

STATE OF NEW JERSEY  
DEPARTMENT OF AGRICULTURE

PHILLIP ALAMPI, *Secretary*



**Forty-fourth Annual Report**  
OF THE  
**New Jersey**  
**State Department of Agriculture**

July 1, 1958 — June 30, 1959

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Trenton, N. J., June 30, 1959

NEW JERSEY  
STATE BOARD OF AGRICULTURE

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MICHAEL J. KLEIN,<sup>1</sup> Clifton, *President*  
ERNEST C. BELL,<sup>1</sup> Bellmawr, *Vice-President*  
LESLIE M. BLACK, Stockton  
CHARLES A. COLLINS, Moorestown  
ALFRED H. LOWE, SR., Cranbury  
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ALVIN W. STRING, Harrisonville  
HERBERT O. WEGNER, Newfield

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PHILLIP ALAMPI, *Secretary of Agriculture*  
WILLIAM C. LYNN, *Assistant Secretary of Agriculture*  
DR. E. L. BROWER,<sup>2</sup> *Director, Division of Animal Industry*  
FRED W. JACKSON, *Director, Division of Information*  
WARREN W. OLEY,<sup>3</sup> *Director, Division of Markets*  
FRANK A. SORACI, *Director, Division of Plant Industry*  
FLOYD R. HOFFMAN, *Director, Office of Milk Industry*

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<sup>1</sup> Messrs. Klein and Bell will retire from the Board on June 30, 1959. The new members will be Irving K. Christensen, Wood-Ridge, and Clarence H. Steelman, Sr., Princeton.

<sup>2</sup> Dr. Brower became director of the Division of Animal Industry on June 1, 1959. He succeeds Dr. R. A. Hendershott who retired on May 15, 1959.

<sup>3</sup> Mr. Oley will retire as director, Division of Markets, on June 30, 1959. Vinton N. Thompson has been appointed acting director, effective July 1, 1959.

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STATE OF NEW JERSEY  
DEPARTMENT OF AGRICULTURE  
PHILLIP ALAMPI, *Secretary*  
TRENTON

June 30, 1959.

*To His Excellency, the Governor, and Members of the Senate  
and General Assembly of the State of New Jersey:*

I have the honor to transmit, on behalf of the State Board of  
Agriculture, the Forty-fourth Annual Report of the New Jersey  
Department of Agriculture, for the fiscal year ended June 30,  
1959.

Respectfully yours,

*Phillip Alampi*

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## **The State Board of Agriculture**

The State Board of Agriculture is responsible for all policies of the State Department of Agriculture, and is the highest official agency representing New Jersey's agricultural industry.

The eight members of the Board are all active farmers, who serve without compensation. They meet at least once each month in Trenton with the Secretary of Agriculture and often with other officials of the Department. During the 1958-59 fiscal year, 18 meetings of the Board were held.

Terms of Board members are staggered and two new members are appointed each year. They are chosen by official delegates to the annual State Agricultural Convention for recommendation to the Governor for appointment. The law provides for 84 official delegates, who represent the county boards of agriculture, Pomona granges, and State breed and commodity organizations.

The proceedings of the 44th State Agricultural Convention appear on page 154.

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## The Year in Review

In contrast to the severe drought experienced throughout New Jersey in 1957, generally ample rainfall was enjoyed during the 1958 crop year. The favorable weather especially benefited pastures and such crops as hay, grains, fruits and vegetables. Because less irrigation was necessary, the level of water tables in various parts of the State rose to a more satisfactory level.

For the first time in several years, the gross farm value of products was higher than the year before. It is estimated that the gross farm value of commodities for the calendar year of 1958 was \$339,293,000. This was an increase of 1.7 per cent over the 1957 figure. In general, the increase was due, not to higher prices for farm products, but rather to greater yields and higher total production. As a matter of fact, quite a few prices were below the averages of 1957.

As has been the case for a number of years, eggs ranked first among New Jersey's agricultural products in gross farm value. Eggs and poultry combined accounted for about one-third of the 1958 total gross farm value. Grains rose from ninth to fifth place by virtue of the splendid yields caused by favorable growing conditions. Their gross farm value increased by 64 per cent. For the same reason, hay made a substantial advance. Commodities suffering the largest decreases percentagewise were fruits and white potatoes.

The gross farm value of agricultural products in 1958, with percentage changes from 1957, is tabulated below:

| Commodity              | Gross Farm Value      |                   | Per Cent<br>Change 1958<br>Compared With<br>1957 |
|------------------------|-----------------------|-------------------|--|
|                        | 1958<br>(Preliminary) | 1957<br>(Revised) |  |
| Eggs                   | \$91,200,000          | \$92,900,000      | — 1.8  |
| Milk                   | 65,934,000            | 67,122,000        | — 1.8  |
| Vegetables             | 50,155,000            | 51,788,000        | — 3.2  |
| Greenhouse and nursery | 32,647,000            | 31,830,000        | + 2.6  |
| Grains and soybeans    | 21,282,000            | 13,006,000        | +63.6  |
| Meat animals and wool  | 20,981,000            | 18,611,000        | +12.7  |
| Hay                    | 17,312,000            | 14,324,000        | +20.9  |
| Poultry                | 16,349,000            | 17,791,000        | — 8.1  |
| Tree fruits            | 12,025,000            | 13,800,000        | —12.9  |
| White potatoes         | 5,184,000             | 5,777,000         | —10.3  |
| Berries                | 4,636,000             | 5,017,000         | — 7.6  |
| Miscellaneous          | 1,588,000             | 1,565,000         | + 1.5  |
| All farm products      | \$339,293,000         | \$333,531,000     | + 1.7  |



## THE WORK OF THE DEPARTMENT

The work of the Department has two broad phases. One of these is regulatory ; the other is service or promotional. The Legislature has charged the Department with responsibility for the enforcement of a number of agricultural laws. These have to do with the control and eradication of livestock diseases, notably tuberculosis and brucellosis in cattle ; and diseases and insect pests of trees, nursery stock, and plant life in general. Others are concerned with the licensing and bonding of dealers in milk, produce, eggs and poultry, and cattle, and the sale of eggs to consumers.

The promotional and service work of the Department includes a number of projects having to do with the marketing of farm products. Such services as the dissemination of market news, and the grading and inspection of a wide variety of fruits and vegetables, as well as eggs and poultry, are important phases. The recent addition of four promotional councils as units of the Department has enlarged the scope of promotional work, especially for those farm products which are now being marketed under the New Jersey State Seal of Quality.

## ADVERSITIES IN THE POULTRY INDUSTRY

A disastrous drop in egg prices during the spring months of 1959 resulted in economic distress for a number of poultrymen. For the fiscal year 1958-59, egg prices averaged 39.6 cents per dozen or nearly 15 per cent below the average of a year ago. The low point was reached in May 1959 when eggs averaged 28 cents a dozen. It was in this month that it took nearly 15 dozens of eggs to buy a hundred pounds of feed, compared with 9.6 dozens to buy a similar quantity in May 1958.

It was a severe experience, especially to those who were not financially able to weather such a storm. As a consequence, a number of producers were forced out of business. The recession had some far-reaching effects by (1) reducing the number of laying hens in New Jersey, and (2) reducing the volume and operations of hatcheries in the State. Hatchery capacity was 7 per cent below the year before.

The work of the New Jersey Poultry Products Promotion Council has aided in developing better markets for quality products. It has likewise developed a greater recognition on the part of the producer of the need for packing to high standards. At the year's end, the volume of eggs marketed under the State Seal of Quality program had passed the half-million dozen a week mark and was shooting for a three-quarter of a million goal.

## FRUIT AND VEGETABLE MARKETING

One of the Department's most beneficial services to producers is the supervision of inspection work whereby products are identified with an official grade. The major portion of this work is devoted to cannery tomatoes, asparagus for processing (freezing and canning), and white potatoes and apples for the fresh market. During the past year the services of 85 Federal-State fruit and vegetable inspectors were required to handle the work. Growers and/or shippers pay fees for the service rendered and the certificates issued.

The nine farmer-owned, farmer-controlled fruit and vegetable auction markets in New Jersey have generally netted higher prices to producers than other outlets. These markets have had a stabilizing influence on the market. During the calendar year 1958, they collectively sold more than four billion packages, most by auction, although a small volume was by direct sales through the market. Because of lower prices, however, the gross value was about 5 per cent below that of 1957. In round figures, 8.8 million dollars worth of products were sold through these markets in 1958 compared with 9.8 million the previous year.

The marketing of white potatoes in 10-pound consumer bags bearing the State Seal of Quality got under way in the 1958 season with about a half million such packages being sold. These were moved principally through chain stores in the large consuming areas in New Jersey. Growers and the New Jersey White Potato Industry Council considered this to be a start, with hopes for enlarging the program as time goes on. This program requires official inspection to see that the potatoes meet U. S. No. 1 grade—plus requirements of the State seal regulations established by the State Board of Agriculture.

A new merchandising program, an adjunct to the State seal program, was developed for the special State seal potatoes in the 1958 season. Federal research and marketing funds enabled us to employ a fieldman to visit personally the chain and independent stores in the North Jersey area. This had much to do with the acceptance of this product by the outlets. Much the same kind of assistance was introduced in the 1959 asparagus selling season.

## LICENSING AND BONDING

The licensing of dealers in produce, eggs and poultry, and milk has served to build up a reputable group of buyers for these products in New Jersey. A number of complaints were settled without recourse to the bond furnished by dealers. In only a few instances was it necessary to apply the bond against the claims of farmers who had not been paid by the dealer contracting for the product.

## LIVESTOCK DISEASE CONTROL

The continued testing of herds for tuberculosis and brucellosis, and the removal of infected animals, continued at a very satisfactory level. The incidence of disease is very low and well within the requirements of the Federal government for maintaining New Jersey as an accredited area.

Progress likewise was made in the control of swine diseases. All garbage feeding farms, with the exception of those at Secaucus, have met State Board requirements for cooking of garbage and sanitation, and were duly licensed. Those in the Secaucus area were not licensed by the Department, on the order of the Office of the Attorney General, because of a court order for their complete removal from that area.

## PLANT PEST CONTROL

Nearly 1,000 nurseries were inspected during the year as required by law for the issuance of a certificate to indicate freedom from insect and disease pests. This was an increase of 128 nurseries or about 15 per cent over the previous year and is indicative of the prosperity of this segment of New Jersey agriculture by virtue of the continued expansion of home developments.

It is worthy of note that two serious insect threats in New Jersey have been warded off by prompt eradication measures. One of these is gypsy moth which was attacked by aerial spray during the spring of 1957 over a 200,000-acre area. The work was followed with a trapping program to determine if any moths escaped extermination.

The other insect which aroused intense interest several years ago was the white-fringed beetle found in the Vineland area. By virtue of prompt eradication measures, the infestation was completely wiped out and no evidence of the insect was found during the current fiscal year.

A new service of value to our vegetable producers was the development of regulations governing the importation of southern vegetable plants. Millions of vegetable plants, mostly tomatoes and quite a few peppers, are grown in Georgia and Florida and shipped north at proper planting time. Heretofore, this has been a source of possible introduction of disease. The Georgia Department of Agriculture has cooperated to the full in checking and certifying the shipments made to New Jersey.

## SEED CERTIFICATION

The certification of seed, indicating its trueness to variety and freedom from disease, is one of the most notable and valuable services of the Department. Based on the premise that it takes good seed to grow a good

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crop, the Department has been instrumental in increasing yields, especially of grains and tomatoes. Corn and soybeans were prominent in this program during the fiscal year. The average yield of corn for certification was the highest ever achieved in New Jersey seed corn production. Nearly 60,000 pounds of tomato seed were certified during the year. The leading variety was No. 135, a variety introduced by Campbell Soup Company; Rutgers ranked second. This is the first time in more than 20 years that the Rutgers variety did not lead certified seed production in New Jersey.

These, in brief, are some of the activities and programs in which the Department is engaged. Detailed reports of the work of the various Divisions will be found in the balance of this report.

## Report of the Division of Administration

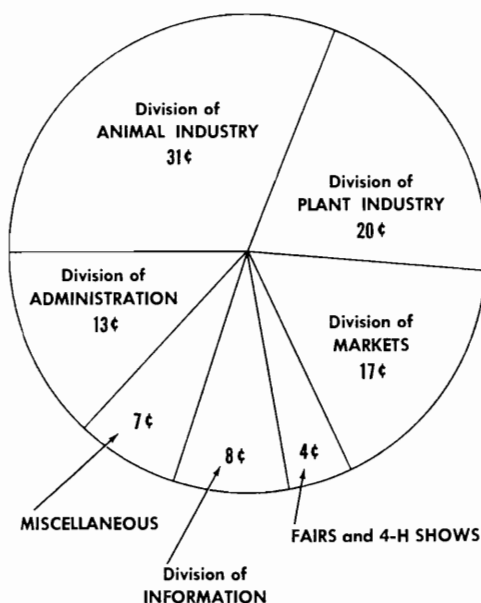
The chief responsibilities of the Division of Administration are fiscal, personnel and administrative services for the operating divisions of the Department. The Division carries out the policies established by the Secretary of Agriculture and the Departments of Civil Service and the Treasury.

The Department budget excludes funds appropriated to the Office of Milk Industry. That agency is self-sustaining. Office of Milk Industry expenditures do not exceed the revenue from license fees and fines imposed for violations of its regulations.

During the year 1958-59 Department expenditures totaled \$1,428,435. These funds were derived from three sources.

Expenditures from the State appropriation to the Department totaled \$1,107,222.76. These moneys were used to carry out provisions of the agricultural laws of New Jersey. The following diagram indicates how the State appropriation was spent by divisions of the Department.

**NEW JERSEY DEPARTMENT OF AGRICULTURE**  
**1958-1959 BUDGET EXPENDITURES**  
 (Cents per Dollar)



The diagram indicates that livestock disease control is the Department's most costly program. Of the \$350,000 spent, indemnification to farmers for the destruction of diseased cattle totaled \$75,000. Direct payment to private veterinary practitioners for their services in the testing programs totaled \$56,000.

Special promotion taxes provided some \$300,700. These taxes were collected on poultry feed, white seed potatoes and asparagus. The laws creating these taxes provide that the revenue be placed in special accounts. Expenditures can only be made for administrative costs, research and promotion as recommended by the specific promotion council and approved by the State Board of Agriculture.

Federal matched funds expended totaled \$18,394. These funds are provided for joint projects between the Department and the United States Department of Agriculture. These funds were used to expand statistical surveys and market expansion projects.

#### REORGANIZATION OF THE DEPARTMENT

A function of the Division of Administration is to encourage operating efficiency throughout the Department. All jobs and work projects are evaluated with the operating divisions. Better work methods and work procedures are constantly sought.

On recommendation of the State Secretary of Agriculture, a reorganization of the Department was approved by the State Board of Agriculture on October 22, 1958. Essentially this action consolidated farm products promotion work within the Division of Information, coordinated licensing and bonding with marketing functions, and centralized control of the 79-vehicle fleet.

The Department is now organized in six units. There are the Divisions of Administration, Animal Industry, Information, Markets, and Plant Industry, and the Office of Milk Industry.

#### PERSONNEL

There are 151 full-time employees assigned to the Department. Temporary assistants are employed for special work assignment. Also, Department personnel supervise the work of fruit and vegetable inspectors employed by the New Jersey Agricultural Society.

During 1958 the Department employed some 50 temporary employees for three to four months. Most were assigned to seasonal scouting work for gypsy moth control. The Agricultural Society used 83 inspectors during the peak inspection period.



All full-time and temporary personnel paid from State funds are employed under the provisions of the Civil Service law. Exceptions are the Secretary of Agriculture and the Director and Deputy Director of the Office of Milk Industry. These positions are filled by appointment.

To comply with the requirements of Civil Service, the Division of Administration must maintain specifications on each job assigned to the Department and maintain complete personnel records.

In recent years the Department has encountered considerable difficulty in recruiting. There was evidence that the salary ranges established for agricultural positions were inadequate. These ranges were revised in 1958 by the Civil Service Commission. The Secretary of Agriculture demonstrated that since 1946, the cost of living in New Jersey had increased 62%. In the same period the average State employee received salary increases totaling 63%. However, the salary increase for jobs peculiar to agriculture had increased only 41%. Consequently, a salary revision was approved to correct this inequity.

#### ADMINISTRATIVE SERVICES

During the past year automobile fleet control was centralized, machine data processing was started and efforts to obtain a Department of Agriculture building were increased.

There are 79 vehicles assigned to the Department. In 1958 control of the vehicles was transferred from the operating divisions to the Division of Administration. A preventive maintenance program was installed. All vehicles are periodically serviced by the Department garage. In 1958 the cost of operating the fleet was reduced \$1,000.

IBM machines were installed to improve efficiency and to permit the Department to assume new projects without additional personnel. This equipment is rented. A complete analysis of machine utilization has been accomplished. Department work records which will be transferred to the machines have been programmed. The transition from hand to machine records will be started July 1, 1959.

The Department continues to be plagued with inadequate office space and an inaccessible animal laboratory. Negotiations have been started to erect a Department of Agriculture building which will include a diagnostic laboratory for large animals. Since the Legislative Building Committee has recommended that Agriculture not be restricted to locating in Trenton with other units of State Government, it is intended to locate this building outside the City of Trenton.

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## STAFF CHANGES

The retirement of two Division directors was announced during the past fiscal year. Warren W. Oley, director of the Division of Markets since 1928, retired on June 30, 1959. He had been with the Department a total of 32 years.

On May 15, 1959, Dr. R. A. Hendershott, who had been director of the Division of Animal Industry, retired from the post he had held for the past 23 years. Dr. Hendershott had joined the Division staff in 1926 as head of the diagnostic laboratory.

Another retirement, on March 1, 1959, was that of Edgar G. Rex, chief of the Bureau of Plant Pathology.

Dr. Edwin L. Brower was appointed director of the Division of Animal Industry on June 1, 1959. He had been acting chief of the Bureau of Livestock Disease Control and has been affiliated with the Department a total of 22 years.

Gerald E. Zich was named assistant director of the Division of Information on January 1, 1959. On June 29, 1959, Dr. C. Kenneth Jewell was appointed chief of the Bureau of Livestock Disease Control.

Resignations announced during the year included Dr. Walter M. Andress, chief, Bureau of Poultry Disease Control, on August 1, 1958, and Dr. Raymond E. Kerlin, chief, Bureau of Livestock Disease Control, on December 29, 1958.

## THE NEW JERSEY JUNIOR BREEDERS' FUND

During the fiscal year 1958-59 a total of 189 loans amounting to \$18,744.12 were made by the New Jersey Junior Breeders' Fund. This was an increase of \$2,020.57 over the \$16,723.55 loaned the previous year. This increase was due primarily to a larger number of dairy, swine and agricultural loan fund loans as indicated by the following comparison of the last three years.

| Type of Loan           | Number of Loans |         |         | Amount Loaned |             |             |
|------------------------|-----------------|---------|---------|---------------|-------------|-------------|
|                        | 1958-59         | 1957-58 | 1956-57 | 1958-59       | 1957-58     | 1956-57     |
| Agricultural loan fund | 49              | 23      | 16      | \$2,005.77    | \$869.40    | \$885.57    |
| Beef                   | 39              | 49      | 26      | 5,647.35      | 7,034.15    | 3,463.83    |
| Dairy                  | 82              | 69      | 75      | 9,175.00      | 8,005.00    | 9,742.50    |
| Poultry                | 1               | ..      | 2       | 36.00         | .....       | 154.00      |
| Sheep                  | 10              | 14      | 10      | 740.00        | 815.00      | 640.00      |
| Swine                  | 8               | ..      | ..      | 1,140.00      | .....       | .....       |
| Total                  | 189             | 155     | 129     | \$18,744.12   | \$16,723.55 | \$14,885.90 |



Charges against the emergency fund for livestock losses incurred by members totaled \$1,776.00 for the year. These losses were ten sheep, three beef animals, two swine and seven dairy heifers. Five of the dairy animals were non-breeders.

Earnings from interest charged on loans provided all members with subscriptions to breed journals and awards at the following events:

|                                  |          |
|----------------------------------|----------|
| Flemington State 4-H Dairy Show  | \$165.00 |
| Cumberland County 4-H Dairy Show | 85.00    |
| State FFA Livestock Show         | 95.00    |
| 4-H Baby Beef Show               | 200.00   |
| Atlantic County Fat Lamb Show    | 14.00    |
|                                  | <hr/>    |
|                                  | \$559.00 |

The New Jersey Agricultural Society continued its awards to members of the New Jersey Junior Breeders' Association. These awards were for the best fitted animal in each breed at the Flemington State 4-H Dairy Show and Cumberland County 4-H Dairy Show and to the highest producers on 4-H Meritorious Milk Production Records. Awards were also made to three vocational agriculture students whose projects were scored highest for the year.

The Frelinghuysen Memorial Awards recognizing 4-H club members whose dairy animals made the highest milk production records were presented at breed association annual meetings where winners were guests of the New Jersey Junior Breeders' Fund. High scoring vocational agriculture project students were recognized with certificates at the FFA State Convention. The Garden State Publishing Company also continued to provide subscriptions to *New Jersey Farm and Garden* for all members of the fund.

During the 38 years which the New Jersey Junior Breeders' Fund has been available to rural youth of New Jersey more than 4,360 loans in excess of \$384,000 have been transacted. The large number of requests for new loans to 4-H club members and vocational agriculture students which are received each year demonstrates the continuing need for this type of financing.

## Report of the Division of Markets

WARREN W. OLEY, *Director*

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New Jersey weather during the summer of 1958 was extremely variable. It was wetter than normal in the southern sections, while precipitation in the northern half of the State ranged from normal to below normal. These conditions were in sharp contrast to 1957, when the lowest rainfall on record occurred during the summer months throughout most of New Jersey.

As a result of the extreme drought in 1957, farmers continued to expand their irrigation facilities during the summer of 1958. Irrigation was not used extensively in the southern half of the State, but was used to advantage in irrigating potatoes and other crops in the central and northern sections. The increased precipitation raised the ground-water tables in most areas, and water for irrigation needs was ample.

The added rainfall following the high sunshine year of 1957 resulted in large 1958 crops of perennial fruits. This was especially true in the case of peaches; the 1958 crop was the largest of record with fine quality. Apples and blueberries did not fare so well due to poor weather conditions during the pollination stage. Apples were unusually large due to the light set of fruit and ample rainfall in production areas. This caused marketing problems because most chain stores want small apples for sale in consumer packages. Cranberries, though flooded by excessive rains in some cases, showed better yields and the total crop was improved over 1957.

Hay and grain crops produced record or near record yields in most areas of the State. The corn crop was particularly bountiful, reaching an average yield of 68 bushels per acre, one of the highest in the United States. Tomato and other vegetable crops yielded well above average. The newly introduced crack resistant strains of tomatoes contributed to the improved yields, especially in areas of the State where the rainfall was much above normal. The tomato yield of 12.6 tons per acre equaled the previous record yield of 1956.

The unusually wet summer of 1958 was followed by a more normal fall and a relatively dry winter. Precipitation for September, November, December, January and February was below normal. During these months a number of farm wells went dry and new ones had to be drilled to deeper water sources. Most farmers are finding that they cannot depend on shallow wells for their farm water supply. A modern farm requires a much larger and more dependable supply of water than a farm did only a few decades ago.

December was much colder than normal; January and February were only slightly colder than usual. April was much warmer than average and field work got under way very rapidly. Due to the moderate spring temperatures of 1959, along with fewer and less severe frosts than usual, fruit and vegetable crops made rapid progress during the spring months. The marketing season began a week to ten days ahead of 1958 and sales of spring vegetables were well ahead of normal. The end of the fiscal year was marked by good growing weather: warm and dry during May and warm and wet in June. Crops matured rapidly and sweet corn, cucumbers, snap beans, peppers and tomatoes appeared on the market earlier than usual.

Quality of farm crops during the fiscal year, while somewhat varied, was generally excellent. In some instances the excessive rainfall caused quality problems that made marketing difficult.

Market outlets for New Jersey dairy products have been stabilized by the Federal milk marketing order which went into effect on August 1, 1957. The price of milk to the consumer continues to be low in comparison with other foods. This has increased market acceptance which is a factor in favor of the New Jersey dairy farmer. As the fiscal year closed, two large dairy farmer cooperatives requested that a hearing be held on a Federal milk marketing order for southern New Jersey, Delaware and eastern Pennsylvania.

Total milk production was at a high level during the fiscal year. Production per cow set a new record of 8,180 pounds, making New Jersey second only to California in this respect. However, the number of dairy cows in New Jersey continued to decline.

Poultry farmers were generally in serious economic distress as the 1958-1959 fiscal year ended. Prices for eggs in May and June, 1959, were at low pre-war levels, despite tremendous increases in cost of feed and other production expenses. The economic depression resulted in a reduction in the number of laying hens in New Jersey. The price of eggs has failed to return the cost of production to the average poultry producer in much of the past fiscal year. Increased competition from other production areas and overproduction generally are causing continuing low returns to both egg and poultry meat producers.

Our relations with other departments have been cordial. A fine relationship exists with the Division of Weights and Measures of the Department of Law and Public Safety and with the Department of Conservation and Economic Development. This Division cooperates fully with the Division of Weights and Measures in the development of standardized packages and in enforcement of the laws concerning weights and measures of New Jersey agricultural products. The New Jersey State Marketing Council, consisting of the staffs of the College of Agriculture, the Experi-

ment Station and the Division of Markets, held several meetings during the 1958-1959 fiscal year. The Director of this Division serves as secretary of this Council. Better understanding of the programs of work and the accomplishments of the two agencies has resulted from the sessions of this Council.

The following sections of this report record in some detail the objectives and accomplishments of the various programs of work of the Division of Markets. Not infrequently accomplishments of other marketing organizations reflect the endeavors and aid of personnel of this Division.

### BUREAU OF FRUIT AND VEGETABLE SERVICE

This Bureau aids and develops shipping point and roadside markets, and through its grading, inspection and standardization services, works towards the improvement of the quality of New Jersey fruits and vegetables. The Bureau cooperates with commodity groups in educational programs to create more outlets and greater demand for farm products.

The Bureau's principal activity is the supervision of inspection and certification of fresh fruits and vegetables for domestic and foreign shipment, and grading of raw products for processing. The work is performed on the basis of established standards, jointly supervised and conducted under a written agreement between the Federal and State Departments of Agriculture and the New Jersey Agricultural Society.

The number of fresh market inspections is affected by such factors as production, quality, demand, market prices and marketing regulations. Volume of white potatoes inspected this fiscal year was up approximately 10 per cent and apples down about 75 per cent. The over-all number of inspections for all commodities for fresh market was less than 3 per cent under last year while total volume was greater.

The volume of products for processing varies annually in proportion to production and contracted acreage. Most processors who buy raw supplies in New Jersey do so on the basis of established standards or contract specifications closely allied with the standards. Volume of tomatoes graded for processing this year increased about 47,200 tons despite a smaller contracted acreage. Volume of asparagus graded this spring established a new record and exceeded last year's volume by more than 13½ million pounds.

The value of our grading service to both producer and processor is enhanced by assistance given by our inspectors on ways and means by which growers can improve their grades. Since prices received by growers are directly proportionate to quality delivered, better grades mean higher income. Processors benefit by getting better quality raw products which mean less cost in processing and better end-products.

## PURPOSE OF INSPECTION

Inspection and certification on the basis of established standards provides a means by which long distance trading between buyers and sellers of fresh produce may be satisfactorily accomplished.

Packing in accordance with official standards is the first step required for orderly marketing of fruits and vegetables. The standards serve as a yardstick for measuring variations in quality.

The determination of the grade of a product provides a means for the settlement of disputes between buyers and sellers, makes possible a fair adjustment in the settlement of claims against transportation companies, and provides a basis for comparing market news prices. Distributors are helped to place products in markets that will insure the greatest returns. Purchasers have an opportunity to buy uniform quality and sellers can advertise and promote on a sound basis. Establishment of grades is of prime importance in determining the value of products upon which loans may be made.

Inspection is available to applicants throughout the State on carlots, trucklots, warehouse and storage lots. The service is permissive and provides unbiased certification at reasonable cost.

In addition to the activities connected with the administration of the inspection service, personnel of this Bureau also work with the local fruit and vegetable auctions and city farmers' markets. The Bureau also co-operates and assists in the operation of the program of Jersey Certified Farm Markets, Inc. In the early spring of 1959, personnel of this Bureau provided technical assistance to committees representing the asparagus and cultivated blueberry industries. These groups assisted in revising New Jersey Standards for fresh market asparagus and the promulgation of tentative New Jersey Standards for fresh and processed cultivated blueberries.

During the fiscal year, 85 Federal-State fruit and vegetable inspectors licensed by the United States Department of Agriculture were required to handle the inspection and grading of commodities for fresh market and processing in New Jersey.

## CERTIFYING FRESH PRODUCE

*Apples*

Apple inspections this fiscal year were only about one-third of last and represented only 26 per cent of last year's volume. The reasons for the decline are twofold. One is that the European apple crop was the largest produced in many years, therefore reducing European demand for United

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States apples; the other is that our New Jersey crop was about 300,000 bushels short of the previous year which aided in maintaining a fairly good domestic market. Adverse weather during the pollination process prevented the bees from working, and resulted in a reduction in the set of fruit in New Jersey. Although our crop was short the national supply of apples was above normal.

Inspection of apples for export is mandatory under the U. S. Export Apple and Pear Act. For domestic shipment, inspection is voluntary and we get few requests for certification.

The 1958 crop kept well in storage and until the end of March most lots met U. S. Condition Standards for Export.

About 70 per cent of the volume inspected this year was certified for export. A total of 107 lots containing 53,566 bushels was inspected. Last year 336 lots comprising 204,960 bushels were inspected.

### *White Potatoes*

Although the 1958 growing season for potatoes was one of the best, harvesting was about two weeks late in getting under way. Potato growing areas to the south were also late. As our crop came on, southern supplies were still plentiful and prices were depressed in the terminal markets throughout the east. This was a further deterrent to harvesting in New Jersey. In July digging was sporadic and light. Periodic delays occurred in harvesting due to rain and wet fields in August and September. Volume gradually caught up and by the end of October had surpassed that of the 1957 crop.

Quality and size of this year's crop were excellent. The average yield per acre was 225 hundredweight as compared with last year's 190 hundredweight. Estimated commercial acreage was the same as in 1957, 18,000 acres.

At the request of the larger shippers, inspectors were assigned to them on a full-time basis. This required the placing of 17 inspectors in the Central Jersey area with headquarters at Hightstown.

The total number of lots inspected this fiscal year was 3,109 comprising 943,338 hundredweight equivalents. Last year the totals were 3,007 lots and 862,511 hundredweight equivalents.

A program to assist New Jersey growers and shippers in marketing their 1958 crop was sponsored by the Department of Agriculture and made available to those who wished to participate. Briefly, it specified minimum grade and size of potatoes that could be identified with a label bearing the State Department of Agriculture Seal. The minimum grade and size

requirements were U. S. No. 1—Size A, fairly well matured. For round varieties Size A means  $1\frac{7}{8}$  inch minimum diameter, with 60 per cent or more, by weight,  $2\frac{1}{4}$  inches or larger. Inspection and certification for State seal potatoes were compulsory.

During the season approximately 59,000 hundredweight equivalents were sold under the seal. Of this quantity, 50,000 were packed in 10-pound bags and 9,000 in 50-pound bags. Since our statistical records reveal that 98 per cent of all volume inspected graded U. S. No. 1—Size A or better, including 57 per cent 2 inches, or larger, minimum diameters, it becomes evident that more advantage could have been taken of the program.

### *Green Corn and Lettuce*

The Cooperative Growers Association, Inc., of Beverly, again this year requested inspection of green corn. The growing season was excellent due to ample moisture supplied by timely rains. Quality was above average during the entire season of approximately six weeks from early July to mid-August. This season 26 lots, comprising 8,592 crates of one-bushel capacity, were certified. Last year, due to drought conditions, the season lasted only three weeks during which 17 lots consisting of 7,240 crates were certified.

In the fall of 1958 one of the upstate New York lettuce shippers became interested in the South Jersey production area around Cedarville. The Cedarville Cooperative Growers Association, Inc., installed a vacuum cooling unit large enough to cool completely loaded trailers. Vacuum cooled lettuce can be shipped long distances and arrive at destination in good condition. This was the main attraction to the out-of-state buyer. An inspector was assigned on a full-time basis. During October and November 44 trailer loads were certified. In May 1959 the Atlantic County Market Growers Association attempted a similar program, but unseasonably hot weather caused a rapid breakdown in the quality of lettuce. Shipments were discontinued almost immediately after the program started. Only four trailer loads were certified. The combined shipments inspected and certified in the fall of 1958 and spring of 1959 amounted to 48 lots comprising 26,331 crates of two dozen head capacity.

### CANNERY CROPS

Exclusive of white potatoes, more than half of the vegetable acreage of New Jersey is planted to crops for processing. The processing industry is the single most important user of Jersey-grown vegetables, including a considerable volume of white potatoes.

The most important processing crops are asparagus and tomatoes. Other crops for which our grading service is requested are carrots, snap

beans, red sweet peppers and green tomatoes. An occasional request is received and certification made on the basis of the standards for processing, on trucklot shipments of apples, sweet potatoes, collard greens and other products.

The grading service is made available to growers and processors to establish the value of each load delivered. Contracts between processors and growers specify prices to be paid according to quality, based on standards or contract specifications. The inspectors determine the quality by analyzing samples from each load, according to specifications, and applying the percentages to the entire load. The value of each load is directly proportionate to the quality delivered as established by inspection. This system encourages delivery of higher quality which means greater returns to growers, and provides an opportunity for processors to maintain a high quality finished product at minimum cost.

### *Asparagus*

The grading of green asparagus for processing is the largest single activity of this Bureau. In the spring of 1959, 23 receiving stations were established in the producing areas, operated by four processors and 11 brokers. Each station was manned by one or more inspectors. Two supervisors and 37 inspectors were required to handle the grading work.

New Jersey is the second ranking state in the United States in the production of asparagus, California being first. Early spring estimated acreage for harvest in New Jersey in 1959 was approximately 31,000 acres, a reduction of some 1,200 acres from 1958 and 2,500 less than 1957.

Due to heavy inventories left over from the 1957 pack, processors failed to contract considerable acreage in 1958. This spring they went back to about the same ratio of contracted acreage as normally prevailed prior to 1958, about 60 per cent of the entire acreage.

The contract price this season was  $10\frac{1}{4}$  cents per pound for N. J. No. 1 spears, 7 inches in length,  $4\frac{1}{2}$  inches minimum green color,  $\frac{3}{4}$  inch minimum diameter measured at the butt of the spear. Last year's price for the same specifications was 10 cents per pound.

Only three contracts were used this season by processors in purchasing asparagus, compared with seven last year. The greatest volume purchased by contract was based on the specifications described in the paragraph above. One canner-grower agreement did not make particular reference to standards but specified maximum length and minimum diameter of spears. A third contract was instituted late in the season by an out-of-state processor buying through a local broker. This agreement specified N. J.



No. 1 spears, 8 inches in length, 6 inches minimum green color,  $\frac{3}{8}$  inch minimum diameter at the butt.

Throughout the harvesting season this year the quality of asparagus was below that of 1958. Unseasonably hot weather early in April resulted in rapid growth and brought out swarms of asparagus beetles. Both caught growers unprepared. They lacked sufficient help for harvesting and their dusting equipment was not prepared for action. By the time preparations were made to handle both problems, cold weather had returned. This slowed growth and prevented effective control of the beetles. The first half of the season was a succession of hot and cold periods hampering successful control of insects and preventing smooth and continuous harvesting. The average temperatures during May and June were well above those of 1958 and further damage from spreading and seeding of tips kept weekly average grades below those of 1957.

The volume graded this year set a new record. This was due primarily to higher average temperatures, more acreage contracted and a slightly longer season for most processors.

Volume graded this season on the basis of the regular contract, using New Jersey Standards and calling for a seven-inch spear, was 56,542,272 pounds. Average grades were 72 per cent N. J. No. 1, 6 per cent culls and 22 per cent butts. Corresponding figures on the same contract basis in 1958 were 30,068,202 pounds graded, with averages of 75 per cent New Jersey No. 1, 5 per cent culls and 20 per cent butts.

Volume graded on the basis of the eight-inch spear was 46,410 pounds with averages of 17 per cent N. J. No. 1, 32 per cent N. J. No. 2, 16 per cent culls and 35 per cent butts. This contract was in operation only the last two weeks of this season and not at all in 1958.

Volume graded on the basis of the canner-grower contract totaled 2,257,770 pounds with 83 per cent meeting contract specifications for pay weight and 17 per cent butts.

Total volume graded this season was 58,846,452 pounds compared with a total volume of 45,306,202 pounds in 1958. This figure was shown in last year's annual report as 48,675,114 pounds but was later revised.

### *Tomatoes*

New Jersey is annually one of the leading states in the production of tomatoes for processing and this year was no exception. Early indications pointed to a record yield on the estimated 19,900 acres planted. A yield of 12.6 tons per acre brought New Jersey into second position in the production of tomatoes for processing, outranked only by California.

Two new crack-resistant strains introduced this season proved to be a boon to tomato growers, particularly during periods of wet weather. Almost all acreage for processing was planted with these strains.

From the very outset, yield and quality were above average. The season was about a week later than normal but caught up rapidly during early and mid-August, reaching peak deliveries the last week of the month. Volume and quality remained at a high level most of September. At the end of the month the season closed with processors reporting record or near record packs.

The volume of tomatoes graded at the 11 receiving stations operated by six processors this season amounted to 191,399 tons. Five processors contracted with growers on the basis of the U. S. Standards for Tomatoes for the Manufacture of Strained Tomato Products. Volume graded on this basis was 150,659 tons with average grades of 64 per cent U. S. No. 1, 34 per cent U. S. No. 2 and 2 per cent culls. In the 1957 season the comparative figures were 121,568 tons graded, with averages of 69 per cent U. S. No. 1, 29 per cent U. S. No. 2 and 2 per cent culls. Over-all tonnage graded in 1957 was 144,196 tons. Both years one large processor contracted with growers on the basis of contract specifications. Growers were paid a flat rate per ton and grading was done to provide the processor with legal authority to reject loads of poor quality or those showing excessive culls.

At the peak of the season 32 Federal-State inspectors were required to handle the tomato grading work.

SUMMARY 1958 CANNERY TOMATO SEASON AND COMPARISON WITH  
PREVIOUS 10 YEARS

| Seasons | Total Tons<br>Graded | U. S. No. 1<br>(Per Cent) | U. S. No. 2<br>(Per Cent) | Culls<br>(Per Cent) |
|---------|----------------------|---------------------------|---------------------------|---------------------|
| 1948    | 132,561              | 60                        | 36                        | 4                   |
| 1949    | 147,076              | 63                        | 34                        | 3                   |
| 1950    | 195,697              | 69                        | 29                        | 2                   |
| 1951    | 215,875              | 70                        | 28                        | 2                   |
| 1952    | 127,418              | 57                        | 39                        | 4                   |
| 1953    | 192,623              | 66                        | 32                        | 2                   |
| 1954    | 130,462              | 62                        | 36                        | 2                   |
| 1955    | 36,705               | 47                        | 49                        | 4                   |
| 1956    | 157,464              | 64                        | 33                        | 3                   |
| 1957    | 144,196              | 69                        | 29                        | 2                   |
| 1958    | 150,659              | 64                        | 34                        | 2                   |

### *Other Cannery Crops*

Grading service is sometimes requested on several other important crops grown in New Jersey for processing. Each raw product is graded on the basis of the U. S. Standards for Processing for that commodity.

Following is the quantity of each graded product as compared with last year.

| 1958-1959         |            | 1957-1958         |            |
|-------------------|------------|-------------------|------------|
| Product           | Pounds     | Product           | Pounds     |
| Carrots           | 11,117,491 | Carrots           | 11,547,552 |
| Snap beans        | 3,545,230  | Snap beans        | 4,027,800  |
| Red sweet peppers | 1,256,000  | Red sweet peppers | 2,716,000  |
| Green tomatoes    | 729,000    | Green tomatoes    | 2,810,000  |

### SHIPPING POINT AND MISCELLANEOUS INSPECTIONS

In addition to the products covered in detail in this report, others such as snap beans, beets, cabbage, celery, cucumbers, onions, peaches and sweet potatoes were inspected and certified. The total number of inspections on miscellaneous products this season covered 38 shipments and 12,812 packages.

Federal-State inspectors were also stationed at several of the shipping point fruit and vegetable auction markets for inspection and arbitration purposes.

The following table shows the 10-year record of shipping point inspections by products.

| TEN-YEAR RECORD OF SHIPPING POINT INSPECTIONS BY PRODUCTS |         |         |         |         |         |         |         |         |         |         |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|   | 1949-50 | 1950-51 | 1951-52 | 1952-53 | 1953-54 | 1954-55 | 1955-56 | 1956-57 | 1957-58 | 1958-59 |
| Apples  | 789     | 234     | 796     | 157     | 228     | 369     | 150     | 191     | 336     | 107     |
| Asparagus   | 93      | 46      | 10      | 45      | 36      | 24      | 14      | 32      | 6       | 1       |
| Beans   | ..      | 1       | ..      | 1       | 2       | ..      | ..      | ..      | ..      | 1       |
| Beets   | ..      | 1       | ..      | ..      | 1       | ..      | ..      | ..      | 1       | 4       |
| Cabbage   | 8       | 5       | 4       | 7       | 2       | 1       | 6       | 6       | 8       | 10      |
| Carrots   | 6       | ..      | ..      | 1       | 1       | 1       | ..      | 10      | ..      | ..      |
| Cauliflower   | 2       | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      |
| Celery  | 2       | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      | 1       |
| Collards  | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      | 2       | ..      |
| Corn  | 37      | 67      | 92      | 113     | 135     | 91      | 33      | 35      | 17      | 26      |
| Cucumbers   | 8       | ..      | 1       | 4       | 49      | 1       | 5       | ..      | 7       | 2       |
| Lettuce   | 1       | 2       | ..      | 5       | 1       | 5       | 1       | 36      | 14      | 48      |
| Onions  | 28      | 15      | 42      | 14      | 27      | 28      | 15      | 9       | 6       | 14      |
| Onions, green   | ..      | ..      | ..      | 2       | 1       | ..      | ..      | ..      | ..      | ..      |
| Parsley   | 1       | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      |
| Peaches   | 1       | 1       | 5       | 3       | 3       | 8       | 1       | 2       | ..      | 4       |
| Peppers   | 48      | ..      | 5       | 5       | 2       | ..      | ..      | ..      | 3       | ..      |
| Potatoes  | 10,454  | 18,429  | 9,989   | 1,748   | 782     | 632     | 493     | 1,858   | 3,007   | 3,109   |
| Radishes  | 3       | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      |
| Rutabagas   | ..      | ..      | ..      | 3       | ..      | ..      | 1       | ..      | ..      | ..      |
| Spinach   | 2       | ..      | ..      | 1       | ..      | ..      | ..      | ..      | ..      | ..      |
| Squash  | 1       | 6       | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      |
| Sweet potatoes  | 5       | 26      | 12      | 7       | 24      | 9       | 33      | 2       | 1       | 1       |
| Tomatoes  | 1       | 1       | ..      | ..      | 4       | ..      | ..      | 12      | 10      | ..      |
| Turnips   | 1       | ..      | ..      | 1       | ..      | ..      | ..      | ..      | ..      | ..      |
| Mixed fruits and vegetables                               | 550     | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      | ..      |
| Mixed vegetables  | 128     | 3       | ..      | 2       | 1       | 3       | 2       | 2       | ..      | ..      |
| Totals  | 12,169  | 18,837  | 10,956  | 2,119   | 1,299   | 1,172   | 754     | 2,195   | 3,418   | 3,328   |

### TERMINAL INSPECTIONS

While this Bureau's chief responsibility is the inspection and certification of products grown and packed in New Jersey, its inspection activities also include certification of products shipped to New Jersey terminals in interstate commerce. Inspections are made at the request of the receivers of such produce. Most requests are for potato inspections. Inspection of fresh supplies for State hospitals and institutions also comes under terminal work. Most of this work is on purchases by the New Jersey State Hospitals at Trenton and Marlboro.

Only inspectors appointed by the United States Department of Agriculture as collaborators are eligible to make terminal inspections. Authorized for this work in New Jersey are the chief of the Bureau, three State supervisors and three Agricultural Society inspectors. We are presently in the process of having another Society inspector authorized. All terminal inspections are certified on straight Federal certificates rather than the Federal-State type used in reporting shipping point inspections.

The following list shows commodities and volume certified at various terminals in New Jersey during the fiscal year.

| Product                  | Volume                |
|--------------------------|-----------------------|
| Apples (processing)      | 109,942 pounds        |
| Cranberries (processing) | 46,950 pounds         |
| Cucumbers                | 786 bushels           |
| Onions                   | 1,225—50-pound sacks  |
| Oranges                  | 2,138 boxes           |
| Potatoes                 | 164,287 hundredweight |
| Rutabagas                | 1,200—50-pound sacks  |
| Watermelons              | 218 melons            |

Inspections on fresh fruit and vegetables delivered to institutions, including those on items for replacement of rejections on original deliveries, amounted to 166 and comprised 1,004,044 pounds.

### MARKET ACTIVITIES

The 1958 crop season was generally a good one, though excessive rainfall in some areas reduced crop prospects of highly perishable fruits and vegetables. Production of most fruits and vegetables was quite high as shown by the statistics of the nine farmer-owned produce auctions operating last year. An accompanying table gives volume of farm produce sales on the markets and gross values. It can be readily seen that the total volume of all sales was slightly greater than in 1957, while the total value of all sales was about 5 per cent less.

Prices for all fruits and most vegetables declined in 1958. Exceptions were snap beans, cauliflower, peppers and spinach. The more favorable weather for crop production in New Jersey and competitive areas was

responsible for an increased tonnage of fruits and vegetables. The increased supply resulted in lower prices to growers and bargains for consumers. Price drops were particularly severe for peaches, strawberries, cucumbers, tomatoes, cantaloupes, beets, onions, potatoes, sweet corn and raspberries. Asparagus, lima beans, eggplant and blueberries declined moderately in price while lettuce showed no change.

The produce auction cooperative associations are endeavoring to improve their facilities and increase efficiency of operations. Several vacuum coolers were in operation to insure quality lettuce reaching the retail store and the consumer. Hydrocooling of peaches and sweet corn is done prior to marketing in nearly all instances. These up-to-date handling methods have expanded markets for New Jersey produce.

Personnel of the Division attend all membership meetings and most of the monthly directors' meetings of the marketing associations. Division representatives also work closely with the managers and directors of the city farmers' markets. These city farmers' markets have declined in importance as an outlet for New Jersey farm produce. The most important ones are located at Trenton, Atlantic City, Bradley Beach, Newark and Paterson.

### *Shipping Point Auction Markets*

Following the method of reporting used in previous annual reports, information in this section is given for the complete calendar or crop growing year. Therefore, the entire marketing year of 1958 is covered in the following tables. It should be noted that volume and sales figures of cooperative shipping point auctions do not reflect total sales of fruit and vegetables in New Jersey.

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## SUMMARY OF SALES AT FRUIT AND VEGETABLE AUCTION MARKETS

| Market                  | Season of 1958          |                | Season of 1957          |                |
|-------------------------|-------------------------|----------------|-------------------------|----------------|
|                         | Number of Packages Sold | Value of Sales | Number of Packages Sold | Value of Sales |
| Beverly                 | 275,018                 | \$381,436.58   | 201,878                 | \$331,591.90   |
| Consigned and direct    | 176,076*                | 352,764.16     | 184,080*                | 477,431.55     |
| Cedarville              | 520,850                 | 1,138,480.29   | 513,632                 | 1,080,816.65   |
| Glassboro               | 416,817                 | 654,620.91     | 367,473                 | 759,815.94     |
| Hammonton               | 301,068                 | 1,098,299.85   | 336,529                 | 1,266,583.71   |
| Blues to processors     | 74,255 lbs.*            | 14,788.05      | 429,122 lbs.*           | 90,115.62      |
| Sweets to processors    | 379,024 bu.*            | 438,947.60     | 205,861 bu.*            | 257,190.25     |
| Hightstown              | 436,878                 | 457,791.78     | 380,682                 | 512,268.05     |
| Consigned and direct    | 48,548*                 | 85,926.60      | 7,336*                  | 8,294.81       |
| Landisville             | 544,787                 | 964,518.54     | 697,087                 | 1,284,334.68   |
| Consigned and direct    | 53,387*                 | 95,844.00      | 79,748*                 | 109,860.33     |
| Pedricktown             | 164,873                 | 445,807.20     | 145,836                 | 391,796.65     |
| Swedesboro              | 790,786                 | 1,857,627.85   | 710,768                 | 1,747,672.55   |
| Asparagus to processors | 1,341,110*              | 134,111.00     | 1,199,253 lbs.*         | 122,923.43     |
| Vineland                | 839,460                 | 1,434,271.58   | 886,954                 | 1,428,675.37   |
| Totals—by auction       | 4,290,537*              | \$8,432,854.58 | 4,240,839*              | \$8,803,555.50 |
| Value—all sales         | .....                   | \$9,555,235.99 | .....                   | \$9,869,371.49 |

Average price per package (by auction), 1958 \$1.964

Average price per package (by auction), 1957 \$2.075

Per cent of decrease in price per package, all commodities (by auction), 1958 from 1957 5.3

(In addition to markets listed, other markets may have had special sales, no record of which is available in the Division of Markets office.)

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\* "Number of Packages sold," not included in totals sold by auction or in average price per package by auction, but included in "Value—all sales."



PRINCIPAL COMMODITIES SOLD AT FRUIT AND VEGETABLE AUCTION MARKETS  
VOLUME IN 1958 WITH 1957 COMPARISONS

| Commodity                     | Unit                      | 1958    | 1957    |
|-------------------------------|---------------------------|---------|---------|
| Apples                        | Bushels                   | .....   | 31,752  |
| Peaches                       | Bushels                   | 185,805 | 164,770 |
| Blackberries                  | Crates, 12 pints          | 2,997   | 3,120   |
| Blueberries and huckleberries | Crates, 12 pints          | 192,915 | 222,117 |
| Raspberries                   | Crates, 12 pints          | 5,309   | 7,416   |
| Strawberries                  | Crates, 24 quarts         | 125,879 | 98,899  |
| Asparagus                     | Crates, dozen bunches     | 567,745 | 453,376 |
| Beans, lima                   | Bushels                   | 22,031  | 17,910  |
| Beans, snap                   | Bushels                   | 161,417 | 195,950 |
| Beets                         | Bushels                   | 10,457  | 9,634   |
| Broccoli-rabe                 | Bushels                   | .....   | 62,826  |
| Cabbage                       | Bushels                   | 65,988  | 73,995  |
| Cantaloupes                   | Bushels                   | 53,779  | 38,358  |
| Cauliflower                   | Crates, 1½ bushel         | 6,279   | 3,610   |
| Corn, sweet                   | Bushels or sacks          | 125,362 | 74,019  |
| Cucumbers and pickles         | Bushels                   | 197,856 | 285,894 |
| Dandelion                     | Bushels                   | .....   | 27,118  |
| Eggplants                     | Bushels                   | 123,558 | 83,273  |
| Leek                          | Crates                    | .....   | 4,741   |
| Lettuce                       | Crates, 2 dozen           | 308,820 | 253,043 |
| Okra                          | Climax baskets, 12 quarts | .....   | 15,987  |
| Onions                        | Sacks, 50 pounds          | 73,011  | 78,982  |
| Parsley                       | Bushels                   | .....   | 31,449  |
| Peppers                       | Bushels                   | 484,929 | 587,200 |
| Potatoes, sweet               | Bushels                   | .....   | 552,491 |
| Potatoes, white               | Sacks, 100 pounds         | 18,782  | 13,931  |
| Radishes                      | Crates                    | .....   | 17,274  |
| Scallions                     | Crates                    | .....   | 11,384  |
| Squash                        | One-half bushel           | .....   | 91,168  |
| Tomatoes                      | Climax baskets            | 576,173 | 602,653 |
| Watermelons                   | Each                      | .....   | 5,781   |
| Watermelons-icebox            | Bushels                   | .....   | 5,587   |

### BUREAU OF MARKET NEWS AND COOPERATIVES

The basic service work of the Bureau is assistance to cooperative businesses, and the various farm markets in the State. The major part of the market service work is market news. This includes country shipping point pricing as well as weekly market price reviews. Regulatory work of the Bureau is confined to that portion of the cooperative law which requires cooperatives to file financial statements annually with the Department.

## COOPERATIVE SERVICE

The Bureau assists New Jersey producers in the formation and maintenance of cooperative marketing, purchasing and service agencies. Information on regulations and statutes is compiled for use of farm cooperatives. New rules or court decisions that may affect the operation of cooperatives are analyzed. This information is disseminated by a bi-monthly publication, the *New Jersey Cooperative News*.

Membership in cooperatives by individual producers totals about 25,000. Many producers belong to two, three or more cooperatives. For instance, a dairyman may belong to a cooperative breeding association, a dairy herd improvement association, a livestock sales cooperative and a dairy feed purchasing cooperative, may market his milk cooperatively.

In addition to direct contacts with directors and managers of the cooperatives, a close relationship is maintained with attorneys and accountants of these associations. Many attorneys and accountants request information and assistance from the Bureau on matters affecting cooperatives which they represent.

The Bureau chief is a director and vice-president of the National Society of Accountants for Cooperatives and many cooperative accountants in New Jersey are members of this organization. Exchange of information, not only among accountants in New Jersey but throughout the United States, is helpful in improving cooperative operations.

Additional services to cooperatives are performed through conferences on such problems as marketing agreements with members, direct sales programs, mergers, defalcations of employees, employee pension plans, responsibilities of directors, income tax problems, revision of by-laws and changes in operation to meet marketing needs.

*The New Jersey Cooperative News*

The *New Jersey Cooperative News* is a bi-monthly publication published in the interests of New Jersey cooperative business. It is mailed to some 900 directors, managers, attorneys and accountants of cooperatives. Important news items on mergers, steps necessary to effect mergers, information concerning the work of New Jersey cooperatives, check lists of cooperatives currently incorporated or newly incorporated and programs and reports of the American Institute of Cooperation and the National Council of Farmer Cooperatives are included.



## MARKET NEWS SERVICE

*Country Point Pricing*

The market reporter collects daily price information from dealers, growers and farmer marketing organizations. This is released to the Associated Press and the United Press International about three o'clock daily, and is immediately moved to their subscribers. Two radio stations, covering New Jersey production areas, give a digest of these prices during a five-minute newscast at 3:30 p.m. daily. Newspapers usually carry it in the morning edition.

At the same time, the information is placed on the United States Department of Agriculture leased wire teletype machine in the Trenton office and sent to all terminal and shipping point Federal market news offices. The various United States Department of Agriculture offices which publish daily reports include this information for the use of growers and receivers at distant points. This service was inaugurated in 1957 at the request of growers and country point shippers in New Jersey. It has proved to be very satisfactory as an aid in stabilizing prices, and placing a more realistic value on the offerings.

*Weekly Market Review*

In addition to the f. o. b. price reporting service, a weekly price digest on grains, feeds, eggs and poultry, fruits and vegetables is released. Information in the *Weekly Market Review* covers both the terminal markets and the country auction markets. Much interest in the *Review* is centered on the egg quotations. Egg information covers price ranges and weighted averages by color, quality and size of eggs at six auction markets. Latest statistics of receipts and cold storage holdings in the New York market, as well as the range and most common prices of State Seal of Quality cartoned and candled eggs, are included.

*The New Jersey Truck Crop News*

The *New Jersey Truck Crop News* is a popular and informative weekly report issued during the active harvesting season. Many daily newspapers and weekly trade papers use the information from this weekly report. The Trenton Weather Station, United States Department of Commerce; the Crop Reporting Service, United States Department of Agriculture; and this Department prepare material cooperatively.

The Trenton Weather Bureau supplies rainfall and temperature data for the past week with comparisons and rainfall accumulations for the previous four weeks. Crop Reporting Service employees accumulate crop information from producer contacts. Information on conditions, quality

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of offerings and volumes marketed are reported by Division of Markets employees. The mailing list includes buyers, food editors, farmers and others who have requested the report as an aid to their operations. The nearness to the largest consumer area in the world, and the ability to deliver fruits and vegetables in farm fresh condition, make reports on New Jersey crop conditions most worthwhile to food columnists.

### *Auction News*

The *Auction News* is compiled and edited by Bureau personnel and distributed to approximately 800 buyers. It is a direct mail information sheet drawing attention to fruits and vegetables currently being marketed and sold through the nine New Jersey farmer owned and operated auction markets. The cost of paper and postage is paid by the auction markets through the Cooperative Marketing Associations in New Jersey, Inc. That organization is a semi-federation of 15 egg, poultry, livestock, fruit and vegetable marketing organizations. However, the direct mail advertising applies only to the nine fruit and vegetable auction markets. In addition to identifying the markets and the commodities available, the sheet carries a statistical summary of the previous week's business. The review of prices by commodities is detailed for many commodities such as blueberries and peaches because the prices and volume are segregated by varieties and sizes. For most commodities, there is a breakdown as to size and all commodities are segregated by container. In addition to the high and low for the week, the weighted average price is included. This figure is obtained by dividing the total dollars for the commodity according to size, grade, variety or type of package by the number of packages. This indicates the price within the range that most nearly represents the true value of the classification of the product.

### OTHER PROJECTS OF THE BUREAU

In addition to the work previously outlined, the Bureau chief has aided in the development of the program for the New Jersey White Potato Industry Council. Since July 1, 1958, when plans were made for the 1958 potato crop, regulations were prepared for approval by the State Board of Agriculture, for the use of the State Seal of Quality on white potatoes. Regulations require licensing of packers to use the seal on bags, licensing of manufacturers of bags to print the bags, licensing of bag dealers, and record keeping of bag sales and use by each. The licensing and record keeping are necessary to insure that all potatoes sold in bags imprinted with the State seal were inspected and their quality certified. A Department employee checked all licensed packers and found compliance. Bag manufacturers reported sales of bags as to the amount and size. The licensed packer's inventory includes the number of bags on hand plus the amounts

sold under inspection. Exchange of bags between packers was permitted, provided receipts were given to the licensed packer who sold or exchanged the bags. No exchanges could be made with packers not licensed to use the seal.

Consumer reaction to the State Seal of Quality program on potatoes was good. Extensive sales were made in the North Jersey metropolitan area which had not been a good market in recent years. Experience with the 1958 crop indicates that additional merchandising help should be given to packers of 50-pound State seal packages. Movement of this size package was very light.

The Bureau chief also worked with the asparagus industry as treasurer of a non-profit corporation whose objective was to promote processed asparagus and provide some funds for research in varieties and marketing. It depended on voluntary contributions from processors and growers. The voluntary plan laid the groundwork for the comprehensive all-industry program developed under the Asparagus Promotion and Tax Act, enacted April 13, 1959.

The Bureau chief served as the Secretary of Agriculture's designee on the Asparagus Industry Council established under the Asparagus Promotion and Tax Act. Objectives of the Council are the promotion of fresh and processed asparagus produced in New Jersey. In addition, a research program has been developed in cooperation with Rutgers University to select improved strains of asparagus which would increase size of spear and yields per acre. To reduce costs of harvesting and packaging, which are extremely high because land labor is necessary, research was undertaken to develop a mechanical cutter, which in initial trials has shown promise. New packages for asparagus are being developed by two commercial firms as well as the College of Agriculture. Consumers show preference for these new packages when offered in the store along with the old type 2½-pound package.

Information on promotion of potatoes and asparagus under these new programs is contained in the Division of Information report.

## DAIRY SERVICE

During the fiscal year 1958-1959, Federal Milk Marketing Order 27, which went into effect August 1, 1957, in the 13 northern counties of New Jersey, has aided in stabilizing the milk industry in New Jersey. Milk prices in the eight southern counties are controlled by the Office of Milk Industry. A large portion of the milk produced in South Jersey is shipped into the New York-New Jersey area governed by Order 27 and into the Philadelphia area governed by Federal Order 61.

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Since Order 27 has been in effect, there has been a trend for the smaller milk dealers to close their own plants and have their milk processed at larger plants. Therefore, some previously cooperating dealers have discontinued the services offered by the Department of Agriculture. The larger milk dealers have their own inspection and quality control personnel.

In the last year there has been a considerable decrease in the number of dairy herds in New Jersey, but the remaining herds have increased in size. The total amount of milk produced on dairy farms in the State has increased.

The supervisor spent much of his time working on a State seal milk program to promote and distinguish New Jersey-produced milk. The program was finally approved by the Attorney General's office and the State Board of Agriculture on April 22, 1959. Copies of the regulations for the program were sent to the milk dealer associations in the State and to interested milk dealers. To date, there has been no request to use the State Seal of Quality on milk containers.

The supervisor of Dairy Products Standardization, in cooperation with the New Jersey Official Grades Milk Dealers' Association, the New Jersey Milk Dealers' Association, the Dairy Department at Rutgers University and representatives of processing plants, made the necessary arrangements to initiate a Driver-Salesman course for milk-route drivers. The course was started in the fall of 1958 and conducted at Rutgers University. The original course was over enrolled and a second course was conducted in the spring of 1959. The milk dealers who enrolled their men in this course felt it was worthwhile and helpful to their business.

#### OFFICIAL GRADES PROGRAM

The New Jersey Official Grades inspection service of the Department has been carried out with our cooperating dealers. Once each year every milk plant employee must be examined by a physician to determine if he is medically satisfactory to handle milk. In the past year 76 employees were given milk handlers' cards by the Department of Agriculture after satisfactorily passing medical examinations.

New Jersey Dairy Laboratories of New Brunswick, has made microscopic analyses of all milk samples taken in our control work.

During the year 2,041 samples were collected and analyzed, and reports sent from our office to producers, dealers and health officers cooperating.

During the year 41 warning letters were sent out from this office to producers having two consecutive high bacteria counts. No producers were suspended from their market because of a third high bacteria count.

New Jersey Official Grades milk comes from 135 farms. This milk is produced by 182 herds, consisting of 6,454 cows, under the supervision of

the Department of Agriculture. These herds are physically examined once a year by veterinarians in accordance with the New Jersey Official Grade regulations.

The accompanying table records the physical examination of cows by counties during the fiscal year 1958-1959 and the results of examinations.

#### RESULTS OF VETERINARIAN EXAMINATION OF HERDS BY COUNTIES

| County  | Number of<br>Herd<br>Examinations | Number of<br>Animal<br>Examinations | Number of<br>Animals<br>Passed | Number of<br>Animals<br>Isolated | Number of<br>Animals<br>Condemned |
|---|-----------------------------------|-------------------------------------|--------------------------------|----------------------------------|-----------------------------------|
| Burlington                                    | 17                                | 600                                 | 589                            | 11                               | ..                                |
| Cumberland                                    | 1                                 | 17                                  | 17                             | ..                               | ..                                |
| Gloucester                                    | 2                                 | 50                                  | 48                             | 2                                | ..                                |
| Hunterdon                                     | 75                                | 2,808                               | 2,753                          | 55                               | ..                                |
| Mercer  | 6                                 | 192                                 | 188                            | 4                                | ..                                |
| Monmouth                                      | 9                                 | 346                                 | 340                            | 6                                | ..                                |
| Morris  | 18                                | 642                                 | 630                            | 12                               | ..                                |
| Salem   | 18                                | 744                                 | 734                            | 9                                | 1                                 |
| Somerset                                      | 36                                | 1,055                               | 1,039                          | 15                               | 1                                 |
| Totals  | 182                               | 6,454                               | 6,338                          | 114                              | 2                                 |
| No. of herds in which all animals were passed |                                   |                                     |                                | 123 or 67.6%                     |                                   |
| No. of herds in which animals were excepted   |                                   |                                     |                                | 59 or 32.4%                      |                                   |
| No. of animals passed                         |                                   |                                     |                                | 6,338 or 98.20%                  |                                   |
| No. of animals isolated                       |                                   |                                     |                                | 114 or 1.77%                     |                                   |
| No. of animals condemned                      |                                   |                                     |                                | 2 or 0.03%                       |                                   |

The supervisor and fieldmen have aided several dairymen in the installation of bulk milk tanks on farms. The bulk tank system is the trend throughout the State.

The supervisor attended the New Jersey Dairymen's Council meetings throughout the year, representing the Division of Markets, and also attended hearings called by the Office of Milk Industry pertaining to the pricing of milk.

#### LIVESTOCK AUCTION MARKETS

Six livestock auctions operating in New Jersey have continued their fine cooperation by sending us weekly reports on all sales, giving class of animals sold and prices obtained. During the past year the number of animals sold was lower than in the 1957-1958 year, but total money returns were higher. The following chart shows the sales at the six cooperating markets for the 1958-1959 fiscal year.



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## SUMMARY OF SALES AT LIVESTOCK AUCTION MARKETS, 1958-59

| Market       | No. of Head | Value           |
|--------------|-------------|-----------------|
| Flemington   | 16,843      | \$774,954.82    |
| Hackettstown | 49,631      | 3,975,239.04    |
| Mount Holly  | 3,377       | 90,720.63       |
| New Egypt    | 7,191       | 585,244.68      |
| Sussex       | 41,751      | 2,903,032.03    |
| Woodstown    | 27,914      | 1,840,582.48    |
| Totals       | 146,707     | \$10,169,773.68 |

## BUREAU OF POULTRY SERVICE

During the first half of 1959 New Jersey's poultry industry experienced its most severe economic recession since 1941. The market price of eggs slumped to as much as 12 cents below the average cost of production. According to the Crop Reporting Service, the average price of eggs during May 1959 was 29 cents per dozen, 13.5 cents below May 1958. During the months of March, April, May and June, the egg-feed ratio was at the lowest level in 24 years. The year as a whole is recorded as the fifth consecutive year of economic distress for egg producers in New Jersey.

In January, 1958, there were 13,178,000 layers on farms in New Jersey, according to the Crop Reporting Service. This was 4 per cent below 1957. The decline continued and in January, 1959, the number was reduced to 12,612,000 layers. As the year closes, there are reported to be 11,450,000 layers, the lowest total since June, 1954. The off-farm movement of laying fowl continues at a rate above normal with fewer replacements added.

Representatives of a relatively large part of the industry attempted to gain relief by requesting that the government establish price supports, set up controls to curb expansion of egg production elsewhere in the country and make feed available at lower cost. Meanwhile, a greatly expanded poultry industry in the southeastern states has not only reduced an outlet for western eggs but is now exporting eggs to the northeastern markets at a most attractive price. It remains to be seen whether such competition will be continuous throughout this year.

## POULTRY STANDARDIZATION

This program originated in 1923 as a service to the New Jersey poultry industry and was administered entirely under rules and regulations established by this Department. In 1935 there came into existence, as the result of united effort by a majority of the states, a National Poultry Improvement Program which was quite similar to the various state programs. The objective was uniformity of poultry standardization work. In 1943 a program applicable to turkeys was added. These services are now referred

to as the National Poultry and Turkey Improvement Plans. This is, therefore, the 36th year of Department service to the poultry industry of New Jersey in poultry standardization work and the 24th year of such service under the identity of the National Program.

During the past year, the Bureau certified 680,938 birds from 266 flocks in 18 counties with 66 hatcheries cooperating. The number of birds in participating flocks was 12.5 per cent less than the 1957-1958 total of 778,503 birds in 298 flocks. Production of chicks in the State-supervised hatcheries was approximately 27,637,000. About 100,000 turkey poulters were produced under State supervision.

Ninety-four privately employed workers were certified as flock selectors and 107 as pullorum-typhoid testing agents working in various phases of the N. J.-U. S. National Poultry Improvement Plan.

The State inspector and seasonally employed assistant are supported by fees paid by participants.

Department personnel selected and blood-tested 339,576 birds (49.5 per cent of the total); 346,351 birds were handled by field agents. The agents were assisted and their work was closely checked and found satisfactory by the Bureau of Poultry Service inspector and two Division of Animal Industry men. Selecting agents operated in two breeding stages, Approved and Certified. Testing agents operated in the Pullorum-Typhoid Clean stage.

The average participating flock numbered 2,560 birds last year, 158 per cent greater than the 993 bird flock average of 10 years ago. Total capacity of the participating hatcheries is 10,528,290 eggs per setting, 88.0 per cent of the total hatchery capacity for New Jersey. The average hatchery capacity is 159,520 eggs per setting, about 76 per cent greater than 10 years ago (average capacity in 1948-1949 was 90,704 eggs).

The trend since 1953 toward fewer hatching egg flocks, hatcheries and breeders in New Jersey continued in 1958-1959. Twenty-two (two more than last year) New Jersey hatcheries have taken on franchise breeding contracts with 14 (one more than last year) out-of-state breeders. During the fiscal year two national breeders with franchise set-ups have been purchased by other franchise breeders. The franchise names purchased have disappeared from the national advertising picture.

The breeding and health classifications used were:

| Breeding Stages                 | Pullorum-Typhoid Classes          |
|---------------------------------|-----------------------------------|
| N.J.-U.S. Record of Performance | N.J.-U.S. Pullorum-Typhoid Clean  |
| N.J.-U.S. Certified             | N.J.-U.S. Pullorum-Typhoid Passed |
| N.J.-U.S. Approved              |                                   |

The scope of the services the poultry standardization program rendered is indicated in Poultry Table 1.

POULTRY TABLE 1

| N.J.-U.S. Improvement Plans                               | Number in<br>1958-59 | Number in<br>1957-58 | Per Cent<br>Change |
|---|----------------------|----------------------|--------------------|
| Number of flocks cooperating                              | 266                  | 298                  | —10.7              |
| Total number of breeders                                  | 680,938              | 778,503              | —12.5              |
| Number of hatcheries cooperating                          | 66                   | 74                   | —10.9              |
| Hatchery capacity cooperating                             | 10,528,830           | 11,347,480           | — 7.2              |
| Hatchery capacity in New Jersey                           | 11,959,000           | 12,963,000           | — 7.7              |
| Number of birds in pullorum-typhoid classes only          | 764                  | 648                  | +17.9              |
| Number of birds in Approved stages                        | 634,346              | 754,249              | —15.9              |
| Number of birds in Certified stages                       | 45,828               | 23,606               | +94.1              |
| Number of birds in ROP Trapnest                           | 0                    | 1,507                | —100.0             |
| Number of females in ROP breeding pen                     | 589                  | 471                  | +25.1              |
| Percentage of birds reacting to the pullorum-typhoid test | 0.0020               | 0.0060               | — 0.0040           |
| Number of flock inspections                               | 262                  | 302                  | —13.2              |
| Number of hatchery inspections                            | 92                   | 116                  | —20.6              |

Poultry Tables 2 and 3 give the classification and distribution of birds under supervision, and the number of birds banded by breeds and by counties. Ocean County leads in the number of breeding birds, followed by Monmouth, Cumberland and Hunterdon.

White Leghorns accounted for 76.0 per cent of all varieties enrolled in the State program. Incross mated numbered 44,378; some of these were counted as White Leghorns in the past, but have been separated in this report. New Hampshires and Rhode Island Reds increased in numbers, the former to 3,355 birds compared with 1,449 birds in 1957-1958. Plymouth Rocks also increased in number, there having been 2,848 of the Barred variety and 8,227 White Rocks. White and buff Cornish continued to grow in popularity to supply males for crossing on other varieties to produce modern meat type chicks.

Two New Jersey poultry breeders are selecting poultry families for the factor of interior egg quality.

Participation in the Turkey Improvement Program totaled 5,551 birds in 1958-1959, which is a 27.5 per cent increase from 1957-1958.

Two new agents qualified at the 18th annual school for flock selectors and pullorum-typhoid testers. Instructors from the College of Agriculture cooperated with the Division of Markets and the Division of Animal Industry.

One Federal supervisor visited the State. The National Poultry and Turkey Improvement Plans Regional Conference in Providence, Rhode



Island, was attended by two members of the Division of Markets and by two members of the Division of Animal Industry.

Lists of participating breeding flocks and hatcheries, with their official ratings, were published in circular form.

POULTRY TABLE 2  
CLASSIFICATION AND DISTRIBUTION OF BIRDS UNDER SUPERVISION IN THE  
POULTRY STANDARIZATION PROGRAM

| County     | Number<br>of<br>Flocks | NUMBER OF BIRDS   |  |   |  | Totals  |
|------------|------------------------|---|--|---|--|---------|
|            |                        | N.J.-U.S.<br>Certified<br>Pullorum-<br>Typhoid<br>Clean | N.J.-U.S.<br>Approved-<br>Pullorum-<br>Typhoid<br>Passed | N.J.-U.S.<br>Approved-<br>Pullorum-<br>Typhoid<br>Clean | N.J.-U.S.<br>Pullorum-<br>Typhoid<br>Clean |         |
| Atlantic   | 12                     | 2,417   | ....   | 37,465  | ....                                       | 39,882  |
| Bergen     | 3                      | ....  | ....   | 1,382   | ....                                       | 1,382   |
| Burlington | 7                      | ....  | ....   | 6,600   | ....                                       | 6,600   |
| Camden     | 3                      | ....  | ....   | 513   | ....                                       | 513     |
| Cape May   | 4                      | ....  | ....   | 16,931  | ....                                       | 16,931  |
| Cumberland | 55                     | 17,347  | ....   | 117,358   | ....                                       | 134,705 |
| Gloucester | 8                      | 5,735   | ....   | 15,342  | ....                                       | 21,077  |
| Hunterdon  | 32                     | ....  | ....   | 72,811  | 32   | 72,843  |
| Mercer     | 22                     | ....  | ....   | 34,131  | 623  | 34,754  |
| Middlesex  | 7                      | ....  | ....   | 26,797  | ....                                       | 26,797  |
| Monmouth   | 26                     | ....  | ....   | 109,896   | ....                                       | 109,896 |
| Morris     | 1                      | ....  | ....   | 723   | ....                                       | 723     |
| Ocean      | 45                     | 20,329  | ....   | 126,613   | ....                                       | 146,942 |
| Passaic    | 6                      | ....  | 4,623  | 810   | ....                                       | 5,433   |
| Salem      | 18                     | ....  | ....   | 26,656  | ....                                       | 26,656  |
| Somerset   | 5                      | ....  | ....   | 22,756  | ....                                       | 22,756  |
| Sussex     | 10                     | ....  | ....   | 9,050   | 109  | 9,159   |
| Warren     | 2                      | ....  | ....   | 3,889   | ....                                       | 3,889   |
| Totals     | 266                    | 45,828  | 4,623  | 629,723   | 764  | 680,938 |

POULTRY TABLE 3

NUMBER OF BREEDERS, BY COUNTIES, BREEDS OR VARIETIES

| County     | Single Comb<br>White<br>Leghorns | New<br>Hampshires | Rhode<br>Island<br>Reds | Barred<br>Rocks | White<br>Rocks | Crosses | Incross | Others | Turkeys                     |                            |        | Totals  |
|------------|----------------------------------|-------------------|-------------------------|-----------------|----------------|---------|---------|--------|-----------------------------|----------------------------|--------|---------|
|            |                                  |                   |                         |                 |                |         |         |        | Broad<br>Breasted<br>Bronze | Broad<br>Breasted<br>White | Others |         |
| Atlantic   | 32,672                           | ....              | 1,213                   | ....            | ....           | 3,419   | 2,417   | 161    | ....                        | ....                       | ....   | 39,882  |
| Bergen     | 694                              | ....              | 196                     | ....            | ....           | 492     | ....    | ....   | ....                        | ....                       | ....   | 1,382   |
| Burlington | 5,686                            | ....              | ....                    | 458             | ....           | 456     | ....    | ....   | ....                        | ....                       | ....   | 6,600   |
| Camden     | ....                             | ....              | ....                    | ....            | ....           | ....    | ....    | ....   | 349                         | 52                         | 112    | 513     |
| Cape May   | 11,926                           | ....              | ....                    | ....            | ....           | 5,005   | ....    | ....   | ....                        | ....                       | ....   | 16,931  |
| Cumberland | 84,132                           | 85                | 3,730                   | ....            | 336            | 28,325  | 17,847  | 250    | ....                        | ....                       | ....   | 134,705 |
| Gloucester | 11,942                           | ....              | ....                    | ....            | 1,013          | 8,122   | ....    | ....   | ....                        | ....                       | ....   | 21,077  |
| Hunterdon  | 60,298                           | 715               | 779                     | ....            | 1,064          | 9,377   | ....    | 32     | ....                        | 470                        | 108    | 72,843  |
| Mercer     | 15,649                           | ....              | ....                    | 2,390           | 1,527          | 13,027  | ....    | 623    | 1,227                       | ....                       | 311    | 34,754  |
| Middlesex  | 26,586                           | ....              | ....                    | ....            | ....           | ....    | ....    | ....   | ....                        | 52                         | 159    | 26,797  |
| Monmouth   | 102,949                          | ....              | ....                    | ....            | 3,049          | 3,594   | ....    | ....   | ....                        | 304                        | ....   | 109,896 |
| Morris     | 723                              | ....              | ....                    | ....            | ....           | ....    | ....    | ....   | ....                        | ....                       | ....   | 723     |
| Ocean      | 120,157                          | ....              | ....                    | ....            | ....           | 1,895   | 24,114  | ....   | 776                         | ....                       | ....   | 146,942 |
| Passaic    | 3,099                            | 1,284             | 300                     | ....            | ....           | 750     | ....    | ....   | ....                        | ....                       | ....   | 5,433   |
| Salem      | 3,585                            | 681               | ....                    | ....            | 1,238          | 21,152  | ....    | ....   | ....                        | ....                       | ....   | 26,656  |
| Somerset   | 22,756                           | ....              | ....                    | ....            | ....           | ....    | ....    | ....   | ....                        | ....                       | ....   | 22,756  |
| Sussex     | 6,829                            | 590               | ....                    | ....            | ....           | ....    | ....    | 109    | 34                          | 1,320                      | 277    | 9,159   |
| Warren     | 3,889                            | ....              | ....                    | ....            | ....           | ....    | ....    | ....   | ....                        | ....                       | ....   | 3,889   |
| Totals     | 513,572                          | 3,355             | 6,218                   | 2,848           | 8,227          | 95,614  | 44,378  | 1,175  | 2,386                       | 2,198                      | 967    | 680,938 |

## COOPERATIVE MARKETING

The cooperative egg marketing associations are of two types. Those which physically handle the eggs of their members originated as auctions and are located at Paterson, Hackettstown, Flemington, Hightstown, Mount Holly and Vineland. Others are known as "bargaining" cooperatives and are located mainly in the Lakewood-Toms River area, with a few in the vicinity of Vineland. The auction type cooperative has its individual method of pricing; the bargaining type cooperative negotiates contracts in behalf of its members using the New York market quotation as the base.

The total volume of eggs marketed through the auction cooperatives in 1958-1959 was 990,802 (30-dozen) cases which is 4.40 per cent less than last year. One bargaining cooperative reported handling 263,670 (30-dozen) cases during the same fiscal year while six bargaining cooperatives through a federation reported handling 480,000 cases. No report of the volume handled by six other bargaining cooperatives is made to the Department. The Bureau of Poultry Service, however, serves all cooperatives.

In 1958-1959 the average price per dozen of all grades and sizes of eggs sold through the "auction" type cooperatives was 39.6 cents or \$11.88 per 30-dozen case. This compares with the average price of 46.2 cents per dozen or \$13.88 per 30-dozen case in 1957-1958.

Live poultry sales are conducted by five cooperatives. The total annual volume handled was 49,724 crates or 2,546,418 pounds which sold for \$426,396.28. This was 564,068 pounds less than last year's volume and \$140,933.03 less than last year's value. In 1958-1959 the average price per pound of all poultry sold was 16.7 cents compared with the average price of 17.4 cents in 1957-1958.

Table 4 shows the volume and value of sales of the "auctions."

POULTRY TABLE 4  
SUMMARY OF EGG AND POULTRY AUCTION MARKETS  
July 1, 1958 to June 30, 1959

| Market   | Cases of<br>Egg | Value of<br>Eggs | Crates<br>of<br>Poultry | Pounds<br>of<br>Poultry | Value of<br>Poultry | Total Value     |
|--|-----------------|------------------|-------------------------|-------------------------|---------------------|-----------------|
| Flemington                                       | 289,958         | \$3,450,300.60   | 29,590                  | 1,370,491               | \$260,532.62        | \$3,710,833.22  |
| Hackettstown                                     | 25,814          | 303,513.07       | 4,997                   | 295,414                 | 42,376.69           | 345,889.76      |
| Hightstown                                       | 117,028         | 1,354,977.49     | 3,534                   | 207,595                 | 28,206.28           | 1,383,183.77    |
| Mount Holly                                      | 49,250          | 576,393.60       | 7,407                   | 422,750                 | 64,280.04           | 640,673.64      |
| Paterson   | 41,741          | 490,367.09       | 4,196                   | 250,168                 | 31,000.65           | 521,367.74      |
| Vineland   | 467,011         | 5,596,227.01     | .....                   | .....                   | .....               | 5,596,227.01    |
| Totals   | 990,802         | \$11,771,778.86  | 49,724                  | 2,546,418               | \$426,396.28        | \$12,198,175.14 |
| Average price per case of eggs, 1958-59          |                 |                  |                         |                         | \$11.88             |                 |
| Average price per pound of live poultry, 1958-59 |                 |                  |                         |                         |                     | \$0.167         |
| Average price per case of eggs, 1957-58          |                 |                  |                         |                         | \$13.88             |                 |
| Average price per pound of live poultry, 1957-58 |                 |                  |                         |                         |                     | \$0.182         |

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Table 5, "Average Price Per Dozen Eggs on Six New Jersey Auction Markets" provides a comparison of seasonal values on a monthly basis.

POULTRY TABLE 5  
AVERAGE PRICE PER DOZEN EGGS ON SIX NEW JERSEY AUCTION MARKETS

| Month     | 1958     | For Comparison |          |
|-----------|----------|----------------|----------|
|           |          | 1957           | 1939     |
| July      | \$0.4222 | \$0.4362       | \$0.2647 |
| August    | .4478    | .4463          | .2678    |
| September | .4754    | .4666          | .2948    |
| October   | .4307    | .5219          | .3029    |
| November  | .4375    | .5308          | .3118    |
| December  | .4263    | .5023          | .2453    |
|           | 1959     | 1958           | 1939     |
| January   | .4183    | .4442          | .2372    |
| February  | .3968    | .4485          | .2260    |
| March     | .3835    | .5344          | .2305    |
| April     | .3114    | .4296          | .2218    |
| May       | .2827    | .4364          | .2146    |
| June      | .3257    | .4040          | .2384    |

Table 6, "Ten-Year Summary of New Jersey Poultry and Egg Auction Sales," traces the development of the marketing program.

POULTRY TABLE 6  
TEN-YEAR SUMMARY OF NEW JERSEY POULTRY AND EGG AUCTION SALES

| Year    | Number<br>Cases of<br>Eggs | Number<br>Crates of<br>Poultry | Pounds of<br>Poultry | Total<br>Combined Value<br>Eggs and Poultry |
|---------|----------------------------|--------------------------------|----------------------|---|
| 1958-59 | 990,802                    | 49,724                         | 2,546,418            | \$12,198,175.14                             |
| 1957-58 | 1,036,495                  | 61,634                         | 3,110,486            | 14,958,559.86                               |
| 1956-57 | 1,201,770                  | 83,501                         | 4,237,116            | 15,143,821.58                               |
| 1955-56 | 1,181,742                  | 99,084                         | 4,954,517            | 18,245,286.84                               |
| 1954-55 | 1,348,732                  | 112,629                        | 5,718,722            | 18,148,548.35                               |
| 1953-54 | 1,334,554                  | 116,074                        | 5,869,994            | 22,068,208.60                               |
| 1952-53 | 1,291,951                  | 114,313                        | 5,869,308            | 23,083,519.57                               |
| 1951-52 | 1,180,320                  | 130,754                        | 6,882,213            | 20,302,196.16                               |
| 1950-51 | 1,067,278                  | 122,147                        | 6,548,720            | 19,353,488.51                               |
| 1949-50 | 1,007,268                  | 123,392                        | 7,170,230            | 16,035,952.60                               |
| Totals  | 11,640,912                 | 1,013,252                      | 52,907,724           | \$179,537,757.21                            |

## AUCTION MARKETS' EGG-FEED RATIO

The ratios of egg prices compared with feed costs presented in Table 7 reveal that no months during the fiscal year were favorable economically to New Jersey egg producers. It is generally accepted that an egg-feed ratio of 8 dozen = 100 pounds of feed is an indication of poultry producer prosperity.

## POULTRY TABLE 7

## NEW JERSEY EGG AUCTIONS—EGG-FEED RATIO

|   | 1958        | July<br>1957    | 1939      | 1958        | August<br>1957   | 1939      | 1958        | September<br>1957 | 1939      |
|---|-------------|-----------------|-----------|-------------|------------------|-----------|-------------|-------------------|-----------|
| <b>EGGS</b>                               |             |                 |           |             |                  |           |             |                   |           |
| Total dozens sold                         | 2,633,280   | 2,664,720       | 891,300   | 2,390,820   | 2,808,300        | 900,540   | 2,716,740   | 2,700,480         | 855,660   |
| Total price paid                          | \$1,111,845 | \$1,162,365     | \$235,920 | \$1,070,680 | \$1,253,228      | \$241,138 | \$1,291,513 | \$1,260,158       | \$252,290 |
| Av. price per doz.                        | \$0.4222    | \$0.4362        | \$0.2647  | \$0.4478    | \$0.4463         | \$0.2678  | \$0.4754    | \$0.4666          | \$0.2948  |
| <b>FEED</b>                               |             |                 |           |             |                  |           |             |                   |           |
| Av. 100 lb. scratch                       | \$3.90      | \$3.80          | \$1.60    | \$3.90      | \$3.80           | \$1.50    | \$3.80      | \$3.80            | \$1.86    |
| Av. 100 lb. mash                          | \$4.60      | \$4.30          | \$2.18    | \$4.60      | \$4.35           | \$2.16    | \$4.45      | \$4.35            | \$2.02    |
| Av. laying ration                         | \$4.25      | \$4.05          | \$1.89    | \$4.25      | \$4.08           | \$1.83    | \$4.13      | \$4.08            | \$1.94    |
| <b>RATIOS</b>                             |             |                 |           |             |                  |           |             |                   |           |
| Doz. eggs required to buy<br>100 lb. feed | 9.0         | 9.3             | 7.1       | 9.5         | 9.1              | 6.8       | 8.7         | 8.7               | 6.6       |
| No. lb. feed one doz. eggs<br>will buy    | 9.9         | 10.7            | 14.0      | 10.5        | 10.9             | 14.6      | 11.5        | 11.4              | 15.2      |
|   | 1958        | October<br>1957 | 1939      | 1958        | November<br>1957 | 1939      | 1958        | December<br>1957  | 1939      |
| <b>EGGS</b>                               |             |                 |           |             |                  |           |             |                   |           |
| Total dozens sold                         | 2,702,700   | 2,856,000       | 995,430   | 2,310,840   | 2,505,600        | 969,330   | 2,395,680   | 2,519,370         | 1,135,350 |
| Total price paid                          | \$1,163,986 | \$1,490,517     | \$301,571 | \$1,010,936 | \$1,330,092      | \$302,285 | \$1,021,193 | \$1,265,570       | \$278,465 |
| Av. price per doz.                        | \$0.4307    | \$0.5219        | \$0.30296 | \$0.4375    | \$0.5308         | \$0.3118  | \$0.4263    | \$0.5023          | \$0.2453  |
| <b>FEED</b>                               |             |                 |           |             |                  |           |             |                   |           |
| Av. 100 lb. scratch                       | \$3.75      | \$3.75          | \$1.78    | \$3.75      | \$3.70           | \$1.77    | \$3.75      | \$3.75            | \$1.83    |
| Av. 100 lb. mash                          | \$4.45      | \$4.35          | \$2.54    | \$4.45      | \$4.25           | \$2.25    | \$4.45      | \$4.30            | \$2.58    |
| Av. laying ration                         | \$4.10      | \$4.05          | \$2.16    | \$4.10      | \$3.98           | \$2.14    | \$4.10      | \$4.03            | \$2.20    |
| <b>RATIOS</b>                             |             |                 |           |             |                  |           |             |                   |           |
| Doz. eggs required to buy<br>100 lb. feed | 9.5         | 7.8             | 7.1       | 9.4         | 7.5              | 6.9       | 9.6         | 8.0               | 9.0       |
| No. lb. feed one doz. eggs<br>will buy    | 10.5        | 12.9            | 14.0      | 10.7        | 13.3             | 14.6      | 10.4        | 12.4              | 11.2      |

POULTRY TABLE 7—Continued

## NEW JERSEY EGG AUCTIONS—EGG-FEED RATIO

|   | 1959      | January<br>1958 | 1939      | 1959      | February<br>1958 | 1939      | 1959      | March<br>1958 | 1939      |
|---|-----------|-----------------|-----------|-----------|------------------|-----------|-----------|---------------|-----------|
| <b>EGGS</b>                               |           |                 |           |           |                  |           |           |               |           |
| Total dozens sold                         | 2,177,970 | 2,381,940       | 1,099,080 | 2,154,330 | 2,126,580        | 1,085,550 | 2,549,490 | 2,402,580     | 1,372,230 |
| Total price paid                          | \$911,049 | \$1,058,034     | \$260,807 | \$854,887 | \$953,859        | \$245,377 | \$977,657 | \$1,283,953   | \$316,304 |
| Av. price per doz.                        | \$0.4183  | \$0.4442        | \$0.2373  | \$0.3968  | \$0.4485         | \$0.2260  | \$0.3835  | \$0.5344      | \$0.2395  |
| <b>FEED</b>                               |           |                 |           |           |                  |           |           |               |           |
| Av. 100 lb. scratch                       | \$3.80    | \$3.75          | \$1.54    | \$3.80    | \$3.75           | \$1.54    | \$3.80    | \$3.75        | \$1.56    |
| Av. 100 lb. mash                          | \$4.55    | \$4.30          | \$2.04    | \$4.55    | \$4.25           | \$2.04    | \$4.50    | \$4.30        | \$2.06    |
| Av. laying ration                         | \$4.18    | \$4.03          | \$1.79    | \$4.18    | \$4.00           | \$1.79    | \$4.15    | \$4.02        | \$1.81    |
| <b>RATIOS</b>                             |           |                 |           |           |                  |           |           |               |           |
| Doz. eggs required to buy<br>100 lb. feed | 9.99      | 9.07            | 7.5       | 9.5       | 8.9              | 7.9       | 9.8       | 7.5           | 7.9       |
| No. lb. feed one doz. eggs<br>will buy    | 10.0      | 11.0            | 13.3      | 9.49      | 11.2             | 12.6      | 9.2       | 13.3          | 12.7      |
|   | 1959      | April<br>1958   | 1939      | 1959      | May<br>1958      | 1939      | 1959      | June<br>1958  | 1939      |
| <b>EGGS</b>                               |           |                 |           |           |                  |           |           |               |           |
| Total dozens sold                         | 2,712,690 | 2,557,020       | 1,213,620 | 2,528,220 | 2,925,750        | 1,388,070 | 2,451,300 | 2,646,510     | 1,117,170 |
| Total price paid                          | \$844,841 | \$1,098,574     | \$269,177 | \$714,824 | \$1,165,565      | \$297,863 | \$798,363 | \$1,069,310   | \$266,289 |
| Av. price per doz.                        | \$0.3114  | \$0.4296        | \$0.2218  | \$0.2827  | \$0.4364         | \$0.2146  | \$0.3257  | \$0.4040      | \$0.2384  |
| <b>FEED</b>                               |           |                 |           |           |                  |           |           |               |           |
| Av. 100 lb. scratch                       | \$3.80    | \$3.85          | \$1.58    | \$3.85    | \$3.90           | \$1.64    | \$3.85    | \$3.85        | \$1.69    |
| Av. 100 lb. mash                          | \$4.50    | \$4.50          | \$2.11    | \$4.50    | \$4.45           | \$2.18    | \$4.40    | \$4.45        | \$2.18    |
| Av. laying ration                         | \$4.15    | \$4.18          | \$1.84    | \$4.18    | \$4.18           | \$1.91    | \$4.13    | \$4.15        | \$1.94    |
| <b>RATIOS</b>                             |           |                 |           |           |                  |           |           |               |           |
| Doz. eggs required to buy<br>100 lb. feed | 13.3      | 9.7             | 8.3       | 14.7      | 9.6              | 8.9       | 12.7      | 9.3           | 8.1       |
| No. lb. feed one doz. eggs<br>will buy    | 7.5       | 10.3            | 12.1      | 6.8       | 10.4             | 11.2      | 7.9       | 9.7           | 12.3      |



The extremes in egg prices occurred in the months of September with a high of 47.54 cents per dozen and in May with a low of 28.27 cents per dozen.

Poultry feed cost during 1958-1959 was \$4.16 per hundredweight as compared with a hundredweight cost of \$4.07 in the 1957-1958 fiscal year.

Based on actual reports and estimates, the average New Jersey hen in 1958-1959 produced 16.1 dozen eggs which earned a gross income of \$6.38. With a feed cost of \$4.16, there is a balance of \$2.22 per bird for all other costs. In 1957-1958 the average hen produced 16 dozen eggs, earning a gross income of \$7.40. The feed cost was \$4.07, leaving a balance of \$3.33 per bird for other costs.

#### GRADING AND INSPECTION SERVICE

The grading and inspection service encompasses four specific phases of inspection and influences the grading of other eggs even though they may not be officially identified.

New Jersey Wholesale Grades for Eggs are applied at the auction markets located at Flemington, Hightstown, Mount Holly and Vineland. In 1958-1959 these markets had a total volume of 923,247 cases or 27,697,410 dozens, which was 5.10 per cent less than last year. The auctions located at Paterson and Hackettstown use grades of their own specifications and their volume figures are not included here.

The Bureau also supervises another form of inspection. Licensed graders employed by two bargaining cooperatives determine percentages of different qualities in every producer's lot inspected. The information is recorded on grading certificates but no declaration of grade is made. Such inspections and certificates are used for purposes of price determination and for producer education on quality improvement. These two cooperatives marketed 743,682 cases of eggs during the year.

The Bureau also inspects eggs for institutional use and other lots where a vendor must deliver in accordance with specific specifications and must have official evidence that the lot conforms to the correct grade and size. The eggs must conform to Consumer Grade A packaged in 30-dozen cases and the official egg grading certificate is needed to substantiate the facts. There were 10,251 cases of eggs inspected in the performance of this phase of the work.

The fourth phase of inspection is concerned with the packaging of eggs in one dozen consumer cartons under the State Seal of Quality. Fifty-six firms are licensed and authorized to affix the seal, and perform this function

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under contract. Under these conditions the firm has a capable employee who is licensed by the Department to serve as a resident egg grader. In addition, supervisory personnel of the Bureau make periodic inspections to insure correct application of the official standards. The same Bureau personnel also make inspections in carrying out the provisions of the Fresh Egg Law and the Source Identification Law as described separately under those headings. The total volume of eggs packed in consumer cartons under the State Seal of Quality, as reported by the 56 firms under contract, was 664,702 cases or 19,941,060 dozen.

The total of all eggs graded under the supervision of Bureau of Poultry Service personnel amounted to 2,341,882 cases or 70,256,460 dozen. Administrative and inspection fees are recovered on the basis of established charges for such services.

Poultry meat growers in the southern part of the State organized to market caponettes under the State Seal of Quality. Grading service on a limited scale was extended at no cost to help the project get under way. Similar service was extended to turkey growers who qualified under New Jersey Department of Health regulations concerning the operation of a slaughterhouse and inspection for wholesomeness.

#### FRESH EGG LAW ENFORCEMENT

Enforcement policy and procedure in administering the Fresh Egg Law serves the interest of the consumer and applies the law as the rule for proper egg marketing. Field personnel receive excellent cooperation from retailers and suppliers. The field staff perform inspections under the provisions of the Fresh Egg Law as well as other laws assigned to the Department for enforcement. This not only broadens their services but enables them to follow through more constructively in a total effort to gain compliance.

Enforcement personnel made 10,752 inspections at retail outlets and found 1,473 violations or 13.70 per cent, a 7.21 per cent increase. There were 159 letters of warning issued to effect compliance.

Table 8 shows the number of stores inspected and the number of stores in violation by counties.

POULTRY TABLE 8  
NUMBER OF STORES INSPECTED AND PER CENT VIOLATIONS, BY COUNTIES

| County                      | Stores<br>Inspected | Number of<br>Violations | Per Cent<br>Violations |
|-----------------------------|---------------------|-------------------------|------------------------|
| Atlantic                    | 152                 | 12                      | 7.89                   |
| Bergen                      | 761                 | 13                      | 1.71                   |
| Burlington                  | 236                 | 33                      | 13.98                  |
| Camden                      | 623                 | 69                      | 11.08                  |
| Cape May                    | 73                  | 7                       | 9.59                   |
| Cumberland                  | 115                 | 18                      | 15.65                  |
| Essex                       | 2,809               | 471                     | 16.77                  |
| Gloucester                  | 140                 | 13                      | 9.29                   |
| Hudson                      | 1,518               | 40                      | 2.64                   |
| Hunterdon                   | 109                 | 25                      | 22.94                  |
| Mercer                      | 375                 | 73                      | 19.47                  |
| Middlesex                   | 790                 | 167                     | 21.14                  |
| Monmouth                    | 271                 | 80                      | 29.52                  |
| Morris                      | 431                 | 97                      | 22.51                  |
| Ocean                       | 153                 | 18                      | 11.76                  |
| Passaic                     | 504                 | 23                      | 4.56                   |
| Salem                       | 112                 | 9                       | 8.04                   |
| Somerset                    | 239                 | 37                      | 15.48                  |
| Sussex                      | 95                  | 16                      | 16.84                  |
| Union                       | 1,148               | 240                     | 20.91                  |
| Warren                      | 98                  | 12                      | 12.24                  |
| Totals                      | 10,752              | 1,473                   |                        |
|                             |                     | 1958-59                 | 1957-58                |
| Total stores inspected      |                     | 10,752                  | 10,022                 |
| Total violations            |                     | 1,473                   | 856                    |
| Average per cent violations |                     | 13.70                   | 8.54                   |

#### SOURCE IDENTIFICATION LAW

As described under Fresh Egg Law Enforcement, inspections made in the course of administering the law are done by the same field staff.

The source identification law has three purposes: (1) to insure correct use of the name New Jersey in identification of eggs; (2) to prevent improper re-use of egg cases, and (3) to insure proper identification of eggs as to their state of origin.

There were 385 inspections made, of which 231 revealed violation. Violations were mainly concerned with the re-use of egg cases without removal or obliteration of the markings of the previous user. Forty letters of warning were issued to effect compliance.

During the period of depressed egg prices there was considerable demand from New Jersey poultrymen that the Source Identification Law be more strictly enforced. This demand is reasonable, but the services of the Bureau cannot be stretched beyond the capacity of the personnel avail-

able to perform the duty. This problem is not always recognized by the industry. Every effort is made to use available personnel in the Bureau of Poultry Service as broadly as possible to effect the fullest use of their services.

## BUREAU OF LICENSING AND BONDING

This Bureau issues licenses to the various dealers who purchase agricultural commodities from New Jersey farmers, and in some cases, obtains bonds from them. The law requires that dealers in cattle, fruits, vegetables, eggs and live poultry be licensed. Garbage-feeding hog farms, as well as disposal plants that process the bodies of dead animals or packing house refuse, are also licensed.

During the past two years legislation has been enacted providing for "promotion taxes" on poultry and eggs, white potatoes, asparagus and apples. This legislation imposes a tax on the grower of the commodity. The proceeds of the tax are used to promote the sale of the product. The collection of these taxes has been assigned to this Bureau.

### MILK DEALER'S LICENSING AND BONDING ACT

Licenses to purchase milk and cream from New Jersey producers during the period July 1, 1958 to June 30, 1959 were issued to 131 milk dealers. Before such a license is granted, the applicant is required to file a bond, the amount being based on the volume of anticipated purchases. A total of \$4,751,000 in such bonds was provided in support of these licenses, consisting of surety bonds and U. S. Government securities.

During the year one licensed milk dealer ceased operations, leaving unpaid obligations to three New Jersey producers amounting to \$10,822.18. Since the licensee has failed to pay these obligations, the surety company will be called upon for payment of the \$8,000 provided by the bond. In this case the claims exceeded the bond because the farmers extended credit to the dealer over a longer period than the 1½ months covered by the bond.

### PRODUCE DEALER'S LICENSING AND BONDING ACT

Dealers licensed under this act include those who purchase fruits, vegetables, eggs and live poultry from New Jersey producers. Licenses were issued to 621 such dealers this year. Each dealer is required to provide a bond in support of his license, the size of the bond depending on the dollar value of commodities purchased and the promptness with which payment is made. A total of \$2,666,000 in bonds was filed in support of the 621 licenses issued.

Complaints were received against 22 dealers. Most complaints involved small amounts which were settled without the filing of formal claims against the bonds of the licensees. Settlement was usually effected by having an investigator make a series of calls on the producer and the dealer involved. Formal claims were filed against five bonds. Two were subsequently paid by the dealers involved. Three claims totalling \$4,786.35, were not paid by the licensees, and will be paid by the surety companies which provided the bonds.

#### CATTLE DEALER'S LICENSING ACT

During the period July 1, 1958 to June 30, 1959, licenses were issued to 147 cattle dealers. Applicants for these licenses are not required to provide bonds, their practices being regulated by the threat of revocation of license. Three complaints against licensed dealers were investigated, two involving failure to keep proper records, an offense of which dealers with a small volume of business are sometimes guilty. The third involved an exchange of cattle. Since the dispute was based on a very informal verbal agreement, no decision could be reached.

#### DISPOSAL PLANT OPERATOR'S LICENSING ACT

Licenses were issued to 32 operators who receive or transport the bodies of dead animals or parts thereof within the State. The increase from 23 licenses the previous year was largely due to a tightening of Federal regulations pertaining to the movement of packing house refuse. The advent of Federal regulations revealed the existence of several transporters and receivers not previously licensed.

#### GARBAGE-FEEDING HOG FARM LICENSING ACT

This law, enacted in 1957, requires that all garbage-feeding hog farms be licensed by the Department. In order to obtain a license, the operator must meet requirements designed to control contagious and infectious swine diseases. The requirements include the cooking of all garbage used as swine feed.

Applications for these licenses are submitted to this Bureau. Personnel of the Division of Animal Industry then inspect the premises and practices of the applicant and approve or disapprove the application. When all requirements have been met, the license is issued by this Bureau.

Licenses are for the calendar year. In 1958, 296 farms were licensed. As of June 30, 1959, licenses had been issued to 281 farms for 1959.

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## POULTRY PRODUCTS PROMOTION COUNCIL AND TAX ACT

This act imposes a tax of one cent per hundred pounds on all poultry feed used in New Jersey, the proceeds to be used in promoting the sale of poultry and eggs. Three taxing periods have now been completed. The collections are summarized below:

| Taxing Period        | Amount Collected | Sources |
|----------------------|------------------|---------|
| July 1—Dec. 31, 1957 | \$86,750.03      | 337     |
| Jan. 1—June 30, 1958 | 87,973.09        | 302     |
| July 1—Dec. 31, 1958 | 89,400.35        | 302     |

## WHITE POTATO INDUSTRY PROMOTION AND TAX ACT

This law, which became effective in the fall of 1957, imposes a tax of five cents per hundredweight on all seed potatoes planted in New Jersey, the proceeds to be used in promoting the sale of New Jersey produced white potatoes. During the first year of its operation the tax yielded \$15,604.13. This amount was collected on seed potatoes planted during the spring of 1958, the tax being due on or before August 1, 1958.

## ASPARAGUS INDUSTRY PROMOTION AND TAX ACT

During April 1958 the Asparagus Industry Promotion and Tax Act was passed. This act levies a tax of \$0.002 on each pound of asparagus sold for processing in New Jersey and a tax of \$0.02 per crate on all asparagus sold for fresh market.

Because the law was passed very shortly before the asparagus season began, it has been difficult to adequately acquaint those liable for the tax with the provisions of the act. Letters of instruction and sample return forms were sent to all the licensed produce dealers, brokers and commission merchants in the State. Similar letters and forms were sent through the cooperation of the Extension Service and the county agricultural agents, to all known asparagus growers of the State.

The first return on the tax is due on or before August 1, 1959.

## APPLE INDUSTRY PROMOTION AND TAX ACT

This act, similar to the three promotion tax acts described above, provides for a tax of \$0.03 on each bushel of apples sold for marketing as fresh apples and \$0.03 per hundredweight on apples sold for processing other than for cider or apple juice. The proceeds are to be used for financing programs of marketing, promotion and research for the benefit of the apple industry.

The law requires that the tax be collected quarterly, on or before the 15th day of each October, January, April and July, on all apples sold during each preceding three months. The act becomes effective July 1, 1959, so the first tax return is due on or before October 15, 1959.



# **Report of the Division of Animal Industry**

DR. E. L. BROWER, *Director*

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## **BUREAU OF LIVESTOCK DISEASE CONTROL**

### **BOVINE BRUCELLOSIS**

New Jersey completed the first full year as a modified certified brucellosis free area. The rate of infection continues to be reduced. During the fiscal year, 934 reactors were disclosed in testing 135,004 blood samples. The reaction rate was 0.69 per cent. In addition to the actual blood testing, brucellosis ring tests were conducted on 5,215 herds consisting of 252,806 animals. Negative results were obtained on 4,671 herds of 226,261 animals. The 544 suspicious herds were subjected to the usual blood testing.

Official calfhooD vaccination against brucellosis at no expense to the owner continues to play a very big part in the eradication of brucellosis in New Jersey. During fiscal year 1958-1959, 4,729 lots, comprising 16,305 calves, were officially vaccinated against brucellosis. We are striving to get 100 per cent of the calf crop vaccinated annually and to this end, permission has been granted the staff veterinarians of the Division to vaccinate calves where farmers are unable to procure private veterinary service for this purpose. This should not be construed as to interfere with the established policy of the private veterinary practitioner doing the vaccination at State expense.

During the fiscal year, six counties were completely tested and qualified for recertification: Bergen, Essex, Morris, Sussex, Union and Warren. The following counties are pending certification: Camden, Cumberland and Mercer.

### **BOVINE TUBERCULOSIS**

The bovine tuberculosis eradication program was conducted in accordance with established procedures and policies. All cattle herds of more than five head are tuberculin tested annually; herds of five or less head are tuberculin tested every other year. All animals reacting to the tuberculin test are promptly sent to slaughter, and all herds from which reactors have been removed are quarantined until they have passed the prescribed number of tests without evidence of reaction.

During the fiscal year we received four reports from the Federal Meat Inspection Service on non-reactor cows presenting tuberculosis lesions on post-mortem examination. One of these was traced to a herd in another

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state and the proper Federal and State officials were notified. The three New Jersey herds which were involved were carefully studied and tested.

The entire State of New Jersey is modified accredited tuberculosis free. During the fiscal year, six counties were completely tested and qualified for reaccreditation: Bergen, Essex, Morris, Sussex, Union and Warren.

## CATTLE UNDER SUPERVISION

1945-1959

|           | Herds  | Animals | Tuberculosis<br>Reactors<br>Indemnified | Brucellosis<br>Reactors<br>Indemnified | Calves<br>Officially<br>Brucella<br>Vaccinated |
|-----------|--------|---------|---|--|--|
| 1958-1959 | 6,771  | 174,203 | 150                                     | 759                                    | 16,305   |
| 1957-1958 | 6,987  | 175,026 | 175                                     | 1,224                                  | 15,665   |
| 1956-1957 | 8,014  | 185,327 | 162                                     | 1,830                                  | 16,179   |
| 1955-1956 | 8,488  | 194,937 | 141                                     | 2,133                                  | 17,514   |
| 1954-1955 | 9,483  | 204,620 | 173                                     | 1,801                                  | 17,886   |
| 1953-1954 | 9,797  | 214,212 | 188                                     | 653                                    | 22,029   |
| 1952-1953 | 10,415 | 215,660 | 135                                     | 362                                    | 23,626   |
| 1951-1952 | 10,683 | 207,959 | 193                                     | 254                                    | 22,394   |
| 1950-1951 | 11,273 | 200,496 | 232                                     | 166                                    | 19,944   |
| 1949-1950 | 11,962 | 205,105 | 198                                     | 191                                    | 18,305   |
| 1948-1949 | 12,692 | 200,817 | 282                                     | 190                                    | 16,183   |
| 1947-1948 | 13,478 | 201,238 | 368                                     | 206                                    | 14,813   |
| 1946-1947 | 14,347 | 202,034 | 770                                     | 203                                    | 13,381   |
| 1945-1946 | 14,867 | 201,349 | 707                                     | 209                                    | .....  |

## CATTLE AND GOAT SURVEY

June 30, 1959

| County     | Cattle |         | Goats |         |
|------------|--------|---------|-------|---------|
|            | Herds  | Animals | Herds | Animals |
| Atlantic   | 77     | 318     | 12    | 67      |
| Bergen     | 48     | 718     | 21    | 173     |
| Burlington | 571    | 20,354  | 16    | 69      |
| Camden     | 96     | 1,355   | 7     | 50      |
| Cape May   | 49     | 327     | 2     | 2       |
| Cumberland | 297    | 5,092   | 9     | 61      |
| Essex      | 22     | 450     | 2     | 23      |
| Gloucester | 391    | 4,389   | 29    | 72      |
| Hudson     | ...    | ...     | ..    | ..      |
| Hunterdon  | 1,131  | 27,181  | 43    | 317     |
| Mercer     | 273    | 5,796   | 7     | 17      |
| Middlesex  | 261    | 4,679   | 19    | 80      |
| Monmouth   | 461    | 7,913   | 19    | 90      |
| Morris     | 336    | 8,485   | 33    | 156     |
| Ocean      | 95     | 943     | 16    | 43      |
| Passaic    | 58     | 359     | 20    | 81      |
| Salem      | 621    | 16,846  | 13    | 63      |
| Somerset   | 469    | 10,826  | 46    | 307     |
| Sussex     | 755    | 32,062  | 6     | 36      |
| Union      | 18     | 121     | 8     | 27      |
| Warren     | 742    | 25,989  | 31    | 101     |
| Totals     | 6,771  | 174,203 | 359   | 1,835   |

## SUMMARY OF TESTING

July 1, 1958 to June 30, 1959

## TUBERCULOSIS ERADICATION PROGRAM

| Veterinarians Testing    | Cattle |         | Goats |         |
|--------------------------|--------|---------|-------|---------|
|                          | Lots   | Animals | Lots  | Animals |
| State                    | 356    | 13,789  | 34    | 218     |
| Federal                  | 257    | 7,098   | 58    | 418     |
| Accredited practitioners | 5,471  | 160,748 | 86    | 770     |
| Total                    | 6,084  | 181,635 | 178   | 1,406   |
| Reactors — 203 — 0.11%   |        |         |       |         |

## BRUCELLOSIS ERADICATION PROGRAM, BLOOD TESTING

| Veterinarians Testing    | Cattle |         | Goats |         |
|--------------------------|--------|---------|-------|---------|
|                          | Lots   | Animals | Lots  | Animals |
| State                    | 482    | 13,437  | 26    | 158     |
| Federal                  | 391    | 9,476   | 60    | 351     |
| Accredited practitioners | 4,996  | 112,091 | 98    | 856     |
| Total                    | 5,869  | 135,004 | 184   | 1,365   |
| Reactors — 934 — 0.69%   |        |         |       |         |

## BRUCELLOSIS ERADICATION PROGRAM, BRUCELLOSIS RING TESTING

|                             | Division of Animal<br>Industry Laboratory | Out-of-State<br>Laboratories | Total   |
|-----------------------------|---|------------------------------|---------|
| Herds tested                | 5,215                                     | 56                           | 5,271   |
| Animals in tested herds     | 252,806                                   | 2,234                        | 255,040 |
| Clean herds                 | 4,671                                     | 54                           | 4,725   |
| Animals in clean herds      | 226,261                                   | 2,135                        | 228,396 |
| Suspicious herds            | 544                                       | 2                            | 546     |
| Animals in suspicious herds | 26,545                                    | 99                           | 26,644  |

## BRUCELLOSIS TESTS OF IMPORTED ANIMALS

| Veterinarians Testing    | Cattle |         |
|--------------------------|--------|---------|
|                          | Lots   | Animals |
| State                    | 625    | 6,738   |
| Federal                  | 225    | 3,704   |
| Accredited practitioners | 304    | 6,191   |
| Total                    | 1,154  | 16,633  |
| Reactors — 19 — 0.11%    |        |         |

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## TUBERCULOSIS REACTORS INDEMNIFIED

July 1, 1958 to June 30, 1959

|  |             |          |
|--|-------------|----------|
| Cattle appraised                               | Total       |          |
| Registered                                     | 34          |          |
| Grade  | 116         |          |
| Total  | 150         |          |
| Salvage  |             | Average  |
| Registered                                     | \$6,748.80  | \$198.49 |
| Grade  | 22,215.96   | 191.52   |
| Total  | \$28,964.76 | 193.10   |
| State indemnity                                |             |          |
| Registered                                     | \$5,057.40  | \$148.75 |
| Grade  | 8,530.99    | 73.54    |
| Total  | \$13,588.39 | 90.59    |
| Federal indemnity                              |             |          |
| Registered                                     | \$1,700.00  | \$50.00  |
| Grade  | 2,888.15    | 24.90    |
| Total  | \$4,588.15  | 30.59    |
| Sum of salvage, Federal<br>and State indemnity | \$47,141.30 | \$314.28 |

Total State indemnity paid for tuberculin test reactors from the beginning of this work in 1916 to June 30, 1959—\$4,015,261.94.

## Infected Herds as of June 30, 1959

Tuberculosis  
58

Brucellosis  
114

## STATE DEPARTMENT OF AGRICULTURE

## BRUCELLOSIS REACTORS INDEMNIFIED

|                           | July 1, 1958<br>to June 30, 1959 | December 16, 1940<br>to June 30, 1959 |
|---------------------------|----------------------------------|---------------------------------------|
| Cattle appraised          |                                  |                                       |
| Registered                | 65                               | 1,697                                 |
| Grade                     | 694                              | 11,182                                |
| Total                     | 759                              | 12,879                                |
| Appraised value           |                                  |                                       |
| Registered                | \$30,410.00                      | \$520,730.00                          |
| Grade                     | 249,990.00                       | 2,874,974.40                          |
| Total                     | \$280,400.00                     | \$3,395,704.40                        |
| Average appraised value   |                                  |                                       |
| Registered                | \$467.85                         | \$306.85                              |
| Grade                     | 360.22                           | 248.17                                |
| Total                     | \$369.43                         | \$263.66                              |
| Salvage                   |                                  |                                       |
| Registered                | \$12,537.41                      | \$177,453.97                          |
| Grade                     | 129,837.14                       | 1,324,361.29                          |
| Total                     | \$142,374.55                     | \$1,501,815.26                        |
| Average salvage           |                                  |                                       |
| Registered                | \$192.88                         | \$104.57                              |
| Grade                     | 187.08                           | 118.44                                |
| Total                     | \$187.58                         | \$116.69                              |
| State indemnity           |                                  |                                       |
| Registered                | \$9,727.91                       | \$190,763.12                          |
| Grade                     | 51,640.44                        | 746,553.09                            |
| Total                     | \$61,368.35                      | \$937,316.21                          |
| Average State indemnity   |                                  |                                       |
| Registered                | \$149.66                         | \$112.41                              |
| Grade                     | 74.41                            | 66.76                                 |
| Total                     | \$80.85                          | \$72.78                               |
| Federal indemnity         |                                  |                                       |
| Registered                | \$3,225.00                       | \$74,581.08                           |
| Grade                     | 17,334.71                        | 258,941.57                            |
| Total                     | \$20,559.71                      | \$333,522.65                          |
| Average Federal Indemnity |                                  |                                       |
| Registered                | \$49.62                          | \$43.95                               |
| Grade                     | 24.98                            | 23.16                                 |
| Total                     | \$27.09                          | \$25.90                               |

## BRUCELLOSIS SERVICE FEES AND INDEMNITY PAID

1945-1959

|           | State<br>Indemnity<br>Paid | Federal<br>Indemnity<br>Paid | State<br>Veterinary<br>Service Fees<br>For Testing | Federal<br>Veterinary<br>Service Fees<br>For Testing | State<br>Veterinary<br>Service Fees<br>For Vaccination | Federal<br>Veterinary<br>Service Fees<br>For Vaccination |
|-----------|----------------------------|------------------------------|--|--|--|--|
| 1958-1959 | \$61,368.35                | \$20,559.71                  | \$543.75   | \$34,004.10  | \$1,292.50   | \$17,370.50  |
| 1957-1958 | 98,268.10                  | 33,164.99                    | 2,279.90   | 37,373.95  | 1,051.95   | 17,242.50  |
| 1956-1957 | 143,400.01                 | 48,048.65                    | 8,542.85   | 47,336.63  | 9,636.50   | 10,173.50  |
| 1955-1956 | 168,913.00                 | 56,516.13                    | 14,433.25  | 41,585.98  | 22,024.50  | .....  |
| 1954-1955 | 142,561.23                 | 46,105.99                    | 24,880.25  | 18,554.00  | 20,790.50  | .....  |
| 1953-1954 | 53,787.83                  | 8,071.00                     | 37,602.55  | .....  | 24,121.50  | .....  |
| 1952-1953 | 30,883.20                  | 10,339.77                    | 33,826.95  | .....  | 25,771.50  | .....  |
| 1951-1952 | 23,676.13                  | 7,950.45                     | 12,427.85  | .....  | 24,480.50  | .....  |
| 1950-1951 | 14,070.37                  | 4,904.19                     | 8,973.50   | .....  | 22,447.50  | .....  |
| 1949-1950 | 17,027.83                  | 5,745.34                     | 7,395.05   | .....  | 21,137.50  | .....  |
| 1948-1949 | 18,521.50                  | 6,289.40                     | 6,397.05   | .....  | 18,704.00  | .....  |
| 1947-1948 | 20,666.25                  | 7,077.12                     | 5,312.75   | .....  | 17,210.50  | .....  |
| 1946-1947 | 17,814.89                  | 6,337.06                     | 3,358.90   | .....  | 14,975.00  | .....  |
| 1945-1946 | 16,349.96                  | 6,835.27                     | 1,916.00   | .....  | .....  | .....  |



## LEPTOSPIROSIS

A survey of the incidence of leptospirosis in New Jersey was conducted on all herds and cattle tested for a six-month period from January to June, inclusive. There were 3,525 herds tested, of which 1,283 showed suspicious reactions or 36.4 per cent. Of 70,928 cattle in these herds tested, 3,900 or 5.5 per cent were suspicious.

The incidence of this disease is not as great as was first suspected. We will continue to test the cattle in the herds of the farmers that request such tests.

At the present time no program for the eradication of this disease is contemplated because the knowledge we have is not sufficient to warrant any action. Vaccination will be recommended in those herds in which infection is suspected and if the practitioner deems it necessary. This will be on a voluntary basis and at the expense of the owner.

## ANTHRAX

Four cases of anthrax were disclosed during the past fiscal year. The mink farm of Samuel Kawaleski, Riverside, was found to be infected with anthrax in November. Infected animals were destroyed and the premises cleaned and disinfected with no further evidence of infection.

A cow from the herd of Michael Lamb, Englishtown, which died suddenly in February and was sent to the Suburban Mink Ranch at Marlboro, showed suspicious evidence. Anthrax samples sent to our laboratory confirmed the presence of infection. The infected carcass was disposed of in accordance with standard procedures and the mink ranch cleaned and disinfected. The herd of Michael Lamb was also quarantined, the animals vaccinated, and the premises cleaned and disinfected. There was no further evidence of infection.

The worst outbreak occurred in May in the herd of Leon Tice, Monroeville, where subsequent infection of a swine herd was directly traceable to this farm through offal obtained from the Irell Packing Company, Monroeville. The waste material which was used as swine feed, had been cooked but not to a high enough temperature nor long enough to kill the spore of the anthrax organisms. Mr. Leon Tice became affected during this outbreak, but was successfully treated and recovered. In all, there were seven cows and one goat infected in the Tice outbreak. The cattle herd was vaccinated and very thorough cleaning and disinfection were conducted.

The swine herd of Norman Dilks, Monroeville, was found to have two animals infected; one of which was slaughtered and the organism found, the other was treated with penicillin and recovered.

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Anthrax in swine is manifested usually by swelling of the lymph glands in the throat area or by intestinal involvement causing a profuse bloody diarrhea. Treatment of swine with penicillin is usually successful and vaccination of swine herds is not recommended.

There was much discussion and excitement in Cumberland and Salem counties over this outbreak. Vaccine was procured and offered to the farmers who requested vaccination of their herds.

The policy on the handling and vaccination of anthrax infected herds has been established and is as follows:

The practicing veterinarian will vaccinate the infected herds with vaccine supplied by the Department of Agriculture. In those instances in which the practicing veterinarian cannot make arrangements to do the work at the time deemed necessary by the Department, the Department then reserves the right to have the area veterinary supervisor immediately inject the herd for its own protection. The Department of Health is to be promptly notified of infection, and informed of measures taken to clean and disinfect the premises. Disposal of infected animals is done in accordance with established procedures acceptable to both departments.

#### CERTIFICATION OF IMPORTS AND EXPORTS

All cattle moved into New Jersey are required to comply with New Jersey laws and regulations. An official health certificate from the state or country of origin gives the history of each animal. The animals are then examined, and certain classes of animals are tested as indicated. The table titled "Cattle and Goats Imported and Released" shows the number of various classes that were imported, and the states and countries from which they were moved.

All states and countries have laws and regulations governing entry of cattle. The Division of Animal Industry attempts to keep acquainted with the most recent laws and regulations of all states. Official health certificates are issued covering cattle moved out of New Jersey. If the movement is to another country, the certificate is sent to the local office of the United States Department of Agriculture to be certain that the requirements of the country of designation are complied with. The table titled "Cattle and Goats Shipped Out of New Jersey" shows the number of animals moved out of New Jersey and the states or countries to which they were moved.

## STATE DEPARTMENT OF AGRICULTURE

## CATTLE AND GOATS IMPORTED AND RELEASED

July 1, 1958 to June 30, 1959

| Origin         | Adult Dairy<br>and Breeding | Calves Under<br>6 Months and<br>Vaccinated Animals<br>Under 24 Months | Feeder<br>Steers | Goats |
|----------------|-----------------------------|---|------------------|-------|
| California     | ...                         | ..  | ..               | 1     |
| Canada         | 499                         | 17  | ..               | ..    |
| Connecticut    | 420                         | 4   | ..               | ..    |
| Delaware       | 227                         | 4   | ..               | ..    |
| Florida        | 2                           | ..  | ..               | ..    |
| Idaho          | ...                         | ..  | 69               | ..    |
| Illinois       | 1                           | 1   | ..               | ..    |
| Indiana        | 1                           | ..  | ..               | ..    |
| Isle of Jersey | 50                          | ..  | ..               | ..    |
| Kansas         | 1                           | ..  | ..               | ..    |
| Maine          | 11                          | 1   | ..               | ..    |
| Maryland       | 160                         | 38  | ..               | ..    |
| Massachusetts  | 13                          | 11  | ..               | ..    |
| Michigan       | 329                         | 17  | ..               | ..    |
| Minnesota      | 12                          | ..  | ..               | ..    |
| Mississippi    | 1                           | ..  | ..               | ..    |
| Missouri       | 2                           | ..  | ..               | ..    |
| New Hampshire  | 47                          | 1   | ..               | ..    |
| New York       | 1,828                       | 11  | ..               | ..    |
| Ohio           | 50                          | 4   | ..               | ..    |
| Oklahoma       | 1                           | ..  | ..               | ..    |
| Oregon         | 1                           | ..  | ..               | ..    |
| Pennsylvania   | 751                         | 63  | 983              | ..    |
| Rhode Island   | 1                           | ..  | ..               | ..    |
| Vermont        | 690                         | 36  | ...              | ..    |
| Virginia       | 116                         | 18  | 131              | ..    |
| Washington     | 5                           | ..  | ..               | ..    |
| West Virginia  | 3                           | ..  | ..               | ..    |
| Wisconsin      | 11,801                      | 245   | ..               | ..    |
| Totals         | 16,933                      | 471   | 1,183            | 1     |

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## CATTLE AND GOATS SHIPPED OUT OF NEW JERSEY

July 1, 1958 to June 30, 1959

| Destination        | Cattle |         | Goats |         |
|--------------------|--------|---------|-------|---------|
|                    | Lots   | Animals | Lots  | Animals |
| Africa             | ..     | ..      | 1     | 2       |
| Alabama            | 5      | 5       | ..    | ..      |
| Arizona            | 2      | 3       | ..    | ..      |
| California         | 6      | 6       | 1     | 3       |
| Canada             | 14     | 25      | ..    | ..      |
| Central America    | 3      | 64      | ..    | ..      |
| Colorado           | 22     | 22      | ..    | ..      |
| Connecticut        | 24     | 122     | ..    | ..      |
| Costa Rica         | 1      | 1       | ..    | ..      |
| Delaware           | 52     | 254     | ..    | ..      |
| Florida            | 21     | 70      | 1     | 5       |
| Georgia            | 16     | 26      | ..    | ..      |
| Germany            | 1      | 1       | ..    | ..      |
| Greece             | 1      | 1       | ..    | ..      |
| Idaho              | 1      | 1       | ..    | ..      |
| Illinois           | 18     | 22      | ..    | ..      |
| Indiana            | 12     | 14      | ..    | ..      |
| Iowa               | 6      | 6       | ..    | ..      |
| Italy              | 1      | 3       | ..    | ..      |
| Kentucky           | 4      | 19      | ..    | ..      |
| Louisiana          | 5      | 8       | ..    | ..      |
| Maine              | 4      | 16      | ..    | ..      |
| Maryland           | 88     | 430     | ..    | ..      |
| Massachusetts      | 5      | 17      | ..    | ..      |
| Michigan           | 6      | 44      | ..    | ..      |
| Minnesota          | 7      | 31      | ..    | ..      |
| Mississippi        | 11     | 25      | ..    | ..      |
| Missouri           | 8      | 85      | ..    | ..      |
| Nebraska           | 1      | 1       | ..    | ..      |
| Nevada             | 2      | 96      | ..    | ..      |
| New Hampshire      | 1      | 3       | ..    | ..      |
| New Mexico         | 1      | 1       | ..    | ..      |
| New York           | 131    | 584     | ..    | ..      |
| North Carolina     | 355    | 565     | ..    | ..      |
| North Dakota       | 2      | 2       | ..    | ..      |
| Ohio               | 29     | 65      | ..    | ..      |
| Oklahoma           | 2      | 3       | ..    | ..      |
| Oregon             | 1      | 20      | ..    | ..      |
| Pennsylvania       | 480    | 1,094   | 1     | 2       |
| Phillipine Islands | 1      | 1       | ..    | ..      |
| Rhode Island       | 3      | 10      | ..    | ..      |
| South America      | 2      | 3       | ..    | ..      |
| South Carolina     | 17     | 77      | ..    | ..      |
| South Dakota       | 1      | 1       | ..    | ..      |
| Tennessee          | 5      | 6       | ..    | ..      |
| Texas              | 21     | 67      | ..    | ..      |
| Utah               | 4      | 4       | ..    | ..      |
| Vermont            | 8      | 11      | ..    | ..      |
| Virginia           | 86     | 960     | 1     | 1       |
| Virgin Islands     | 8      | 28      | ..    | ..      |
| West Virginia      | 4      | 13      | ..    | ..      |
| Wisconsin          | 9      | 10      | ..    | ..      |
| Wyoming            | 1      | 2       | ..    | ..      |
| Totals             | 1,519  | 4,948   | 5     | 13      |

## SHEEP SCABIES

Periodic inspections of sheep flocks were made during the year to examine for scabies and other conditions. As the year ended, 414 flocks containing 10,202 sheep were under supervision.

Scabies was observed in four flocks. The flocks were quarantined. Therapeutic dipping was supervised. All four flocks were released from quarantine by the end of the fiscal year.

## SCRAPIE

Eight head of sheep that were exposed to scrapie or were the progeny of sheep affected with scrapie were sent to slaughter in August, 1958. Three of these animals were eligible for indemnity. They were the entire flock of Virginia Huff, Great Meadows, and no other sheep were replaced on the premises.

Three other flocks continued to be inspected periodically with no evidence of scrapie apparent. It is necessary to hold these flocks under surveillance for 42 months in order to be sure that the animals which might have been exposed do not become affected. No infection has been apparent from these inspections. The flock of Lee Wagner, Green Village, was released in August of 1958 following the completion of the 42 months surveillance.

Dr. E. L. Brower attended a scrapie study group meeting in Washington, D. C., on November 17 and 18. The problem of the control, transmission and incidence of this relatively new disease in sheep was fully discussed and it is recognized that much study and knowledge is needed to cope with it.

## SHEEP INSPECTION

July 1, 1958 to June 30, 1959

|  |        |
|--|--------|
| Number flocks under supervision                        | 414    |
| Number sheep in flocks under supervision               | 10,202 |
| Number inspections conducted                           | 399    |
| Number sheep inspected                                 | 10,233 |
| Number farms where scabies was found                   | ...    |
| Number farms remaining under quarantine at end of year | ...    |

Indemnity, in the amount of \$90.00, was paid for three sheep slaughtered because of exposure to scrapie.

There were five lots of 49 sheep shipped out of New Jersey.

## MISCELLANEOUS DISEASES

Several requests from private veterinary practitioners were received during the year to investigate unknown conditions in the sudden death of animals in several parts of the State. On post-mortem examination the causes were determined as acute indigestion, plant poisoning and malignant edema. The field men stand ready at all times to render assistance to the practitioners in the diagnosis of obscure cases where their help is desired and requested.

## EQUINE ENCEPHALOMYELITIS

Two cases of equine encephalomyelitis were reported in Gloucester County in September, 1958. Another case was reported in Cape May County in October, 1958. Veterinarians reporting these cases vaccinated the remaining horses on the farms. There was no subsequent infection.

## INSPECTION OF DISPOSAL PLANTS

The Division of Animal Industry conducted the required investigations on 30 disposal plants prior to licensing.

## SWINE DISEASE CONTROL

Cooking of garbage and sanitation of swine farms continued to improve during the past fiscal year. All garbage feeding farms, with the exception of the Secaucus area, were licensed for 1959. All requirements for full licensing were met, and no conditional licenses were issued.

Several violators were detected feeding raw garbage and hearings were held for the following farmers:

On July 31, the Secretary of Agriculture invoked a suspension of the license of Anthony Penke, Sewell, for 30 days, during which time he was not allowed to feed any garbage to his swine.

In September, the hearing of Joseph Scanlon, Farm No. 2, Sewell, resulted in a license suspension of 100 days and a fine of 300 dollars for two violations of the garbage cooking law. The fine was suspended subject to good conduct during the 100-day license suspension.

On May 5, 1959, a hearing was held for three farmers who had not met the requirements for licensing under the garbage feeding swine law. James Givens, Trenton, and Roy A. Scott, Paulsboro, appeared and, as they had met the requirements of sanitation just prior to the hearing, were given stiff warnings to comply at all times in the future. William Cormaney, Sewell, failed to appear at this hearing because of a misunderstanding and a future hearing was set for May 19. He likewise



had met the deadline and was given a warning that future violations might cause him to have his license revoked or to be fined.

At the end of the fiscal year there were 276 licensed garbage feeding farms plus two new farms under process of being licensed. The inspections on these farms were made on a bi-weekly basis in regard to sanitation. Periodic checks of temperatures of the cooking of garbage were also made.

The sanitation of garbage feeding swine farms was greatly improved during the past year. Constant checking by our inspectors should result in further improvements.

On the advice of the Attorney General's office, the swine farmers in the Secaucus area were not licensed for 1959, as they were under a contempt of court order to vacate as of November 1, 1958. The Board of Agriculture agreed to this procedure. Those farmers who presented evidence of the purchase of farms in other areas were allowed to continue, while the others were depopulated as quickly as possible. As of July 1, 1959, there were 10 farms left in Secaucus; eight garbage feeders and two grain feeders. As this was the end of the extension period, we are awaiting word of action by the courts on these remaining farms.

SWINE SURVEY  
(Garbage-Fed Swine)  
June 30, 1959

| County     | Licensed |         | Non-Licensed |         | Total |         |
|------------|----------|---------|--------------|---------|-------|---------|
|            | Herds    | Animals | Herds        | Animals | Herds | Animals |
| Atlantic   | 26       | 4,640   | ..           | ..      | 26    | 4,640   |
| Bergen     | 2        | 2,700   | ..           | ..      | 2     | 2,700   |
| Burlington | 28       | 17,374  | ..           | ..      | 28    | 17,374  |
| Camden     | 10       | 3,793   | ..           | ..      | 10    | 3,793   |
| Cape May   | 23       | 5,476   | ..           | ..      | 23    | 5,476   |
| Cumberland | 7        | 1,925   | ..           | ..      | 7     | 1,925   |
| Essex      | ..       | ....    | ..           | ..      | ..    | ....    |
| Gloucester | 88       | 79,955  | 1            | 33      | 89    | 79,988  |
| Hudson     | ..       | ....    | 8            | 7,950   | 8     | 7,950   |
| Hunterdon  | 5        | 3,335   | ..           | ..      | 5     | 3,335   |
| Mercer     | 14       | 1,444   | ..           | ..      | 14    | 1,444   |
| Middlesex  | 10       | 1,240   | ..           | ..      | 10    | 1,240   |
| Monmouth   | 25       | 8,751   | 2            | 746     | 27    | 9,497   |
| Morris     | 10       | 3,225   | 1            | 30      | 11    | 3,255   |
| Ocean      | 7        | 943     | ..           | ..      | 7     | 943     |
| Passaic    | ..       | ....    | ..           | ..      | ..    | ....    |
| Salem      | 3        | 180     | ..           | ..      | 3     | 180     |
| Somerset   | 6        | 1,535   | 1            | 25      | 7     | 1,560   |
| Sussex     | ..       | ....    | ..           | ..      | ..    | ....    |
| Union      | 1        | 50      | ..           | ..      | 1     | 50      |
| Warren     | ..       | ....    | ..           | ..      | ..    | ....    |
| Total      | 265      | 136,566 | 13           | 8,784   | 278   | 145,350 |

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INSPECTION OF SWINE HERDS  
July 1, 1958 to June 30, 1959

|                                | State | Federal | Total |
|--------------------------------|-------|---------|-------|
| Grain fed farms                | 459   | 273     | 732   |
| Heat treated garbage fed farms | 2,717 | 3,579   | 6,296 |
| Raw garbage fed farms          | 77    | 34      | 111   |
| Total                          | 3,253 | 3,886   | 7,139 |

## SWINE MOVED UNDER PERMIT

|                                | Slaughter | Feeder  | Breeder | Total   |
|--------------------------------|-----------|---------|---------|---------|
| Grain fed farms                | 29,282    | 19,210  | 27      | 48,519  |
| Heat treated garbage fed farms | 137,113   | 149,516 | 118     | 286,747 |
| Raw garbage fed farms          | ....      | 44      | ...     | 44      |
| Total                          | 166,395   | 168,770 | 145     | 335,310 |

## SWINE IMPORTED

|               |           |
|---------------|-----------|
| For slaughter | 1,026,723 |
| For feeding   | 42,964    |
| For breeding  | 23        |

## BUREAU OF POULTRY DISEASE CONTROL

## PULLORUM DISEASE

During the fiscal year, 688,365 fowl were tested in the field for pullorum disease. This represents a decline of 113,329 from 1957-1958. The number of reactors decreased to 12 or 0.001 per cent, as compared with 95 or 0.011 per cent last year.

A substantial reduction in the incidence of pullorum disease has been noted for the past year. While this is good news, it is well to continue to be constantly vigilant in disease control.

During the past year there were two flocks quarantined for pullorum disease. One flock previously quarantined was released.

## FOWL TYPHOID

During 1958-1959, 16 flocks of poultry were quarantined. Eleven were released after effective control methods had been applied.

In many cases, the flocks quarantined for fowl typhoid are being fed NF-180 with very good results in regard to mortality. In most cases, production seems to be good, and under present conditions the farmers are keeping these birds for egg production.

## PULLORUM-TYPHOID CONTROL

|                           |         |
|---------------------------|---------|
| Fowl tested in field      | 688,365 |
| Number reacting           | 12      |
| Per cent reacting         | 0.001   |
| Fowl tested in laboratory | 9,022   |
| Number reacting           | ....    |
| Per cent reacting         | ....    |
| Total fowl tested         | 697,387 |
| Total fowl reacting       | 12      |
| Per cent reacting         | 0.001   |

## AVIAN TUBERCULOSIS

During the year avian tuberculosis was disclosed in the flock of Joseph Fisher, Bridgeton. Avian tuberculosis is relatively rare in New Jersey, and this apparent outbreak was quite interesting and resulted in considerable time spent in following up this condition.

One of our agents learned from a South Jersey poultry dressing plant that chickens received from the Fisher farm were affected with tuberculosis, and that many were lost on inspection. Our agent contacted the owner and discussed the matter thoroughly. There were about 10,000 White Leghorn birds in this flock. It was decided to test a small group of these birds to confirm the fact that tuberculosis did exist in the flock. About 50 birds were tuberculin tested. The test disclosed five reactors. Three of these reactors showed typical lesions of avian tuberculosis on post mortem. Another group of 466 birds was tuberculin tested and 84 reactors were disclosed. At this point the owner was advised to sell off all old birds for slaughter under proper inspection. The entire farm was quarantined. A complete plan was made regarding the operation on this farm and given to the owner. Since the quarantine was placed on this farm, all the old stock has been sent to slaughter under official permit. It was suggested to the owner that we be permitted to conduct a tuberculin test on a percentage basis on all producing birds and a few young birds, in order to determine if the younger birds are clean. The owner was most cooperative, and this test will be conducted in the near future.

## TERMINAL MARKET POULTRY INSPECTION

The Department's agent at the Vanderpool Street Market in Newark inspected 4,563 truck loads of poultry during the year. These consisted of some 4,362,500 birds which weighed 22,843,000 pounds. Of this volume, 36,975 birds weighing 159,450 pounds were condemned.

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INSPECTION OF POULTRY  
July 1, 1958 to June 30, 1959

| State                                 | Truck Loads | Birds     | Approximate Weight |
|---------------------------------------|-------------|-----------|--------------------|
| Connecticut                           | 401         | 464,000   | 2,005,000          |
| Delaware                              | 999         | 1,092,000 | 4,995,000          |
| Kentucky                              | 14          | 8,000     | 70,000             |
| Maryland                              | 8           | 15,000    | 40,000             |
| Massachusetts                         | 34          | 34,000    | 170,000            |
| New Hampshire                         | 264         | 270,000   | 1,320,000          |
| New Jersey                            | 1,363       | 1,286,000 | 6,815,000          |
| New York                              | 389         | 369,000   | 1,975,000          |
| North Carolina                        | 69          | 32,500    | 355,000            |
| Pennsylvania                          | 788         | 593,000   | 3,940,000          |
| Rhode Island                          | 165         | 170,000   | 825,000            |
| Virginia                              | 69          | 29,000    | 333,000            |
| Total                                 | 4,563       | 4,362,500 | 22,843,000         |
| Number of birds condemned             |             |           | 36,975             |
| Approximate weight of birds condemned |             |           | 159,450            |

## EXPORTS OF HATCHING EGGS AND POULTRY

Most countries have laws and regulations governing entry of hatching eggs and poultry. These requirements usually include inspection of farms from which these eggs and poultry were obtained. The table below titled "New Jersey Imports of Hatching Eggs and Poultry" shows the countries to which New Jersey consignors shipped, and the classes of eggs and poultry involved. The Division of Animal Industry conducts this type of activity in cooperation with the local office of the United States Department of Agriculture.

NEW JERSEY EXPORTS OF HATCHING EGGS AND POULTRY  
July 1, 1958 to June 30, 1959

| Country to Which Consigned | Hatcheries Shipping | Hatching Eggs | Baby Chicks | Cockerels | Pullets |
|----------------------------|---------------------|---------------|-------------|-----------|---------|
| Azores                     | 1                   | ....          | ....        | 100       | 350     |
| Belgium                    | 1                   | ....          | ....        | 200       | ....    |
| Bermuda                    | 3                   | 30            | 458         | ....      | ....    |
| British Guiana             | 2                   | 17,520        | 9,500       | 4,050     | 450     |
| British West Indies        | 4                   | 1,800         | 79,500      | 20,600    | 3,700   |
| Canada                     | 6                   | 11,120        | 197,881     | 28,900    | 3,800   |
| Chile                      | 2                   | ....          | 100         | 640       | 1,160   |
| Cuba                       | 2                   | ....          | ....        | 75        | 550     |
| Dutch Guiana               | 1                   | ....          | 1,400       | ....      | ....    |
| Ecuador                    | 1                   | ....          | 1,000       | ....      | ....    |
| Egypt                      | 1                   | 600           | 400         | ....      | ....    |
| Germany                    | 3                   | 7,400         | ....        | ....      | ....    |
| Greece                     | 2                   | 100           | ....        | 15        | 85      |
| Holland                    | 1                   | 400           | ....        | ....      | ....    |
| Italy                      | 3                   | ....          | 900         | ....      | 200     |
| Panama                     | 1                   | 19,800        | ....        | ....      | ....    |
| Puerto Rico                | 5                   | 1,015,030     | 229,948     | 26,950    | 72,375  |
| Thailand                   | 1                   | 100           | ....        | ....      | ....    |
| Venezuela                  | 3                   | 672,460       | 1,000       | 50        | 950     |
| West Africa                | 1                   | ....          | 3,000       | ....      | ....    |
| Totals                     | 44                  | 1,746,360     | 525,087     | 81,580    | 83,620  |

## DIVISION LABORATORY REPORT

July 1, 1958 to June 30, 1959

## BLOOD TESTS MADE FOR BRUCELLOSIS ON INSHIPPED ANIMALS

|                  |         |
|------------------|---------|
| Samples received | 16,633* |
| Unfit for test   | 30      |
| Sample tested    | 16,603* |
| Reactors         | 68      |
| Negative         | 16,535  |

## BLOOD TESTS MADE FOR BRUCELLOSIS ON ANIMALS IN HERDS UNDER SUPERVISION

|                  |         |
|------------------|---------|
| Samples received | 136,714 |
| Unfit for test   | 319     |
| Samples tested   | 136,395 |
| Reactors         | 935     |
| Suspicious       | 4,183   |
| Negative         | 131,277 |

## MILK RING (BRT) TESTS FOR BRUCELLOSIS

|                |       |
|----------------|-------|
| Samples tested | 6,732 |
| Suspicious     | 638   |
| Negative       | 6,094 |

## HOTIS TEST MADE FOR MASTITIS ON MILK SAMPLES OF ANIMALS

|                   |      |
|-------------------|------|
| Number of animals | 199  |
| Number of samples | 456  |
| Streptococci      | .... |
| Negative          | 259  |

## BLOOD TESTS MADE FOR PULLORUM DISEASE OF POULTRY

|                  |        |
|------------------|--------|
| Samples received | 11,635 |
| Samples tested   | 11,635 |
| Negative         | 11,635 |

## BLOOD TESTS MADE FOR LEPTOSPIROSIS OF ANIMALS

|                  |        |
|------------------|--------|
| Samples received | 77,239 |
| Negative         | 70,707 |
| Suspicious       | 6,532  |
| Unfit            | ....   |

## BACTERIOLOGICAL, MICROSCOPIC AND POST-MORTEM EXAMINATION

July 1, 1958 to June 30, 1959

| Lots | Animal | No. | Material                | Condition Suspected            | Findings               |
|------|--------|-----|-------------------------|--------------------------------|------------------------|
| 73   | Avian  | 206 | Chickens                | <i>S. pullorum</i>             | Negative               |
| 2    | Avian  | 4   | Chickens                | <i>S. pullorum</i>             | <i>S. pullorum</i>     |
| 1    | Avian  | 2   | Liver and spleen        | Fowl typhoid                   | Fowl typhoid           |
| 2    | Avian  | 2   | Turkey liver and spleen | <i>S. pullorum</i>             | Negative               |
| 1    | Avian  | 1   | Chicken liver           | Fowl typhoid                   | Negative               |
| 1    | Avian  | 8   | Chicks                  | <i>S. pullorum</i> and typhoid | Negative               |
| 1    | Avian  | 1   | Chicken                 | Unknown                        | Leukosis               |
| 1    | Avian  | 2   | Chickens                | Unknown                        | Tapeworms and leukosis |

\* This figure includes titre carrying calfhooed vaccinates eligible for entry.

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| Lots | Animal  | No. | Material                     | Condition Suspected              | Findings                         |
|------|---------|-----|------------------------------|----------------------------------|----------------------------------|
| 1    | Avian   | 1   | Chicken liver and ovary      | <i>S. pullorum</i>               | Negative                         |
| 1    | Avian   | 1   | Sub-cutus of chicken         | Tuberculosis                     | Negative                         |
| 1    | Avian   |     | Frozen livers                | Pathogenic bacteria              | Negative                         |
| 1    | Avian   | 1   | Meat and poultry             | Anthrax                          | Negative                         |
| 5    | Bovine  | 6   | Blood samples                | Anthrax                          | Negative                         |
| 7    | Bovine  | 7   | Ears                         | Anthrax                          | Negative                         |
| 1    | Bovine  | 1   | Ears and swabs               | Anthrax                          | <i>B. anthracis</i>              |
| 3    | Bovine  | 6   | Blood samples and swabs      | Anthrax                          | Negative                         |
| 1    | Bovine  | 1   | Spleen and intestine         | Anthrax                          | Negative                         |
| 1    | Bovine  | 1   | Spleen                       | Anthrax                          | <i>B. anthracis</i>              |
| 1    | Bovine  | 1   | Spleen, heart, blood         | Anthrax                          | Negative                         |
| 7    | Bovine  | 8   | Fetus                        | <i>Brucella abortus</i>          | Negative                         |
| 1    | Bovine  | 1   | Calf                         | <i>Brucella abortus</i>          | Negative                         |
| 1    | Bovine  | 20  | Milk samples                 | <i>Brucella abortus</i>          | Negative                         |
| 1    | Bovine  | 1   | Sample fluid hygroma on knee | <i>Brucella abortus</i>          | Negative                         |
| 1    | Bovine  | 1   | Sample vaginal fluid         | <i>Brucella abortus</i>          | Negative                         |
| 1    | Bovine  | 1   | Fecal material from calf     | Parasitic ova                    | Strongylidae                     |
| 1    | Bovine  | 1   | Bull semen                   | Trichomonads                     | Negative                         |
| 1    | Bovine  | 1   | Liver and kidney             | Cause of death                   | Lead poisoning                   |
| 1    | Bovine  | 1   | Bull semen                   | <i>Vibrio fetus</i>              | Negative                         |
| 1    | Bovine  | 1   | Bovine feces                 | Coccidia and <i>Vibrio fetus</i> | Negative                         |
| 1    | Bovine  | 1   | Pus sample                   | Pathogenic bacteria              | Negative                         |
| 1    | Bovine  | 1   | Milk sample                  | Bacteria causing mastitis        | <i>Strep. agalactiae</i>         |
| 1    | Bovine  | 1   | Premature calf               | Cause of death                   | Omphalophlebitis and septicemia  |
| 1    | Bovine  | 1   | Stomach and bladder of fetus | Brucellosis and vibrio           | Negative                         |
| 1    | Bovine  | 1   | Blood from udder and urine   | Leptospirosis                    | Negative                         |
| 1    | Bovine  | 1   | Milk sample                  | Leptospirosis                    | <i>Leptospira pomona</i> present |
| 1    | Caprine | 2   | Blood samples                | Anthrax                          | Negative                         |
| 1    | Equine  | 1   | Fetus                        | <i>Salmonella abortus equina</i> | Negative                         |
| 1    | Ovine   | 1   | Dead lamb                    | Cause of death                   | Severe gastroenteritis           |
| 1    | Ovine   | 1   | Dead ram                     | Cause of death                   | Enterotoxemia                    |
| 1    | Ovine   | 2   | Lambs                        | Cause of death                   | No pathogens recovered           |
| 1    | Ovine   | 18  | Blood samples and tissues    | Brucellosis and Leptospirosis    | Negative                         |
| 1    | Porcine | 1   | Five week old pig            | Anthrax                          | Negative                         |
| 1    | Porcine | 1   | Ear                          | Malignant edema pathogens        | Negative                         |
| 1    | Porcine | 1   | Hog liver                    | Anthrax                          | <i>B. anthracis</i>              |
| 1    | Porcine | 1   | Ear                          | Anthrax                          | Negative                         |
| 1    | Rodent  | 2   | Minks                        | Anthrax                          | <i>B. anthracis</i>              |
| 1    | Rodent  | 1   | Mink                         | Anthrax                          | Negative                         |
| 1    | Rodent  | 1   | Culture plate from mink      | Pathogenic bacteria              | Negative                         |



## Report of the Division of Plant Industry

FRANK A. SORACI, *Director*

### BUREAU OF ENTOMOLOGY

#### NURSERY INSPECTION

During the year July 1, 1958 to June 30, 1959, 997 nurseries were inspected for issuance of the certificate of inspection of this Department. This is an increase of 128 nurseries over the previous year. Infestations, which required control measures before certification could be granted, were found in 237 nurseries. There were 215 more infestations and 44 more nurseries infested than in the previous year.

| Insect Pests   | INSECT INFESTATIONS | Infestations |
|--|---------------------|--------------|
| Birch leaf miner, <i>Fenusa pusilla</i>  |                     | 61           |
| Holly leaf miner, <i>Phytomyza ilicis</i> , <i>P. ilicicola</i> and <i>P. weidhausii</i>   |                     | 52           |
| Bagworm, <i>Thyridopteryx ephemeraeformis</i>  |                     | 48           |
| Andromeda lace bug, <i>Stephanitis globulifera</i>   |                     | 38           |
| Mealybug (Taxus), <i>Pseudococcus cuspidatae</i>   |                     | 35           |
| Spruce gall aphid, <i>Chermes abietis</i> and <i>Chermes cooleyi</i>                       |                     | 35           |
| Azalea lace bug, <i>Stephanitis pyrioides</i>  |                     | 32           |
| Juniper scale, <i>Diaspis carueli</i>  |                     | 29           |
| Oyster shell scale, <i>Lepidosaphes ulmi</i>   |                     | 27           |
| Euonymus scale, <i>Unaspis euonymi</i>   |                     | 27           |
| Sycamore lace bug, <i>Corythucha ciliata</i>   |                     | 25           |
| Rhododendron lace bug, <i>Stephanitis rhododendri</i>                                      |                     | 23           |
| Pine bark aphid, <i>Pineus strobi</i>  |                     | 23           |
| Aphids (unidentified)  |                     | 21           |
| European pine shoot moth, <i>Rhyacionia buoliana</i>                                       |                     | 15           |
| Azalea leaf roller, <i>Gracilaria azaleella</i>  |                     | 14           |
| Eastern tent-caterpillar, <i>Malacosoma americanum</i>                                     |                     | 11           |
| Spider mites, <i>Tetranychus telarius</i> and <i>Metatetranychus ulmi</i>                  |                     | 11           |
| Crown gall (Willows), <i>Agrobacterium temefaciens</i>                                     |                     | 9            |
| White pine weevil, <i>Pissodes strobi</i>  |                     | 9            |
| Crataegus lace bug, <i>Corythucha cydoniae</i>   |                     | 9            |
| Maple callous borer, <i>Conopia aceris</i>   |                     | 8            |
| Juniper webworm, <i>Dichomeris marginella</i>  |                     | 8            |
| Leaf spot (Rhododendron), <i>Cercospora</i> sp., <i>Phyllosticta</i> sp., <i>Phoma</i> sp. |                     | 7            |
| Woolly apple aphid, <i>Eriosoma lanigerum</i>  |                     | 5            |
| Boxwood leaf miner, <i>Monarthropalpus buxi</i>  |                     | 3            |
| Putnam scale, <i>Aspidiotus ancyllis</i>   |                     | 3            |
| Pine leaf scale, <i>Chionaspis pinifoliae</i>  |                     | 3            |
| Armored scale (unidentified)   |                     | 3            |
| Kermes scale, <i>Kermes pubescens</i>  |                     | 2            |
| Tulip scale, <i>Toumeyella liriodendri</i>   |                     | 2            |
| Cedar-apple rust, <i>Gymnosporangium juniperi-virginianae</i>                              |                     | 2            |
| Gouty oak gall, <i>Plagiotrochus punctatus</i>   |                     | 2            |
| Peach tree borer, <i>Sanninoidae exitiosa</i>  |                     | 2            |
| Lilac borer, <i>Podosesia syringae</i>   |                     | 2            |
| Canker (Willows), <i>Botryasphaeria ribis</i> , <i>Valsa sordida</i>                       |                     | 2            |
| Mildew, <i>Microsphaera alni</i>   |                     | 2            |

|   |   |
|---|---|
| Borers (Willow, unidentified)                           | 2 |
| Lecanium scale (unidentified)                           | 2 |
| Oak leaf gall (unidentified)                            | 1 |
| Dogwood twig girdler, <i>Oberia tripunctata</i>         | 1 |
| Cottony scale (crataegus), <i>Pulvinaria vitis</i>      | 1 |
| Elm scale, <i>Gossyparia spuria</i>                     | 1 |
| Rose scale, <i>Aulacaspis rosae</i>                     | 1 |
| Magnolia scale, <i>Neolecanium cornuparvum</i>          | 1 |
| Poplar tent-maker, <i>Ichthyura inclusa</i>             | 1 |
| Mimosa webworm, <i>Homadaula albizziae</i>              | 1 |
| Oriental fruit moth, <i>Grapholitha molesta</i>         | 1 |
| Pine sawfly (unidentified)                              | 1 |
| Pine tip moth, <i>Rhyacionia frustrana</i>              | 1 |
| Grape leafhopper, <i>Erythroneura comes</i>             | 1 |
| Jumping plant lice (unidentified)                       | 1 |
| Apple scab, <i>Venturia inaequalis</i>                  | 1 |
| Juniper needle blight, <i>Phomopsis juniperovora</i>    | 1 |
| Yellow-necked apple caterpillar, <i>Datana ministra</i> | 1 |
| Rose leaf roller (unidentified)                         | 1 |

### *Dealers Certificates*

Certificates were issued to 359 dealers in nursery stock. This represents an increase of 68 dealers over last year. Each dealer must inform the Department of his source of nursery stock before a dealer's certificate is issued. A certificate is issued only when the Department is satisfied that the nursery stock obtained from these sources is free of injurious insects and plant diseases.

During the year 396 inspections were made of dealer establishments to determine whether stock being held over and sold was free of insect pests and plant diseases. The premises of 13 dealers were found to be infested and required control measures.

### *Special Certificates*

Special certificates were issued to 342 private individuals and nurserymen desiring to ship plants out of New Jersey in accordance with the special regulations of the receiving states and foreign countries.

### *Canadian Certificates*

One hundred and seventy special certificates were issued for the movement of plant material to Canada in accordance with the regulations of that Dominion.

### *Special Corn Borer Certificates*

Eighty-two corn borer certificates were issued for the movement of herbaceous plant material into those states having regulations on account of the European corn borer.

*Domestic Inspections*

Twenty inspections were made of plant materials shipped into New Jersey from other states. These inspections are made to check on the efficiency of the inspection services of the other states. One shipment of 485 plane trees, badly girdled by flatheaded borers, was condemned and destroyed.

*Gypsy Moth Inspections*

Twenty-two nurseries located within or near the area quarantined on account of the gypsy moth were inspected during the winter months. No egg masses were found.

*Special (Request) Inspections*

Seventy-six inspections were made for residents of New Jersey who requested identification of insects and plant diseases affecting their premises, and information about their control.

*Native Plant Inspections*

Fifteen inspections were made for persons desiring to move deciduous plant material from the wild. When the plant material was found to be free of injurious insects and plant diseases or when control measures had been satisfactorily completed, a special certificate was issued.

*Truck Inspections*

Fifteen trucks carrying nursery stock were examined during the fall and spring shipping seasons. This effort was made in cooperation with the New Jersey State Police to determine if proper certification was carried and to ascertain whether the stock was free of insect pests and diseases. Of the 15 trucks stopped, nine carried certificates and clean stock. One truck carrying stock from another state, with a certificate, was found to be infested and had to be treated. Nine trucks carried no certificates. The stock carried by these nine trucks was inspected, found to be free of infestation, and permitted to proceed to points of destination in this State.

*Christmas Tree Inspections*

During the month of December, three road blocks were established in cooperation with the New Jersey State Police. Trucks carrying Christmas trees from quarantined areas were stopped to ascertain whether the proper gypsy moth quarantine certificates had been issued for the movement. Nine trucks were stopped, all of which carried valid certificates.

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## POST-ENTRY QUARANTINE INSPECTIONS

During the year 173 inspections were made of plant materials imported from foreign countries in accordance with the requirements of the Foreign Plant Pest Act of the United States Department of Agriculture. Certain restricted plant materials, capable of carrying and spreading virus and other diseases, may be imported into this State from foreign countries, only if such materials are grown under the supervision of this Department until deemed safe. They may then be released to the trade. Most materials are released after two growing seasons, but the holding period may be lengthened or shortened according to the kinds of plants and diseases.

## PLANT MATERIAL IMPORTED DURING 1958-59, BY GENUS

| Genus of Plants     | Number Imported |
|---------------------|-----------------|
| <i>Acer</i>         | 1,826           |
| <i>Anthurium</i>    | 4               |
| <i>Azalea</i>       | 100             |
| <i>Castanea</i>     | 3               |
| <i>Cytisus</i>      | 55              |
| <i>Daphne</i>       | 100             |
| <i>Euonymus</i>     | 250             |
| <i>Fraxinus</i>     | 10              |
| <i>Hydrangea</i>    | 115             |
| <i>Ilex</i>         | 1               |
| <i>Juniperus</i>    | 112             |
| <i>Laburnum</i>     | 149             |
| <i>Rhododendron</i> | 108             |
| <i>Rosa</i>         | 60              |
| <i>Sorbus</i>       | 33              |
| Totals              | 2,926           |

## PLANT MATERIAL RELEASED DURING THE YEAR, BY GENUS

| Genus of Plants              | Number of Plants<br>Originally Imported | Number of Plants<br>Released |
|------------------------------|---|------------------------------|
| <i>Acer</i>                  | 3,730                                   | 2,514                        |
| <i>Aesculus</i>              | 5                                       | 2                            |
| <i>Hydrangea</i>             | 300                                     | 222                          |
| <i>Ilex</i>                  | 300                                     | 48                           |
| <i>Juniperus</i>             | 2,280*                                  | 430*                         |
| <i>Laburnum</i>              | 75                                      | 70                           |
| <i>Malus</i> (Malling Stock) | 300                                     | 294                          |
| <i>Punica</i>                | 2                                       | 2                            |
| <i>Rhododendron</i>          | 3                                       | 3                            |
| <i>Rosa</i>                  | 2,881**                                 | 2,384**                      |
| <i>Sorbus</i>                | 51                                      | 51                           |
| Totals                       | 9,927                                   | 6,020                        |

\* Seven transferred to Florida.

\*\* Eleven transferred to Florida.

## WHITE-FRINGED BEETLE CONTROL

There is now reason to believe that the eradication of the white-fringed beetle, *Graphognathus leucoloma*, from the known infested area in Vineland has been accomplished.

During July, August and early September, 1958, a thorough search was made for adult beetles on the 350-acre control area and other vital points. A representative of the Federal Plant Pest Control Division, experienced in white-fringed beetle control operations, was present for a short period to advise on the adequacy of our New Jersey program.

As in the past, work varied according to conditions and consisted of regular and close inspection, row-by-row and blade-by-blade inspection. No live or recently emerged beetles were found, but light remnants of white-fringed beetles from previous years' emergence were found. As a precautionary measure, granular dieldrin was applied to the areas of these finds.

In 1959, spring inspections made at the time soil was being prepared for planting revealed no larvae or pupae. The 1959 survey for adult white-fringed beetles was initiated in mid-June. Results to date have been negative.

Surveys on a reduced scale will be necessary for several years before eradication can be considered an established fact and the local quarantine removed. In the meantime, the movement of plants, soil, produce and farm machinery is being controlled, in accordance with quarantine regulations.

## GOLDEN NEMATODE

A joint Federal-State survey of the potato growing areas of New Jersey for golden nematode, *Heterodera rostochiensis*, has been conducted annually since 1948.

Starting in August, a total of 1,231 soil samples, representative of an aggregate of 5,893 acres, was collected. Of these samples, 705 were collected at grader stations and 526 from potato fields.

All samples were processed at the Division laboratory. No golden nematode cysts were recovered from the sample lots.

## BLUEBERRY CERTIFICATION PROGRAM

The new blueberry certification program is now in its second year. Certification under this program is based on spring and fall inspections of cutting beds, nursery plants and enough mother plants to supply cutting wood. Mother plants are those plants that have been cut to a maximum of

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24 inches from the ground. Plants showing symptoms of virus diseases, such as stunt, shoestring, mosaic and ringspot, must be removed by the grower. Mother plants are allowed a tolerance of only 0.50 per cent and nursery plants 0.75 per cent stunt for the season. Five rows of field bushes are also inspected on both sides of mother plants to provide isolation. Diseased plants in these rows must also be removed. It is further required that all injurious insects found in the plantings be controlled before certification is granted. In addition, all plants to be certified must be dusted twice each year with insecticides to control the sharp-nosed leafhopper, the known carrier of stunt disease.

During the calendar year 1958, 23 growers entered plantings for certification in comparison with 26 the previous year. At the completion of the fall inspection, 69,066 mother plants, 832,000 nursery plants and 1,993,939 rooted cuttings were certifiable. These figures represent a slight decrease in the number of certified plants. Weather conditions favored growth and an adequate supply of excellent plants and cuttings was available.

The following table summarizes the incidence of disease :

| Disease    | Mother Plants |      | Isolation Plants |      |
|------------|---------------|------|------------------|------|
|            | Spring        | Fall | Spring           | Fall |
| Stunt      | 6             | 1    | 11               | 12   |
| Mosaic     | 6             | 10   | 17               | 19   |
| Shoestring | ..            | ..   | 2                | ..   |
| Ringspot   | ..            | ..   | ..               | ..   |
| Totals     | 12            | 11   | 30               | 31   |

#### RED STELE DISEASE OF STRAWBERRIES

During April, 1959, 40 growers entered strawberry plantings for certification representing a total acreage of 126.75. Inspection is conducted in accordance with regulations designed to prevent the further introduction and spread of red stele disease, *Phytophthora fragariae*, within the State. This is the first year since 1950 that no red stele was found. A summary of the work follows :

| County     | Number of Growers | Acreage |
|------------|-------------------|---------|
| Atlantic   | 18                | 65.00   |
| Burlington | 3                 | 17.00   |
| Cape May   | 2                 | .75     |
| Cumberland | 6                 | 10.00   |
| Gloucester | 2                 | 5.00    |
| Hunterdon  | 1                 | 1.00    |
| Mercer     | 3                 | 15.50   |
| Monmouth   | 5                 | 12.50   |
| Totals     | 40                | 126.75  |



## JAPANESE BEETLE QUARANTINE ENFORCEMENT

This cooperative Federal-State program has two major phases: certification and summer regulatory activities. Certification is a year-round operation, regulating the shipment of plant materials to points outside the area of Japanese beetle infestation. Summer regulatory measures are designed to control the spread of adult beetles by carriage on vehicles and hazardous materials.

The major regulatory activity within the State is the certification of soil and plants throughout the entire year. A total of 5,080,877 plants was certified as a result of treatment before digging, after digging or through visual inspection. In addition, 494 cubic yards of potting soil were treated, as well as 829,540 square feet of surface soil. The estimated value of all materials certified was \$1,748,658. In the performance of this work, 3,085 calls were made to commercial establishments and private individuals. Help was extended to growers interested in employing newer and less costly techniques to meet certification requirements. Residual insecticides, in granular form, applied by ground power equipment, were popular with many growers during the past year.

July, 1958, marked a change in quarantine operations. In accordance with new procedures, all points within the regulated area are considered to be subject to summer regulations. However, the regulations are put into operation only when and where local inspectors determine that infestations warrant such action. Under this arrangement, the inspectors are able to devote more time to locating and appraising infestations than they did previously.

All major shipping points throughout the State, such as airfields, auction produce markets, trucking and railroad centers, were scouted. Two hundred and twenty-four shipping points were scouted and 142 observations were made at 46 airfields. In addition to visual scouting, traps were placed at 10 of the larger airports. Regulatory measures were required at five trucking centers and 12 airfields. Four of the five trucking centers required treatment of surrounding foliage; the fifth had all weed growth removed. The airports received from one to seven foliage treatments during the flight season of the Japanese beetle.

## GYPSY MOTH CONTROL

The gypsy moth, *Porthetria dispar*, has been the subject of continuous control and suppression work by both State and Federal governments since its introduction into the United States in 1869. Through control and quarantine operations in the infested states, the main body of infestation had been confined to the area east of the Hudson River valley. In 1950 the gypsy moth population reached an explosive stage which resulted in infestations in New York, New Jersey and Pennsylvania.

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With new advances in the fields of insecticides and aerial application of spray, complete control of the gypsy moth seems possible. All evidence indicates that such an objective can be achieved over a period of years, at a lesser cost than scattered control efforts, and with safety to other forms of life within the infested areas.

The control program in New Jersey consists of four separate operations: trapping, scouting, spraying and quarantine.

Trapping is conducted during the flight season of the male moth which extends through July and August. The traps, baited with sex-attractant, are placed in the field to locate infestations and serve as a check on prior spray operations. These traps are patrolled regularly throughout the summer.

Scouting is conducted when the moth is in the egg stage. Clusters of approximately 400 eggs are laid during late July and early August. The moth remains in the egg stage until early May of the following year. Visual examination for egg masses on all standing vegetative growth is conducted within a half-mile radius around trap sites where moths were recovered during the trapping operation. Selective-site scouting is also provided. This type of scouting takes into consideration common-carrier traffic, high points of elevation and favorite food species of the gypsy moth. Occurrence of egg masses serves as the basis for spraying and quarantine operations.

Spraying is conducted during the larval stage of the moth which normally begins in mid-May in New Jersey. As the larvae emerge from the eggs, they are extremely susceptible to an insecticidal solution of one pound of DDT to one gallon of oil to the acre.

Quarantine is conducted throughout the entire life cycle of the insect. Regulated articles, such as timber products, shrubs, vines, plants, quarry products and other hazardous materials, are permitted to move only after they have been inspected and found free of any life stages of the gypsy moth. The objective of quarantine is to prevent the movement of infested articles into uninfested areas.

### *Trapping*

Beginning May 18, 1958, traps were placed in the field on a seven-eighths mile grid throughout the northern half of the State. This grid is based upon the known attracting radius of one-half mile for each trap. Theoretically, the grid system saturates the entire area with gypsy moth scent. Thus, any male moth within the area comes under the influence of one or more traps during the flight season. The traps are serviced at 10-day intervals, when they are inspected for captured moths and the component parts of each trap freshened or replaced.

An inspection force of 34 men (10 Federal and 24 State) was employed in this work. Slightly less than 6,100 traps were placed in the field over an area of approximately two and one-half million acres of land.

The southern boundary of the trapped area extended along a line running approximately from Camden to Wrightstown, northeast to Freehold and then north to Keansburg.

An intensive grid was placed around each of the three trap sites which attracted moths in the summer of 1957. They were encompassed by a two-mile circle containing 65 traps. In addition, 65 traps were placed in the same pattern around a nursery in the vicinity of Bordentown, where an infestation of gypsy moth had been discovered in June, 1957.

On August 18, 1958, one male gypsy moth was captured in a trap near the town of Hibernia, Morris County. Seventeen additional traps were immediately placed in a ring around the attracting trap. However, no more moths were taken throughout the entire area.

The following table shows the distribution of traps by counties :

| County      | Number of Traps |
|-------------|-----------------|
| Bergen      | 369             |
| Burlington  | 432             |
| Essex       | 192             |
| Hudson      | 51              |
| Hunterdon   | 639             |
| Mercer      | 437             |
| Middlesex   | 472             |
| Monmouth    | 315             |
| Morris      | 816             |
| Ocean       | 38              |
| Passaic     | 330             |
| Somerset    | 453             |
| Sussex      | 836             |
| Union       | 162             |
| Warren      | 554             |
| 15 counties | 6,096 traps     |

Removal of traps was begun on September 8 and was completed on October 10.

### *Scouting*

Preliminary scouting for egg masses around the one 1958 attracting trap was begun on October 14. Plant growth was examined within a radius of one-half mile. The search failed to reveal egg masses. A second, more intensive, search was made in the area; again, the results were negative. A third inspection was conducted within the same area. At this time anything that could possibly harbor an egg mass was ripped apart and thoroughly inspected. This survey also failed to produce egg masses.

Surveys were then conducted in areas which had histories of infestation and moth captures. No egg masses were found.

A final attempt to locate the origin of the captured moth consisted of a selected-site survey. A seven-man inspection force worked in areas of Hunterdon, Morris, Passaic and Somerset counties. Again the survey gave negative results.

All scouting was suspended on May 1, 1959, by which time a total of 155 open and 2,004 woodland acres had been inspected. There were also 627 miles of roadside inspected.

The following table summarizes the scouting program:

| County    | Open Acres | Woodland Acres | Roadside Miles |
|-----------|------------|----------------|----------------|
| Morris    | 150        | 1,540          | 116            |
| Sussex    | ...        | 195            | ...            |
| Hunterdon | ...        | 109            | 431            |
| Passaic   | 5          | 95             | 40             |
| Bergen    | ...        | 65             | ...            |
| Somerset  | ...        | ...            | 40             |
| Totals    | 155        | 2,004          | 627            |

### *Quarantine*

Thirteen inspections of especially hazardous material were made during the year. Operations involving such hazard were investigated, following which approval for the movement of regulated articles was granted to cover the full extent of the operation. In only two cases was it necessary to grant certification for movement of specific articles over a 24-hour period only. The certificates issued covered four lumber operations and nine involving cutting of Christmas trees and boughs.

Since the Christmas tree business involves an important hazard in the spread of the gypsy moth, retail and wholesale dealers were brought under observation. During November and December, the holdings of 585 dealers were inspected. Three violations were disclosed and remedial action was taken.

Through the cooperation of the New Jersey State Police, three quarantine checks were held on Route 17, Mahwah Township, in December. One truckload of cordwood was found to be moving in violation of the quarantine. In this case the wood was being moved into the city of New York from an area under quarantine. Proper authorities were notified of the violation.

### SOUTHERN VEGETABLE PLANT REGULATIONS

Under regulations, adopted by this Department in November, 1958, all vegetable plants shipped into the State must be certified to have been

grown under an official certification program of the state of origin, or to have been inspected and certified to be apparently free of injurious insects, nematodes and plant diseases. The latter regulation is based on inspection and certification not more than three days prior to removal of the plants from the soil.

In addition, agreements have been reached with officials of the states of Florida and Georgia which will aid in strengthening the programs of these states, do much to improve the quality of plants shipped into New Jersey, and prove of much value in the successful application of our regulations.

In cooperation with the Georgia Department of Agriculture, a Division inspector spent five weeks in Georgia during April and May, inspecting plants grown for the New Jersey trade. This assisted in preventing the movement of undesirable vegetable plants from that State into New Jersey. Cooperation of the Georgia growers was excellent. No violations of the new regulations were discovered on plants from Georgia, although shipments were carefully policed, both in that State and on arrival in New Jersey.

During April, 1959, six shipments of uncertified southern-grown vegetable plants, which had been shipped from Florida and North Carolina in violation of the above regulations, were inspected. One shipment of 56 crates of curly endive and escarole from Florida was destroyed when it was found to be heavily infested with root-knot nematode, leaf spot and aphids. One shipment had already been planted. The rest were found to be clean on inspection and were released.

#### VIRUS-FREE STRAWBERRY PLANT CERTIFICATION

In this cooperative program, the Department is the inspecting and certifying agency; the New Jersey Agricultural Experiment Station provides clinically-tested virus-free and nematode-free "Foundation" stock; the sponsoring New Jersey Small Fruits Council retains ownership of the plants and controls distribution of progeny until sold to fruit growers. It is expected that this program will do much to improve the planting stock and prevent many of the losses which now occur in commercial strawberry plantings.

The spring of 1959 was the first in which apparently virus-free New Jersey strawberry plants were made available to strawberry fruit growers. Better than 300,000 "Improved" certified plants of the varieties Midland and Sparkle were sold to fruit growers by the New Jersey Small Fruits Council, Inc.

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The following clinically-tested virus-free and nematode-free "Foundation" stock was released by the Experiment Station for growing as "Registered (Increase)" plants during the summer of 1959: 471 Sparkle, 911 Midland and 4,275 Jersey Belle.\*

In addition, 1,848 "Registered" Sparkle plants and 2,987 "Registered" Midland plants were planted for increase and sale in 1960 to New Jersey fruit growers.

#### BEE CULTURE

Regular inspections were made throughout the season in 18 counties of New Jersey. In order to locate and eradicate any American foulbrood, scouting for new or abandoned apiaries was conducted during the winter months, as weather and road conditions permitted. Where dead colonies were found, the equipment was inspected for signs of bee diseases.

Three hundred forty-three registered apiaries were visited and 4,054 colonies were inspected. American foulbrood was found in 69 apiaries consisting of 303 colonies. Thus, 7.4 per cent of the colonies inspected in the registered apiaries were infected with American foulbrood.

During the year, 67 new apiaries containing 369 colonies were inspected. Twelve apiaries with a total of 30 colonies were found to be infected with American foulbrood. Thus, 8.1 per cent of the new colonies were found to be diseased.

The percentage of American foulbrood found in all colonies inspected this fiscal year was 7.5, as compared with 5.4 per cent during 1957-1958. This significant rise can be attributed to negligence on the part of several commercial beekeepers in the southern part of the State. They neglected either to employ proper inspections of their colonies or to eradicate the American foulbrood found during inspections.

One commercial apiary was quarantined until the 400 colonies in it could be inspected frame-by-frame and all American foulbrood destroyed. Two hundred eighty-five of these colonies were located in Cumberland County and on inspection 108 were found to be infected with American foulbrood.

Sulfa drugs and terramycin are being fed by some beekeepers as a preventive measure to prevent outbreak of foulbrood. However, when American foulbrood is found, the Department requires the burning of disease-infected combs and the sterilization of other bee equipment.

During April, the supervisor required the burning of 104 colonies; 82 of these were in Cumberland County, 13 in Monmouth County, seven in Burlington County, one in Mercer County and one in Passaic County.

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\* The first year virus-free plants of this variety were available.



Favorable weather conditions during the months of July and August resulted in an abundance of flowers from which the bees gathered nectar and pollen. A surplus of honey was stored and an abundance of pollen was available for brood rearing. During September, goldenrod, aster, Joe-pye weed, Spanish needle and heartsease provided a better source of nectar than during the same period in 1957-1958. It was noted that Spanish needle, once thought of as a southern New Jersey plant, was found in the northern areas of the State. Bees worked aster until late October, enabling them to deposit a good supply of honey within easy reach of the winter clusters.

An unusually large number of older bees remained in the winter clusters. December's cold spell caused the bees to consume large quantities of food to generate the necessary heat for survival. Prolonged cold periods during December prevented cleansing flights, and many colonies contracted dysentery. In January, temperatures were moderate, permitting frequent cleansing flights. Winter loss for the year was average, approximately 15 per cent.

Mild weather prevailed during early March, making possible an early start in the inspection of apiaries. Pollen from maple, pussywillow, skunk cabbage, spice bush, etc., stimulated early colony build-up. By May, colonies were strong and a good supply of nectar was available. Nectar secretion continued heavy during June and colonies collected a good surplus. Tulip poplar produced little nectar in the northwestern section of the State. The honey crop from that species was therefore smaller than usual.

During the fiscal year, two three-day short courses were held for beginners in beekeeping at Rutgers University. The supervisor assisted by lecturing on bee diseases and by advising prospective apiarists of the requirements of the Bee Disease Law.

The supervisor of bee culture was the guest speaker at meetings of various New Jersey beekeeping organizations. He also participated in the Eastern Regional Apiculture meeting at Amherst, Massachusetts, in August, 1958, where the main topic of discussion was the use of antibiotics as a control measure for foulbrood. The regulatory officials agreed that the use of antibiotics as a general preventive measure for foulbrood should not be encouraged until the full effects of such use are better understood. The use of the antibiotics as a curative measure is generally discouraged.

The beekeepers have formed a Stock Improvement Committee, the objective of which is to breed a better strain of bees for New Jersey beekeepers. At the first meeting, it was decided to select certain queens and test their progeny against those of other strains. Professor R. S. Filmer, Research Specialist in Entomology, Rutgers University, will evaluate the stock and assemble the data. Two queens have already been selected for this breeding program.

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## SUMMARY OF INSPECTIONS

| County     | Apiaries | Colonies | Nuclei | Crossed Comb | American Apiaries | Foul Brood Colonies | European Apiaries | Foul Brood Colonies | Colonies Burned | Microscopic Determination |        |      |
|------------|----------|----------|--------|--------------|-------------------|---------------------|-------------------|---------------------|-----------------|---------------------------|--------|------|
|            |          |          |        |              |                   |                     |                   |                     |                 | A.F.B.                    | E.F.B. | Neg. |
| Atlantic   | 14       | 305      | ..     | ..           | 6                 | 11                  | 6                 | 19                  | ..              | ..                        | ..     | ..   |
| Bergen     | 43       | 283      | ..     | ..           | 8                 | 27                  | ..                | ..                  | 16              | ..                        | ..     | 1    |
| Burlington | 28       | 609      | ..     | ..           | 12                | 43                  | 9                 | 105                 | 23              | 1                         | 5      | 3    |
| Camden     | 36       | 288      | ..     | ..           | 1                 | 3                   | 3                 | 4                   | ..              | ..                        | ..     | 2    |
| Cape May   | 10       | 177      | 65     | ..           | 3                 | 5                   | ..                | ..                  | 5               | ..                        | ..     | ..   |
| Cumberland | 20       | 315      | ..     | ..           | 10                | 108                 | 3                 | 19                  | 4               | ..                        | ..     | ..   |
| Essex      | 2        | 9        | ..     | ..           | ..                | ..                  | ..                | ..                  | ..              | ..                        | ..     | ..   |
| Gloucester | 3        | 17       | ..     | ..           | ..                | ..                  | ..                | ..                  | ..              | ..                        | ..     | ..   |
| Hunterdon  | 34       | 579      | ..     | ..           | 9                 | 45                  | 3                 | 29                  | 5               | 1                         | ..     | ..   |
| Mercer     | 12       | 87       | ..     | ..           | 1                 | 1                   | ..                | ..                  | ..              | ..                        | ..     | ..   |
| Middlesex  | 13       | 117      | ..     | ..           | 2                 | 4                   | 1                 | 1                   | ..              | 2                         | ..     | 3    |
| Monmouth   | 42       | 496      | ..     | ..           | 4                 | 17                  | 2                 | 7                   | ..              | ..                        | 1      | ..   |
| Morris     | 38       | 305      | ..     | ..           | 6                 | 17                  | ..                | ..                  | 3               | 1                         | ..     | ..   |
| Passaic    | 24       | 129      | ..     | 1            | 12                | 35                  | ..                | ..                  | 14              | 1                         | ..     | ..   |
| Somerset   | 2        | 23       | ..     | ..           | ..                | ..                  | ..                | ..                  | ..              | ..                        | ..     | ..   |
| Sussex     | 25       | 263      | ..     | 32           | 2                 | 6                   | ..                | ..                  | 6               | ..                        | ..     | ..   |
| Union      | 8        | 33       | ..     | ..           | ..                | ..                  | ..                | ..                  | ..              | ..                        | ..     | ..   |
| Warren     | 56       | 388      | ..     | ..           | 5                 | 11                  | ..                | ..                  | ..              | ..                        | ..     | ..   |
| Totals     | 410      | 4,423    | 65     | 33           | 81                | 333                 | 27                | 184                 | 76              | 6                         | 6      | 9    |

Certificates of Transfer Issued: 3

Queen-Rearing Certificates Issued: 15

## BUREAU OF SEED CERTIFICATION

## GRAIN SEED CERTIFICATION

Seed certification programs utilize the agricultural research, extension and regulatory facilities of the State for the production and orderly distribution of purebred planting seed. Officially certified seed gives the purchaser an accurate estimate of quality and potential performance. Today, certified seed is recognized and demanded by the farmer, just as registration papers are recognized and demanded in the purchase of purebred livestock.

To carry out the programs, the results of scientific developments are practiced both in the laboratory and in the field. A relatively new development in methods is the use of laboratory biological assay to determine whether proper chemical seed treatments have been applied. Testing is also conducted in the laboratory to determine whether seed is infected with bacteria or fungi that could cause diseased plants.

It is becoming common practice to test the performance of seed in Florida during the winter months. The tests serve to eliminate any lots of potato and sweet corn seed that might not meet the requirements of certification.

*Barley*

A total of 625 acres of barley was entered for certification in 1958 compared with 429 acres in 1957. This was an increase of 196 acres of 45 per cent. Some of the increased acreage this year was not suitable for seed production because of excessive weeds and poorly maintained seed fields.

An aggregate of 45 acres was rejected at field inspection because of improper roguing and inseparable weeds. At bin inspection, 93 acres were rejected because of improper harvesting and low germination. The rejected acreage amounted to 22 per cent of the total entered for certification.

Unlike the dry weather of 1957, the spring of 1958 was favored with abundant rain, and an excellent barley crop resulted. Unfortunately, the rain continued into the summer and caused considerable damage at harvest. One lot of seed containing 2,700 bushels was harvested too early and the immature seed failed to meet the germination requirements. Several farmers failed to harvest part of their acreage because the seed lost quality before it became dry enough to combine.

Dog fennel, *Anthemis cotula*, a weed which has caused considerable loss in barley fields, was again prevalent. Considerable progress is being made in the chemical control of this weed.

Field inspections made during May proved the merit of seed treatment with hot water in the control of loose smut. The registered seed fields,

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which were grown from hot water treated seed, contained no loose smut. The certified seed fields, which are one generation from hot water treatment, contained an average of five smutted plants per acre.

The certified and registered barley fields contained a slight mixture of wheat and all growers were required to rogue their fields before inspection. A limited generation type of program is employed in barley; all seed is the progeny of a small quantity of foundation seed. Thus, a very slight mixture in the foundation seed can be most troublesome when increases to the certified class are made.

The total of 22,659 bushels certified this year compares with 23,171 bushels in 1957.

The following is a summary of the winter barley seed certification program:

| Variety    | Acres<br>Entered | Acres Rejected<br>Field | Bin | Acres<br>Passed | Bushels<br>Sealed |
|------------|------------------|-------------------------|-----|-----------------|-------------------|
| Wong       |                  |                         |     |                 |                   |
| Foundation | 3                | ..                      | ..  | 3               | 125               |
| Registered | 46               | ..                      | 6   | 40              | 1,910             |
| Certified  | 576              | 45                      | 87  | 444             | 20,624            |
| Totals     | 625              | 45                      | 93  | 487             | 22,659            |

### *Field Corn*

Thirty-five acres were rejected during field inspection, because of improper detasseling and insufficient isolation. During bin inspection an estimated 800 bushels of seed had to be rejected because of mold and sprouted kernels.

The following is a summary of the 1958 field corn program by acreage:

| Hybrid                | Acres Entered | Acres Rejected | Acres Passed |
|-----------------------|---------------|----------------|--------------|
| New Jersey No. 8      | 125           | 8              | 117          |
| New Jersey No. 9      | 164           | 27             | 137          |
| New Jersey No. 10     | 10            | ...            | 10           |
| Experimental No. 5311 | 2.5           | ...            | 2.5          |
| Experimental No. 5412 | 2.5           | ...            | 2.5          |
| Connecticut No. 554   | 9             | ...            | 9            |
| Totals                | 313           | 35             | 278          |

A total of 14,087 bushels of flat grades was eligible for certification. This provided an adequate quantity to supply the needs of New Jersey farmers. New Jersey No. 10, Experimental No. 5311 and Experimental No. 5412 remained in short supply. Increased production of these hybrids should be encouraged next year.

The following is a summary of the field corn seed certified in 1958:

| Hybrid                | New Crop |        | Carry Over |        | Bushels Sealed |
|-----------------------|----------|--------|------------|--------|----------------|
|                       | Flats    | Rounds | Flats      | Rounds |                |
| New Jersey No. 7      | ...      | ...    | 361        | 18     | 379            |
| New Jersey No. 8      | 5,123    | 242    | 1,292      | 6      | 6,663          |
| New Jersey No. 9      | 5,618    | 259    | 554        | 4      | 6,435          |
| New Jersey No. 10     | 361      | 16     | ...        | ...    | 377            |
| Experimental No. 5311 | 55       | 6      | ...        | ...    | 61             |
| Experimental No. 5412 | 75       | 7      | ...        | ...    | 82             |
| Connecticut No. 554   | 382      | 22     | 253        | ...    | 657            |
| Totals                | 11,614   | 552    | 2,460      | 28     | 14,654         |

A total of 278 acres produced 11,614 bushels of flats, which is slightly more than 41 bushels of flats sealed per acre. This average yield exceeds the 1956 crop by one bushel per acre, making this the highest average yield ever achieved in New Jersey seed corn production.

Two new growers of field corn were accepted into the program this year. They were encouraged with their results and will probably continue in the program.

Adequate moisture this year was reflected in good yields of seed corn. New Jersey No. 8 averaged 47 bushels of flat grades per acre and New Jersey No. 9 averaged 40 bushels of flats per acre. These yields are approximately 10 bushels higher than normal.

Some growers experienced difficulty at harvest because of sprouted and moldy kernels due to excessive moisture. These moldy ears were hand-removed and the resulting seed was of high quality.

At the request of the Board of Directors of the New Jersey Crop Improvement Association, the Department, with the cooperation of the mill foreman, developed a new grading system for field corn which was used on the 1958 crop. The new grades are more readily accepted by the dealers and farmers with no appreciable loss to the seed producer.

Under current regulations, seed which is three years old cannot be certified. It appears, however, that high quality seed which is stored under proper conditions may retain its high quality for some time. Therefore, the Department is cooperating with the New Jersey Agricultural Experiment Station in order to devise some method which can accurately determine the quality of stored seed. Tests already conducted have proved that two-year-old seed which has been handled and stored improperly is inferior to three-year-old seed which has had proper care.

Rutgers University Extension Service conducted and supervised varietal trial tests in eight New Jersey counties during 1958. These trials contained the 15 most popular varieties of field corn grown in New Jersey.



New Jersey certified seed corn out-yielded uncertified seed in seven of the eight trials. New Jersey hybrid No. 9 had an average yield in all eight trials of 126.4 bushels per acre. This is nine bushels per acre higher than the nearest competitor.

### *Sweet Corn*

After a complete evaluation of the previous crop, a large group of seed producers, as well as commercial sweet corn farmers, were enthusiastic to increase the acreage of the seed program. Ten growers were selected for seed production. Facilities for isolation and irrigation were important factors in the selection of acreage. The foundation seed was properly prepared and distributed as follows:

New Jersey No. 101— 2 acres  
New Jersey No. 106— 8 acres  
New Jersey No. 109—19 acres  
New Jersey No. 111— 1 acre  
New Jersey No. 114— 5 acres

Sweet corn fields varied in appearance from fair to excellent during the growing season. Sufficient rain fell during critical growth periods. Soil conditions and temperature are critical factors in the production of sweet corn seed, which results from inbred crosses. Every precaution was taken for optimum growing conditions.

One field of New Jersey No. 106 was planted incorrectly; the pollinator was planted seven days after the ear parent when it should have been planted before the ear parent. This error made the pollen shed two weeks late. Efforts to control growth by chemical means failed and the field was rejected. Several other fields that were mishandled produced poor quality seed and were rejected from certification. Sweet corn seed production required, in some instances, two inspections per day during critical periods.

Harvest started in August when the moisture content of the seed was about 35 per cent. Although seed should be allowed to mature in the field as long as possible, damage by birds and disease necessitated early harvesting.

To further prove the genetic purity of the New Jersey certified seed, samples of all seed lots were sent to Florida in October, to be grown and inspected for inbreds. This additional inspection is for the protection of the seed producer. From the results of the Florida tests, one field of New Jersey No. 111 was rejected from certification. All other fields contained a very small quantity of inbred seed.

A new cleaning and processing line was established by the New Jersey Crop Improvement Association and sweet corn grades were established.



A high of 1,707 pounds of seed was produced per acre. This yield would indicate New Jersey can produce seed in competition with the west. Market acceptance was excellent. All seed was sold and it appears a much greater market can be developed.

| Variety            | Acres Entered | Pounds Certified (Flats) |          |          |       | Total |
|--------------------|---------------|--------------------------|----------|----------|-------|-------|
|                    |               | Large                    | Medium 1 | Medium 2 | Small |       |
| New Jersey No. 101 | 2             | 66                       | 290      | 94       | 66    | 516   |
| New Jersey No. 109 | 19            | 1,371                    | 4,575    | 2,066    | 535   | 8,547 |
| New Jersey No. 114 | 5             | 115                      | 212      | 97       | 41    | 465   |
| Totals             | 26            | 1,552                    | 5,077    | 2,257    | 642   | 9,528 |

| Variety            | Acres Entered | Pounds Certified (Rounds) |          |          |       | Total |
|--------------------|---------------|---------------------------|----------|----------|-------|-------|
|                    |               | Large                     | Medium 1 | Medium 2 | Small |       |
| New Jersey No. 101 | 2             | 4                         | 33       | 102      | 18    | 157   |
| New Jersey No. 109 | 19            | 80                        | 270      | 374      | 529   | 1,253 |
| New Jersey No. 114 | 5             | 87                        | 144      | 113      | 34    | 378   |
| Totals             | 26            | 171                       | 447      | 589      | 581   | 1,788 |

### Oats

The new winter oat Experimental No. 6903 proved once again to be an improvement over the varieties now being used in New Jersey. A total of 57 bushels was harvested this year which, when multiplied, will produce a sufficient quantity for testing throughout the State.

A total of 46.5 acres of winter oats was entered for certification compared with 76.5 acres in 1957. One field containing nine acres of spring oats was entered; last year no spring oats were entered in the certification program.

The following is a summary of the certified oat program:

| Variety               | Acres Entered | Acres Rejected |     | Acres Passed | Bushels Sealed |
|-----------------------|---------------|----------------|-----|--------------|----------------|
|                       |               | Field          | Bin |              |                |
| LeConte               | 24            | 7              | ..  | 17           | 930            |
| Dubois                | 12.5          | 4.5            | 8   | ..           | ..             |
| Experimental No. 6903 | 1             | ..             | ..  | 1            | 57             |
| Clinton               | 9             | ..             | ..  | 9            | 288            |
| Totals                | 46.5          | 11.5           | 8   | 27           | 1,275          |

Of the 46.5 acres entered, a total of 19.5 acres or 41 per cent was rejected because of mixture of other crops, inseparable weeds or low germination.

Eight acres of the Dubois variety were rejected because of low germination, probably due to early harvest. Therefore, this seed was sealed with an emergency certificate (red tag), notifying the purchaser of the reasons why the seed did not possess the regular blue certification tag.

The acreage of winter oats in this State will be limited until better winter-hardiness is achieved. There is some hope that a market for winter oats will develop in states south of New Jersey. If this happens, the production of certified oat seed may increase.

### *Soybeans*

The total acreage of soybeans entered for certification was 1,014, which is approximately 200 acres less than the previous year. The Clark variety still remains the most popular with 91 per cent of the acreage.

During field inspection 144 acres or 14 per cent were rejected because of varietal mixture and disease problems. During bin inspection 190 acres or 18 per cent were rejected because of poor appearance and low germination. Soybeans which remained unharvested in the field after November 1 dropped rapidly in germination.

The growing season for soybeans was excellent, resulting in extremely good vine growth and seed set. A disease known as brown spot, *Septoria glycines*, was first noticed in a 25-acre field near Freehold. Both Hawkeye and Clark varieties were planted in this field. All varieties appear to be equally susceptible to this disease.

Brown spot was recognized in the United States for the first time in North Carolina in 1922. Formerly regarded as a disease of minor importance, it has greatly increased in prevalence and severity in recent years. The causal fungus is seed borne, but is also capable of overwintering on diseased stems and leaves. The symptoms of the disease are brown spots occurring on the leaves, usually surrounded by a zone of light green or yellow tissue. When brown spot infection starts early in the season, one-half or more of the foliage may be lost before maturity. Seed from badly diseased fields should not be used for plantings, because seed treatment does not give satisfactory control of the disease. A crop rotation of at least one year can be helpful in preventing further infection.

A total of 132 acres or 13 per cent of the total acreage was found to be severely infected and was rejected from certification. A survey indicated that approximately one-half of the total acreage had some symptoms of the disease.

Samples of soybeans were collected from the heavily infected fields after harvesting. They were analyzed by the Plant Pathology Department at Rutgers University. The brown spot disease organism could not be isolated from these samples but it was found that the soybeans had a germination of only 39 per cent, indicating that severe damage had been done.

Since the disease is more prevalent in years when there is abundant rainfall and because it can apparently be kept under control by crop rotation, adequate control measures should not be too difficult.

There was a strong demand for New Jersey certified soybeans with a total of 10,854 bushels being sealed and sold. This is approximately 1,400 bushels more than the previous year.

The following is a summary of the certified soybean program :

| Variety    | Acres<br>Entered | Acres Rejected<br>Field | Bin | Acres<br>Passed | Bushels<br>Sealed |
|------------|------------------|-------------------------|-----|-----------------|-------------------|
| Clark      |                  |                         |     |                 |                   |
| Registered | 1                | ...                     | ... | 1               | 31.5              |
| Certified  | 922              | 123                     | 187 | 612             | 8,653.5           |
| Carry-over | ...              | ...                     | ... | ...             | 750               |
| Hawkeye    |                  |                         |     |                 |                   |
| Registered | 7                | ...                     | ... | 7               | 171               |
| Certified  | 68               | 21                      | 3   | 44              | 879               |
| Carry-over | ...              | ...                     | ... | ...             | 66                |
| Lincoln    | 16               | ...                     | ... | 16              | 303               |
| Totals     | 1,014            | 144                     | 190 | 680             | 10,854            |

#### *Soybean Cyst Nematode Field Survey*

This survey was undertaken for the second consecutive year to determine whether or not soybean cyst nematode is present in New Jersey crop land.

Areas where flower bulbs are planted commercially were soil-sampled, whether or not a soybean crop was growing. Rural roads were traveled, and inspections made of all soybean fields. Records were made of estimated acreage and growth condition of the fields. Soybean fields were sampled where areas or sections exhibited nematode symptoms. Samples of soil from the affected areas of a field were taken around the roots of the affected plants. Each sample was numbered and its exact location placed on a map. The sample was then delivered to the Division laboratory for drying and analysis.

Fields which had been planted early were in vigorous growth at the time the survey was begun. A small portion of the soybean acreage planted after barley or late in the season could not be properly inspected. Field conditions were satisfactory by July 1.

Throughout the State there seemed to be more acreage in soybeans in combination with sorghum or Sudan grass than in the 1957 season. Usually the rank growth of these grasses made observation of the soybean plants impossible except at the margins of the fields. As tabulated, the acreage reported includes soybeans in combination.

Approximately 40 to 45 per cent of New Jersey soybean acreage was inspected and soil-sampled where indicated. The reduction of soil samples, from 74 in 1957 to 12 in 1958, is a reflection on the season's plant growth.

#### SOYBEAN CYST NEMATODE SURVEY, 1958

| County     | Estimated<br>Acres Surveyed | Estimated<br>Fields Surveyed | Samples<br>Drawn |
|------------|-----------------------------|------------------------------|------------------|
| Atlantic   | 146                         | 23                           | ..               |
| Burlington | 2,577                       | 150                          | 1                |
| Camden     | 234                         | 20                           | ..               |
| Cape May   | 6                           | 2                            | ..               |
| Cumberland | 622                         | 37                           | ..               |
| Gloucester | 203                         | 33                           | ..               |
| Hunterdon  | 581                         | 43                           | ..               |
| Mercer     | 3,987                       | 226                          | ..               |
| Middlesex  | 3,150                       | 178                          | 4                |
| Monmouth   | 8,241                       | 465                          | 7                |
| Ocean      | 231                         | 22                           | ..               |
| Salem      | 558                         | 59                           | ..               |
| Somerset   | 855                         | 61                           | ..               |
| Totals     | 21,391                      | 1,319                        | 12               |

#### *Wheat*

Wheat entered for certification totaled 773 acres, an increase of 127 acres over the previous year.

In the course of field inspection, 33 acres or 4 per cent of the acreage entered was rejected because of loose smut, varietal mixture and inseparable weeds. Only one field of Dual wheat was entered for certification and excessive loose smut caused it to be rejected. This seed had been hot water treated for the control of smut, but the treatment was not effective. Dual has never been certified in New Jersey, due to the high percentage of loose smut, but various methods of treatment are being investigated to lower the disease count within the requirements of New Jersey regulations. Dual variety has many advantages that make it attractive to New Jersey growers. Its resistance to Hessian fly is outstanding. The variety is also suitable for early fall planting.

The Seneca variety is also very susceptible to loose smut. In 1957 the entire acreage of Seneca had to be rejected. This year, however, the smut count was reduced from 12,000 heads per acre to 100 heads per acre, which is within the certification requirements.

During bin inspections, the seed from 207 acres, representing 27 per cent of the total acreage, was rejected. Wet weather during harvest caused a large percentage of the seed to be harvested with moisture content higher than the maximum allowed for certification. All lots of seed that did not have a satisfactory moisture content by September 15 were rejected from certification.

Rejection at field and bin inspection amounted to 31 per cent of the total, compared with 19 per cent the previous year. Although more acres were entered for certification in 1958, the high rejection rate resulted in approximately the same approved acreage as the previous year.

Yields per acre this year were very high. In most cases, however, only portions of fields were eligible for certification, since the frequent rains caused kernels to sprout while still in the heads. An average of 31 bushels of clean seed was sealed for each acre passing certification.

The following is a summary of the 1958 certified wheat program :

| Variety    | Acres<br>Entered | Acres<br>Field | Rejected<br>Bin | Acres<br>Passed | Bushels<br>Sealed |
|------------|------------------|----------------|-----------------|-----------------|-------------------|
| Seneca     |                  |                |                 |                 |                   |
| Foundation | ...              | ...            | ...             | ...             | 20                |
| Registered | 3                | ...            | ...             | 3               | 91                |
| Certified  | 73               | 7              | 26              | 40              | 1,288.5           |
| Pennoll    |                  |                |                 |                 |                   |
| Foundation | ...              | ...            | ...             | ...             | 20                |
| Registered | 5                | ...            | ...             | 5               | 181               |
| Certified  | 682              | 16             | 181             | 485             | 14,982.5          |
| Dual       | 10               | 10             | ...             | ...             | ...               |
| Totals     | 773              | 33             | 207             | 533             | 16,583            |

A summary of the certified seed grain sealing from 1941 to 1958 follows :

| Year  | Total<br>Sealed<br>(bushels) | Corn<br>(bushels) | Oats<br>(bushels) | Wheat<br>(bushels) | Barley<br>(bushels) | Soybeans<br>(bushels) | Sweet<br>Corn<br>(pounds) |
|-------|------------------------------|-------------------|-------------------|--------------------|---------------------|-----------------------|---------------------------|
| 1958  | 66,251                       | 14,654            | 1,275             | 16,583             | 22,659              | 10,854                | 11,316*                   |
| 1957  | 66,968                       | 15,005            | 2,568             | 16,803             | 23,171              | 9,421                 | 2,756                     |
| 1956  | 84,281                       | 28,972            | 3,456             | 14,356             | 19,478              | 18,019                | .....                     |
| 1955  | 56,955                       | 8,309             | 5,289             | 17,324             | 22,033              | 4,000                 | .....                     |
| 1954  | 65,941                       | 15,356            | 1,650             | 21,026             | 17,958              | 9,564                 | .....                     |
| 1953  | 61,182                       | 19,794            | 2,115             | 20,172             | 10,438              | 8,663                 | .....                     |
| 1952  | 67,777                       | 14,593            | 1,836             | 25,159             | 15,265              | 10,924                | .....                     |
| 1951  | 56,404                       | 13,315            | 2,745             | 19,224             | 13,828              | 7,292                 | .....                     |
| 1950  | 43,819                       | 13,583            | 2,904             | 9,961              | 9,999               | 7,372                 | .....                     |
| 1949  | 41,935                       | 14,288            | 2,145             | 8,666              | 12,366              | 4,470                 | .....                     |
| 1948  | 27,278                       | 12,993            | 1,941             | 3,996              | 5,784               | 2,564                 | .....                     |
| 1947  | 23,937                       | 9,173             | 1,612             | 5,188              | 6,994               | 970                   | .....                     |
| 1946  | 27,217                       | 9,371             | 2,853             | 6,915              | 7,098               | 980                   | .....                     |
| 1945  | 21,226                       | 12,408            | 2,306             | 2,424              | 3,653               | 435                   | .....                     |
| 1944† | 25,253                       | 9,534             | 5,316             | 4,068              | 5,473               | 874                   | .....                     |
| 1943† | 25,074                       | 6,461             | 1,408             | 3,917              | 3,023               | 13,263                | .....                     |
| 1942† | 24,571                       | 9,744             | 1,576             | 4,882              | 2,052               | 5,900                 | .....                     |
| 1941† | 19,159                       | 9,125             | 1,750             | 3,706              | .....               | 3,764                 | .....                     |

\* 226 bushels.

† Total sealed represents only the principal crops.

## SEED POTATO CERTIFICATION

Very little change was noted in the potato acreage or the number of growers participating in the program. Acceptance of New Jersey certified potato seed remains high, and in comparison with other seed sources, New Jersey certified seed rates very favorably. The problems of sufficient financial return per acre for seed and storage throughout the winter months restrict seed production.

The rate of rejections was normal, based on varietal mixture and disease. The selection of fields is a most important factor in the control of disease. Isolation from other potato fields and rotation are the best means of protection against the introduction of diseases. Seed fields cannot be located adjacent to commercial table-stock fields, since table-stock fields are not maintained to control disease to the extent that a seed field must be maintained. A slight aphid infestation of no particular importance in the table-stock field can be responsible for the establishment and spread of virus diseases in the seed crop.

In the past year a very small percentage of seed was winter tested in Florida. Some seed fields that were not Florida tested had an abnormally high index of virus diseases. These diseases developed late in the growing season so that symptoms were not seen in the field. There is now a growing opinion that all seed should be tested during the winter months.

During the second field inspection, late blight was noted in almost all seed fields. Sprays were being applied for controlling the disease in the majority of the fields and those where blight had developed were required to be sprayed or withdrawn from certification.

## PRODUCTION OF CERTIFIED WHITE POTATO SEED OF NEW JERSEY

| Variety         | 1958   |                         | 1957   |                         |
|-----------------|--------|-------------------------|--------|-------------------------|
|                 | Passed | Production<br>(bushels) | Passed | Production<br>(bushels) |
| Cobbler         | 2.50   | 300                     | 2.50   | 425                     |
| Katahdin        | 37.50  | 5,062                   | 65.50  | 12,118                  |
| Chippewa        | 31.50  | 4,095                   | 34.00  | 6,460                   |
| Kennebec        | 3.50   | 455                     | 1.00   | 185                     |
| Jersey Red Skin | 5.00   | 575                     | 1.25   | 210                     |
| Totals          | 80.00  | 10,487                  | 104.25 | 19,398                  |

INSPECTION AND CERTIFICATION WORK OF NEW JERSEY  
LATE CROP WHITE POTATO SEED IN 1958

| Seed Source | 100-lb. Bags | Per Cent |
|-------------|--------------|----------|
| Maine       | 1,125        | 88       |
| New Jersey  | 150          | 12       |
| Totals      | 1,275        | 100      |



## TOMATO SEED CERTIFICATION

The 1958 field inspection for tomato seed certification commenced on July 30 and was completed on August 25. For the past two seasons field inspections have been accomplished with two-man crews. One of the crew members is sufficiently experienced in tomato work to recognize varieties and diseases. The other member of the crew gives assistance in the observations. A crew normally can inspect 100 to 150 acres per day depending on field sizes, location of farms, traveling time between fields, weather, etc.

Before field inspections started, a one-day school was arranged to familiarize the inspectors with the different aspects of tomato seed work. At this school the Plant Pathology Department of the New Jersey Agricultural Experiment Station assisted in presenting descriptions of tomato diseases. The Vegetable Department of the College cooperated by arranging a field trip of its farm where the varieties were studied. The school also served to inform the inspectors of changes in tomato regulations and inspection procedures.

A total of 1,691 acres met the requirements for certification; this was 158 acres less than the previous year. The seed fields were composed of eight varieties with Rutgers the most prominent. However, the Rutgers acreage decreased from 1,208 to 659 and probably will continue to decline as canhouse producers change to other varieties.

The certified acreage produced a total of 59,599 pounds of seed, an increase of 3,479 pounds over the previous year. Six growers participated in the program. The variety from which the greatest quantity of seed was certified was No. 135 with 16,940 pounds; Rutgers was second with 15,707 pounds. This is the first time in more than 20 years that the Rutgers variety did not lead certified seed production in New Jersey. Other varieties and amounts certified were No. 146, 13,175 pounds; Homestead, 6,565 pounds; Marglobe, 4,015 pounds; Improved Garden State, 1,885 pounds; Valiant, 1,082 pounds; and Queens, 230 pounds.

Three new varieties were added to the recommended list for production in 1958: No. 135, No. 146 and Homestead No. 24. Before seed can be certified in New Jersey, it must first pass the three year trials of the New Jersey Agricultural Experiment Station. No. 135 and No. 146 are releases of the Campbell Soup Company; the Homestead variety is the release of the United States Department of Agriculture. Arrangements were made to supply foundation seed of No. 135 and No. 146 to New Jersey seedsmen annually. This will assist the seedsmen in meeting the three generation requirement for certified seed status.

It was evident early in the growing season that many plants were infected with bacterial spot. Weather conditions promoted development

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of the disease, and just before field inspections were to be made, widespread infection occurred. Bacterial spot was observed on many tomato fruits and was of great concern to the seed industry. A meeting was held at Swedesboro on July 24 which included members of the seed industry, representatives from the New Jersey Agricultural Experiment Station, DuPont personnel and others interested. It was generally concluded that fields with serious bacterial spot infections would be removed from certification and that all certified seed would be treated with one of the approved mercurial compounds. The evidence is rather conclusive that seed properly treated with a mercurial will not carry the bacterial spot pathogen. Further study is necessary to ascertain the germination factor with seed that has been treated with a mercurial compound and hermetically sealed in metal cans.

Laboratory plating of tomato seed continued for the second year. All lots of New Jersey certified seed were tested by two methods to ascertain effectiveness of the fungicidal treatments.

New seed certification regulations were written and adopted. The regulations have been so prepared that new seed may be added without complete revision of the rules.

For the first time the Department issued tags to the seedsmen. This means that all New Jersey certified seed carries a uniform tag. Only bags with the official tags are recognized as certified.

Several articles on New Jersey certified tomato seed were released nationally to assist in promoting sales. With the cooperative effort of all seedsmen, plus the facilities of the New Jersey Agricultural Experiment Station and the New Jersey Department of Agriculture, it is expected that the New Jersey product will secure a better share of the market.

## TOMATO SEED CERTIFICATION 1951-1958

## VARIETAL DISTRIBUTION CERTIFIED TOMATO SEED ACREAGES

| Year | Baltimore | Marglobe | Valiant | Stokes-<br>dale | Rutgers | Pritchard | Improved<br>Garden<br>State | Ontario | Queens | Century | Brookston | No.<br>135 | No.<br>146 | Homestead | Total |
|------|-----------|----------|---------|-----------------|---------|-----------|-----------------------------|---------|--------|---------|-----------|------------|------------|-----------|-------|
| 1958 | ...       | 97       | 26      | ...             | 659     | ...       | 118                         | ...     | 10     | ...     | ...       | 369        | 289        | 123       | 1,691 |
| 1957 | ...       | 179      | ...     | ...             | 1,208   | ...       | 436                         | ...     | 26     | ...     | ...       | ...        | ...        | ...       | 1,849 |
| 1956 | ...       | 135      | 16      | 50              | 1,749   | 10        | 635                         | 16      | 86     | 9       | ...       | ...        | ...        | ...       | 2,706 |
| 1955 | ...       | 312      | 29      | 69              | 2,012   | 10        | 518                         | ...     | 73     | 17      | 22        | ...        | ...        | ...       | 3,062 |
| 1954 | 1         | 232      | 80      | 28              | 1,929   | 33        | 348                         | ...     | 62     | 26      | ...       | ...        | ...        | ...       | 2,739 |
| 1953 | ...       | 243      | 52      | 30              | 2,035   | 15        | 320                         | ...     | 38     | 9       | ...       | ...        | ...        | ...       | 2,742 |
| 1952 | ...       | 258      | 31      | 79              | 2,658   | 13        | 252                         | 4       | 6      | ...     | ...       | ...        | ...        | ...       | 3,301 |
| 1951 | 3         | 190      | 10      | 30              | 3,058   | 10        | 173                         | 2       | ...    | ...     | ...       | ...        | ...        | ...       | 3,476 |

## FORTY-FOURTH ANNUAL REPORT

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POUNDS OF NEW JERSEY CERTIFIED TOMATO SEED VALIDATED FOR EXPORT SHIPMENT  
July 1, 1958-June 30, 1959

| Ceylon | Cuba | Southern<br>Rhodesia | South Africa |                   |                   | For Export |           | Total   |
|--------|------|----------------------|--------------|-------------------|-------------------|------------|-----------|---------|
|        |      |                      | Pretoria     | Johannes-<br>burg | Port<br>Elizabeth | Texas      | Tennessee |         |
| 269    | 921  | 50.5                 | 80           | 450               | 30                | 351        | 200       | 2,351.5 |

POUNDS OF NEW JERSEY VEGETABLE (AND OTHER) SEED EXPORTED FOR  
WHICH PHYTOSANITARY CERTIFICATES WERE ISSUED

| Cuba | Trujillo | Ceylon | Italy | Total |
|------|----------|--------|-------|-------|
| 156  | 900*     | 48     | 359   | 1,463 |

## BUREAU OF PLANT PATHOLOGY

## CANKER STAIN DISEASE CONTROL

(Calendar Year 1958)

A disease of the common shade tree, the London plane, *Platanus acerifolia*, has become well established in certain areas of New Jersey. The disease is especially prevalent in Burlington and Camden counties. The American sycamore or native plane tree, *P. occidentalis*, is also susceptible to this disease.

The cause of the disease is a fungus, *Endoconidiophora* sp. In the trunk or branches it produces a canker which is a typically darkened, elongated, annually-zoned, sunken area. The wood beneath the canker is stained bluish black or reddish brown.

The fungus is commonly spread by mechanical injury to the bark, with contaminated objects. These injuries occur through pruning operations, or through scraping by vehicles, playing children, lawn mowers and many other means. The organism is thus readily transferred from infected to healthy trees.

Control is presently being attempted by removing infected trees as soon as symptoms become apparent. The removed trees are required to be burned and all tools and equipment which have come into contact with the infected wood must be sterilized before being used on other trees.

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\* Alfalfa and red clover seed.

Following is the progressive report for canker stain disease control for the calendar year 1958.

#### CANKER STAIN SCOUTING BY COUNTIES

| County     | Total<br>Number Trees<br>Inspected | Diseased Trees Located to January 1, 1958 |                  |          | Trees<br>Tagged<br>in 1958 |
|------------|------------------------------------|---|------------------|----------|----------------------------|
|            |                                    | Total                                     | Total<br>Removed | Standing |                            |
| Bergen     | 4,302                              | ...                                       | ...              | ...      | ...                        |
| Burlington | 23,380                             | 35  | 32               | 3        | 50                         |
| Camden     | 56,350                             | 662                                       | 602              | 60       | 389                        |
| Cape May   | 5,300                              | ...                                       | ...              | ...      | ...                        |
| Essex      | 6,958                              | ...                                       | ...              | ...      | ...                        |
| Hudson     | 17,084                             | ...                                       | ...              | ...      | ...                        |
| Hunterdon  | 1,258                              | ...                                       | ...              | ...      | ...                        |
| Mercer     | 3,936                              | 14  | 14               | ...      | 9                          |
| Middlesex  | 14,881                             | ...                                       | ...              | ...      | ...                        |
| Monmouth   | 8,063                              | ...                                       | ...              | ...      | ...                        |
| Morris     | 367                                | ...                                       | ...              | ...      | ...                        |
| Passaic    | 2,979                              | ...                                       | ...              | ...      | 1                          |
| Somerset   | 556                                | ...                                       | ...              | ...      | ...                        |
| Sussex     | 12                                 | ...                                       | ...              | ...      | ...                        |
| Union      | 10,539                             | 3   | 3                | ...      | ...                        |
| Warren     | 1,958                              | 7   | 7                | ...      | ...                        |
| Totals     | 157,923                            | 721                                       | 658              | 63       | 449                        |

#### OAK WILT SCOUTING

(Calendar Year 1958)

Scouting for oak wilt in New Jersey was initiated in 1952. For two years, the scouting was conducted principally through a cooperative agreement with the United States Department of Agriculture, which entailed the use of aircraft for aerial surveys. During this two-year period a number of suspect trees were sampled; all the laboratory reports were negative.

Because no oak wilt infections were found in New Jersey during 1952 and 1953, the cooperative airplane scouting in this State was suspended in 1954. Additional effort was thereby expended in other states where oak wilt is definitely established. Since 1953, scouting for this disease in New Jersey has been entirely by ground observation.

The generous and well distributed rainfall throughout the growing season of 1958 caused a lush growth of forest foliage. Scouting by Department personnel gave negative results. One tree on private property in Millville, which displayed symptoms closely approaching those ascribed to oak wilt, was reported, examined, sampled and laboratory cultured, but found to be negative for oak wilt.

On the basis of the 1958 observations, it may be assumed that oak wilt does not exist in New Jersey.

### DUTCH ELM DISEASE CONTROL (Calendar Year 1958)

A general survey to determine the trend of Dutch elm disease in the State was conducted during the year. Findings by counties were as follows:

|                    |  |
|--------------------|--|
| Bergen County—     | Oakland-Mahwah vicinity, general increase.   |
| Passaic County—    | Wayne Township, increase in 1958 over 1957.  |
| Hudson County—     | Definite increase on the Jersey City street trees and the Hudson County Park within the City limits.   |
| Warren County—     | Penwell-Hackettstown area, increase. Waterloo-Hackettstown area, principally along the Musconetcong River, increase.   |
| Sussex County—     | Newton-Lafayette, increase. Andover-Lake Mohawk, increase. Sporadic spraying on Lake Mohawk properties demonstrated the effectiveness of the control recommendation.   |
| Morris County—     | Myersville-New Vernon area, increase. Troy Hills, Mountain Lakes area, increase. Netcong-Waterloo area, increase. Surprisingly the incidence of disease in the Florham Park area is much reduced from the severity of the previous five years. This area should be investigated.         |
| Union County—      | Westfield, a striking increase of disease on the street trees. A definite increase in the number of diseased trees in the parks of the Union County Park system. The severity of the disease on the property of Baltusrol Country Club has remained at a low level; three trees in 1958. |
| Essex County—      | A definite increase in the number of diseased trees in Newark and East Orange. Municipal activity in Montclair in 1957 resulted in a sharp decline in the number of diseased trees in 1958. A slight increase in the number of diseased trees in the Essex County Park system.           |
| Somerset County—   | Heavier in 1958, mostly native elms, Oldwick-Bedminster area and the Franklin Park-Griggstown area.  |
| Hunterdon County—  | A decrease in this county with the exception of the Musconetcong River Valley at Califon.  |
| Mercer County—     | Princeton-Hopewell area, sharp increase.   |
| Middlesex County—  | Significant increase in the number of infected trees in the Metuchen-Hadley Airport area.  |
| Monmouth County—   | Scattered infected trees throughout the county.  |
| Burlington County— | General but not serious, except in Burlington City.  |
| Camden County—     | General but not serious except in Brooklawn.   |
| Gloucester County— | No symptomatic trees observed this year.   |
| Cumberland County— | One laboratory confirmed tree detected in Greenwich was immediately removed. Three symptomatic non-cultured trees in the immediate area also removed. First record for this county.  |
| Salem County—      | No symptomatic trees observed this year.   |
| Ocean County—      | No symptomatic trees observed this year.   |
| Atlantic County—   | No symptomatic trees observed this year.   |
| Cape May County—   | No symptomatic trees observed this year.   |



*Assistance to Shade Tree Commissions*

Considerable time was spent scouting municipal trees and trees in county and State park systems. Because park areas are extensive and often adjoin municipalities, a concerted control effort in park systems is important. A summary of the principal park and municipal scouting work follows:

| Park or Municipality | Number<br>Trees Examined | Diseased<br>Trees Found |
|----------------------|--------------------------|-------------------------|
| Essex County parks   | 6,000                    | 193                     |
| Hudson County parks  | 2,500                    | 42                      |
| Jersey City          | 2,000                    | 8                       |
| Bayonne              | 600                      | 2                       |
| Ringwood State Park  | 500                      | 42                      |
| Kearny               | 200                      | 27                      |
| Union County parks   | 2,900                    | 320                     |

The reaction to the detection of diseased trees in Hudson County was quite prompt. Most of the trees were destroyed by burial into sanitary land fill of the Hackensack meadows. The town of Kearny encountered difficulties because the spray equipment did not function properly. Before the necessary repairs were made, the bark beetles had emerged and undoubtedly caused infective feeding. Ringwood State Park has been a perennial problem because the trees are of mammoth size and funds are not available for the procurement of suitable spray equipment. The loss of trees can be expected to continue, particularly since neighboring woodland trees display a high degree of infection.

The Dutch elm disease spray program of the Union County Park system has been somewhat varied during the past three years. Pre-foliar sprays were not applied in 1957 and 1958. At the request of the commissioner of this park, the entire area was scouted and 320 infected trees were detected. The commission is planning to remove all of the infected trees. In 1959 a dormant season spray program will be established for the protection of the remaining trees.

The Town of Newton in Sussex County has a planting of memorial elms encircling the municipal athletic fields. Several of these trees have been lost because of Dutch elm disease. The city manager has arranged for the services of this Department in planning a program for Dutch elm disease control for 1958 and thereafter.

Numerous other municipalities received service from the inspectors of this Division. The responsible shade tree officials were given recommendations for the disposition of their immediate problems. Many of the properties of the State Department of Institutions and Agencies were again examined and trees requiring special attention, elms or otherwise, were directed to the attention of the custodian.

*Assistance to Commercial Arborists and Private Property Owners*

A total of 75 requests was received from this group for information and assistance on elm tree problems. With few exceptions, inspections resulted in a recommendation for tree removal. The most significant example of active cooperation by private property owners with this Department is the Baltusrol Country Club at Springfield. This club, after a distressing experience with a commercial arborist, has assumed full responsibility for spraying its trees. Sprays were applied according to the recommendations of this Department and resulted in a sharp reduction in the number of diseased trees. Inspection results are as follows:

46 diseased trees marked in 1955  
35 diseased trees marked in 1956  
6 diseased trees marked in 1957  
3 diseased trees marked in 1958

The DunWalke Farms, Far Hills, has a fine collection of ornamental elms together with woodland and fence row trees of the same species. Dutch elm disease losses occurred in 1957 and 1958. A special spray program, including a trial with Captan, is being formulated for 1959.

The Levittown, New Jersey, Corporation, which is developing a 750-acre Burlington tract, requested the inspection of a 35-acre woodland clearance and recommendations for the disposition of encountered elm wood.

*Inspection of State Highway Contracts*

A clause in all State highway contracts requires that this Department provide the services of an inspector to supervise the disposition of encountered elm wood. In 1958, this service was provided for the following highway contracts: (1) The re-routing of U. S. 22 at Clinton; (2) The re-routing of U. S. 22 at Bloomsbury; (3) The re-routing of New Jersey 46 at Dover; (4) The re-routing of New Jersey 46 at Morris Plains; (5) Extension of New Jersey No. 21 at Belleville; (6) Interchanges at the junction of New Jersey 46 and Garden State Parkway at Clifton, (7) A three-mile detached section (George Washington Bridge to Delaware Water Gap Freeway) in Morris County.

*General Observations*

The appearance of Dutch elm disease symptomatic trees during late May and the month of June presaged a significant increase in Dutch elm disease in 1958 over the previous year. Excessive rainfall during the month of April encouraged prolific sporulation of the fungus in elm bark beetle galleries. Consequently, emerging beetles were generously covered with inoculum, which they subsequently carried to the trees where they fed.

Dutch elm disease scouting work was not hampered by the activity of defoliators. Elm leaf beetles and cankerworms were again so few in number that little, if any, spraying was done specifically for these insects.

### COOPERATIVE ECONOMIC INSECT SURVEY

Since 1953, the Department has conducted surveys to determine the presence or status of insects of importance to agriculture. The Agricultural Experiment Station and the Extension Service cooperate in this project. Representatives of the Station consult with the Department in determining subjects worthy of study; then receive and analyze the material taken in the course of the survey. The Extension Service receives the results; publishes and distributes them to farmers, county agricultural agents, the Agricultural Research Service, Cooperative Economic Insect Survey and other interested agencies and persons.

A summary of the results of the various surveys follows:

#### *Asparagus Beetles*

The common asparagus beetle, *Crioceris asparagi*, and the spotted asparagus beetle, *C. duodecimpunctata*, are serious pests of asparagus in New Jersey. The populations of the beetles vary widely from year to year. If the relative abundance of the overwintering beetles is known, growers are better able to achieve early, economical control of the pests. A yearly survey is made to provide this information.

RESULTS OF ASPARAGUS BEETLE SURVEYS, 1958\* AND 1959†

| County                      | Number<br>Locations | Average Number per 100 Stalks per Field |      |                |      |
|-----------------------------|---------------------|---|------|----------------|------|
|                             |                     | Common Beetle                           |      | Spotted Beetle |      |
|                             |                     | 1958                                    | 1959 | 1958           | 1959 |
| Cumberland                  | 10                  | 2.3                                     | 13.5 | 0.3            | 0.1  |
| Salem                       | 10                  | 1.2                                     | 5.6  | 0.3            | ..   |
| Gloucester                  | 10                  | 3.3                                     | 15.1 | 0.3            | 0.2  |
| Atlantic                    | 5                   | 5.6                                     | 55.0 | 0.6            | 0.6  |
| Camden                      | 5                   | 5.6                                     | 73.2 | 0.2            | 0.4  |
| Burlington                  | 5                   | 11.8                                    | 53.2 | 1.2            | 0.2  |
| Total                       | 45                  |   |      |                |      |
| Average per field Statewide |                     | 4.1                                     | 27.8 | 0.4            | 0.2  |

The common asparagus beetle was more abundant than in 1958. Normally, it is the more destructive, as well as the more common, of the two beetles. Growers and processors reported heavy intestations during the growing season, proving the accuracy of the forecast.

\* Survey was begun January 3 and completed February 5, 1958.

† Survey was begun December 17, 1958, and completed January 15, 1959.

*Carrot Weevil*

The carrot weevil, *Listronotus oregonensis* (Leconte), was first noticed to be causing damage to celery in 1936 and to carrots in 1937, in New Jersey. Parsley is also attacked by this insect.

The carrot weevil has at least three generations a year and overwinters as an adult beetle in grass and debris around fields. In the spring the adults puncture plant stems and insert one or more eggs. The hatching larvae feed around the roots of parsley plants.

Recently, difficulties in growing parsley have been reported. Symptoms indicated that the carrot weevil was the cause. A survey was made to determine the area of occurrence of this insect in vegetable growing sections of the State.

Fifty-two fields in 17 counties were surveyed for evidence of infestation. Counts of egg punctures and eggs of this insect, as well as adult beetles, were taken. The weevil was present in Bergen, Gloucester, Atlantic, Cumberland and Salem counties. The infestation in the last four counties was centered in the Vineland area.

*Cyclamen Mite on Strawberries*

In the recent past, only two infestations of the cyclamen mite, *Tarsonemus pallidus*, on strawberries have been located in New Jersey. Control measures were quickly applied and no infestations of the mites have been reported since.

The mite builds up rapidly on strawberry plants in cool, late spring weather. When infested, the plant quickly deteriorates and symptoms are easily noticed. Since it was important to know if strawberries grown for official certification were infested with the mite, observations were made in 17 fields in seven counties growing such plants. No mites were detected.

*European Apple Sawfly*

The European apple sawfly, *Hoplocampa testudinea*, an introduced pest of apple trees, causes important injury to the fruit. The young larvae of the sawfly tunnel under the skin and feed in the apple.

This insect was first recorded in New Jersey in Bergen County; in 1958, a survey revealed it to be present in northeastern Sussex County and northern Monmouth County. In 1959, the insect was found in Morris and Somerset counties. It is believed that the sawfly has not yet extended its range beyond Sussex County to the north and Monmouth County to the south.

*European Chafer*

In the spring of 1959, the European chafer, *Amphimallon majalis*, a highly injurious imported insect, was found in Brooklyn, New York. Previously the insect was known to exist in western New York State, Connecticut and one isolated location in West Virginia. The chafer is the subject of a Federal quarantine.

By late June, when the adults emerge, the insect had been found on some 14 square miles, bordering the Hudson River and New York Bay. Heavy infestations were observed along the Belt Parkway and at the Brooklyn terminal of the Staten Island ferry. Under these conditions, it must be expected that the European chafer will soon be found in New Jersey. By the end of June, a cooperative survey with the Plant Pest Control Division of the Agricultural Research Service had been organized.

*European Corn Borer*

A survey of the overwintering population of the European corn borer, *Pyrausta nubilalis*, was again conducted in the fall and spring months.

Results of the fall survey, completed in November, are presented below with last year's data. Ten fields were surveyed in 10 of the counties listed below, while five fields only were surveyed in Camden and Cumberland counties. The techniques used were the same as those for previous surveys.

| County                                   | Average Number of Borers<br>per 100 Plants |       |
|--|--|-------|
|  | 1957                                       | 1958  |
| Sussex                                   | 3.6  | 10.8  |
| Warren                                   | 7.6  | 8.0   |
| Hunterdon                                | 10.4                                       | 16.0  |
| Somerset                                 | 150.6                                      | 292.8 |
| Middlesex                                | 63.0                                       | 298.8 |
| Monmouth                                 | 407.8                                      | 368.8 |
| Mercer                                   | 117.4                                      | 185.8 |
| Burlington                               | 81.2                                       | 188.4 |
| Camden                                   | 94.0                                       | 128.0 |
| Gloucester                               | 52.8                                       | 162.8 |
| Salem                                    | 40.6                                       | 168.4 |
| Cumberland                               | 36.0                                       | 99.8  |
| State mean for 12<br>comparable counties | 88.8                                       | 160.7 |

The fall population was found to be almost twice as large as that of last year. The central and southern counties showed the largest increase in number of borers.

The spring survey, conducted in 110 fields of the above 12 counties, served as a measure of the overwintering mortality and phenological development of the borer.



Mortality of the late fall population of the European corn borer was approximately 32.4 per cent. Causes are estimated as follows:

Bird feeding—52.1 per cent  
Insect parasitization—41.1 per cent  
Mechanical injury of the stalk—6.8 per cent

The number of borers, per apparently infested stalk, was found to be 1.73. In 1958, this average was 1.29.

The surveys indicated better survival of borers than in the previous year. Therefore, more damage from this insect was predicted. The damage from the first generation in 1959 bore out the prediction.

Larval collections were made in the fall of 1958, in cooperation with the United States Department of Agriculture at Ankeny, Iowa, to determine the levels of parasite establishments. Of a total of 961 borers collected from 21 sites in 16 counties, 132 or 13.7 per cent were found to be parasitized. *Macrocentrus gifuensis* was responsible for the greatest number of parasitizations, 116 or 12.1 per cent. Other parasites found were *Lydella grisescens* on 1.2 per cent of the borers and *Horogenes punctorius* on 0.3 per cent.

#### *Insects on Corn*

A survey to provide information on three corn infesting insects of major importance was performed during July, August and September. These insects were the corn earworm, *Heliothis zea*; European corn borer, *Pyrausta nubilalis*, and the fall armyworm, *Laphygma frugiperda*.

Field inspections of sweet and field corn were made by examining 25 silks in each field for corn earworm eggs and 25 plants for armyworm egg masses. The degree of damage and infestation by the European corn borer was also noted.

Results of these investigations were made available to the extension specialist in entomology, who used them as a basis for timely warnings to affected growers.

#### *Khapra Beetle*

The Khapra beetle, *Trogoderma granarium*, is a serious pest of stored grain and cereal products. It has not yet been reported from New Jersey.

As in 1955, 1956 and 1958, scouting was performed in the spring of 1959 to determine whether or not the insect is present in the State. This was a cooperative effort with the Plant Pest Control Division of the Agricultural Research Service.

Two hundred and fourteen establishments in 19 counties were visited during the survey.



Specimens from 12 different establishments were submitted for identification, but none proved to be Khapra beetle.

### *Light Trapping*

A program of trapping insects of economic importance during seasons of flight was developed. In 1958 one trap was used; two were in service in 1959.

The information obtained by counts of insects collected from the traps was transmitted to the growers, through Extension Service channels. This information proved to be extremely useful in the establishment of control programs. The economically important pests concerned were the armyworm, *Pseudaletia unipuncta*; black cutworm, *Agrotis ypsilon*; corn earworm, *Heliothis zea*; fall armyworm, *Laphygma frugiperda*; tomato hornworm, *Protoparce quinquemaculata* and European corn borer, *Pyrausta nubilalis*.

### *Mexican Bean Beetle*

A survey was conducted to determine the abundance of the overwintering population of the Mexican bean beetle, *Epilachna varivestis*. This insect damages snap and lima beans by adult and larval feeding on the undersides of the leaves. The population of the beetle in commercial fields has been very low for several years, but accurate information is necessary because of the threat of cyclic population build-up.

A survey method was designed and employed to predict the relative population abundance during a growing season, from counts of hibernating insects in the previous winter months.

Four hundred and thirteen square yards of duff in 18 wooded locations in Cumberland, Cape May and Salem counties were examined for overwintering adults. In 1957, only three beetles were found at two locations; the 1958 survey revealed 11 beetles scattered in seven wooded sites. These numbers are insignificant. Obviously, additional information is needed on beetle hibernating sites, other than woodlands. Standing bean fields in December revealed beetles in plant debris on the soil surface. The subject will be further studied.

### *Pepper Weevil*

The pepper weevil, *Anthonomus eugenii*, was found for the first time in the State last year in Gloucester County. Knowledge of the biology of this insect in other areas indicated that the insect would be unable to overwinter in New Jersey.

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A survey was conducted in July, September and October for larval and adult beetle damage as well as for adult beetles themselves. No specimens were found.

#### *Potato Leafhopper*

The potato leafhopper, *Empoasca fabae*, causes much injury to alfalfa, white potatoes and snap beans by nymphal and adult feeding. Each week beginning in July and continuing into September, fields in the central part of the State were surveyed. Twenty-five 180-degree sweeps with a standard insect collecting net were made in each field. A count of the insects taken was made and the results were made available to the growers through Extension Service channels. It is expected that this service will reduce losses caused by the insect.

#### *Potato Aphid*

The potato aphid, *Macrosiphum solanifolii*, injures tomatoes, white potatoes, egg plants, peppers and sweet potatoes. The aphids can reduce the set on the first tomato blossom clusters by as much as 50 per cent.

Counts were made of the overwintering eggs of this aphid on its primary overwintering host, swamp rose, *Rosa palustris*. At each of 18 locations in seven counties, 270 buds and 270 crotches were inspected and records of the distended (alive) and shrunken (dead) eggs were made.

The counts of fully distended eggs in the spring of 1959 revealed a sixfold increase over 1958. At the start of the 1959 growing season, severe aphid damage was expected. However, a disease of the aphid became prevalent and the threat was not realized.

#### *Spittlebug*

Surveys to determine the abundance of the meadow spittlebug, *Philaneus leucophthalmus*, which is injurious to alfalfa and clover, have been carried on since the fall of 1953. In the fall, egg masses are counted on red clover plants, and in the spring, the number of nymphs found on dandelion plants is recorded. Fall counts are used to predict spittlebug abundance the following year.

Except for 1956, the number of egg masses found in fall surveys has declined steadily since 1953. The insect has gradually become less important. The fall egg populations of 1958 and spring nymph populations of 1959 were lower than at any time since these surveys began.

#### *Spotted Alfalfa Aphid*

The spotted alfalfa aphid, *Therioaphis maculata*, is an injurious pest of alfalfa in many parts of the country. It has moved from the western

alfalfa sections to many of the eastern areas of the United States. This survey was made to determine if the insect had spread into New Jersey.

Samples of aphids from alfalfa fields in the southern counties were collected and sent to the Agricultural Experiment Station for identification. Suspicious specimens were separated there and submitted to the United States Department of Agriculture for final determination. The results were negative.

### *Sweet Potato Yellow Dwarf*

Sweet potato yellow dwarf or mosaic, a serious virus disease of sweet potato plants, was found in New Jersey for the first time in 1957. This disease had become established on nine farms in southern New Jersey. In all cases, it occurred on sweet potato plants of the Georgia Red variety.

In August and September, a survey was conducted to determine whether or not the disease was still present. All sweet potato fields owned by growers who had infected plantings the previous year, and adjacent sweet potato fields, were inspected. A total of 33 fields, comprising approximately 169 acres in Gloucester, Cumberland and Atlantic counties was inspected.

Yellow dwarf or mosaic disease symptoms were found in one planting near Newfield. The owner has been required to take the necessary control measures.

### *Collection of Codling Moth Larvae*

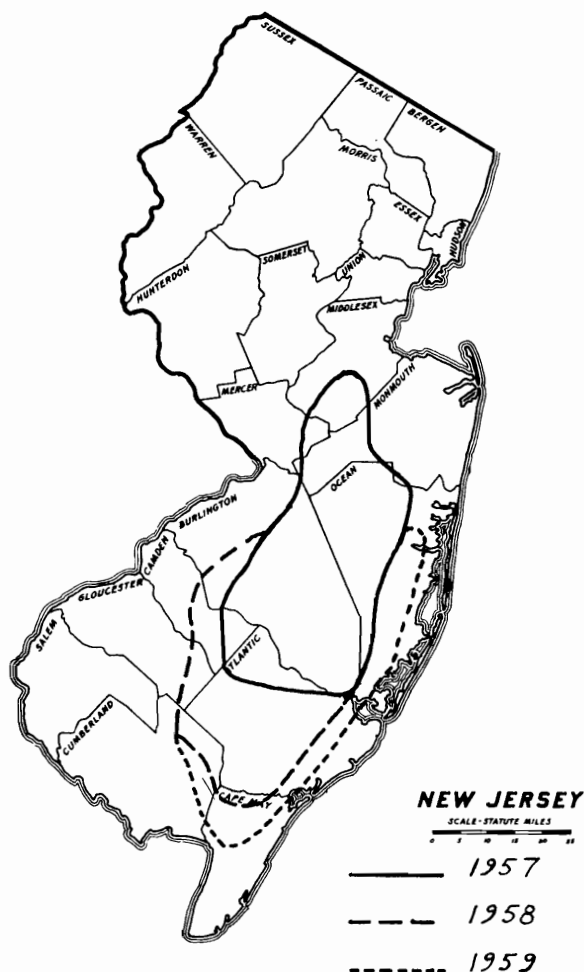
Collections of the larvae of the codling moth, *Carpocapsa pomonella*, were made in Gloucester and Burlington counties as part of an investigation begun in past years. The specimens were submitted to the Agricultural Experiment Station to be used in studies of resistance to the insecticide DDT.

## LABORATORY ACTIVITIES

## BIOLOGICAL CONTROL OF A SAWFLY IN NATIVE PINE

In the year 1956 an infestation of a sawfly feeding mainly on pitch pine, *Pinus rigida*, was noticed and by 1957 an outbreak of epidemic proportions had occurred. The sawfly was identified as *Neodiprion pratti paradoxicus*. The Division laboratory reported measures aimed at the biological control of the insect in the forty-second and forty-third annual reports of the Department.

The following map shows the spread of the insect since 1957.



Distribution of the pine sawfly, *Neodiprion pratti paradoxicus*, in New Jersey in 1957, 1958 and 1959.

The establishment and study of biological control agents in the area infested by the sawfly continued as a major work program for the year. The background information on these problems is contained in the two previous annual reports.

The known area of infestation by this sawfly now encompasses 2,340 square miles in New Jersey. This outbreak is part of a vast upsurge in forest defoliators now reaching from Maine to Florida. Practically all of the pitch pine area in New Jersey is involved. The area has thus increased substantially in the past year. The intensity of the infestation, as judged by the density of the insect population and resultant defoliation, showed a marked reduction occurring between the spring of 1957 and the spring of 1958. This trend to lesser damage continued to be evident in the spring of 1959. There are now large areas, formerly severely defoliated, showing scarcely perceptible damage except on close inspection. Certain localized areas still show very heavy damage.

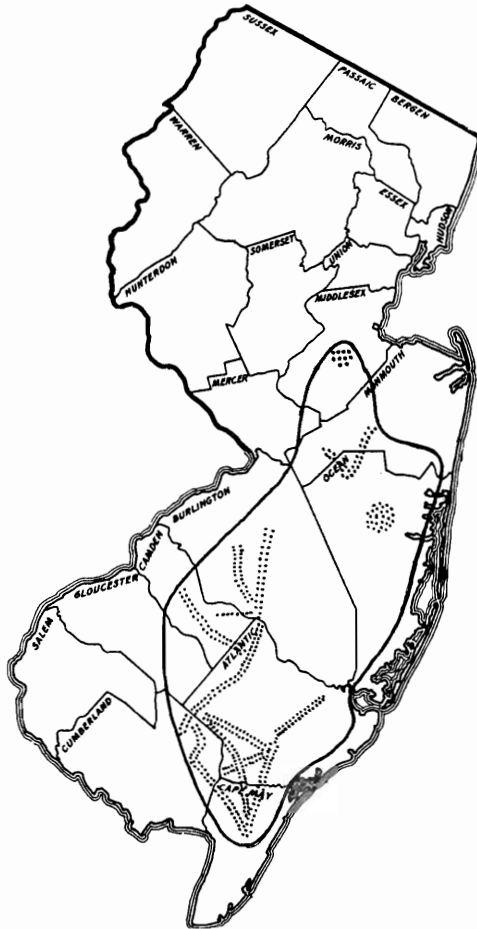
Laboratory rearing and field introduction of *Dahlbominus fuscipennis* (Zett.), a parasite of sawfly cocoons, was continued in the manner reported last year. An estimated 60,000 cocoons of *Neodiprion sertifer* were collected and used in rearing 600,000 *Dahlbominus* for release in the area infested by *N. pratti paradoxicus*. The limitations of personnel, space and present laboratory facilities precluded any larger effort in rearing insect parasites.

Field distribution of the parasites was completed in the period September 16 to September 24, 1958. Earlier releases could not be made because the breeding stock of parasites failed to live through the transition period while the laboratory was being moved from White Horse to the present Miller Avenue location. This made it necessary to recover the parasite from nature and increase the numbers to practical rearing proportions.

The locale of release of *Dahlbominus* was governed by the following three factors in the current year: (1) locations where only a small introduction was previously made in 1957; (2) areas showing a continuing heavy infestation by the sawfly, even though parasites were introduced in 1957; (3) newly discovered peripheral infestation areas, or areas so lightly infested in 1957 that no parasites were released. The accompanying outline map of the State shows the boundary of infestation by *N. pratti paradoxicus* determined in June, 1959 and the pattern of parasite distributions made in September, 1958.

The hymenopterous parasite *Exenterus canadensis* (Prov.), which oviposits on the last feeding instar of sawfly larvae, was abundant throughout the area of appreciable infestation by *N. pratti paradoxicus*. The dipterous parasite, *Anthrax sinuosa* (Weid.), the larvae of which attack cocooned sawflies, occurred in great numbers throughout the areas of infestation. Sawfly cocoon collections from the field, plus observations on

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Map showing the area infested by the pine sawfly, *Neodiprion pratti paradoxicus*, in June 1959. Dots indicate the location of field releases of the sawfly cocoon parasite, *Dahlbominus fuscipennis*, made in September, 1958.

the abundance of these adult parasites, indicate strongly that *Exenterus* and *Anthrax* are the dominant parasites, and that they are present in sufficient numbers to exert a distinct control on the pest insect. The cocoon parasite *Mastrus argeae* (Vier.) increased in abundance during the summer of 1958 and was noted in most localities observed. Another parasite of sawfly cocoons, *Aptesis basizonius* (Grav.), also increased in numbers and apparently in range; this species is very secretive in habit and difficult to observe, so that detection and evaluation may be deceptively low.



There is now evidence that *Dahlbominus*, first introduced into the *N. pratti paradoxicus* infested area in 1957, has become established. Recoveries have been made from the Lebanon State Forest, Holmanville, Ridgeway, Port Republic, Pleasant Grove and Folsom. A comprehensive survey to establish the status of parasite distribution and abundance is badly needed at this time.

A hitherto unmentioned sawfly of the genus *Neodiprion* (species yet undetermined) was first noted in the Folsom area on September 22, 1958, with mature larvae in large numbers feeding on pitch pine. This species cocooned shortly after the first of October. Larvae of apparently the same species were observed in the first instar stage on May 28, 1959, in the same area. Observations were continued as time permitted to the close of June, 1959. Locally the species is in outbreak in the Folsom area, and near Port Republic on the Garden State Parkway. It was also found in the Bass River State Forest. The spring generation of this sawfly consumes both the old and new growth of pitch pine. The late summer generation feeds on any age of needles present on the pine. If this species develops to outbreak proportions, it is probable the resultant damage will far exceed that caused by *Neodiprion pratti paradoxicus*.

Problems with sawflies now seem perennial in New Jersey. The prospects for control by biological methods are promising, but this type of work requires highly trained personnel, specialized equipment, patience and persistence. Meanwhile, the very limited program is providing important information which might serve as a basis for more intensive work when that becomes possible.

#### SURVEY OF NURSERIES FOR PLANT PARASITIC NEMATODES

A survey of New Jersey nurseries for plant parasitic nematodes was initiated in July, 1958. Collection of samples and preparatory processing for microscopical examination continued throughout the remainder of the summer and fall seasons. Nematologists in the Department of Entomology of the New Jersey Agricultural Experiment Station contributed substantially to the taxonomic aspects of the survey. Samples were collected from 32 genera of plants, taken from 33 commercial nurseries located in 15 of the State's 21 counties. A total of 190 samples was examined in this phase of the survey. A Department circular, No. 411, "Nematodes and the Nursery Industry," presents the survey results in considerable detail, from the point of view likely to be most useful to the plant industry. While this is the most extensive survey of this type undertaken to date, the results must be considered as exploratory and not definitive. The list of plants examined is given in Table 1.

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TABLE 1. PLANTS SAMPLED IN NURSERY NEMATODE SURVEY

| Plant Genus          | Common Name            | Number<br>Samples Taken |
|----------------------|------------------------|-------------------------|
| <i>Abelia</i>        | Abelia                 | 1                       |
| <i>Acer</i>          | Maple                  | 1                       |
| <i>Andromeda</i>     | Andromeda              | 11                      |
| <i>Berberis</i>      | Barberry               | 3                       |
| <i>Buxus</i>         | Box                    | 2                       |
| <i>Chamaecyparis</i> | False cypress          | 4                       |
| <i>Chrysanthemum</i> | Chrysanthemum          | 2                       |
| <i>Cornus</i>        | Dogwood                | 4                       |
| <i>Cupressus</i>     | Cypress                | 1                       |
| <i>Euonymus</i>      | Euonymus               | 3                       |
| <i>Forsythia</i>     | Forsythia              | 6                       |
| <i>Hibiscus</i>      | Rose of Sharon         | 3                       |
| <i>Ilex</i>          | Holly                  | 30                      |
| <i>Juniperus</i>     | Juniper                | 9                       |
| <i>Larix</i>         | Larch                  | 1                       |
| <i>Laurus</i>        | Laurel                 | 1                       |
| <i>Ligustrum</i>     | Privet                 | 2                       |
| <i>Liriodendron</i>  | Tuliptree              | 1                       |
| <i>Magnolia</i>      | Magnolia               | 1                       |
| <i>Malus</i>         | Crab apple (flowering) | 1                       |
| <i>Myrtus</i>        | Myrtle                 | 1                       |
| <i>Pachysandra</i>   | Pachysandra            | 1                       |
| <i>Paeonia</i>       | Peony                  | 3                       |
| <i>Picea</i>         | Spruce                 | 10                      |
| <i>Pinus</i>         | Pine                   | 8                       |
| <i>Rhododendron</i>  | Azalea                 | 9                       |
| <i>Rhododendron</i>  | Rhododendron           | 9                       |
| <i>Salix</i>         | Willow                 | 1                       |
| <i>Syringa</i>       | Lilac                  | 5                       |
| <i>Taxus</i>         | Yew                    | 28                      |
| <i>Thuja</i>         | Arborvitae             | 16                      |
| <i>Tsuga</i>         | Hemlock                | 8                       |
| <i>Viburnum</i>      | Viburnum               | 4                       |

The genera of nematodes recovered from New Jersey nursery stock are given in Table 2. Some of these are of doubtful significance as plant parasites and might better be classed as plant associates. Others are unquestioned plant pathogenic agents. Since so much is still obscure in the field of phytonematology, it is felt that no further apology is necessary. Such ubiquitous soil forms as *Rhabditis*, *Mononchus*, *Plectus* and a host of others encountered are not listed since they are clearly not plant parasites.

TABLE 2. GENERA OF PLANT PARASITIC NEMATODES AND PLANT ASSOCIATES  
RECOVERED IN THE PRELIMINARY NURSERY STOCK SURVEY

|                          |                         |
|--------------------------|-------------------------|
| <i>Aphelenchus</i>       | <i>Nothotylenchus</i>   |
| <i>Aphelenchoides</i>    | <i>Paratylenchus</i>    |
| <i>Bolcodorus</i>        | <i>Pratylenchus</i>     |
| <i>Criconemoides</i>     | <i>Psilenchus</i>       |
| <i>Ditylenchus</i>       | <i>Pungentus</i>        |
| <i>Gottholdsteiniera</i> | <i>Rotylenchus</i>      |
| <i>Helicotylenchus</i>   | <i>Trichodorus</i>      |
| <i>Hemicyclophora</i>    | <i>Tylenchus</i>        |
| <i>Hoplolaimus</i>       | <i>Tylenchorhynchus</i> |
| <i>Leptonchus</i>        | <i>Xiphinema</i>        |
| <i>Meloidogyne</i>       |                         |

The relationship of the nematode genera to the plant genera is complex and cannot be given here. Suffice it to say that most of the plant parasitic nematodes were found on a number of different hosts, and that each plant genus harbored from one to as many as 13 genera of plant parasites.

Nematode examinations were made on 80 intercepted shipments of nursery stock from other states entering New Jersey. The list of recovered plant parasites from this material very closely paralleled the list from New Jersey nurseries. A small amount of work was done on wild plants, such as sweet gum, wild cherry, oaks and other plants not associated with nursery culture. It became clear that the plant parasitic forms found on nurseries occur in the wild plants as well. Also, the condition in New Jersey is by no means unique. As such work is continued, it becomes increasingly evident that regulatory measures restricting the movement of nursery stock because of common nematode infestation would be ill advised.

Recognition of nematodes as the source of trouble in hitherto unexplained cultural failure of plants directly benefits the nursery industry of the State. A number of cases of severe injury caused by these pests have come to light and remedial measures to prevent a recurrence or alleviate the trouble have been suggested to and adopted by the affected nurserymen. A substantial gain in the efficacy of the regular nursery inspection and certification programs could result from making a nematode examination in addition to the observation for insects and diseases.

#### STRAWBERRY PLANT EXAMINATIONS FOR NEMATODES

During the field examination of strawberry plants being produced under the State certification program, samples were routinely taken and submitted to the laboratory for nematode examination. Sixty-five samples were examined, originating from fields of 35 growers. The genera of nematodes found, frequency and percentage occurrence, are summarized in Table 3.

TABLE 3. NEMATODES FOUND IN SAMPLING STRAWBERRY PLANTS

| Genus Nematode          | Number of Encounters | Per Cent Samples Occurring |
|-------------------------|----------------------|----------------------------|
| <i>Aphelenchoides</i>   | 9                    | 14                         |
| <i>Aphelenchus</i>      | 45                   | 69                         |
| <i>Criconemoides</i>    | 1                    | 2                          |
| <i>Ditylenchus</i>      | 53                   | 82                         |
| <i>Hoplolaimus</i>      | 3                    | 5                          |
| <i>Meloidogyne</i>      | 4                    | 6                          |
| <i>Paratylenchus</i>    | 3                    | 5                          |
| <i>Pratylenchus</i>     | 40                   | 61                         |
| <i>Tylenchorhynchus</i> | 1                    | 2                          |
| <i>Tylenchus</i>        | 42                   | 65                         |

Ordinarily, the root-knot nematode, *Meloidogyne*, receives most attention because it produces visible root lesions. However, other, less easily seen, nematodes may also cause difficulty. Since strawberries grow on the same ground for several years, and often no rotation is practiced, they are extremely vulnerable to the insidious attack of nematodes. It should be pointed out that the disease called spring dwarf is caused by *Aphelenchoides fragariae*, and summer dwarf by *Aphelenchoides besseyi*. The stem nematode, *Ditylenchus dipsaci*, occasionally causes serious trouble. *Pratylenchus* can and does become a serious problem in strawberry production, possibly exceeding *Meloidogyne* in importance.

This, the first such routine examination made in plants being grown under the certification program, indicates an increasing awareness of the part played by nematodes in limiting plant growth and production.

#### SOYBEAN CYST NEMATODE SURVEY

A plant symptom type survey for the soybean cyst nematode, *Heterodera glycines*, was conducted during part of July and August, 1958. The growing season was such that only 20 samples from suspicious appearing areas were collected. These were processed in the laboratory and the recovered cyst nematodes examined by specialists from the United States Department of Agriculture. No cysts of *H. glycines* were found. The predominant cyst forms found were of the *Heterodera weissi* group, with an occasional member of the *Heterodera schachtii* group.

In addition, all samples taken from potato fields and graders were examined for the soybean cyst nematode as well as the golden nematode of potatoes. No soybean cyst nematodes were found in 964 samples collected from 113 properties, and representative of an aggregate of 4,100 acres of farm land.

This is the second year that surveys have shown this pest to be absent from New Jersey.

#### CERTIFIED SEED EXAMINATIONS

Laboratory tests were made to assure the Seed Certification Bureau that submitted seed had been adequately treated with an approved disinfectant agent and, where necessary, protective insecticide. A total of 118 lots of seed was submitted for testing, the majority being tomato seed. Most lots were found to have been satisfactorily treated. Lots inadequately treated required retreatment as a condition of eligibility.

#### BEЕ DISEASE EXAMINATIONS

Microscopic examination was made of all bee disease material that could not be classified in the field by the inspectors of the bee culture section. The results of these examinations were transmitted to the supervisor of bee culture for appropriate action.

## Report of the Division of Information

FRED W. JACKSON, *Director*

With the reorganization of the Department in October, 1958, the scope of work of this Division was considerably expanded and its staff and duties enlarged.

In addition to the general information and public relations activities which have been the responsibility of the Division since it was established, three other lines of work have been added or expanded. With the formation of three farm products promotion councils and the transfer of their staffs to this Division, work in this field has become much more comprehensive. The staff of the Rural Advisory Council has also been added to this Division, as has the State staff of the New Jersey Crop Reporting Service.

### INFORMATION ACTIVITIES

The primary function of the Division of Information is to keep the people of the State, particularly the farmers, fully and promptly informed about the activities and services of the Department of Agriculture. Regular news services are maintained for press and radio, many special articles and services are provided for newspapers, trade papers and farm magazines, and photographs and mats related to Department work or to farming in New Jersey are supplied to the press. The Information section is also responsible for editing and processing all Department publications.

### NEWS SERVICES

Press releases are mailed at least once each week to a list of about 300. About 175 of these are daily and weekly newspapers and radio stations in New Jersey, New York City and Philadelphia. Much of the balance of the list is composed of farm magazines, special commodity publications, and trade journals. The 14 newsmen at the State House, representing the major wire services, as well as State and metropolitan dailies, are serviced by messenger.

During 1958-59, a total of 293 releases, covering Department activities or general news of New Jersey agriculture, was distributed. This amounts to an average of almost six a week. The releases were widely and regularly used in news columns and radio broadcasts.

In conjunction with the regular news service, approximately 1,000 photographs or mats were issued. Division personnel supervised the taking of pictures at numerous agricultural meetings and were responsible for their distribution. In addition, many requests for photographs for special purposes were filled.



Numerous requests from editors of farm and general publications seeking articles, and information on the Department or the State's agricultural industry, were serviced.

In cooperation with the Agricultural Communications Office of the New Jersey College of Agriculture, taped radio programs were produced on a regularly scheduled basis. The five-minute monthly report of the Secretary of Agriculture identified as "Agreport" went to 10 key radio stations, including one in Philadelphia and one in Easton, Pa.

A five-minute farm news summary from the Department went to eight stations on a bi-weekly basis. These are identified as "Agri-News." Three-minute interviews with members of the Department or reports of special events were sent to 18 radio stations.

Maintaining personal contact with station managers and program directors has helped to maintain their interest in presenting farm news reports and other material for New Jersey farmers as well as metropolitan area consumers.

Two 15-minute television programs on New Jersey agriculture were provided for the Governor's weekly television report. Various members of the staff participated in these telecasts.

#### FARMERS WEEK

Advance, current and follow-up publicity for the more than 40 agricultural groups meeting during the annual New Jersey Farmers Week is a responsibility of the Division of Information. In addition, the Division is also active in program planning and arrangements for the week.

A total of 54 press releases was issued in connection with the 1959 Farmers Week. In addition to these general mailings, special articles were prepared for magazines and for the publications of various groups interested in individual meetings. Especial acknowledgement should be made of the generous cooperation of *New Jersey Farm and Garden* which devoted much space in its January issue to advance publicity.

During the 1959 Farmers Week the five-minute daily summary of highlights was expanded to service 24 stations in New Jersey, Philadelphia, Easton and New York City. In addition, two ten-minute "Specials" and a fifteen minute "Documentary of Farmers Week" went to these 24 stations.

A one-minute 16 millimeter black and white sound film was produced for television use as an invitation to Farmers Week. Production of the film was made possible by using the studio facilities of the Agricultural Communications Office of the College of Agriculture.



### PUBLICATIONS

The Division edits and handles the processing details for all printed Department reports, circulars and other publications.

It prepares six issues of FARM SERVICE NEWS each year. This four-page illustrated publication, devoted to news of the Department and articles of current interest on New Jersey agriculture, is mailed to approximately 18,000 farm and rural readers in New Jersey.

The following circulars and reports were edited and published during 1958-59.

- Circular No. 333 (Revised)—Marketing Fresh Eggs in New Jersey.
- Circular No. 406—Laws, Rules and Regulations Governing the Shipment of Nursery Stock Out of New Jersey (No. 386 Revised).
- Circular No. 407—Dealers Licensed Under the Milk Dealers' Licensing and Bonding Act, Produce Dealers' Licensing and Bonding Act (Including Egg and Live Poultry Dealers), Cattle Dealers' Licensing Act and Disposal Plant Operators' Licensing Act.
- Circular No. 408—American Foul Brood and Its Treatment (No. 387 Revised).
- Report—Forty-third Annual Report of the New Jersey State Department of Agriculture—July 1, 1957-June 30, 1958.
- Leaflet—Commission Merchants, Dealers, Brokers and Agents Law.

Publications prepared in connection with the 1959 Farmers Week were as follows:

- 1959 Farmers Week Program.
- Homemakers' Program—1959 Farmers Week.
- Highlights of Your Convention.
- Citations for Distinguished Service to New Jersey Agriculture, 1959.

As of June 30, 1959, two circulars have been edited but delivery has not been completed by the printers:

- Circular No. 409—New Jersey Agricultural Statistics, 1957-1958.
- Circular No. 410—New Jersey Apple and Peach Tree Surveys.

### PROMOTIONAL ACTIVITIES

Although farm products promotional activities have been conducted for many years by the Department, comprehensive programs were not possible because financing was inadequate prior to the enactment of the mandatory commodity taxing laws.

Three commodity groups conducted sales promotional programs supported by special taxes during fiscal 1958-59 through industry councils, functioning as official agencies within the Department. These were the Poultry Products Promotion Council, the White Potato Industry Council, and the Asparagus Industry Council. As the fiscal year ended, preparations were being completed for adding the Apple Industry Council to the Department's official family.

The plans of work and budgets of the councils are approved by the State Board of Agriculture just as are other official units of the Department. Industry consultation and participation are traditional in New Jersey agricultural government and self-determination of such programs by each council is the policy and practice. Many minds are brought to bear upon the problems of expanding the markets for the products of the three groups, through the monthly meetings of the councils and special committees. Industry representatives give direction to the activities of the working staffs and judge the quality and effectiveness of advertising copy, media, methods and all components of each program.

The active participation of many persons on the staff of the Department, especially the Division of Markets, has been an important factor in developing the new lines of work. The product inspection and grading service staffs, which have always encouraged quality control as a prerequisite of sound marketing, have intensified their activities. Promotion is one of the tools of marketing, and only quality products can be successfully promoted. Although the regular marketing services and the new promotional services are administratively separated, their interdependence has resulted in close teamwork.

For example, the egg promotion has more than doubled the sales of inspected eggs, thus increasing the scope and effectiveness of the egg inspection service. The asparagus and potato councils are working toward a quality control program, special committees having been named to make recommendations to the State Board of Agriculture. These actions largely stem from needs underscored by the new promotional programs. In the planning stages, the councils acknowledged that advertising and merchandising must be based upon the solid substance of conformity with standards of product condition and size, if food trade requirements and consumers' preferences are to be effectively influenced. The White Potato Council adopted a comprehensive program of quality control and promotion; however, acceptance of official inspection has not been industry-wide. Other commodity groups which are considering promotional work are being urged to place quality control first on their timetables. Headway in that direction was made with the blueberry industry, but growers generally were not ready, and some reluctance to undertake added costs or extra work without assurance of rewards was indicated. Understandably, there is a "wait and see" attitude, and the established programs are being watched for results before the non-promoted commodity groups make their decisions.

The financial support of the United States Department of Agriculture under the Agricultural Marketing Service "Matching Funds" program is gratefully acknowledged. The Federal grant supplemented the regular Department allotment and funds provided by two of the councils, making possible the employment of specialized personnel to expand marketing outlets for New Jersey farm products through quality improvement and adop-

tion of better handling and merchandising practices. In further detail, this work is reported in the sections for poultry products, white potatoes and asparagus. A complete report, too voluminous for inclusion here, has been made to the United States Department of Agriculture. A copy is available for review in the offices of the New Jersey Department of Agriculture.

The matching funds work on market expansion also included special services to other commodities, including blueberries, peaches, sweet potatoes and milk. These services are being continued into the new fiscal year with the promise that several of these commodity groups will adopt complete programs. Plans of work, and justification for increasing the market expansion project, have been submitted to Washington for these products, and also for New Jersey honey, and nursery and greenhouse products.

Also gratefully acknowledged is the financial assistance given to the Department by the State Promotion Section, Department of Conservation and Economic Development. Several commodity groups are being encouraged to undertake complete programs. Small grants were made to give these groups experience with promotional activities, and to underscore State Government's interest in the economic security of all food producers.

A coordination of efforts of all farm products promotional groups in New Jersey is an objective toward which a beginning has been made. The Department has proposed to the industry councils that eventually two or more may be combined in an advertising campaign, and that merchandising workers may represent several products. To demonstrate the possibilities, 16 different farm products were promoted in a single television show produced by the Department. In another project, asparagus and eggs were combined in a special promotion to food editors. Potatoes, tomatoes and lettuce were shown in company with eggs in full-color point-of-sale displays placed in 2,000 retail outlets. Many more examples could be cited; however, these are indicative of what has been tried, and what is contemplated.

#### POULTRY PRODUCTS

The Poultry Products Promotion Council has completed its second year of operation. The paid staff consists of the executive director and his assistant, four fieldmen and two clerical workers. An advertising agency is under contract for special professional and technical services.

Of the \$100,000 State Treasury loan advanced to initiate the program, \$75,000 has been repaid. Expenditures for advertising and promotion amounted to \$144,982 during fiscal 1958-1959.

In addition to the Council's three field representatives, one man has been assigned to merchandising work. Originally, the fieldmen devoted almost full-time to egg quality survey work at the farm level. They made 1,399 farm visits that resulted in 455 surveys this year. Twenty-six farms

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were completely resurveyed to measure the effectiveness of the work, and 90 per cent showed improvement in their on-farm quality practices.

The field work is now concentrated upon producers who are experiencing difficulty in meeting quality standards. This has permitted a gradual shift of emphasis toward merchandising State Seal of Quality poultry products to retailers, restaurants, institutional users and dairies. Calls on more than 2,000 retail outlets to discuss the program and to offer merchandising assistance and point-of-purchase posters have met with excellent results. In the past, retailers received few visits on behalf of eggs, and they are most receptive to this new service.

The 1959 egg market depression dramatically demonstrated the need for the industry's long range marketing program, and the advantages of having a specialized staff ready and funds available for intensified efforts to sell New Jersey eggs. An acceleration of aggressive merchandising and promotion was made possible by the very existence of the Council.

Recognizing the need to employ all tools of a well-rounded marketing program in selling a staple food product under increasingly competitive conditions, the Council focused its first six-month egg advertising program for 1958-1959 on a self-liquidating premium offer. In 26 weeks, more than five million premium order blanks were distributed in cartons of State Seal of Quality eggs as a result of cooperation of licensed distributors. Consumers and trade interest in New Jersey eggs was generated, and sales distribution of eggs widened as a result of this promotional effort.

An egg marketing plan specifically for hotel, restaurant and institutional users was developed. State seals of enlarged size were provided for application to 30-dozen cases of individually candled eggs packed under Department inspection and supervision. For use in public eating places, back-bar strips, table tents and menu clip-ons were supplied at no cost to the trade. The staff worked closely with the associations of New Jersey restaurant and hotel operators, and egg sales were increased.

There is a great potential for increased sales of eggs through dairies delivering milk to homes. Through the Council, more than 200,000 milk bottle hangers, including recipes that called for the use of eggs and milk, were allocated to 35 cooperating dairies.

As a result of advertising, sales promotion and merchandising, and with available point-of-purchase material designed for specific uses, the State Seal of Quality egg program now embraces the retail outlet, the restaurant and institutional trade, and the milk delivery routes.

Ready-to-cook native poultry was marketed for the first time under the State Seal of Quality. The New Jersey Poultry Meat Growers Cooperative Association was given technical assistance at the growing, processing and



retailing levels. Consumer and trade acceptance was immediate. Combination advertising of two poultry products under the same official symbol was possible for the first time.

New Jersey turkey producers were assisted by the Council's staff through the difficult transition from a non-inspected status to the new mandatory program of inspection for wholesomeness under regulations promulgated by the State Department of Health. Grower cooperation was excellent. The Council advertised the availability of top quality fresh-frozen New Jersey turkeys.

Expansion of the sales volume of inspected New Jersey eggs in consumer cartons, identified with the State Seal of Quality, is a continuing prime objective. Compared with 250,000 State-inspected dozens marketed weekly at the inception of the program in 1957, a weekly sales volume of 533,000 dozens has now been attained. Sales in 30-dozen cases account for an additional 15,000 dozen weekly. The number of retail outlets currently handling New Jersey State Seal of Quality eggs has been expanded to more than 2,000.

Paid advertising in the three major consumer media, newspapers, radio and television, promoted eggs, poultry meat and turkeys on a sustained basis. A combined total weekly all-media audience of 3,965,681 was urged "to buy Genuine New Jersey Fresh Eggs with the State Seal of Quality."

Through the cooperation of the leading chain and independent retail store operators, display posters promoting eggs "for a better breakfast," were placed in more than 3,000 New Jersey stores during April by the Council's staff. The Council continued to stimulate consumer demand at retail by making available 3,500 full-color summertime egg posters. Fieldmen, again, merchandised New Jersey fresh eggs while placing 2,000 posters at point-of-purchase.

The Council obtained strong interest and enthusiasm among widely respected food publicists in the New Jersey marketing area through public relations activities. Consumer interest in New Jersey fresh eggs and poultry products was stimulated by the release of articles, photographs and recipe suggestions to influential food editors and home economists, to supplement the paid advertising. Three interim progress reports on the Council's activities were prepared and distributed to more than 2,000 industry people.

The poultry products promotional workers participated in many meetings and conferences of producers and distributors. Exhibits were set up and attended at food industry expositions and fairs. Special promotional events, including New Jersey Egg Month, and the State's participation in "EGG-tober," were handled by the staff in cooperation with other agencies.

## ASPARAGUS

The New Jersey Asparagus Industry Council is a new agency in the Department, authorized by a law enacted April 13. An industry institute, financed by voluntary contributions, carried on a precedent program of promotion and research. The council's work was initiated with a State Treasury loan of \$50,000, to be repaid from tax revenues to be collected from growers and processors.

The council has a salaried executive director, and an advertising agency retained by the State under contract. Regular Department personnel provide technical and marketing assistance. Part of the time of a Federal-State matching funds fieldman has been used for merchandising asparagus.

During the fresh market season, \$23,600 was invested in advertising asparagus. A \$45,000 budget is contemplated for processed asparagus promotion, to be followed by a fresh market campaign in the spring of 1960.

The council has contracted with the Agricultural Experiment Station for an accelerated research project on mechanical harvesting, and plans research in marketing and superior varieties.

A public relations type of promotional program is stressed in the council's plans. Cooking instructions and nutritional information on asparagus were disseminated to food publicists of press, radio and television. Pamphlets and recipe cards for consumer distribution are being printed. Advertisers of food products which are companionate with asparagus have been asked to include asparagus whenever possible in their recipe photographs and advertising. Point-of-sale display materials have been prepared, as well as automobile bumper strips, and utilization of these items has begun.

The paid advertising schedule consists of commercial announcements on television programs in New York City and Philadelphia. Public demonstrations of the uses of asparagus have been made on an exploratory basis, and an extension of this work is planned.

Supplementing the work of the council's director with food wholesalers and distributors, the matching funds fieldman distributed kits of asparagus advertising material to chain store and independent buyers, merchandising directors, wholesalers and jobbers servicing almost 4,000 stores in New Jersey, New York City, Philadelphia and Connecticut. Retail stores were visited to observe display position of asparagus and how point-of-sale material is being used.

Packaging more attractively and conveniently than in the traditional ribbon-tied 2½-pound bunch should expand the sales of asparagus. This is receiving considerable attention from growers and packers, and members of the Department staff are giving technical assistance. At least two new packages were given marketing tests this year. One is a plastic wrapper



for one pound; the other a cardboard box holding two pounds. Both packages reduce packing house and handling costs; however, more research and practical testing are needed on packaging.

Exhibits of New Jersey fresh products were serviced in display cases at the New Jersey Food Merchants Association annual meeting at Asbury Park, and at the Super Market Institute, Atlantic City. The displays were refrigerated through the cooperation of manufacturers of refrigerated display cases. Asparagus was prominently displayed in the standard bunch, and the new type packages. The display case also contained potatoes and other New Jersey vegetables, and point-of-sale material was used. The displays attracted much attention and there were numerous requests for promotional material from store operators. Their suppliers were subsequently contacted for support of the program.

At the Thriftway Foods "open house" at King of Prussia, attended by 25,000, a merchandising display featured State Seal eggs, caponettes, potatoes and New Jersey asparagus, together with merchandising material.

#### WHITE POTATOES

Marketing service workers, the inspection service and promotional workers have cooperated in the development of the program of the White Potato Industry Council. A large share of the time of one field representative, supported by Federal-State matching funds, was devoted to producer education and to merchandising white potatoes to food distributors. Regular Department workers contributed special services.

The North Jersey market for New Jersey potatoes had been neglected for a number of years. Buyers had become critical of grade, quality and taste characteristics of the potatoes offered in previous years. The 1958 potato program was a marketing test, not only to regain wholesaler, retailer and consumer acceptance, but to overcome some ingrained prejudices against New Jersey potatoes.

Prior to the 1958 potato harvest, the State Seal of Quality program for potatoes was developed. An advertising agency was retained under contract. A schedule of advertising, public relations activities, and point-of-sale material were approved by the council and the State Board of Agriculture. A State seal identified paper bag in 10-pound and 50-pound sizes was designed. Regulations were promulgated for use of these containers. Information on minimum quality of product permitted in the bag was disseminated to the trade.

A market expansion project merchandising agent called on potato buyers of chains and independent stores in North Jersey to acquaint them with the program. He emphasized the merits of quality control and promotion to the buyers, visited store managers to evaluate the program,

arranged for position preference and attractive displays, and brought back complaints to the industry, and suggestions for improvement to the council. The merchandising kit included proofs of the newspaper advertising and samples of the point-of-sale posters. Local newspaper space was utilized. Retail outlets which stocked supplies for consumer purchase were listed in the advertising.

With 12 growers participating, more than 500,000 of the 10-pound State seal-identified packages were sold in addition to at least three times that volume under private labels. A well known competitive shipping area sold 700 carlot equivalents less than previously in New Jersey during the 1958 marketing season. A printed report of progress made in 1958 was issued to growers and the trade.

As the 1959 harvest season approaches, growers' attitudes toward the comprehensive program of quality control plus promotion are mixed. The council is considering an alternative program under which "New Jersey potatoes" would be advertised separately from "State seal potatoes." The Department has recommended advertising only the inspected product.

Some growers are enthusiastic about inspection and promotion as a result of their personal successful experiences with the full program last year. The industry is generally closer to acknowledging the need for quality control as a result of the lessons taught by the first year's test of promotional selling.

For example, interest is increasing in such modern market-preparatory practices as washing and convenience-packaging of potatoes.

### RURAL ADVISORY COMMITTEE

The Rural Advisory Committee appointed by Governor Robert B. Meyner continued to make much progress during the fiscal year in carrying out its assignment to study social and economic problems facing New Jersey's rural areas.

One of the highlights of the year was the passage of legislation creating a Rural Advisory Council in the Department of Agriculture. This act, signed into law on April 20, 1959, by Governor Meyner, gave permanent recognition to the official status of the council.

### PLANNING AND ZONING STUDIES

The comprehensive study program on rural planning which was begun in 1958 was continued. By the end of the fiscal year field work had been

completed in six townships. The areas in which pilot planning study programs have been completed are as follows :

- (1) A rural area under no urban pressure in southern New Jersey, Greenwich and Stow Creek Townships, Cumberland County.
- (2) A rural area in southern New Jersey under moderate to intense urban pressure, Washington Township, Gloucester County.
- (3) A rural area in northern New Jersey under little urban pressure, Franklin Township, Hunterdon County.
- (4) A rural area in northern New Jersey under moderate urban pressures, Manalapan Township, Monmouth County.
- (5) A semi-urban area in southern New Jersey under intense urban pressures, Delaware Township, Camden County.

Planning and zoning are urgently needed in nearly all New Jersey municipalities. The rural planning and zoning pilot study report will provide a guide for many rural communities interested in initiating planning or improving existing controls.

Despite the fact that local planning boards are responsible under New Jersey laws for preparation of comprehensive plans for community growth, only a few rural townships have actually completed or are making such studies. Land use zoning ordinances, not backed up by sound planning, will not withstand pressure of selfish interests in the future. Sound comprehensive planning is essential to the welfare of farmers and other rural residents.

Urban pressures have continued very strongly on our rural areas. The entire State is feeling this "push to the country" from rapidly expanding urban centers. The most urban pressure continues to be from the northeastern New Jersey metropolitan area which is overflowing both people and industry into Bergen, Passaic, Morris, Somerset, Middlesex and Monmouth counties. Gloucester, Camden and Burlington counties are also receiving a heavy influx of new homes plus a moderate amount of industrial growth.

An example is Willingboro Township, Burlington County, the site of the new Levittown, New Jersey. This project of 16,000 homes was well under way by the end of the fiscal year. In all, nearly 4,500 acres of farm and wooded areas are being converted to urban use. At the end of the year this formerly quiet rural area had become a busy residential city of nearly 7,000 people. By 1962, when finished, it will have a population of nearly 65,000 persons. While this type of development is unusual, it readily demonstrates the cause of social and economic problems in adjacent rural areas.

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Population increases throughout New Jersey are bringing increased demand for municipal services. Schools, elementary and secondary, are rapidly increasing in enrollment and constantly requiring more facilities and staff personnel. Police, fire protection, libraries, sanitary facilities, welfare and other services are becoming increasingly necessary as many communities continue to increase in population density. Farmers and other rural residents seldom demand more than a token amount of these services, but often pay a large proportion of their cost.

To illustrate that farmers are an important source of property tax revenue in a large area of the State, other than the urbanized sections, the Rural Advisory Committee prepared a report entitled *Farm Real Estate Taxation in New Jersey in 1957*. This report demonstrated that farmers were paying 10 per cent or more of all local property taxes levied in more than 55 per cent of the land area of New Jersey. This report has been distributed to farm organizations, county extension agents and others as an educational aid to those interested in property taxation.

#### WATER SUPPLIES

The Rural Advisory Committee assisted the Department of Conservation and Economic Development in the preparation of legislation concerning the control of surface waters for farm irrigation and other private uses. Legislation to insure farm water supplies for irrigation is very important and has been introduced in the Legislature. Fortunately, water supplies were generally adequate during the summer of 1958 as a result of ample rainfall.

#### VERTICAL INTEGRATION

Vertical integration, which is rapidly appearing in some types of New Jersey farm operations, was another subject of interest to the Rural Advisory Committee during the year. Vertical integration may be defined as the combining of two or more steps in the production and marketing of agricultural commodities under single management. This subject is so vital that the Rural Advisory Committee is sponsoring a research project on contract farming in New Jersey. These studies are being conducted by the College of Agriculture, Rutgers University and were begun February, 1959. The Rural Advisory Committee is anxious to determine whether contract farming is beneficial to the average New Jersey farmer. Widespread economic and social effects have been attributed to vertical integration in other areas of the country.

#### VOCATIONAL AGRICULTURE

Urban pressures are affecting the vocational agricultural education program in New Jersey. The Rural Advisory Committee recommended to the

Commissioner of Education that he appoint a State Advisory Committee for Vocational Agricultural Education made up of farm and rural citizens. This committee is now functioning and a stronger rural education program can be expected.

#### URBAN-RURAL CONFLICTS

Urban-rural conflicts of interest concerning matters such as taxes, water supply, zoning, public health regulation, schools, trailer camps, building codes, sub-division controls and certain farm operations have been studied and investigated by the Rural Advisory Committee staff. Many conferences have been held with farmer groups, taxpayer associations, local assessors, State, county and local officials, planning boards, health officers and others in resolving these problems. While most of this conflict of interest occurs in the urban-fringe townships, many problems occur in the most rural areas with some in urban districts. Near the close of the fiscal year, the Rural Advisory Committee began a study of local zoning ordinances in New Jersey to determine their effect on farm operations and land use in the rural areas. It is anticipated that this study will be completed in the fall of 1959 and published in cooperation with the State Bureau of Planning.

#### FARM CREDIT

Farm credit is a rapidly increasing problem, particularly to young farmers. The Rural Advisory Committee has cooperated with rural credit agencies such as private banks, the Farmers Home Administration, and production credit associations, in seeking better ways to serve New Jersey farmers who need larger amounts of credit. In many instances credit needs are growing so rapidly that very few young people will be able to start farming. Some way must be found to provide them with the large amounts of capital needed for the establishment of a modern farm enterprise. Farm credit agencies, public and private, are being encouraged to seek solutions to this problem.

#### OTHER PROJECTS

The Rural Advisory Committee is lending support to a statewide land use survey being made by the New Jersey Council for Geographic Education. This study of all rural land use in New Jersey was begun in the Spring of 1959. It is being conducted by junior high school students and will provide land use data for each municipality of the State upon its completion.

At the close of the fiscal year, the Committee staff prepared, at the request of the State Bureau of Planning, information on greenbelt planning and exclusive agricultural zoning, for distribution to local planning boards and professional planners engaged in local planning activities. This material had been in great demand and demonstrates the interest of New Jersey municipalities in maintaining open space for future generations.

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## NEW JERSEY CROP REPORTING SERVICE

For the past five years the New Jersey Crop Reporting Service has been a joint activity of the New Jersey and the United States Departments of Agriculture. By operating the service as a cooperative unit of both departments, over-lapping functions are avoided, duplication of effort is eliminated and the work is carried on with the greatest amount of efficiency and economy. Federal funds provide for the basic program of crop and livestock estimates for the State as a whole, comparable with estimates for other states. State funds make it possible to collect, summarize and publish more detailed statistical data on farm products of particular importance to New Jersey agriculture. One of the most important phases of these special reports is the annual publication of county estimates for crops, livestock and poultry which would not be possible under the limited Federal program.

### VOLUNTARY REPORTERS

A basic concept of the Crop Reporting Service is that the statistical data shall be obtained voluntarily from producers. Nearly 8,000 farmers serve as crop or livestock reporters and receive, during the year, one or more of several different series of questionnaires. Some report monthly while others report only a few times during the year, depending upon the statistical data needed. The Department of Agriculture again commends and deeply appreciates the work of these public-spirited citizens, who take time out of their own busy schedule to provide basic information for the use and benefit of all New Jersey agriculture. All serve voluntarily without pay. Voluntary reporting by mail makes it possible to issue timely reports at minimum cost.

### CONTINUING REPORTS

The work of collecting and publishing agricultural statistics is now nearing the century mark and is one of the oldest programs of both the Federal and State Departments of Agriculture. While the basic concept of providing unbiased data has remained unchanged over the years, the work has been enlarged in response to needs for additional information. The methods and procedures have also been revised and modernized to meet the changes that have taken place in all segments of farming during the past century.

During the past fiscal year 148 reports, covering 25 different phases of agriculture, were issued. In its service to the farmers of the State the Crop Reporting Service office handled nearly one-quarter million pieces of mail. Separate mailing lists are maintained for each of the different types of reports published, and these lists range from approximately 200 for some of the specialized crops to over 5,000 names for the general crop



and livestock reports. Some reports, such as those on general crops, prices, hatchery, slaughter and poultry, are issued monthly during the year. In addition, at less frequent intervals, reports were released for grain stocks on farms, livestock inventories, pig crops, turkeys and honey. As usual, these reports were mailed without charge to anyone who requested them.

#### SPECIAL REPORTS AND SURVEYS

The Agricultural Marketing Act of 1946 authorized the expenditure of Federal funds for matching State funds in marketing service work including the collection and dissemination of additional basic statistics. During the past fiscal year matched funds were used for several basic statistical studies.

A continuing and increasing demand in the field of basic data exists for up-to-date production estimates by counties. The production pattern within the State is basic to the planning of research and service projects in marketing. County estimates are also in strong demand by companies which buy farm products or sell supplies and equipment to farmers. County estimates for crops, livestock, dairy and poultry for 1957 and 1958 were included in a comprehensive bulletin of New Jersey agricultural statistics. This publication, now in press, will be issued as Circular 409 of the New Jersey Department of Agriculture.

A detailed summary report was prepared, showing data from the apple and peach tree survey conducted by personal enumeration in 1957. This will also be published as a New Jersey Department of Agriculture circular. This report includes the first available data on numbers of fruit trees by age and variety since 1946. In addition to including data on the peach and apple industries of New Jersey, the report also shows tree numbers in some of the competing fruit growing areas of the eastern part of the United States. This enumerative survey also provides the basis for a mail survey each spring, which is used in estimating the annual change in bearing trees. Such data are essential in projecting trends for production forecasts.

A report was prepared for publication, summarizing the survey of the meat chicken industry of the State which was conducted in 1958. The study provides the first data on meat chicken production by classes for any state. The breakdown by classes was particularly needed in New Jersey since broilers, which account for most of the meat chickens grown in other states, make up only a small part of all meat chickens grown in New Jersey. Heavy caponettes and heavy pullets weighing five pounds or more, accounted for 71 per cent of the meat chickens grown in New Jersey in 1957. The data collected in this study are being used by the New Jersey Poultry Products Promotion Council in the formulation and development of marketing and promotion programs for these special classes of meat chickens. The results of this study were distributed to approximately 2,500 poultry growers and interested agencies.

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FORTY-FOURTH ANNUAL REPORT

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As the fiscal year closed, a report of commercial production of flowers, plants and bulbs was ready for publication. This study covered statistics on indoor and outdoor cut flowers, finished and young plants for growing-on, and bulbs, corms and tubers. A similar survey of all commercial growers of nursery stock was conducted by personal enumeration in the winter months of 1959. Tabulation of the nursery data has been completed, and the results will be published in circular form during the coming fiscal year. Production of these horticultural specialties is the leading type of agriculture in several New Jersey counties and ranks high in value for the State as a whole.

Special monthly reports were issued showing detailed information for competing areas on fruits, vegetables and potatoes. Annual summaries for poultry, dairy and livestock included in one report all of the available annual and monthly data on production, sales, prices and value, plus estimates for leading counties.

## Report of the Office of Milk Industry

FLOYD R. HOFFMAN, *Director*

### BUREAU OF ADMINISTRATION

Milk marketing in northern New Jersey has been stabilized by Federal Milk Marketing Order 27, which went into effect in 1957, the result of joint Federal-State efforts. The competition of lower-priced milk produced out-of-state has been almost completely eliminated, thereby guaranteeing a steady market to dairymen in the 13 counties presently under Federal control.

The milk marketing area of southern New Jersey continues to operate entirely under the control of the Office of Milk Industry. However, petitions have been filed by two producer organizations, United Milk Producers of New Jersey and Inter-State Milk Producers' Cooperative, Inc., with the United States Department of Agriculture for a hearing to consider a separate Federal order for this area of the State. This area includes the counties of Mercer, Burlington, Camden, Gloucester, Cumberland, Salem, Cape May, Atlantic and part of Ocean. While part of the milk marketed in South Jersey is regulated by the Philadelphia Federal Order No. 61, the two producer organizations are requesting a separate order. Statistical data have been provided by the Office of Milk Industry to the petitioners at their request to be used in the preparation of proposals and testimony for a hearing.

The dairy industry rates second among New Jersey's agricultural enterprises in value of production. However, the number of dairy herds supplying milk to New Jersey handlers continues to decrease each year. There were approximately 100 less herds at the end of the fiscal year than at the same time last year, and approximately 940 less than five years ago. Nevertheless, annual production of milk has remained stable during this period, due to an increase in production per cow.

The number of producers transferring from one market to another was greatly decreased as a result of the stabilization of the market during the past year. Many handlers have required installation of bulk tank equipment and those dairymen who could not provide facilities for this type of handling of raw milk were compelled to change from one handler to another. At the end of June, 1959, 888 dairymen were using the bulk tank method rather than the can method, compared with 775 in June, 1958 and 634 in June, 1957.

In most cases the minimum resale prices for milk during the past year as fixed by the Office of Milk Industry have been below the actual prices charged in the market place. It is reported that the actual market price has been from one to four cents higher than the fixed minimum prices. This condition has tended to create a stable resale market.

No milk shortages, strike activities or price wars affected the supply of milk for the New Jersey market. In September, 1958, action was taken by the Teamsters' Union, A. F. of L. Local No. 69 to instigate a milk strike in some areas of New York State, Pennsylvania and New Jersey. However, the strike activity lasted only one day and did not affect the New Jersey milk supply.

Eleven conferences were held during the year with groups of dealers, subdealers and producers. Some of these meetings were at the request of the industry; others were scheduled by the director. Several of these meetings were held with both North and South Jersey dealer organizations to discuss the advisability of holding price hearings. Other matters discussed with industry representatives included the regulation regarding free distribution of doorstep milk boxes, changing the regulations requiring 60 days' notice before adding or discontinuing supplies of milk and competitive conditions existing in certain areas. Revision of report forms, the proposed Federal order for southern New Jersey and legal decisions were also brought up at these meetings.

The director, deputy director or other representatives attended 19 out-of-state conferences or meetings. These included the Federal-State hearings held outside New Jersey and activities of other milk industry organizations and governmental bodies. Attendance at these meetings keeps this office advised of conditions that affect the supply and marketing of milk in New Jersey.

In addition, the Office of Milk Industry was represented at the meetings concerning the use of the State Seal of Quality on milk, the annual affairs held by industry associations, as well as the regular monthly meetings of the United Milk Producers of New Jersey, Garden State Milk Council and the New Jersey Dairy Council.

#### FEDERAL MILK MARKETING ORDER 27

A large part of the function of the Office of Milk Industry during 1958-1959 was closely related to developments resulting from the New York-New Jersey Milk Marketing Order 27. Order 27 was inaugurated in August, 1957, and embraces the 13 northern counties of New Jersey, the New York metropolitan area, and 22 counties of upstate New York. A Memorandum of Agreement was signed by the director of the Office of Milk Industry and the Secretary of the United States Department of

Agriculture in 1955. Through this agreement, State Order 57-3 was promulgated by the director, thereby creating a means of jointly effectuating the provisions of the Federal order in the northern area of New Jersey.

As a result of this action, any measures taken by the United States Secretary of Agriculture pertaining to Order 27 must also be taken by the Office of Milk Industry. Therefore, during the past year, joint hearings have been held resulting in amendments to both the State and Federal concurrent orders.

A hearing was held in Hartford, Connecticut, beginning June 24, 1958 and concluding July 10, 1958. The main proposal considered at this hearing was the possibility of expanding the New York-New Jersey milk marketing area to include the State of Connecticut. As a result, the United States Department of Agriculture recommended a separate milk marketing order regulating the handling of milk in Connecticut. Amendments to Order 27 were made to coordinate its provisions and those of the new Connecticut order. The definition of "producer" and certain pool plant provisions were changed. Minor changes relating to the method of accounting to Order 27 for fluid sales made in the Connecticut area were also made. An amendment to New Jersey concurring Order 57-3 was issued on April 1. These provisions were adopted to help prevent the "dumping" of surplus milk from other areas into the New York-New Jersey Order 27 pool.

Another milk hearing was held in New York City on July 22, 1958 to consider amendments to the provisions for pricing Class III milk. Class III milk is that milk used for manufacturing purposes. The hearing lasted three days and resulted in an amendment issued in August which eliminated the butter-cheese adjustment paid by handlers during the months of August through November each year. This change enhanced the pool blend price to producers approximately three to four cents on an annual basis.

In August, 1958, proposed amendments were issued by the United States Department of Agriculture based on the joint hearing held in February, 1958. These amendments dealt primarily with:

1. Exemption from regulations of handlers who are also producers (clarified definition of a producer-handler and handler with own farm milk);
2. The conditions under which handlers distributing milk in the marketing area may elect to be non-pool plants;
3. Fluid skim milk for which handlers are required to pay a fluid price; and
4. The zone limit for plants at which nearby location differentials are payable.



Dairy farmers voted overwhelmingly in favor of the amendments as issued, and the order was amended as of September 1.

A joint Federal-State milk hearing was held beginning on August 19 at Newark. This hearing was continued until September 12 and moved to New York State in Watertown, Albany and New York City. The purpose of the hearing was to receive testimony regarding direct delivery differentials paid by handlers to producers and adjustment of transportation differentials.

The Governor's Milk Committee, represented by Lloyd Wescott, presented a statement to protect the benefits provided for New Jersey producers in the order.

The decision on the proposed amendments was issued by the United States Department of Agriculture on June 9, 1959. It provided that the rate of transportation differentials applicable to fluid milk would be changed from 1.4 cents to 1.2 cents per 10-mile zone. This reduces New Jersey dairymen's average income approximately three cents per hundred-weight.

Direct delivery differentials paid by handlers directly to producers delivering milk to specified locations are to be continued at the rates specified in the order. Producers will vote on this amendment in July, 1959.

An order terminating all provisions pertaining to the base and excess plan was issued, effective November, 1958. This action in no way changed price or payments, but relieved handlers of reporting quantities of "base" and "excess" milk and notifying producers of their "bases."

A joint hearing to consider adjustments in the formula pricing for Class I (fluid) milk was held January 6 and 7, 1959 in Elmira, New York. Order 27 provided that a public hearing must be called whenever the price for Class I milk exceeded the midwest condensery price by more than \$2.50 for three consecutive months. Since this condition had prevailed, the hearing was called. The recommended decision issued in May, 1959 would permit the pricing formula to operate substantially the same except that it would change the maximum margin from \$2.50 to a range from \$2.20 to \$2.80, depending upon the supply of pool milk in the market and the sales of fluid milk. Hearings would have to be held in other northeastern markets to add a similar factor where Federal orders are in effect. As of the end of the fiscal year, this recommended amendment was pending.

A provision of the order was suspended in May, 1959 by both the Federal and State agencies. As a result of an amendment to the order made effective on September 1, 1958, the nearby differential rates were reduced. Nearby differentials are additional price allowances paid to producers located within a certain radius of the metropolitan market and



all New Jersey producers under Order 27 fall into this category. This provision applied to payments made for May through November and results in a better price to New Jersey producers.

During the year numerous other meetings were held relative to the marketing of milk under Federal Order 27. One of these meetings was held by the director of the Office of Milk Industry with a group of milk dealers who requested revision of the monthly reports required. They requested proposed changes which would simplify their work in that the reports would conform more closely to the reports filed with the Federal market administrator. After conferring with representatives of the market administrator's office, the reports were revised.

Other meetings were attended at the market administrator's office to discuss amendments to the rules and regulations governing the accounting procedures and market administrator's functions.

Two public meetings were held during the year to consider proposals for amendments to the cooperative payments regulations. A tentative amendment regarding eligible membership, payments and cooperatives reports was issued.

The director attended a meeting held at Newton on April 1, 1959, which was one of nine such sessions called by the market administrator of the New York-New Jersey Milk Marketing Order regarding a proposed fluid milk promotion and research program. The proposed program would be financed by producers who voluntarily contribute one cent per hundred-weight of the milk produced for one year. It would be administered by a group of dairy farmers known as 'The Producers' Milk Market Development Board, Inc.

An emergency meeting was held in May, 1959, to discuss milk handled through bulk tank methods in an effort to get a uniform procedure in the milk shed producing milk for the Order 27 pool.

Representatives from the Office of Milk Industry conferred frequently during the year with the Federal market administrator's office in an effort to promote closer coordination between the two agencies in auditing, handling violations regarding delinquent payments, proper classification of handlers, and other minor problems.

#### PUBLIC HEARINGS

As required by the statute, public hearings are held before price changes may be made. These hearings are advertised and notice circulated throughout the industry to afford all interested parties an opportunity to present testimony. It is mandatory that the decision based on the hearing be announced within 15 days following the close of the hearing.

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During the year 1958-1959, all hearings were held at the War Memorial Building in Trenton and the director presided. This does not include the joint hearings held by Federal-State authorities, although notice of these joint hearings is also advertised by the Office of Milk Industry in the same manner. Below is a summary of the two hearings held in 1958-1959. The orders and regulations referred to are explained in detail in another section of this report.

The director held a public hearing on March 4, 1959, at the request of the South Jersey Milk Dealers' Association. This hearing was called to receive testimony regarding adjustment of milk prices in South Jersey. The counties concerned—Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Salem and a small part of Ocean County—are those not regulated by Federal Milk Marketing Order 27 which covers the 13 northern New Jersey counties.

Testimony was received concerning prices paid to farmers for Class I (fluid) milk and prices charged for milk and cream for both wholesale and retail sales. Only five witnesses appeared: two dealers, one subdealer, and two producers. As a result of the hearing, Order 59-1 was issued reducing the price to South Jersey dairymen 40 cents per hundredweight and the price to consumers one cent per quart during May and June. This reduction was ordered to bring South Jersey prices in line with nearby competing areas during the peak months of production. The same order indicated that on July 1, 1959 the producer price would increase 40 cents per hundredweight, with a corresponding one cent increase to consumers.

At the request of a group of 14 milk dealers, a public hearing was held on May 25 and 26, 1959, to consider (1) the establishment of a method whereby the minimum resale milk prices would be related to the Class I price (fluid milk price paid to farmers) and (2) adjustment of minimum resale prices in Area 1 where producer prices are regulated by Federal Milk Marketing Order 27. This area consists of all of the upstate counties including Bergen, Passaic, Hudson, Essex, Union, Morris, Sussex, Warren, Hunterdon, Somerset, Middlesex, Monmouth and the upper portion of Ocean County.

The group requesting the hearing recommended a two-cent per quart increase in minimum resale prices and requested that a formula be adopted by which resale minimum prices would fluctuate one-half cent per quart for every 20 cents per hundredweight movement in Class I price to producers in this area. Another group of dealers opposed these proposals. Another witness preferred that present prices be maintained.

In addition to five dealer representatives, two subdealer organizations, one processor and one producer-dealer testified. The many opinions offered covered resale prices, spread between prices, farm to consumer price, and cartage allowance.

Resale milk prices had not been changed in Area 1 since the inception of the Federal order in that area which became effective August 1, 1957. After a careful study of the hearing record, Order 59-2 which raised the minimum resale price of milk one cent, effective August 1, 1959, was issued. This decision was based on the increased costs of processing and distributing milk since 1957.

#### PRICE ORDERS AND REGULATIONS

Under the milk control law, price orders and regulations are issued from time to time. According to the statute, an order must be issued within 15 days after the conclusion of a public hearing. This order shall specify the effective date, and may contain provisions for price changes to become effective within three months from the date of the order. However, it may not become effective sooner than the 15th day after it is filed with the Secretary of State. Regulations governing industry activities which do not fix or refix prices may become effective on any desired date.

On July 1, 1958, the price paid to producers was increased 40 cents per hundredweight in those counties in the southern part of New Jersey not under Federal regulation. This restored to producers the reduction made in their price on May 1, 1958, which was provided in Order 58-1 issued in March, 1958. The price after July 1, 1958, was \$5.87 per hundredweight for regular grade milk testing 3.5 per cent butterfat.

Also, on July 1, 1958, Order 58-3 increased the resale prices in South Jersey. Prices for milk sold in Area 3 (Burlington, Camden, Gloucester, Salem, Cumberland, lower portion of Ocean and inland portions of Atlantic and Cape May counties) were increased  $1\frac{1}{2}$  cents per quart for regular grade milk and two cents per quart for premium milks.

In Area 2, which is that part of Atlantic and Cape May counties commonly known as the "seashore area," the resale prices were increased  $2\frac{1}{2}$  cents on regular milk and three cents on premium milks.

The July 1 milk prices were not changed until the issuance of Order 59-1, effective May 1, 1959. This order provided for a reduction of 40 cents per hundredweight (about one cent per quart) in the price paid to dairymen for Class I (fluid) milk testing 3.5 per cent butterfat during the months of May and June, 1959, only. On July 1 the price would be returned to its previous level. Therefore, during May and June, 1959, the price to producers in Areas 2 and 3 was \$5.47 and as of July 1, 1959, \$5.87 per hundredweight.

Order 59-1 also reduced the minimum price to consumers one cent per quart during the same two-months period in Areas 2 and 3. However, it also provided that these prices would return to their previous level on July 1, 1959.

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The resale prices in the 13 northern counties of New Jersey known as Area 1 had not been changed since March, 1957. However, as a result of the hearing held on May 25 and 26, 1959, Order 59-2 was issued by the director increasing minimum prices one cent per quart, beginning August 1, 1959. In most cases, the prices to consumers were already higher than the new minimum and had been so for some time. The prices fixed in Order 59-2 are to remain in effect no later than December 31, 1959. The director plans to complete a detailed cost survey on milk processing and distribution in North Jersey by that date.

Order 59-2 has been appealed by three milk dealers, but the hearing in this matter had not been held prior to the end of the fiscal year. (See "Appeals.")

Below is a table showing the actual minimum prices as fixed by the director in the orders previously explained.

PRODUCER PRICE CHANGES  
(3.5 PER CENT BUTTERFAT MILK)

| Order No. | Effective Date | Area    | Grade "A"       | Regular         |
|-----------|----------------|---------|-----------------|-----------------|
| 58-1      | 7/1/58         | 2 and 3 | \$6.27 per cwt. | \$5.87 per cwt. |
| 59-1      | 5/1/59         | 2 and 3 | 5.87 per cwt.   | 5.47 per cwt.   |
| 59-1      | 7/1/59         | 2 and 3 | 6.27 per cwt.   | 5.87 per cwt.   |

Producer prices in Area 1 are regulated by Federal Order 27 and Office of Milk Industry Order 57-3, and these prices fluctuate each month.

RETAIL PRICE CHANGES  
(BOTTLED MILK)

| Area | Order No. | Effective Date | Dealer to Consumer |         | Store to Consumer |         |
|------|-----------|----------------|--------------------|---------|-------------------|---------|
|      |           |                | Grade "A"          | Regular | Grade "A"         | Regular |
| 1    | 57-1      | 4/1/57         | \$.28              | \$.26   | \$.26½            | \$.24½  |
|      | 59-2      | 8/1/59         | .29                | .27     | .27½              | .25½    |
| 2    | 58-3      | 7/1/58         | .31½               | .28½    | .30               | .27     |
|      | 59-1      | 5/1/59         | .30½               | .27½    | .29               | .26     |
|      | 59-1      | 7/1/59         | .31½               | .28½    | .30               | .27     |
|      | 58-3      | 7/1/58         | .29½               | .26½    | .28               | .25     |
| 3    | 59-1      | 5/1/59         | .28½               | .25½    | .27               | .24     |
|      | 59-1      | 7/1/59         | .29½               | .26½    | .28               | .25     |

The orders provide that milk sold in gallon jugs be one cent per quart less than the prices listed above. Half-gallon jugs shall be one-half cent per quart less than the prices listed. Also, the consumer may purchase milk at the farm of a licensed producer-dealer at one cent per quart less than the store-to-consumer prices.

Two regulations were amended and two new regulations were issued during 1958-1959. The two amended regulations, H-2 and H-8, required wholesale accounts to file 60 days advance notice before adding or discontinuing a supply of milk. It was found when approval was granted at the expiration of the 60-day period, that the wholesale account fre-

quently did not make the change, but would use the approval at a much later date. Therefore, these regulations were amended to limit the approval for change to 30 days from the date of the notice of approval given by the Office of Milk Industry.

Regulation H-9, one of the new regulations, requires all dealers, producer-dealers and subdealers who sell milk to stores to carry the milk license numbers of the stores on their route books. It further requires that the route books or a list of the stores served and their license numbers be on the trucks available for inspection by the Office of Milk Industry. The purpose of this regulation is to aid in securing licenses from all stores who sell milk.

Regulation H-10 pertains to campaigns to promote the sale of milk by the distribution of discount coupons to consumers. These campaigns must be sponsored by a bona fide producer organization and each coupon may permit a discount of up to 1½ cents per quart from the market price. However, in no case may the price be less than the lowest minimum price fixed by the Office of Milk Industry. Each store is limited to one period of three consecutive days in any one calendar year for this promotional program.

Both H-9 and H-10 were issued in June, 1959, and become effective on July 1, 1959.

#### APPEALS AND LEGAL OPINIONS

A formal hearing had been held by the director in December, 1957 in the matter of O'Dowd's Dairy of Pine Brook for failure to pay farmers properly. A penalty of \$50.00 and costs was assessed and, in addition, this dairy was ordered to pay all of its producers at least the minimum price for milk delivered during February, 1957, the period during which the discrepancies occurred. Failure to comply with this decision within 30 days would result in revocation of license. O'Dowd's Dairy appealed this case to the Appellate Division of the Superior Court. The Court granted a stay against the revocation of license in March, 1958. However, the decision was not rendered until October, 1958. The Court decided that the producers should be paid the money due them, and in view of the dispute regarding the amounts, that steps be taken to ascertain proper payments. The decision also stated that if the director assessed a fine as the result of a formal hearing, it would be necessary to sue through civil court procedure to collect. He may revoke, suspend or deny a license as the result of a formal hearing.

Insofar as this particular case is concerned, a further formal hearing has been held by the director in an effort to determine the actual amount of money due producers. Although audits have been made, and a large

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hearing record accumulated, the case was still pending at the end of the fiscal year.

An appeal was filed by Hamilton Farms, Inc., in March 1958, against Regulation F-22, which provides for the number of wholesale and retail deliveries of milk which may be made during any one week in the various areas of the State. This regulation prohibits wholesale deliveries of milk on Sundays in certain areas. The appeal moved from the Superior Court to the Supreme Court and the case was heard in May, 1959. The Court held that on the records presented, the regulation was invalid. However, the Court based its decision on an issue not argued by the parties, and therefore gave the Attorney General and the Office of Milk Industry permission to make a further record which might justify the regulation. The Supreme Court retained jurisdiction pending submission of supplementary evidence. A hearing to obtain this evidence has been scheduled for August 18, 1959.

The Appellate Division of the Superior Court also rendered a decision in the matter of E. J. McGovern Dairy Products, Inc., a subdealer, of Bayonne. This appeal case resulted from the director's decision to revoke the license of this subdealer following a formal hearing. He had been charged with purchasing milk at prices lower than the minimums fixed. The Superior Court upheld the decision of the director.

However, a further matter relative to this licensee is pending in the Chancery Division of the Superior Court. An injunction is being sought by the Office of Milk Industry against this subdealer for operating without a license.

Three milk dealers have filed an appeal with the Appellate Division of the Superior Court against Order 59-2 which increased the price one cent per quart in the North Jersey area beginning August 1. The appellants are Lampert Dairy Farm, Inc., Linden; Earl Woolley, trading as Woolley's Dairy, Neptune; and McGuire Brothers, Inc., Toms River. As of the end of June, 1959, no date had been set by the Court for this hearing.

#### BUREAU OF AUDITING

The function of the Bureau of Auditing is to maintain dealer relations in the milk industry and to audit monthly reports submitted by licensed dealers. The reports give the production, importation and sales of milk. These figures are used to prepare monthly and annual statistics which are supplied to the United States Department of Agriculture and to milk industry organizations.

During the fiscal year, an average of about 255 dealers reports were audited monthly. The figures used in compiling the tables appended to this



report are derived from the monthly reports prepared by the Auditing Bureau.

It is also determined from the reports filed whether producers have been paid the proper price per hundredweight for their milk. Audits disclosed that a total of \$728.79 was underpaid during the year. Underpayments last year amounted to \$3,361.50. This amount is decreasing each year. The current amount shown does not include payments to producers under Federal Orders 27 and 61. At the end of the year, the balance outstanding was \$285.23 and negotiations have been made for the payment of this money.

Because of frequent turnover in personnel, it was not possible to develop the proposed field auditing program. However, 91 field audits were made to determine producer payments and to check records for credit, source of supply and price data. Many of the audits were made in connection with hearings and conferences. Also, 38 producers were visited for verification of sales of milk and payments.

Credit regulations are handled by this Bureau to ascertain if a subdealer has paid his bill in full to the dealer from whom he had been purchasing milk and milk products before he is given permission to change his source of supply. This information is derived from applications filed on forms provided by this Office. A total of 40 applications was received from subdealers to change source of supply or to take on an additional supplier. Of these, 32 were granted permission to change from one handler to another. The balance were either denied permission to change because of indebtedness, or the requests were withdrawn before the expiration of the 60-day waiting period.

The work of this Bureau has been curtailed because a number of employees were temporarily transferred to assist with licensing work and because of the difficulty in securing auditors to fill the existing vacancies. During the past year, eight auditors resigned and at the end of the year three auditor positions were still vacant.

### BUREAU OF LICENSING

The statute provides that any milk dealer, processor, subdealer or store buying milk for resale in New Jersey must be licensed. All licenses, regardless of the date of issuance, expire on June 30. License fees paid by dealers are based on the quantity of milk sold; subdealer fees are based on the number of milk routes operated at \$15.00 per route; the processor fee is \$325.00; the manufacturer fee is \$75.00; and the store fee is \$5.00.

Applications for renewal of licenses must be handled during the period April 1 to July 1 each year. The Licensing Bureau was given substantial assistance by members of the auditing and enforcement bureaus, and tem-

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porary help was allocated to assist with the heavy work load. The following table shows the number of applications processed and licenses issued for the year July 1, 1958 to June 30, 1959 as compared with the previous year.

| Type of License   | 1958-59 | 1957-58 | Change |
|---|---------|---------|--------|
| Dealers, processors, producer-dealers, subdealers and manufacturers | 2,323   | 2,329   | — 6    |
| Stores  | 12,647  | 12,279  | +368   |
| Butterfat testers   | 408     | 395     | + 13   |
| Weighers and samplers   | 379     | 389     | — 10   |
| Permits to purchase   | 143     | 147     | — 4    |

The amount of revenue received from license fees is approximately the same despite the increase in the number of store licenses issued in the past year, as shown above. There was little change in revenue for two reasons: (1) While there was a decrease of only six in the first group of licenses shown on the table above, there were changes in classification which resulted in a much lesser fee than previously paid; (2) There was a decrease in the number of licenses issued in the larger fee brackets. A comparison of the total revenue received from licensing, refunds made, and net amounts derived from license fees is shown as follows:

| Year    | Total Revenue | Refunds    | Net          |
|---------|---------------|------------|--------------|
| 1958-59 | \$182,728.50  | \$2,630.50 | \$180,098.00 |
| 1957-58 | 184,763.50    | 4,519.50   | 180,244.00   |

The exceptionally large amount of refunds made during the fiscal year of 1957-1958 was due to the fact that corporations had previously licensed individually each subsidiary company. However, as the result of an opinion from the Office of the Attorney General, it was decided that a license was required of the parent company only.

The revised system of issuing store licenses provides cross-reference files which facilitate the checking of the status of a store. However, since it involves the maintenance of four different types of files for approximately 12,500 licensees, it does necessitate a much greater volume of work.

Much time was devoted during the course of the year to determine the number of delinquent or unlicensed stores selling milk in New Jersey, and to obtain applications and to license them. This partially accounts for the increased number of store licenses issued during the past year.

## BUREAU OF INVESTIGATIONS AND ENFORCEMENT

Investigators made a total of 5,908 visits which included licensees, consumers, school boards, and other persons involved in routine inquiries. This also included serving subpoenas to witnesses in connection with hearings. The main purpose of these calls was to investigate complaints and alleged violations. Many calls were made to ascertain if stores which had not renewed licenses were operating without a license or were out of business.

As a result of investigations made, 130 informal hearings were held and penalties totaling \$15,670 were assessed. Seventeen formal hearings were scheduled, in each case requiring the licensee to show cause why his license should not be revoked or suspended; or in the case of an applicant for license, to show why the license should not be denied. Of the formal hearings held, eight licenses were revoked; one person was denied a license; and one person withdrew his application. Four additional formal hearings have been held but decisions are pending. Three had not been heard or had not been completed as of the end of the fiscal year.

The violations upon which the hearings were based included distribution of free merchandise; selling or purchasing milk below minimum prices fixed by Office of Milk Industry orders; filing false affidavits; failure to maintain adequate records; failure to file required monthly report forms; selling milk without a license; selling to unlicensed stores; and selling to wholesale accounts without complying with regulations of this office.

Creamery inspectors made 575 visits to milk plants to check composite samples of milk shipped by New Jersey producers to determine if producers had received the proper payment based on the butterfat content of the milk. All of these were found to be correct. In addition, 222 farms were contacted—109 for the purpose of taking fresh samples of milk to be tested, and 113 to check the agitation in newly installed bulk tanks. The fresh samples taken at the farms were all found to agree with butterfat tests reported by handlers. However, five of the bulk tanks were found to have insufficient agitation. This condition was corrected in each case.

A total of 1,650 pieces of glassware were calibrated for use by the industry in testing milk for butterfat content. The fees received for this work amounted to \$82.50 for the year.

The forms submitted by stores and wholesale accounts for change of source of supply or request for additional supply are handled by this bureau. A 60-day waiting period is required by regulation before the change may be made, and during this time information is obtained either by personal contact or by questionnaire forms regarding the money owed, if any, or the possibility of illegal offers. A total of 1,080 applications to change were received. Of these, 750 were approved and the remainder were denied, withdrawn or canceled.

The monthly affidavits, known as H-1A forms, required of each licensee concerning accounts lost or acquired and price data, are handled by this Bureau. Approximately 25,000 of these reports were received and processed during the year.

## BUREAU OF MILK ECONOMICS

Information pertaining to producers, producer prices and production may be found in Tables 1 through 6. Information concerning sales of milk and milk products may be found in Table 7, while information pertaining to imports and exports of milk and milk products may be found in Tables 8 and 9.

During the fiscal year, producers and producer-dealers produced a total of 1,071,626,422 pounds of milk. Total production for 1958-1959 was 1.99 per cent less than in 1957-1958 and 0.35 per cent more than in 1956-1957.

Milk production increased 0.21 per cent in North Jersey, while in South Jersey total production decreased 9.49 per cent. However, these figures are misleading to a certain extent since some of the milk produced in South Jersey is now marketed in the northern New Jersey market.

During the fiscal year, New Jersey dairy farmers, exclusive of producer-dealers, delivered a total of 1,017,308,351 pounds of milk.

The average delivery per farm per month to North Jersey handlers was 26,821 pounds. South Jersey deliveries were 2,171 pounds less per farm per month than North Jersey.

The gross income realized by New Jersey dairy farmers, exclusive of producer-dealers, from milk delivered to handlers exceeded 55 million dollars. This was a decrease of more than 2 million dollars from the gross income producers received for milk delivered in the previous fiscal year.

Although the total gross income received for milk delivered by producers decreased more than 0.50 per cent in North Jersey and more than 12 per cent in South Jersey, the average gross income per farm for the 12-month period was greater than for the previous fiscal year. This was brought about by the fact that there were fewer producers participating in the total gross income received for milk.

New Jersey dairy farmers selling milk to handlers regulated by the Office of Milk Industry continued to receive a price advantage over producers selling milk to handlers regulated by Federal Orders 61 and 27. In the fiscal year 1958-1959, New Jersey dairy farmers delivering milk to plants regulated by the Office of Milk Industry received an average monthly price of \$5.763 per hundredweight while dairymen delivering milk to Federal Orders 61 and 27 plants received an average price of \$4.956 and \$5.027 per hundredweight, respectively. In the previous fiscal year, the price as fixed by the Office of Milk Industry exceeded the Federal Orders 61 and 27 by \$1.094 and \$1.228 per hundredweight, respectively.

Data shown in Table 6 would indicate that marketing conditions were more stable in the fiscal year 1958-1959 than in the previous fiscal year. The number of producers reported to the Office of Milk Industry as transferring to other markets or discontinuing milk production during 1958-1959 was much smaller than in the previous fiscal year. In 1957-1958, 187 producers discontinued milk production while in the past fiscal year 57 milk producers found it necessary to discontinue milk production.

Total sales of fluid milk in New Jersey during 1958-1959 exceeded 815 million quarts. This would be approximately 145 quarts per person in New Jersey.

During the same period, fluid milk sales increased 0.30 per cent over 1957-1958 and 1.56 per cent over 1956-1957. The increase in total fluid sales, however, was centered in South Jersey, where sales increased nearly 4 per cent over the previous fiscal year. In North Jersey sales declined 0.63 per cent from 1957-1958.

Total cream sales in New Jersey during 1958-1959 exceeded 120 million quarts, fluid milk equivalent. This represented an increase of 3.94 per cent over the previous fiscal year. The increase in cream sales was statewide with increases of 3.46 per cent in North Jersey and 6.61 per cent in South Jersey. (See Table 7.)

New Jersey producers are gradually exporting less milk each year. Exports of New Jersey milk in 1958-1959 were 9.76 per cent less than 1957-1958 and 14.27 per cent less than 1956-1957.

Imports of milk increased on a statewide basis. North Jersey handlers imported 0.73 per cent more milk in 1958-1959 than in 1957-1958, but 8.4 per cent less than in 1956-1957. Imports of milk in South Jersey in 1958-1959 were 25.82 and 33.29 per cent higher than in 1957-1958 and 1956-1957, respectively.

Imports of cream declined on a statewide basis during the past fiscal year. However, South Jersey handlers found it necessary to increase their imports of cream by 7 per cent over the previous year. North Jersey handlers imported nearly 5 per cent less cream in 1958-1959 than in 1957-1958. The decrease in quantity of cream imports in North Jersey more than offset the increase in cream imports in South Jersey. Data pertaining to exports and imports of milk and cream may be found in Tables 8 and 9.



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TABLE 1. PRODUCTION OF MILK AS REPORTED BY DEALERS AND  
PRODUCER-DEALERS IN NEW JERSEY (POUNDS)  
1958-1959

|   | North Jersey | South Jersey | New Jersey<br>Total |
|---|--------------|--------------|---------------------|
| 1958  |              |              |                     |
| July  | 65,665,978   | 18,495,020   | 84,160,998          |
| August  | 65,996,200   | 19,124,900   | 85,121,100          |
| September   | 64,047,421   | 18,143,157   | 82,190,578          |
| October   | 66,147,650   | 17,962,169   | 84,190,819          |
| November  | 64,070,594   | 17,235,119   | 81,305,713          |
| December  | 66,779,317   | 17,867,481   | 84,646,798          |
| 1959  |              |              |                     |
| January   | 70,183,401   | 18,593,324   | 88,776,725          |
| February  | 67,390,171   | 17,339,850   | 84,730,021          |
| March   | 77,815,590   | 19,472,050   | 97,287,640          |
| April   | 77,965,895   | 19,563,857   | 97,529,752          |
| May   | 85,694,476   | 21,429,112   | 107,123,588         |
| June  | 75,705,488*  | 18,938,202*  | 94,643,690*         |
| Yearly total  | 847,462,181  | 224,164,241  | 1,071,626,422       |
| Monthly average   | 70,621,848   | 18,680,353   | 89,302,202          |
| Total 1957-1958   | 845,707,368  | 247,659,853  | 1,093,367,221       |
| Per cent increase or decrease,<br>1958-1959 compared with 1957-1958 | +0.21%       | -9.49%       | -1.99%              |

\* Estimated for June, 1959.

TABLE 2. NUMBER OF PRODUCERS, TOTAL AMOUNT OF MILK DELIVERED, TOTAL  
AMOUNT OF MONEY PAID AND AVERAGE PRICE PER MONTH,  
NORTH JERSEY, 1958-1959

|  | Number of<br>Producers | Total<br>Amount of<br>Milk<br>(Pounds) | Total<br>Amount of<br>Money | Price Per<br>Hundred-<br>weight |
|--|------------------------|--|-----------------------------|---------------------------------|
| 1958   |                        |  |                             |                                 |
| July   | 2,505                  | 61,754,455                             | \$3,154,362.97              | \$5.11                          |
| August   | 2,498                  | 62,478,098                             | 3,432,048.45                | 5.49                            |
| September  | 2,514                  | 60,356,829                             | 3,466,854.74                | 5.74                            |
| October  | 2,516                  | 62,222,115                             | 3,635,311.44                | 5.84                            |
| November   | 2,499                  | 60,308,371                             | 3,623,686.24                | 6.01                            |
| December   | 2,499                  | 62,857,457                             | 3,678,497.10                | 5.85                            |
| 1959   |                        |  |                             |                                 |
| January  | 2,465                  | 66,247,329                             | 3,692,053.07                | 5.57                            |
| February   | 2,496                  | 63,723,423                             | 3,423,040.21                | 5.37                            |
| March  | 2,487                  | 73,703,219                             | 3,828,800.51                | 5.19                            |
| April  | 2,469                  | 73,871,894                             | 3,714,544.14                | 5.03                            |
| May  | 2,464                  | 81,536,301                             | 3,819,179.97                | 4.68                            |
| June   | 2,459*                 | 72,018,770*                            | 3,377,680.31*               | 4.69*                           |
| Total  |                        | 801,078,261                            | \$42,846,059.15             |                                 |
| Average  | 2,489                  | 66,756,522                             | \$3,570,504.93              | \$5.38                          |
| Average or total 1957-1958   | 2,529                  | 795,449,980                            | \$43,093,262.73             | \$5.44                          |
| Per cent increase<br>or decrease<br>1958-1959 compared<br>with 1957-1958 | -3.23%                 | +0.71%                                 | -0.57%                      | -1.12%                          |

\* Estimated for June, 1959.



TABLE 3. NUMBER OF PRODUCERS, TOTAL AMOUNT OF MILK DELIVERED, TOTAL AMOUNT OF MONEY PAID AND AVERAGE PRICE PER MONTH, SOUTH JERSEY, 1958-1959

|   | Number of Producers | Total Amount of Milk (Pounds) | Total Amount of Money | Price Per Hundred-weight |
|---|---------------------|-------------------------------|-----------------------|--------------------------|
| 1958  |                     |                               |                       |                          |
| July  | 754                 | 17,762,052                    | \$1,026,323.50        | \$5.78                   |
| August  | 757                 | 18,400,041                    | 1,059,240.24          | 5.76                     |
| September   | 749                 | 17,451,599                    | 1,023,130.71          | 5.86                     |
| October   | 745                 | 17,232,585                    | 1,040,556.95          | 6.04                     |
| November  | 739                 | 16,638,785                    | 996,766.04            | 5.99                     |
| December  | 741                 | 17,227,701                    | 1,031,882.15          | 5.99                     |
| 1959  |                     |                               |                       |                          |
| January   | 745                 | 17,949,282                    | 1,052,051.75          | 5.86                     |
| February  | 731                 | 16,757,015                    | 977,162.77            | 5.83                     |
| March   | 719                 | 18,821,008                    | 1,074,051.66          | 5.71                     |
| April   | 708                 | 18,905,102                    | 1,059,524.22          | 5.60                     |
| May   | 701                 | 20,741,369                    | 1,055,799.98          | 5.09                     |
| June  | 694*                | 18,343,551*                   | 941,638.63*           | 5.13*                    |
| Total   |                     | 216,230,090                   | \$12,338,128.60       |                          |
| Average   | 731                 | 18,019,090                    | \$1,028,177.38        | \$5.72                   |
| Average or total 1957-1958                                      | 816                 | 238,293,778                   | \$14,093,231.18       | \$5.92                   |
| Per cent increase or decrease 1958-1959 compared with 1957-1958 | -10.42%             | -9.26%                        | -12.45%               | -3.38%                   |

\* Estimated for June, 1959.

TABLE 4. NUMBER OF PRODUCERS, TOTAL AMOUNT OF MILK DELIVERED, TOTAL AMOUNT OF MONEY PAID AND AVERAGE PRICE PER MONTH, NEW JERSEY (ENTIRE STATE), 1958-1959

|   | Number of Producers | Total Amount of Milk (Pounds) | Total Amount of Money | Price Per Hundred-weight |
|---|---------------------|-------------------------------|-----------------------|--------------------------|
| 1958  |                     |                               |                       |                          |
| July  | 3,259               | 79,516,507                    | \$4,180,686.47        | \$5.26                   |
| August  | 3,255               | 80,878,139                    | 4,491,288.69          | 5.55                     |
| September   | 3,263               | 77,808,428                    | 4,489,985.45          | 5.77                     |
| October   | 3,261               | 79,454,700                    | 4,675,868.39          | 5.88                     |
| November  | 3,238               | 76,947,156                    | 4,620,452.28          | 6.00                     |
| December  | 3,240               | 80,085,158                    | 4,710,379.25          | 5.88                     |
| 1959  |                     |                               |                       |                          |
| January   | 3,210               | 84,196,611                    | 4,744,104.82          | 5.63                     |
| February  | 3,227               | 80,480,438                    | 4,400,202.98          | 5.47                     |
| March   | 3,206               | 92,524,227                    | 4,902,852.17          | 5.30                     |
| April   | 3,177               | 92,776,996                    | 4,774,068.36          | 5.15                     |
| May   | 3,165               | 102,277,670                   | 4,874,979.95          | 4.77                     |
| June  | 3,153*              | 90,362,321*                   | 4,319,318.94*         | 4.78*                    |
| Total   |                     | 1,017,308,351                 | \$55,184,187.75       |                          |
| Average   | 3,221               | 84,775,695                    | \$4,598,682.31        | \$5.45                   |
| Average or total 1957-1958                                      | 3,345               | 1,033,743,758                 | \$57,186,493.93       | \$5.55                   |
| Per cent increase or decrease 1958-1959 compared with 1957-1958 | -3.71%              | -1.59%                        | -3.50%                | -1.80%                   |

\* Estimated for June, 1959.

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TABLE 5. COMPARISON OF PRICES PAID TO PRODUCERS BY HANDLERS REGULATED BY NEW JERSEY OFFICE OF MILK INDUSTRY WITH PRICES PAID TO PRODUCERS UNDER FEDERAL ORDERS 61 AND 27, FOR 3.5 PER CENT MILK, 1958-1959

| 1958      | Blend Prices Paid Producers |                       |                       | Amount New Jersey Price Exceeded |          |
|-----------|-----------------------------|-----------------------|-----------------------|----------------------------------|----------|
|           | N. J. Handlers <sup>1</sup> | Order 61 <sup>2</sup> | Order 27 <sup>3</sup> | Order 61                         | Order 27 |
| July      | \$5.82                      | \$4.94                | \$4.796               | \$0.88                           | \$1.024  |
| August    | 5.82                        | 4.94                  | 5.166                 | .88                              | .654     |
| September | 5.89                        | 5.14                  | 5.406                 | .75                              | .484     |
| October   | 5.99                        | 5.41                  | 5.456                 | .58                              | .534     |
| November  | 5.95                        | 5.39                  | 5.646                 | .56                              | .304     |
| December  | 5.97                        | 5.36                  | 5.460                 | .61                              | .510     |
| 1959      |                             |                       |                       |                                  |          |
| January   | 5.91                        | 4.99                  | 5.206                 | .92                              | .704     |
| February  | 5.91                        | 4.91                  | 5.106                 | 1.00                             | .804     |
| March     | 5.79                        | 4.78                  | 4.846                 | 1.01                             | .944     |
| April     | 5.72                        | 4.59                  | 4.566                 | 1.13                             | 1.154    |
| May       | 5.16                        | 4.48                  | 4.336                 | .68                              | .824     |
| June      | 5.23*                       | 4.54*                 | 4.337*                | .69*                             | .893*    |
| Average   | \$5.763                     | \$4.956               | \$5.027               | \$0.807                          | \$0.736  |

<sup>1</sup> Average price paid New Jersey producers for Grade B milk by New Jersey handlers not regulated by either Federal Order 61 or Federal Order 27.

<sup>2</sup> Blend prices paid producers by Order 61 handlers converted to a 3.5% butterfat basis.

<sup>3</sup> Blend prices paid producers by Order 27 handlers at the 61-70 mile zone.

\* Estimated for June, 1959.

TABLE 6. NUMBER OF PRODUCERS TRANSFERRING THEIR SUPPLY OF FLUID MILK FROM ONE HANDLER TO ANOTHER, NUMBER OF NEW PRODUCERS, NUMBER OF PRODUCERS DISCONTINUING MILK PRODUCTION, NEW JERSEY, 1958-1959

|           | Producers<br>Transferring<br>Their Supply<br>of Fluid Milk | New Producers | Producers<br>Discontinuing<br>Milk Production |
|-----------|--|---------------|---|
| 1958      |  |               |   |
| July      | 24   | 0             | 2   |
| August    | 4  | 0             | 4   |
| September | 13   | 1             | 0   |
| October   | 17   | 3             | 2   |
| November  | 16   | 2             | 4   |
| December  | 15   | 0             | 1   |
| 1959      |  |               |   |
| January   | 23   | 2             | 9   |
| February  | 5  | 1             | 3   |
| March     | 10   | 0             | 5   |
| April     | 24   | 0             | 16  |
| May       | 15   | 0             | 4   |
| June      | 6*   | 3*            | 7*  |
| Total     | 172  | 12            | 57  |

\* Estimated for June, 1959.

## STATE DEPARTMENT OF AGRICULTURE

TABLE 7. SALES OF MILK AND CREAM AS REPORTED BY NEW JERSEY HANDLERS  
1958-1959\*\*

|   | Milk (Quarts) |              |             | Cream (Quarts) |              |             |
|---|---------------|--------------|-------------|----------------|--------------|-------------|
|   | North Jersey  | South Jersey | N. J. Total | North Jersey   | South Jersey | N. J. Total |
| 1958  |               |              |             |                |              |             |
| July  | 52,057,913    | 16,238,353   | 68,296,266  | 8,605,246      | 2,049,036    | 10,654,282  |
| Aug.  | 53,068,721    | 16,087,253   | 69,155,974  | 8,103,847      | 2,024,761    | 10,128,608  |
| Sept.   | 53,754,003    | 14,712,620   | 68,466,623  | 7,446,040      | 1,441,697    | 8,887,737   |
| Oct.  | 55,811,967    | 15,097,399   | 70,909,366  | 7,783,646      | 1,366,927    | 9,150,573   |
| Nov.  | 52,392,144    | 13,802,334   | 66,194,478  | 8,316,336      | 1,344,155    | 9,660,491   |
| Dec.  | 54,510,268    | 14,141,876   | 68,652,144  | 10,303,277     | 1,487,880    | 11,791,157  |
| 1959  |               |              |             |                |              |             |
| Jan.  | 54,988,418    | 14,500,346   | 69,488,764  | 7,932,179      | 1,206,789    | 9,138,968   |
| Feb.  | 49,819,339    | 13,228,373   | 63,047,712  | 7,459,816      | 1,199,499    | 8,659,315   |
| Mar.  | 54,254,160    | 14,100,310   | 68,354,470  | 8,251,704      | 1,468,197    | 9,719,901   |
| April   | 53,705,053    | 14,117,463   | 67,822,516  | 8,390,909      | 1,570,925    | 9,961,834   |
| May   | 54,887,842    | 14,457,163   | 69,345,005  | 9,424,501      | 1,759,919    | 11,184,420  |
| June  | 51,566,328*   | 13,707,505*  | 65,273,833* | 10,094,768*    | 1,885,730*   | 11,980,498* |
| Total   | 640,816,156   | 174,190,995  | 815,007,151 | 102,112,269    | 18,805,515   | 120,917,784 |
| Average   | 53,401,346    | 14,515,916   | 67,917,262  | 8,509,356      | 1,567,126    | 10,076,482  |
| Total   |               |              |             |                |              |             |
| 1957-58   | 644,906,517   | 167,658,941  | 812,565,458 | 98,694,648     | 17,638,622   | 116,333,270 |
| Per cent<br>increase or<br>decrease<br>1958-1959,<br>compared with<br>1957-1958 | -0.63%        | +3.90%       | +0.30%      | +3.46%         | +6.61%       | +3.94%      |

\*\* Cream equals Fluid Milk Equivalent.

\* Estimated for June, 1959.

TABLE 8. SCHEDULE OF NEW JERSEY PRODUCTION EXPORTED AND IMPORTS OF  
MILK FOR NEW JERSEY USE, 1958-1959

|   | New Jersey Producers Milk<br>Exported (Pounds) |              |              | Pounds Milk Imported |              |               |
|---|--|--------------|--------------|----------------------|--------------|---------------|
|   | North Jersey                                   | South Jersey | Entire State | North Jersey         | South Jersey | Entire State  |
| 1958  |  |              |              |                      |              |               |
| July  | 15,980,224                                     | 1,105,647    | 17,085,871   | 72,833,433           | 22,312,274   | 95,145,707    |
| Aug.  | 16,740,485                                     | 1,598,930    | 18,339,415   | 71,054,731           | 21,526,592   | 92,581,323    |
| Sept.   | 15,696,350                                     | 1,509,146    | 17,205,496   | 77,011,427           | 16,144,419   | 93,155,846    |
| Oct.  | 14,823,328                                     | 1,208,552    | 16,031,880   | 79,623,396           | 17,248,628   | 96,872,024    |
| Nov.  | 14,771,144                                     | 1,009,931    | 15,781,075   | 74,062,987           | 15,144,018   | 89,207,005    |
| Dec.  | 16,043,169                                     | 992,930      | 17,036,099   | 72,985,346           | 15,051,399   | 88,036,745    |
| 1959  |  |              |              |                      |              |               |
| Jan.  | 18,075,595                                     | 1,461,788    | 19,537,383   | 79,457,450           | 15,218,686   | 94,676,136    |
| Feb.  | 17,844,176                                     | 1,640,738    | 19,484,914   | 68,415,543           | 14,089,868   | 82,505,411    |
| Mar.  | 20,877,244                                     | 1,870,393    | 22,747,637   | 74,579,010           | 15,407,645   | 89,986,655    |
| April   | 23,276,159                                     | 2,102,207    | 25,378,366   | 68,627,103           | 14,681,124   | 83,308,227    |
| May   | 26,406,197                                     | 2,289,966    | 28,696,163   | 74,605,314           | 15,403,030   | 90,008,344    |
| June  | 22,402,460*                                    | 2,636,504*   | 25,038,964*  | 73,082,668*          | 17,404,935*  | 90,487,603*   |
| Total   | 222,936,531                                    | 19,396,732   | 242,333,263  | 886,338,408          | 199,632,618  | 1,085,971,026 |
| Average   | 18,578,044                                     | 1,616,394    | 20,194,439   | 73,861,534           | 16,636,052   | 90,497,586    |
| Total   |  |              |              |                      |              |               |
| 1957-58   | 250,094,166                                    | 18,452,572   | 268,546,738  | 879,912,671          | 158,663,369  | 1,037,576,040 |
| Per cent<br>increase or<br>decrease<br>1958-1959,<br>compared with<br>1957-1958 | -10.85%  | +5.12%       | -9.76%       | +0.73%               | +25.82%      | +4.66%        |

\* Estimated for June, 1959.

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TABLE 9. POUNDS OF CREAM\*\* IMPORTED FOR USE IN NEW JERSEY, 1958-1959

|  | North Jersey | South Jersey | Entire State |
|--|--------------|--------------|--------------|
| 1958   |              |              |              |
| July   | 21,564,797   | 2,756,152    | 24,320,949   |
| August   | 19,207,449   | 2,714,908    | 21,922,357   |
| September  | 16,764,486   | 2,011,178    | 18,775,664   |
| October  | 14,560,959   | 1,556,580    | 16,117,539   |
| November   | 16,904,320   | 1,392,328    | 18,296,648   |
| December   | 17,083,933   | 1,556,593    | 18,640,526   |
| 1959   |              |              |              |
| January  | 14,668,757   | 1,347,792    | 16,016,549   |
| February   | 13,598,497   | 1,378,752    | 14,977,249   |
| March  | 15,363,713   | 1,624,684    | 16,988,397   |
| April  | 16,652,664   | 1,615,540    | 18,268,204   |
| May  | 20,812,460   | 1,881,495    | 22,693,955   |
| June   | 23,327,112*  | 2,344,648*   | 25,671,760*  |
| Total  | 210,509,147  | 22,180,650   | 232,689,797  |
| Average  | 17,542,429   | 1,848,388    | 19,390,816   |
| Total 1957-1958  | 221,355,191  | 20,699,781   | 242,054,172  |
| Per cent increase or<br>decrease 1958-1959,<br>compared with 1957-1958 | —4.90%       | +7.15%       | —3.87%       |

\*\* Fluid Milk Equivalent pounds.

\* Estimated for June, 1959.

## Official Proceedings of the Forty-fourth Annual State Agricultural Convention

The forty-fourth annual State Agricultural Convention was held in the Assembly Chamber of the State Capitol in Trenton, on Tuesday, January 27, 1959. The meeting was called to order at 9:30 A. M. by Michael J. Klein, president of the State Board of Agriculture. The invocation was offered by the Reverend Edward C. Dunbar, Pastor, Flemington Baptist Church, Flemington.

The roll of delegates was called by President Klein as follows:

### DELEGATES OF THE STATE AGRICULTURAL CONVENTION

#### *From County Boards of Agriculture*

| Name                   | Address          | Term    | County     |
|------------------------|------------------|---------|------------|
| Delmo Muzzarelli       | Vineland         | 2 years | Atlantic   |
| Louis J. Sanguinetti   | Minotola         | 2 years | Atlantic   |
| Steffen Olsen          | Westwood         | 1 year  | Bergen     |
| Everett L. Conklin     | East Rutherford  | 1 year  | Bergen     |
| Barclay H. Allen       | Mt. Holly        | 1 year  | Burlington |
| Clement B. Lewis       | Riverton         | 1 year  | Burlington |
| Peter N. Angel         | Albion           | 1 year  | Camden     |
| Samuel C. DeCou        | Haddonfield      | 1 year  | Camden     |
| Lester Germanio        | Woodbine         | 2 years | Cape May   |
| Felix Wuerker          | Rio Grande       | 2 years | Cape May   |
| Wilbert C. Newkirk     | Bridgeton        | 1 year  | Cumberland |
| Louis D. Schaible      | Shiloh           | 1 year  | Cumberland |
| William A. Crane       | West Caldwell    | 1 year  | Essex      |
| George F. Meyer        | Caldwell         | 1 year  | Essex      |
| Ralph B. Starkey       | Mullica Hill     | 2 years | Gloucester |
| Joseph Maccarone       | Swedesboro       | 1 year  | Gloucester |
| Henry A. Marselle      | Weehawken        | 2 years | Hudson     |
| Albert Schenone        | Union City       | 2 years | Hudson     |
| Fred H. Totten         | Ringoes          | 2 years | Hunterdon  |
| Harold B. Everitt      | Flemington       | 2 years | Hunterdon  |
| Robert Simpkins        | Trenton          | 2 years | Mercer     |
| Leonard Van Hise       | Cranbury         | 2 years | Mercer     |
| George R. Parker       | Plainsboro       | 1 year  | Middlesex  |
| Alex Dembeck           | New Brunswick    | 1 year  | Middlesex  |
| William Schlechtweg    | Freehold         | 2 years | Monmouth   |
| Walter W. Lott         | Freehold         | 2 years | Monmouth   |
| Harold O. Farrand      | Parsippany       | 1 year  | Morris     |
| Karl Wentorf           | Whippany         | 2 years | Morris     |
| Daniel M. Crabbe       | Toms River       | 1 year  | Ocean      |
| Reginald V. Page       | Toms River       | 1 year  | Ocean      |
| Albert Illes           | Wayne            | 1 year  | Passaic    |
| Ernest Hausamann       | Wayne            | 1 year  | Passaic    |
| Samuel M. Dare         | Monroeville      | 1 year  | Salem      |
| David A. Fogg          | Salem            | 1 year  | Salem      |
| Gilbert I. Runyon      | Skillman         | 1 year  | Somerset   |
| David W. Amerman       | Neshanic Station | 1 year  | Somerset   |
| Robert V. Armstrong    | Augusta          | 1 year  | Sussex     |
| Herman Kleindienst     | Newton           | 1 year  | Sussex     |
| Edward C. Schaffernoth | Scotch Plains    | 1 year  | Union      |
| John Koscielny         | Scotch Plains    | 2 years | Union      |
| Henry Douma            | Hackettstown     | 1 year  | Warren     |
| Edgar Woolf            | Asbury           | 1 year  | Warren     |

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## *From Pomona Granges*

| Name               | Address      | Term    | County             |
|--------------------|--------------|---------|--------------------|
| Martin Decker      | Hammonton    | 1 year  | Atlantic           |
| John Clauss        | Fairlawn     | 1 year  | Bergen-Passaic     |
| C. Harold Joyce    | Medford      | 1 year  | Burlington         |
| Reuben H. Dobbs    | Marlton      | 1 year  | Camden             |
| Allan McClain      | Green Creek  | 2 years | Cape May           |
| Edward Keilblock   | Myersville   | 1 year  | Central District   |
| Robert P. Wheaton  | Bridgeton    | 2 years | Cumberland         |
| Kenneth T. Stretch | Mullica Hill | 1 year  | Gloucester         |
| John T. Hudnutt    | Flemington   | 1 year  | Hunterdon          |
| Charles M. Ewart   | Yardville    | 1 year  | Mercer             |
| J. Van Nest Dumont | Somerville   | 1 year  | Middlesex-Somerset |
| Howard P. Story    | Freehold     | 2 years | Monmouth           |
| Harvey M. Beal     | Elmer        | 1 year  | Salem              |
| John P. Cowan      | Newton       | 1 year  | Sussex             |
| Charles S. Smith   | Broadway     | 1 year  | Warren             |

## *From Other Organizations*

- American Cranberry Growers' Association—Hobart R. Gardner, Indian Mills, 1 year ; Edward V. Lipman, New Brunswick, 1 year.
- Jersey Chick Association—C. K. Darby, Somerville, 1 year ; William Rapp, Farmingdale, 1 year.
- New Jersey Association of Nurserymen—George F. Runge, Elizabeth, 2 years ; William Flemer, III, Princeton, 1 year.
- New Jersey State Florists' Association, Inc.—Charles W. M. Hess, Wayne, 1 year ; George H. Masson, Jr., Yardville, 1 year.
- New Jersey State Grange—Clinton Cowperthwait, Moorestown, 1 year ; W. Ellsworth Oberly, Stewartsville, 1 year.
- New Jersey Horticultural Society—C. William Haines, Sr., Masonville, 1 year ; Clarence H. Steelman, Sr., Princeton, 2 years.
- New Jersey State Poultry Association—Samuel Lipetz, Lakewood, 1 year ; Jerome Taub, Bound Brook, 1 year.
- United Milk Producers of New Jersey—John P. Garrison, Elmer, 1 year ; Thomas L. Lawrence, Hamburg, 1 year.
- Blueberry Cooperative Association—Fred Scammell, Toms River, 1 year.
- Cooperative Growers' Association, Inc.—Charles Heal, Burlington, 1 year.
- Cooperative Marketing Associations in New Jersey, Inc.—William J. Lauderdale, Lambertville, 1 year.
- New Jersey Agricultural Experiment Station—Marvin H. Coombs, Salem, 2 years.
- New Jersey Beekeepers Association—C. F. Peterson, Pitman, 1 year.
- New Jersey College of Agriculture—William H. Martin, New Brunswick, 1 year.
- New Jersey Crop Improvement Association—Thomas H. Sutton, Burlington, 1 year.
- New Jersey Guernsey Breeders' Association—Harvey C. Dreibelbis, Colts Neck, 1 year.
- New Jersey Holstein-Friesian Association, Inc.—Charles Kirby, Harrisonville, 1 year.
- New Jersey State Potato Association—John Pollak, Cranbury, 1 year.
- E. B. Voorhees Agricultural Society—William M. Nulton, Jr., New Brunswick, 1 year.



## APPOINTMENT COMMITTEES

The following committees were appointed by President Klein :

## NOMINATING COMMITTEE FOR MEMBERS OF THE STATE BOARD OF AGRICULTURE

|                                      |  |
|--------------------------------------|--|
| Louis J. Sanguinetti, Chairman ..... | Atlantic County Board of Agriculture       |
| Charles W. M. Hess, Vice Chairman .. | New Jersey Florists' Association           |
| Everett L. Conklin .....             | Bergen County Board of Agriculture         |
| Marvin H. Coombs .....               | New Jersey Agricultural Experiment Station |
| John P. Cowan .....                  | Sussex County Pomona Grange                |
| William A. Crane .....               | Essex County Board of Agriculture          |
| Reuben H. Dobbs .....                | Camden County Pomona Grange                |
| Henry Douma .....                    | Warren County Board of Agriculture         |
| John T. Hudnutt .....                | Hunterdon County Pomona Grange             |
| Clement B. Lewis .....               | Burlington County Board of Agriculture     |
| Edward V. Lipman .....               | American Cranberry Growers' Association    |
| Joseph Maccarone .....               | Gloucester County Board of Agriculture     |
| Henry A. Marselle .....              | Hudson County Board of Agriculture         |
| Allan McClain .....                  | Cape May County Pomona Grange              |
| William M. Nulton, Jr. ....          | E. B. Voorhees Agricultural Society        |
| Reginald V. Page .....               | Ocean County Board of Agriculture          |
| William Rapp .....                   | Jersey Chick Association                   |
| George F. Runge .....                | New Jersey Association of Nursemeymen      |
| Louis D. Schaible .....              | Cumberland County Board of Agriculture     |
| Robert Simpkins .....                | Mercer County Board of Agriculture         |
| Karl Wentorf .....                   | Morris County Board of Agriculture         |

## NOMINATING COMMITTEE FOR MEMBER OF FISH AND GAME COUNCIL

|                                    |                                     |
|------------------------------------|-------------------------------------|
| Thomas L. Lawrence, Chairman ..... | United Milk Producers of New Jersey |
| Albert Illes .....                 | Passaic County Board of Agriculture |
| Edward Keilblock .....             | Central District Pomona Grange      |
| George F. Meyer .....              | Essex County Board of Agriculture   |
| Steffen Olsen .....                | Bergen County Board of Agriculture  |
| Albert Schenone .....              | Hudson County Board of Agriculture  |
| Edgar V. Woolf .....               | Warren County Board of Agriculture  |

## COMMITTEE ON RESOLUTIONS

|                               |   |
|-------------------------------|---|
| Martin Decker, Chairman ..... | Atlantic County Pomona Grange                       |
| Barclay H. Allen .....        | Burlington County Board of Agriculture              |
| David W. Amerman .....        | Somerset County Board of Agriculture                |
| Ernest Hausamann .....        | Passaic County Board of Agriculture                 |
| William J. Lauderdale .....   | Cooperative Marketing Associations in<br>New Jersey |
| Samuel Lipetz .....           | New Jersey State Poultry Association                |
| George R. Parker .....        | Middlesex County Board of Agriculture               |
| Robert P. Wheaton .....       | Cumberland County Pomona Grange                     |

## COMMITTEE ON CREDENTIALS

|                                 |  |
|---------------------------------|--|
| Samuel C. DeCou, Chairman ..... | Camden County Board of Agriculture             |
| Harvey C. Dreibelbis .....      | New Jersey Guernsey Breeders' Association      |
| Charles M. Ewart .....          | Mercer County Pomona Grange                    |
| Charles Kirby .....             | New Jersey Holstein-Friesian Association, Inc. |
| Fred H. Totten .....            | Hunterdon County Board of Agriculture          |

## COMMITTEE TO WAIT ON THE GOVERNOR

|                                     |  |
|-------------------------------------|--|
| Dr. William H. Martin, Chairman ... | New Jersey College of Agriculture      |
| Lester Germanio .....               | Cape May County Board of Agriculture   |
| C. William Haines, Sr. ....         | New Jersey State Horticultural Society |
| W. Ellsworth Oberly .....           | New Jersey State Grange                |
| William Schlechtweg .....           | Monmouth County Board of Agriculture   |

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### REPORT OF COMMITTEE ON CREDENTIALS

The credentials committee examined the certificates of delegates and reported them in order.

### ELECTION OF MEMBERS OF THE STATE BOARD OF AGRICULTURE

The chairman of the nominating committee placed the names of Irving K. Christensen, of Wood-Ridge, Bergen County, representing nurserymen, and Clarence H. Steelman, Sr., of Princeton, Mercer County, representing the fruit interests of New Jersey, in nomination for membership on the State Board of Agriculture. There being no further nominations, the Secretary cast a ballot to make this election unanimous.

### ELECTION OF A MEMBER OF THE FISH AND GAME COUNCIL

The chairman of the nominating committee for membership on the Fish and Game Council of the Department of Conservation and Economic Development placed in nomination the name of Harry Frome, of Blairstown, Warren County, for a second four-year term. There being no further nominations, Mr. Frome was unanimously elected for recommendation to the Governor for a four-year term beginning April 1, 1959.

### CITATIONS

Citations for distinguished service to agriculture were awarded to the following: Albert H. Forsythe, of Mt. Holly; Claire E. Garretson, of Trenton; William A. Haffert, Sr., of Sea Isle City; and Warren W. Oley, of Pennington.

The citations, read by Secretary of Agriculture Phillip Alampi, were as follows:

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#### CITATION OF ALBERT H. FORSYTHE

New Jersey is proud of your lifetime record in the field of dairy husbandry, as well as your role as a farm leader and a public spirited rural citizen. Eminently successful in your own extensive farm operations, you have found time to devote your talents to agricultural and civic affairs, local and state-wide.

You are acknowledged to be one of the outstanding figures in the dairy industry of your adopted State, making important contributions to its welfare. You are well known as a breeder of fine cattle and as an early exponent of the practice of artificial insemination.

Both producers and distributors respect your judgment and hold you in high regard, aware that you always are alert to their needs and welfare. Your career is unique in that both groups have repeatedly demonstrated their confidence in your integrity by honoring you with important posts in which you have served with distinction.

These are but a few of your many noteworthy services to your fellow farmers and breeders, your fellow citizens and neighbors. All are grateful for your earnest zeal in their behalf.

The State Board of Agriculture takes pride in commending you and confers upon you this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE.

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CITATION OF CLAIRE E. GARRETSON

Since 1919 when you joined the staff of the New Jersey Agricultural Experiment Station, you have steadfastly devoted your outstanding talents to serving New Jersey agriculture and advancing the welfare of our farmers.

As a highly competent co-worker, you ably assisted the founders of the New Jersey Association of County Boards of Agriculture, predecessor of the present day New Jersey Farm Bureau. Your sincerity and enthusiasm during those early and often critical periods inspired our pioneer farm leaders to the achievement of their goal—a stronger voice for the New Jersey farmer.

Years of loyal service to each succeeding administration of officers, trustees and staff members of the New Jersey Farm Bureau have won for you the sincere regard of your colleagues. Thousands of farmer members in the county units throughout the State are grateful for your warm and friendly interest. Today, you continue to respond with vigor and enthusiasm whenever an emergency or an adverse situation threatens the welfare of our agriculture.

It is most fitting that we take note of your loyal service and acknowledge our indebtedness for your tireless efforts in behalf of our farmers. We wish to pay tribute to your example and express our gratitude with this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE.

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CITATION OF WILLIAM A. HAFFERT, SR.

To you as founder, editor and publisher of *New Jersey Farm and Garden*, every member of our farm fraternity acknowledges a debt of gratitude. Your valued contributions to the advancement of New Jersey agriculture have been many and enduring.

On every farmstead and in every farm home there are countless tokens of your fruitful efforts to help us build a sound, efficient and prosperous agriculture in our State.

In the dark depression days your boundless faith in the future of our soil, our flocks and herds, opened new horizons. You demonstrated that what were visions and hopes could become real and lasting.

Your interest has never waned and you continue to serve well those who are now on our land. Their heritage is the high rank we enjoy today, thanks to the impact of your pen and publication.

Your career also embraces a wide range of activities as a leader in the civic affairs of your community and county. There too you filled in good measure your role as an outstanding citizen of your native State.

We commend you for your zeal and enterprise. In the presence of these assembled Delegates, the State Board of Agriculture presents you with this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE.

---

CITATION OF WARREN W. OLEY

For many years countless New Jersey farmers have enjoyed better returns from their land, orchards and flocks because of the constructive programs and facilities you have conceived and directed in the field of marketing.

Yours was the vision which loosened the shackles of antiquated practices and substituted a new concept of marketing by auction, thus insuring not only higher returns to the producer but better service to the buyer as well as improved quality for the consumer.

Most noteworthy have been your zealous efforts to further programs of self-help centered around sound cooperatives owned and operated by farmer members. In addition, the present-day use of uniform grades and standards by most of our producers is further testimony of their confidence in your foresight and leadership.

Today, as you approach your retirement, you hold a unique place in the hearts of our farmers who are grateful for your guidance. They join with the members of the State Board of Agriculture in paying tribute to your fruitful career. They wish for you health and happiness in your more leisure years.

In the presence of these Official Delegates we commend you and present this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE.

#### REPORT OF THE COMMITTEE ON RESOLUTIONS

The following resolutions, presented by Martin Decker and reported favorably by the committee, were adopted by the State Agricultural Convention :

---

WHEREAS, Governor Robert B. Meyner has continued to manifest his sincere interest in the agriculture of New Jersey, frequently conferring with our Secretary of Agriculture and other leaders upon problems of the day and matters of mutual concern; therefore be it

*Resolved*, That this Agricultural Convention officially assembled by law in Trenton on January 27, 1959, commend our Chief Executive for his aid and assistance to agriculture in the past, and respectfully entreat his continued attention to this important segment of the economy of the Garden State; and be it

*Further Resolved*, That we ask our Secretary of Agriculture, the Honorable Phillip Alampi, to forward to Governor Meyner a copy of this resolution to thus make known to him our esteem and regard, along with our best wishes for a continuation of this pleasant and valuable relationship which has existed throughout his occupancy of office.

---

*Resolved*, That we welcome as participants in Farmers Week two organizations holding meetings here for the first time, namely, the New Jersey Feed Industry Association and the swine growers under the sponsorship of the New Jersey Livestock Cooperative Association, and wish them the benefits from their conferences which so many of the other participating organizations enjoy through exchange of information and ideas for the improvement of their respective interests.

---

WHEREAS, The office facilities of the Department of Agriculture have become inadequate and unsuitable for efficient administration of the manifold duties delegated to it; and

WHEREAS, New legislation is enacted almost annually which adds to the Department's responsibilities with new services and regulations, which as time goes on will make the situation even more acute; and

WHEREAS, It would be to the best interest of agriculture if the office, its animal and plant laboratories and all its attendant activities were located outside the center of the city, preferably in a rural area easily accessible to farmers from any part of the State; therefore be it

*Resolved*, That this convention of agricultural delegates heartily endorse the effort of the State Board of Agriculture and the Secretary of Agriculture in their attempts to improve the service of the Department of Agriculture to the public through adequate working quarters; and be it

*Further Resolved*, That we urge the proper fiscal authorities in State government to provide the necessary funds for the lease, purchase, or erection of suitable facilities at an early date.

---

WHEREAS, Under the common law farmers do not have undisputable right to take water from surface streams or ponds for irrigation; and

WHEREAS, The Department of Conservation and Economic Development and the Department of Agriculture have prepared jointly, legislation that would insure farmers and other private users water from surface streams for irrigation and other consumptive uses; therefore be it

*Resolved*, That all farm organizations support the passage of a law to permit the private use of surface waters for irrigation and other consumptive uses; and be it

*Further Resolved*, That a copy of this resolution be sent to the Governor, the members of the New Jersey Legislature and all farm organizations.

---

WHEREAS, The milk industry in the southern half of New Jersey is in a grossly unstable condition which is militating against the dairymen of the area; therefore be it

*Resolved*, That we join the New Jersey State Grange and the New Jersey Farm Bureau in their stand of favoring the establishment of a Federal milk marketing order for those counties of New Jersey not now included in Order 27, such order to be operated as a handlers' pool; and be it

*Further Resolved*, That as soon as requested, the proper authorities in the Federal government initiate with all possible haste a formal hearing to ascertain the facts as a basis for developing such an order.

---

WHEREAS, The animal NUTRIA has been introduced into the United States; and

WHEREAS, This animal, originally raised in confinement, has escaped and is now living freely in some parts of the United States; and

WHEREAS, This animal does considerable destruction to agricultural crops; now be it

*Resolved*, By the delegates to the Agricultural Convention that the New Jersey Fish and Game Council be requested to investigate legislation to control NUTRIA *before* it becomes well established in New Jersey through the enactment of laws making it a criminal act to possess, raise in captivity, transport, or liberate a living NUTRIA in the State of New Jersey; and be it

*Further Resolved*, To request that the proper law enforcement agencies be given condemnation and slaughter powers with provision for reimbursement to present owners of NUTRIA if there should be anyone in the State of New Jersey presently raising NUTRIA for any purpose. Further action should be instigated to establish a bounty on NUTRIA to insure their extermination if any NUTRIA should be living freely in the State of New Jersey.

---

*Resolved*, That we commend our State Board of Agriculture, the staff of the Division of Animal Industry and its counterpart in the Federal government, the Animal Disease Eradication Division, the Brucellosis Committee and all others who labored to reduce the incidence of brucellosis in our dairy herds so that on July 1, 1958, New Jersey became the thirteenth state in the Union to be accredited by the United States Department of Agriculture as meeting its requirements for the control of that disease.



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WHEREAS, The Department of Agriculture, with the cooperation of livestock farmers and those allied with the livestock industry, has demonstrated its ability to cope with livestock diseases and bring them under control, as in the case of bovine tuberculosis, and more recently brucellosis among cattle and vesicular exanthema among swine; and

WHEREAS, The dairy industry here and elsewhere is now faced with another disease in the form of leptospirosis, which disease is making inroads and affecting growing numbers of our cattle population; therefore be it

*Resolved*, That we request our State Board of Agriculture to continue its vigilance as to this disease, survey the extent of its existence through the testing of blood samples in whatever number can be handled with our present laboratory facilities and staff, and initiate and adopt a program of control measures if and when necessary to combat its further spread.

---

WHEREAS, There is now functioning in the Department of Agriculture a Rural Advisory Committee; and

WHEREAS, This Committee is actively engaged in studying social and economic problems in the rural areas of New Jersey; now therefore be it

*Resolved*, That the committee be authorized by legislative act to become a permanent Rural Advisory Council in the Department of Agriculture; and be it

*Further Resolved*, That copies of this resolution be sent to the Governor and the members of the Legislature.

---

WHEREAS, The State Soil Conservation Act is in the process of revision, in an effort to make it of greater benefit to New Jersey farmers and fulfill to the utmost the objectives for which it was originally created; therefore be it

*Resolved*, That the State Soil Conservation Committee enlist support to take necessary steps to have the present legislation amended to reflect the changes it feels are necessary to accomplish a strong conservation program in New Jersey; and be it

*Further Resolved*, That copies of this resolution be sent to the Governor and members of the New Jersey Legislature.

---

WHEREAS, The migrant labor situation is becoming more difficult each year because of the great number of men needed, and the scarcity of qualified workers who will stay throughout the entire season; and

WHEREAS, Labor regulations become more stringent and difficult to meet; and

WHEREAS, We face the possibility of having a higher minimum wage established for farm workers in the near future which will not be in line with that of competing states; and

WHEREAS, The State Board of Agriculture and its Secretary are in a key position to express the point of view of New Jersey farmers, especially to State agencies and officials; therefore be it

*Resolved*, By this Agricultural Convention that we delegate the New Jersey State Board of Agriculture through its Secretary to take an active part along with other farm organizations in the formulation of migrant labor policies and programs; and be it

*Further Resolved*, That a copy of this resolution be forwarded to Governor Meyner.



WHEREAS, Since our last convention, God in His infinite wisdom has taken from our midst a number of friends and leaders in their respective fields of endeavor, among whom are H. Norman Fogg of Salem County, C. Russell Jacobus of Essex County, Walton B. Kostenbader of Warren County, and Charles B. Probasco of Mercer County, all of whom were former members of the State Board of Agriculture; Professor Harry O. Sampson, for many years until his retirement the head of vocational education in agriculture here in New Jersey; James W. Gearhart, long-time 4-H club agent and at the time of his passing the county agricultural agent of Essex County; Reverend Guy A. Bensinger, pastor of the Dutch Neck Presbyterian Church who often participated in these and other agricultural gatherings; and the Honorable W. Howard Sharp, Senator for Cumberland County and a respected and active friend of New Jersey agriculture; and

WHEREAS, The passing of these friends has caused sorrow that is best alleviated by the remembrance of their friendship and service to others; therefore be it

*Resolved*, That we pause in our proceedings for a moment of silence as a respectful tribute to their memories.

**NEW JERSEY STATE LIBRARY**