricultural Hall, Albany, N. Y.

TRACTORS TO INCREASE TILLAGE

Twenty-two tractors have been purchased and options taken on forty more. These will be operated under the supervision of the Commission's County Representative at cost of operation.

SEED POTATOES

Thirty-five cars of seed potatoes, (25,000 bushels) have been purchased for county organizations by the Commission's agent sent to Maine for that purpose. Several cars are now being bought daily. The Commission acts as a purchasing agent and is not distributing seed free. This seed is available in small quantities through our county representatives.

BUCKWHEAT AND CORN SEED

Supplies of buckwheat and early corn seed are being located. If you cannot secure what you need, see our county representative.

UNUSED LAND

Every acre of good land should grow crops this year. Vacant and unused lands are being listed with the Commission, which will attempt to secure their use for local farmers or by those seeking opportunity to farm.

TRANSPORTATION TROUBLES

Railroad officials are heartily cooperating to secure prompt deliveries of delayed seed, fertilizer and agricultural machinery, realizing that greater food production is the most essential war measure at the present moment. If your shipments are unduly delayed, give our local representative the name of shipper, route, date shipped, car number, etc., or write direct to our Albany office.

FARM BOYS AT WORK

A small army of Farm Cadets is already in the furrows. Three thousand boys have been released from high school and are at work on their home farms and 1300 are working on other farms. The Delhi school of agriculture has established a Training school for city boys who wish to enlist as Farm Cadets.

(PLEASE POST)

May 15, 1917

No. 2

THE ANNOUNCER

OF THE

NEW YORK STATE FOOD SUPPLY COMMISSION FOR PATRIOTIC AGRICULTURAL SERVICE

Agricultural Hall, Albany, N. Y.

COUNTY ORGANIZATION

The New York State Food Supply Commission has opened offices in every agricultural county in the State. In 41 counties having organized Farm Bureaus these offices are with the Farm Bureaus. In the other 15 counties temporary offices have been established at places already announced in the press and on posters. Branch labor bureaus have been established in each of the offices, and farmers may apply there for information as to where to get labor, seed, and other needed supplies.

HOW TO GET FARM LABOR

Secure application blanks from the County Representative of this Commission see above. Fill these blanks out carefully and return them to his office. If he is unable to secure such labor locally, he will forward his orders to the offices of the State Employment Bureaus and to the Central office of this Commission. At its New York offices this Commission has many applications from Scandinavians, Hollanders and Danes, and sometimes from Germans, who have had practical farm experience. We also have applications from married men of these nationalities whose wives can do housework or assist in milking and similar outdoor work.

BUCKWHEAT SEED

The Commission has purchased two carloads of buckwheat which will be sold at cost to communities which cannot secure it through regular dealers at reasonable prices. More will be purchased if necessary.

SEED CORN

Requests are being made for seed corn. If you need corn, barley, buckwheat, or other seed, and cannot secure it locally, make known your wants to our County Representative, AT ONCE. He must have definite orders that he may know what amounts are needed.

CONTROL OF INSECTS AND DISEASES

The Commission is organizing a corps of trained men who will act as a patrol for detecting unusual injury by insect pests and plant diseases. They will take measures for the immediate suppression of any unusual outbreaks, and will aid communities in the operation of potato sprayers and other means of control which are known to be practical and profitable.

MAY 31, 1917

No. 3

THE ANNOUNCER
OF THE
NEW YORK STATE FOOD SUPPLY COMMISSION
FOR
PATRIOTIC AGRICULTURAL SERVICE
Published Weekly by the Department of Agriculture, State of New York
AGRICULTURAL HALL, ALBANY, N. Y.

EMERGENCY CROPS AND ROTATIONS

Grain crops are high. Hundreds of old pastures should have been broken up years ago, cropped a year or two and reseeded to pasture grasses. This is true of many old meadows. The high price of grain now justifies this.

The following plans are proposed:

1. **June 1. Buckwheat and Rye.**
Plow now and sow buckwheat.
Follow buckwheat with rye.
Use 300 pounds acid phosphate with rye.
A good time to apply lime if land is sour.
Reseed to pasture grasses (or timothy for hay).
2. **July 1. Rye on Pasture or Meadow Sod.**
Plow after haying and fit for rye.
Use 300 pounds acid phosphate.
Sow back to pasture grasses for pasture or timothy for hay.
3. **July 15. Rye and Clover Rotation.**
Legumes are needed now to reduce grain feed bill.
Break old pasture or meadow for rye.
If lime is needed, add 2 tons ground limestone.
Sow to clover next spring using Red Clover 5 pounds, Alsike 3 pounds per acre.
This rotation can be kept up several years and improve the land constantly.

The above suggestions have the following merits:

1. Buckwheat and rye are both reliable crops and can be produced with the minimum of labor.
2. Old pastures and meadows will be greatly improved by the change. In fact, this is the only practical way of improving run down pastures.
3. The change can be made as a temporary measure, to meet present emergency, without permanently disorganizing the farming system.

If you are unable to secure buckwheat or other seed, call upon the County Representative of this Commission.

(PLEASE POST)

THE AGRICULTURAL CENSUS OF NEW YORK

A summary of the agricultural census conducted by the Commission through the school system of the State, has just been published. A copy will be distributed to every farmer reported by the census and others may obtain the bulletin upon application to the Commission or its County Representative.

Among the conclusions of the census are the following:

INCREASED FOOD CROPS IN NEW YORK

"The intelligent way in which New York farmers have responded to the demand for more food is shown by the following comparisons with the acreage eight years ago. The total area of crops is practically the same as it was eight years ago, but there are over 770,000 less acres of grass. This area has been added to the area of grains, fruits and vegetables. In eight years the bean acreage has increased 138 per cent, wheat 45 per cent, fruit 35 per cent. Never before have so many acres of intensive crops been grown in New York."

IS THERE DANGER OF OVERPRODUCTION?

"Some farmers have feared overproduction. This fear might be justified were it not for the conditions in Europe. All of Europe is approaching famine conditions, and there is no chance that farmers of Europe can give the care necessary for the production of the best crops. Large quantities of food are being lost at sea. The world's reserve of food is probably the lowest in history. The grain on farms in the United States on March 1 is 700,000,000 bushels below last year. The quantity in elevators is much short of last year. The wheat crop that has just been harvested in New Zealand, Australia and Argentine is estimated at only 70 per cent of last year's crop. The winter wheat of the United States is in poor condition.

"If as low yields of grains should occur this year as occurred in 1901 conditions would be very serious. If we get as good crops as in 1912, which were the best in twenty years, there would be no chance of low prices for grains."

POTATOES

"The potato acreage to be planted in New York State in 1917 is 382,840 acres which is 77,191 acres greater than in 1916, 27,840 acres greater than in 1915, but more than 7,000 acres less than in 1909 as indicated by the last federal census. To offset this increase and since grain will undoubtedly be high, it would seem that potatoes will likely be used as a substitute and thus benefit from the high price of grain. The safe policy would appear to be to increase the grain acreage in preference to the acreage of perishable products."

JUNE 9, 1917

No. 4

THE ANNOUNCER

OF THE

NEW YORK STATE FOOD SUPPLY COMMISSION

FOR

PATRIOTIC AGRICULTURAL SERVICE

Published Weekly by the Department of Agriculture, State of New York

AGRICULTURAL HALL, ALBANY, N. Y.

JUNE 22, 1917

No. 5

THE ANNOUNCER

OF THE

NEW YORK STATE FOOD SUPPLY COMMISSION

FOR

PATRIOTIC AGRICULTURAL SERVICE

Published Weekly by the Department of Agriculture, State of New York
 AGRICULTURAL HALL, ALBANY, N. Y.

STATE CONFERENCE ON FOOD PRODUCTION

A conference of representatives of all branches of New York agriculture will be held by the Commission at Syracuse, July 5th and 6th, for the consideration of the problems facing the New York farmer in the present food crisis. This conference will advise the Commission as to what it should undertake towards increasing food production and developing better means of marketing and distribution. As a basis for its discussion the Commission invites the opinion of organizations of farmers and business men as to the problems most urgently demanding consideration.

UNUSED LANDS

A survey of the unworked agricultural lands of the State is being made by the county representatives of this Commission. Information as to ownership and acreage of all unworked land should be supplied by all interested persons to the Commission's county representatives.

TRACTION POTATO SPRAYERS

The Commission is in a position to loan a limited number of traction power potato sprayers to groups of responsible farmers who are so organized as to satisfy the Commission of their ability to assume responsibility for one of these machines and assure us of its efficient local management. The machines are placed only through representatives of this Commission, and such associations must in all cases be approved by our county representatives.

POWER DITCHING MACHINES

Three power ditching machines will be purchased and loaned this season to those farm bureau associations who offer evidence of having secured the largest guarantee of ditching. This guarantee together with the ability of such association to make the most efficient use of said machine, will constitute the basis for our final placing of these power ditchers.

FARM LOAN FUND

Reports on the operation of the Patriotic Farm Loan Fund, up to and including June 14th, indicate that a total of approximately \$250,000 has been loaned to 2,500 farmers of the State in amounts averaging one hundred dollars each. Forty thousand acres of food crops which would not have otherwise been planted will be grown by these loans.

A new circular to loan committees under date of June 1st advises that a second installment of these loans is now available and may be used to pay labor needed for caring for crops already grown. For information concerning this fund, address Patriotic Farm Loan Fund, Utica, N. Y.

REPORT FARM LABOR WANTED

Farmers are urged to inform the county representatives of this Commission **AT ONCE** as to the number of farm hands required during July and August, the exact dates on which the help will be wanted, and just what the work is, the terms of employment, and the wages to be paid.

The Labor Division has received applications from a number of women willing to assist at house work on farms during July and August. Some of these declare their ability and willingness to help at the lighter farm tasks. Farmers wishing to secure female help to assist during harvest should make application immediately to their county representative, giving full description of the kind of service which will be required.

FARM CADETS AT WORK

The Military Training Commission reports that over 10,000 farm cadets are now at work on New York farms. The Education Department has announced, "Boys who have enlisted for farm service and who get school credit are expected to continue in service through the summer unless good reasons are presented for withdrawing from service. We expect to cancel credits granted to 'slackers.'"

JUNE 29, 1917

No. 6

THE ANNOUNCER

OF THE

NEW YORK STATE FOOD SUPPLY COMMISSION

Published Weekly by the Department of Agriculture, State of New York
 AGRICULTURAL HALL, ALBANY, N. Y.

BUCKWHEAT AND RYE

The present high price of grain and great demand for bread grains justifies New York State farmers in again returning to a larger production of cereals.

Buckwheat and rye can be more easily and extensively cultivated in this State than any other cereals, for the following reasons:

1. They will produce a fair crop on several million acres of land, such as old pasture and meadow land that would not be suitable to other crops.

2. They can be grown at the minimum cost of labor—very simple preparation that can be fitted in when other work is not pressing.

3. There is a long season when either crop can be sown; buckwheat from June first to the middle of July, and rye from August first to the end of October.

The labor of fitting the ground and seeding can be better arranged without disturbing other farm operations, than for any other cereal crops.

OLD PASTURES AND MEADOWS

There are millions of acres of old pastures in the state that for years farmers have realized should be broken up, farmed a year or two and reseeded to good pasture grasses. These pastures are poor because they were never sown to pasture grasses. They were generally first sown to timothy, and when too weedy and poor were turned into pasture.

Now is the time to break them up, and reseed to a good pasture.

Old meadows need the same treatment. Never a better opportunity for this, than for the next year or two while the price of grain is high.

FERTILIZER

Use a little fertilizer on old pasture or meadow land: It generally pays well. At present prices 200 to 300 pounds of acid phosphate, or better still, phosphate with 2 to 3 per cent of nitrogen.

E. G. MONTGOMERY,
 Department of Farm Crops,
 N. Y. State College of Agriculture.

FOOD CONSERVATION PLANS

A program for food conservation at the point of consumption has been mapped out by the Conservation Division of the Food Supply Commission and has met with the approval of Governor Whitman.

The plan provides for the following:

1. Placing of women food conservation agents in each county and in each city of the state.
2. Instruction by experts on the proper selection, preparation, and substitution of foods.
3. New methods of preparation of rice, corn, barley, buckwheat, rye, oats, and millet to take the place of meat.
4. Enlistment of women of large practical experience for community demonstrations.

METHODS OF WORK

By demonstrations in preserving, in home, community and commercial drying, and by preparing and sending out information and bulletins on the cost of home-prepared and commercially-prepared foods, as well as on the various methods of preservation of the nutritive value of foods, it is hoped by the Commission that much will be accomplished.

County food conservation agents will meet groups of leaders in counties and will bring before them programs for food conservation and present plans for local organization. In cooperation with specially selected committees in the larger cities of the state, and with the cooperation of all women's organizations working for food conservation, programs are being worked out. This work is already in progress in Albany, New York, Utica, Rochester, Syracuse, Buffalo and Elmira. The work is under the immediate direction of Commissioner A. R. Mann, of the State College of Agriculture.

ARE YOU EATING CORN BREAD?

DO YOUR BIT! HELP FEED OUR ALLIES!

JULY 13, 1917

No. 7

THE ANNOUNCER

OF THE

NEW YORK STATE FOOD SUPPLY COMMISSION

Published Weekly by the Department of Agriculture, State of New York
 AGRICULTURAL HALL, ALBANY, N. Y.

Be a loyal New Yorker and talk, study, and practice thrift. Be proud to be known as a thrifty woman. "Make saving, rather than spending, your social standard."

TACKLE your job as a patriotic duty. The world needs food. Are you using more than you need? Are you wasting any food by throwing away left-overs? Do you store your food in such a way that it never spoils? Are you using some cheap substitutes for expensive foods? Do you ever waste food by careless cooking?

HELP train yourself. Tell others of your successes in thrift. Teach those who know less than you do. Take food saving seriously. Enlist at once in the army for food conservation.

RESOLVE to save on food expenditures: by using less meat and cheaper cuts, and more milk, cheese, fish and nuts in place of meats; by using more cereals, especially corn products, oatmeal and rice; by using some dried fruits; by using the cheaper vegetables such as turnips, carrots and greens; by omitting some luxuries.

INQUIRE diligently as to the best and wisest ways of economizing. Do not, for example, if you omit meat on some days, expect starch to replace it. Use milk, cheese, beans or peas, eggs, or fish.

FREE yourself from food prejudice. Sirloin steak may taste good, but it must be as cheap as 19 cents a pound if it is to supply body-building food (protein) as cheaply as milk at 8 cents a quart. One quart of milk builds as much body tissue as 7 ounces of sirloin steak. Cease to say "don't like" or "can't eat."

TRY definitely to eliminate waste.

MILK: Do you use even the last quarter cup? Do you use buttermilk, sour milk, and skimmed milk? Do you make cottage cheese out of left-over milk?

FATS: Do you save every bit of bacon fat, beef fat and other fats? Do you know how to use mutton fat?

BREADSTUFFS: Do you store cereals and flour so that insects cannot get into them? Do you use left-over crusts and stale bread? Is your bread always good? If not, do you know why not? Do you scrape out your mixing bowls thoroughly?

FRUITS: Do you let any spoil? Do you know how to can all kinds?

VEGETABLES: Do you know how to store them? Do you buy more than you care to use so that some wither or spoil? Do you throw away the water in which they are cooked instead of using it for soups? Do you let cooked left-overs spoil? Do you pare carefully so as not to waste? Do you know how to can vegetables?

MEATS: Do you store carefully to prevent spoiling? Do you ever over-cook meat and so waste it by making it inedible? Do you use more than you need? Do you save and use all trimmings, bones and fat? If your family numbers five, do you buy 3 quarts of milk before you buy 1 pound of meat?

NOTE: The foregoing thrift program was prepared by Helen Knowlton, Dean of Women, New Hampshire College and Experiment Station, and published as a press bulletin by the College.





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