

51st Annual Report

of the

New Jersey

Department of Agriculture

July 1, 1965 -- June 30, 1966



HEALTH-AGRICULTURE BUILDING
JOHN FITCH PLAZA • TRENTON, NEW JERSEY

FOREWORD

A full description of the activities of the six divisions of the New Jersey Department of Agriculture for the period July 1, 1965, to June 30, 1966, is contained in the report that follows. A much abbreviated version of the report, covering only the highlights of the year, was previously issued and widely distributed. This limited edition of the complete report is made available to meet the needs of those readers who, because of their special needs, close association with the Department, or for other reasons, require a detailed account of the various programs of the Department.

PHILLIP ALAMPI

Secretary of Agriculture

NEW JERSEY STATE LIBRARY

NEW JERSEY

STATE BOARD OF AGRICULTURE

CHARLES T. PRATSCHLER^{1/}₇/Montague, President

ALBERT H. FORSYTHE^{1/}₇/Moorestown, Vice-President

ROY R. BLAIR, Nutley

ELIA CLEMENSON, Estell Manor

CHARLES V. N. DAVIS, New Centre

THOMAS S. DeCOU, Cherry Hill

GEORGE G. TRAUTWEIN, Closter

FELIX E. WUERKER, Rio Grande

NEW JERSEY

DEPARTMENT OF AGRICULTURE

PHILLIP ALAMPI, Secretary of Agriculture

WILLIAM C. LYNN, Assistant Secretary of Agriculture

WILLIAM E. KENNY, Director, Division of Administration

DR. EDWIN L. BROWER, Director, Division of Animal Industry

FRED W. JACKSON, Director, Division of Information

FRANCIS A. RAYMALEY, Director, Division of Markets

FRANK A. SORACI, Director, Division of Plant Industry

FLOYD R. HOFFMAN, Director, Office of Milk Industry

^{1/} Messrs. Pratschler and Forsythe retire from the Board on June 30, 1966. The new members will be William P. Cadwallader, Salem, and Oscar J. Grossman, Frenchtown.

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STATE BOARD OF AGRICULTURE

The New Jersey State Board of Agriculture, through the Secretary of Agriculture, assigns and supervises all Department of Agriculture functions. The Board is comprised of eight farmers selected by delegates to the State Agricultural Convention. Each member serves a four-year term without compensation.

During 1965-66, the Board held 12 meetings. Official business concerned personnel appointments, promotions, and retirements; regulations which complement agricultural statutes; and the promotion of New Jersey agriculture. Among other actions, the Board:

Approved the Department of Agriculture budget request of \$1,829,737 for the fiscal year 1966-67.

Awarded citations for distinguished service to New Jersey agriculture to:

The late Enoch F. Bills, former manager of the Bordentown plant of Ocean Spray Cranberries.

Alvin W. String, Harrisonville, dairy and vegetable farmer and former president of the State Board of Agriculture.

Herbert O. Wegner, Newfield, poultry farmer and hatchery operator and former president of the State Board of Agriculture.

Lloyd B. Wescott, Rosemont, Guernsey breeder and former chairman of the National Dairy Advisory Committee.

Amended regulations for brucellosis and tuberculosis testing and provided for an increase in fees offered private practitioners from 35 cents to 50 cents an animal.

Adopted regulations to implement the new New Jersey egg law, enacted as Chapter 94, Laws of 1965 and known as the Model Egg Law, following a public hearing at which it was evident that these regulations were satisfactory to the trade.

Adopted a new regulation for keeping records of cattle, sheep and swine dealers. These records of dates of purchase or sale, buyer or seller, description of the animal, and other pertinent information, are by this regulation to be kept in a standard ledger book furnished by the Department. Such information makes it possible to trace the origin of any disease outbreak quickly, and moreover is on a uniform basis. Authority for this regulation was provided by Chapter 27, Laws of 1966.

Amended the designation "State Seal of Quality" to "New Jersey Seal of Quality" and revised the standards to accommodate the inspection of small retail packages of asparagus.

Adopted regulations for packaging eggs under the New Jersey Seal of Quality, updating previous regulations having to do with the marketing of quality seal eggs. The new regulations concern the application for license, the source of eggs, the sliding scale of license fees, and the standards of quality.

Sponsored the 95th annual New Jersey Farmers Week.

Co-sponsored the eighth annual New Jersey Marketing Institute.

Continued control and eradication programs against the European chafer and the gypsy moth.

COUNTY BOARDS OF AGRICULTURE

The State Board of Agriculture, created and organized in 1872, and the County Boards of Agriculture, made possible by an 1887 law and which became established in subsequent years as various county groups formed, have had a legal relationship for upward of 80 years. Obviously, this relationship has varied over the years in the content of activities and their mutual responsibilities one to the other.

In the early years and for perhaps a decade or so after the turn of the century, the acknowledged relationship was based largely on reports of County Boards of Agriculture to the State Board of Agriculture, usually at the annual meeting of the latter group, then a large body in numbers. The reports dealt with current situations in the respective counties, attendant problems, and efforts to solve them and improve agriculture. The State Board in turn took cognizance of these situations and endeavored to bring about the desired actions if possible.

In today's age of instant communication, such reports and actions would be outmoded. They served their purpose in the horse and buggy days, but now now. Moreover, a far greater proportion of today's farmers are very knowledgeable as to the science of production and the intricacies of marketing. They run their operations as a highly skilled business and are a sophisticated, intelligent group.

Over the past several years, a plan to develop a Memorandum of Understanding between County Boards of Agriculture and the State Board of Agriculture has come into being, and at this writing is becoming a reality. This is the fruit of many conferences with County Boards and State Board and Department representatives, and represents sound collective thinking. Such a Memorandum puts down on paper, for all to know, a simple agreement as to (1) what County Boards of Agriculture should and can expect in the way of cooperation and assistance from the State Board and from the Department of Agriculture which it governs; (2) what the State Board seeks in assistance and representation from County Boards; and (3) what each mutually and jointly agrees to do in carrying out functions and operations of interest and value to both. Quite a number of County Boards have definitely signified their intent of signing the Memorandum, and the first such ceremony will be in the fall of 1966. Many others are expected to follow suit shortly, as soon as the formalities of County Board acceptance become a matter local record.

County Boards of Agriculture have long been a nucleus of the annual State Agricultural Convention, and have seated not less than 50 per cent of the delegates provided by law up to and including the 1965 convention. At that time, an amendment to the basic law added a number of other worthy agricultural organizations which until then had not been members of the convention. As a consequence, there are now 97 delegates, of which 42 are still representatives of the 21 County Boards of Agriculture. County Boards are the only organizations now having two delegates; all others have one.

D I V I S I O N O F A D M I N I S T R A T I O N

William E. Kenny, Director

Five divisions and the Office of Milk Industry comprise the Department of Agriculture. The divisions of Animal Industry, Information, Markets and Plant Industry and the Office of Milk Industry conduct the regulatory, service and promotion programs created by law and the State Board of Agriculture. Fiscal, personnel and general service support is provided by the Division of Administration to aid those divisions in performing their duties. In addition, the Division performs services for the State Board of Agriculture and processes work unrelated to the tasks of the other divisions.

FISCAL

The Division of Administration manages all Department fiscal matters, except those of the Office of Milk Industry, whose funds are provided by a separate appropriation. Department revenues are sent to the State Treasurer; appropriations are disbursed to the Divisions and their various projects; and all expenditures are made and recorded in accordance with State policies.

Product promotion taxes, license fees and inspection fees create revenues. The apple, asparagus, poultry and white potato taxes are kept in special accounts and dedicated for use by their respective councils. License fees and inspection fees are deposited in the General Treasury of the State of New Jersey.

In addition to the special product promotion funds, the Department receives operating funds from the State of New Jersey and the United States Government. State funds, the major source of operating money, are provided in the annual State budget. Federal funds are provided under certain cooperative matching fund agreements with the United States Department of Agriculture.

Department appropriations and expenditures for the fiscal year 1965-66 are summarized as follows:

Source of Funds	Amount Expended
General Treasury Funds	\$ 1,617,233.56
State Board of Agriculture	
Federal Loan Fund	63,731.71
Federal matched funds	58,600.82
Promotion tax funds	<u>215,819.25</u>
Total	\$1,955,385.34

PERSONNEL

All Department personnel matters, including those of the Office of Milk Industry, are handled by the Division of Administration. Since personnel actions involve Civil Service regulations and monetary requirements, conformance with fiscal and Civil Service policies is essential.

During the year, the Department maintained 202 permanent, full-time positions. These positions were financed as follows:

Source of Funds	Number of Positions
General Treasury funds	147
State Board of Agriculture	
Federal Loan Fund	1
Federal funds	6
Promotion Council funds	9
Office of Milk Industry funds	<u>39</u>
Total	202

In addition, part-time clerical employees were assigned to the 14 soil conservation districts; some 30 seasonal assistants were employed for plant pest eradication, poultry certification and marketing projects; and the New Jersey Agricultural Society employed 70 fruit and vegetable inspectors. Although Society employees are not paid from State funds, they are employed under Department supervision.

Death of Dr. Robert S. Armstrong

Dr. Robert S. Armstrong of Salem, an area veterinarian for the Division of Animal Industry, died on June 24. His loss will be keenly felt by dairymen, fellow veterinarians and his associates in the Department. Dr. Armstrong joined the Department staff in 1928 and was one of the early pioneers in the anthrax, tuberculosis and brucellosis eradication programs. He worked mainly in Salem, Cumberland, Cape May and Gloucester counties. His knowledge and experience in those areas will be greatly missed.

During the year, the following staff changes occurred among permanent personnel:

Appointments

Charles A. Wagg, Inspector, Plant Industry, July 6, 1965

Barry C. Emens, Inspector, Plant Industry, October 25, 1965

Franklin S. Kinkle, Supervisor, Fruit and Vegetable Standardization, December 6, 1965

Maria Chudzik, Laboratory Technician, Plant Industry, January 31, 1966

Jack R. Estes, Laboratory Technician, Animal Industry, February 16, 1966

R. Donald Bechamps, Farm Products Marketing Representative II, February 21, 1966

Promotions

C. Kenneth Jewell, Deputy Director, Division of Animal Industry, July 5, 1965

Joseph A. Loh, Supervising Auditor, July 5, 1965

Warren H. Fox, Manager, Poultry Products Promotion Council, October 11, 1965

Roger H. Bullock, Senior Inspector, Plant Industry, January 3, 1966

Charles A. Thom, Supervising Inspector, Plant Industry, January 17, 1966

Robert C. Fringer, Principal Wildlife Manager, January 17, 1966

Retirements

Esther M. McClenaghan, Clerk-Stenographer, July 21, 1965

John I. Banks, Supervisor, Fruit and Vegetable Standardization, November 5, 1965

Resignations

Richard L. Stowell, Senior Inspector, Seed Certification, September 21, 1965

Chester J. Teller, Deputy Director, Division of Markets, June 30, 1966

ADMINISTRATIVE SERVICES

Printing, graphic arts and machine data processing services were made available to the Department. Forms control, records retention, departmental awards programs, personnel policies and procedures, and library services have been maintained.

All inside printing services for the Department were completed by the Health Department Print Shop. There were more than 1,200,000 reproductions which included reports, forms, publications and other miscellaneous materials reproduced by the offset method.

The Bureau of Graphic Arts, Department of Health, provided graphic art services for this Department. They designed and produced forms, letterheads, business cards, reports and other materials.

Machine data processing services were available for the Department. In addition to statistical and printing requirements requested by the divisions, inventory and applicable budget data were provided.

A list of all Department forms was kept and maintained by this Division. All forms are recorded in a forms control book which shows the form title and form number. Various forms were revised, developed and eliminated.

In order to eliminate unnecessary public records and documents, a records retention schedule is maintained by this Division. This schedule contains the title of each record and its retention period.

Dr. C. Kenneth Jewell, Charles S. Plumeri and John C. Sirak were appointed by the Secretary to act as the Departmental Awards Committee. This committee is responsible for the conduct and operation of the Awards Program within the Department. They reported their findings and recommendations concerning suggestions, professional accomplishments and service to the New Jersey State Employees' Awards Committee.

Library services were available to Department personnel. The library contains periodicals, magazines, books and other reference material for use by the staff.

The Laboratory moved into the new building during the month of June. Considerable time was devoted to the new buildings to complete the necessary layout and service required.

The carpenter shop staff is continuing the refinishing and necessary repairs to furniture and equipment.

Construction, transportation and set-up of exhibits and displays for use at fairs and the other public functions has increased during the past year. This service is performed by the carpenter shop staff.

Use of motor pool cars increased during the year. Total miles traveled was approximately 1,400,000 about 20,000 miles more than the previous year.

FAIRS

The Department furnishes financial assistance to the educational phases of county fairs. Fairs offer an excellent vehicle for the promotion of agriculture and the advancement of educational interests. During the year, the Department cooperated with some 21 fairs in the distribution of over \$46,000 in assistance. Attendance at all fairs was estimated to be in excess of 600,000 persons. Following is a chronological list of the 1966 New Jersey agricultural fairs:

July 10	Union County 4-H Fair, Elizabeth
July 19-24	Cumberland County Fair, Bridgeton
July 22-24	Cape May County 4-H Fair, Cape May Court House
July 22-24	Monmouth County 4-H Fair, Freehold
July 28-31	Gloucester County 4-H Fair, Clayton
July 29-31	Burlington County Farm Fair, Lumberton
Aug. 4-5	Ocean County Fair, Lakewood
Aug. 5-6	Salem County Fair, Cowtown
Aug. 5-7	Passaic County 4-H Fair, Preakness
Aug. 6-7	Camden County 4-H Fair, Garden State Racetrack
Aug. 9-14	Sussex County Farm & Horse Show, Branchville
Aug. 10-14	Middlesex County Fair, East Brunswick
Aug. 13-14	Essex County 4-H Fair, Caldwell Township
Aug. 13-14	Mercer County Farmers' Picnic & 4-H Show, Trenton
Aug. 18-21	Somerset County 4-H Fair, Somerville
Aug. 18-21	Warren County Farmers' Fair, Harmony
Aug. 19-21	Atlantic County 4-H Fair, Egg Harbor
Aug. 20-28 (Except Aug. 22)	Morris County Fair, Parsippany-Troy Hills
Aug. 31- Sept. 6	Flemington Fair, Flemington
Sept. 11	Bergen County 4-H Fair, Paramus
Sept. 18-26	New Jersey State Fair, Trenton

NEW JERSEY STATE FAIR

For the fourth consecutive year, the Department managed the New Jersey State Building at the State Fair. Each of the 14 departments of State government participated in the exhibition. The exhibits, depicting various programs conducted by the State in the public interest, were viewed by approximately 63,000 persons. The Department exhibit covered several phases of current activities, including plant and nursery stock inspection, apiary inspection, cooperative plant pest control programs with the U. S. Department of Agriculture, and the baby chick health program.

Staff members planned, coordinated and supervised the entire effort.

SHOWS AND EXHIBITS

Exhibits depicting Department activities or promoting New Jersey agricultural products were displayed at approximately 35 locations throughout the State during the year.

The Division assisted in arranging the annual New Jersey Honey Show, which was held during Farmers Week in January. The total of \$327 in premiums was awarded to 17 winning entries. The show was held in the rotunda of the State Capitol Building.

A forward step in the promotion of New Jersey-produced ornamental horticulture products was taken with the incorporation of the all-State New Jersey Flower and Garden Show organization. This corporation was instituted by the New Jersey State Florists' Association, New Jersey Association of Nurserymen, New Jersey Plant and Flower Growers' Association, and the North Jersey Metropolitan Nurserymen's Association, in cooperation with the Rutgers College of Agriculture and Environmental Science and the State Department of Agriculture. The purpose of this organization is to hold an annual Flower and Garden Show starting with the first event in the Spring of 1967.

Cooperation was extended to the Division of Information in the annual New Jersey Dairy Princess Contest, held at Flemington Fair.

LIVESTOCK PROMOTION

Livestock promotion work included participation and financial assistance to several adult and youth shows and sales. Funds were allocated to the following organizations in conducting adult shows: New Jersey Guernsey Breeders' Association, New Jersey Holstein-Friesian Association, New Jersey Brown Swiss Breeders' Association, Jersey Cattle Cooperative Association of New Jersey, and the New Jersey Sheep and Wool Cooperative Association.

Youth shows and other programs included the State 4-H Baby Beef Show and Sale, State 4-H Quality Lamb Show and Sale, State 4-H Dairy Show, State FFA Dairy Show, 4-H Frelinghuysen Memorial Awards, FFA Frelinghuysen Memorial Awards and New Jersey Agricultural Society Certificates of Merit awards.

The Department shared financial assistance with the New Jersey Junior Breeders' Fund, the New Jersey Agricultural Society and Joseph Frelinghuysen in making the above awards.

NEW JERSEY JUNIOR BREEDERS' FUND

The New Jersey Junior Breeders' Fund is a nonprofit corporation which provides loans to farm youth to assist them in establishing livestock projects and purebred herds. Started by endowment in 1921, the program has since been administered by the Department. Members of the State Board of Agriculture serve as trustees of the Fund. For 1965-66 the officers were: Albert H. Forsythe, president; Charles Pratschler, vice-president; Phillip Alampi, secretary-treasurer; and William E. Kenny, assistant secretary-treasurer.

During the year, 76 loans totaling \$8,063.25 were made to 4-H club members and vocational agriculture students. Interest earnings were used to provide each borrower with a one-year subscription to a breed journal, to purchase ribbons and trophies, and to make cash awards at State livestock shows in which the borrowers participated. In addition to those incentives, Frelinghuysen Memorial Awards were made to encourage the youngsters.

The emergency fund insurance program relieved five borrowers of their loan obligations. One dairy and four beef animals died.

Since the inception of the Fund 5,303 loans, totaling more than \$475,000, have been made to rural youth under this program.

STATE BOARD OF AGRICULTURE FEDERAL LOAN FUND

The State Board of Agriculture Federal Loan Fund was established in 1952. At that time, the United States Department of Agriculture commenced to transfer cash assets of the defunct Rural Rehabilitation Corporation to the New Jersey Secretary of Agriculture. Transferred assets now total \$300,000.

These funds are used to make loans to qualified New Jersey farmers for the purchase of farms, equipment and livestock, for the installation of irrigation facilities, and for the construction of farm labor housing.

All outstanding loans, with the exception of one, have been made through the Farmers Home Administration of the United States Department of Agriculture. The exception is a direct loan to a cooperative. Negotiated in 1962, that loan was made for new equipment to improve the handling and packaging of eggs.

All Farmers Home Administration negotiated loans are government insured. To help the borrowers, Farmers Home Administration supervisors provide management advice. The outstanding success the fund has enjoyed must be credited to the efforts of those supervisors.

In 1965-66, the fund issued five loans totaling \$50,000. On June 30, 1966, there were outstanding 30 loans which totaled \$289,111.92. Interest earnings for the year were \$11,238.27. This income was used for administrative expenses and for market expansion studies on New Jersey farm products.

NEW JERSEY FARMERS WEEK

New Jersey Farmers Week was observed in Trenton, January 24 through 29, 1966. The six days of activity included the State Agricultural Convention and approximately 40 meetings of State farm organizations. Two general sessions on subjects of broad significance to the agricultural community again occupied a prominent place on the program. The first, held on Tuesday, January 25, dealt with water. The principal speakers were Hollis R. Williams, Deputy Administrator of Watersheds, Soil Conservation Service, United States Department of Agriculture, and Robert A. Roe, Commissioner, New Jersey Department of Conservation and Economic Development.

The second general session, dealing with New Jersey land use, was highlighted by an address by Mrs. Ann Louise Strong, Acting Director, Institute of Legal Research, University of Pennsylvania Law School. B. Budd Chavooshian, Director of State and Regional Planning, Department of Conservation and Economic Development, shared the rostrum with Mrs. Strong.

NATIONAL ASSOCIATION OF STATE DEPARTMENTS OF AGRICULTURE

This Department played host to the National Association of State Departments of Agriculture which celebrated its 50th Anniversary and 47th Convention from October 3 to 7, 1965, at the Princeton Inn, Princeton. The Association is comprised of top agricultural officials of the 50 states, Puerto Rico and the Virgin Islands.

A number of nationally known speakers appeared at the five-day program. The program included talks by officials of the United States Department of Agriculture. They were United States Secretary of Agriculture Orville L. Freeman; S. R. Smith, Administrator, Consumer and Marketing Service; Dr. Marion W. Parker, Associate Administrator, Agricultural Research Service; Harry C. Trelogan, Administrator, Statistical Reporting Service; and Byron G. Allen, Assistant to the Secretary.

Other speakers included Richard W. Reuter, special assistant to President Lyndon B. Johnson, and director, Food for Peace; Buford Ellington, Director, Office of Emergency Planning; and George P. Larrick, Commissioner, Food and Drug Administration, United States Department of Health, Education and Welfare; all of Washington, D. C.

RURAL ADVISORY COUNCIL

The Rural Advisory Council has completed its seventh year as a unit of the New Jersey Department of Agriculture. The Council is comprised of 12 members, 10 of whom are appointed by the Governor for three-year terms. Members of the Council serve without compensation, but are reimbursed for actual expenses in attending meetings and performing Council duties.

During the past year, the following persons ably served as Rural Advisory Council members:

William A. Haffert, Jr. Chairman	Louis DeEugenio
Phillip Alampi	David J. Goldberg
H. Myron Bacon	Carleton E. Heritage (deceased)
Raymond W. Baker	Dr. Leland G. Merrill, Jr.
Louis A. Calvanelli	Franklin C. Nixon
Mrs. Robert B. Crane	Frank C. Pettit

The New Jersey Department of Agriculture provides the necessary appropriations for the staff, programs and operation of the Council.

Study Projects

The first section of this annual report will review several studies that were sponsored or undertaken by the Council during the year. Other projects, of a more specific nature, are in the later section of the report.

Growth for New Jersey Agriculture

The principal study program initiated this year was the two-year study centered on the future of New Jersey agriculture. The study has two broad objectives:

1. To determine the future role of the agricultural industries of the State through an evaluation of the changes, adjustments and opportunities within agriculture.
2. To determine the effects of continuing urban expansion with its implications on the future development of agriculture.

The two objectives illustrate the complex and dynamic agricultural economy here in New Jersey. In assessing the needs, requirements and potentials in agriculture, recognition must be given to two major forces that are in operation. Number one is the fact that agriculture itself is undergoing many dramatic changes in terms of regional competition, capital usage, labor demands and market potentials. Secondly, the impact from an ever-expanding urbanization process that consumes extensive agricultural acreages cannot be minimized. The combination of these elements reveals the extremely complex situation facing the New Jersey agriculture of the future. Since change creates both problems and opportunities, the study program will direct itself toward finding ways to cope with problems and exploiting the opportunities that will occur.

A study consultant has been engaged and is actively working on Phase 1 of the program. This deals with the development of statistical and objective profiles on each of the major sectors of agriculture. This portion of the study is nearing completion. Once completed, special task forces will be developed to assess, evaluate and complement the material in order to develop recommended ways to maximize agriculture's contributions.

Thus, it is expected that by combining the talents of the agricultural agencies, organizations and leaders in the field, a meaningful contribution can be made to the enhancement of New Jersey agriculture.

Land Resources in Agriculture

The intensive competition for land in New Jersey to satisfy the needs of a growing population has placed tremendous pressure on this fixed resource. Since the total contribution -- physical, aesthetic, economic, environmental -- of agricultural lands is unknown, the Council, in cooperation with the Department of Conservation and Economic Development, asked the Rutgers College of Agriculture and Environmental Science to establish a research program on land resources. The College has since set up a special committee which is in the process of developing a land resources research program.

Considerable interest has been generated in evaluating various proposals to save prime agricultural lands from premature development or to retain them for agricultural purposes. A preliminary evaluation was made, by a study consultant, of the possibility and ramifications of a land use authority approach to retaining agricultural and conservation lands. Though preliminary, this approach has merit if a coordinated approach to future public land needs and benefits can be established.

Comparative Tax Study

A special evaluation was made of the possible impact on farmers of a State sales tax vs. a State income tax. The results of the study revealed that on the average, New Jersey farmers would pay less tax under a State income tax. To a large extent, however, the differential in favor of the income tax depended on the exemption status of farm production items. Under a sales tax, farmers would pay both as producers and as consumers, whereas, the income tax would be based on net income.

Other Activities

This portion of the annual report presents highlights of special activities of the Rural Advisory Council and its staff.

County Boards of Agriculture

Following a recommendation of the Council's study of County Boards of Agriculture, a suggested memorandum of understanding was developed between the State Board of Agriculture and County Boards. During the year, meetings were held with each County Board to present and review the suggested memorandum. Several County Boards have, to date, agreed to adopt the memorandum. It is hoped that the balance of the County Boards will follow suit in the near future.

Rural-Urban Relations Committee

With the continuing conflicts between agricultural producers and nearby residents, a Rural-Urban Relations Committee has been formed to try to resolve potential problems before they develop. One of the first activities of the Committee was to develop a joint health-agriculture procedure to handle nuisance complaints as quickly and equitably as possible. The Council's executive secretary serves as a member of this committee, representing the New Jersey Department of Agriculture.

Farmland Assessment Program

This year witnessed the completion of the second year of operation of the Farmland Assessment Program. Since its inception, many farmers, particularly in urban and suburban areas, have enrolled in the program and received its benefits. Some isolated problems have been encountered in the local application of the program. But overall, there has been a decided favorable influence on the status of agriculture. Many requests for information and assistance have been handled during the year. And it is expected that interest in the program will grow as time goes by.

Interestingly, a number of requests for information have been received from other states. This illustrates that New Jersey, in the forefront of problems related to urbanization, is an initiator of new programs. And it must continue to strive to develop new and unique programs to meet changing times and conditions.

Rural Problems and Interests

Continuing staff assistance was provided to promote and assist rural planning and zoning efforts. To date, about 90 per cent of the State's rural municipalities have planning and zoning programs. This illustrates the recognition that community-wide action is necessary to provide for sound, orderly, efficient growth and development. Problems in rural planning and zoning are, however, becoming more complex as suburban pressures continue and as more sophisticated zoning tools become available. Needless to say, support from all public agencies interested in rural areas will have to be continued to assist local communities in their planning endeavors.

Other Activities

The staff of the Council assisted many farm and rural organizations during the year. Activities ranged from serving on special study committees to providing assistance on special rural or agricultural problems.

In addition, the executive secretary served on a number of State committees. One major interest is the Interdepartmental Committee for State

Planning and several of its subcommittees. As Departmental representative, the executive secretary maintains a continuing liaison with the other departments of State Government in providing assistance to the Statewide Planning Program.

Other committees served include the Rural Area Development Technical Panel, Rural Safety Committee and the Agricultural Coordinating Group.

From this type of working relationship, needs for special studies are brought to the attention of the Council.

Thus, through formal study programs, special projects and assistance to groups or individuals, the Council attempts to fulfill its goal of improving rural, social and economic conditions.

STATE SOIL CONSERVATION COMMITTEE

The soil conservation law was supplemented this year to add provisions to allow greater flexibility and improve the effectiveness of operation of the State's 14 soil conservation districts. It is now possible to have five instead of three-man boards, to redefine district boundaries and to receive financial assistance from a greater variety of sources. This broadening of administrative organization was accompanied by a continued growth of responsibilities in district operations to include more conservation technical assistance to nonfarm people. The United States Soil Conservation Service, working through the district administration, provided conservation services to 4,347 farms. At the same time, they made 4,743 nonfarm consultations, an increase of 40 per cent over the previous year. This expansion of the district program has come about because of the often critical soil, water, drainage and sediment situations which arise in urbanizing areas. The soil conservation districts, which are the units of local government with conservation responsibilities, have available much of the technical assistance and scientific data required to deal with these problems. It is natural, therefore, that districts are tailoring what was once an agriculture-related job to one including all types of land use.

Formalized agreements of cooperation were negotiated between the State Division of Fish and Game and six of the districts. Two administrative handbooks were published by the State Committee during the year. A beach grass protection program was supplemented with additional emphasis in the form of signs, tours, meetings, news articles, radio and television programs.

The State Committee worked toward broadening its relationship and effectiveness with other governmental groups, such as the Departments of Health and Highway, the County Freeholders and county and municipal planning board members. It also carried forward a cooperative research project on sedimentation in a lake and streams with the United States Geological Survey, and the Departments of Health and Conservation and Economic Development.

There are 26 watershed and flood control structures either under construction or in operation this year compared with 22 a year ago. In addition, three more watershed projects entered the planning stage.

Districts were provided with technical service by the United States Soil Conservation Service, the State Bureau of Forestry, and the College of Agriculture and Environmental Science and the Cooperative Extension Service of Rutgers University.

Background of the Soil Conservation Program

Objectives

The State Soil Conservation Committee is a special-purpose conservation agency established by an Act of the Legislature in 1937 to provide for: the advancement of soil conservation, the control and prevention of soil erosion, the prevention of damage to soil and soil resources by flood waters or sediment, and the furtherance of conservation of water for agricultural purposes.

Operating Pattern

Basically, the program has four integral parts. Each contributes a share to the success of the program and can be described as follows:

- (1) The State Soil Conservation Committee administers the program at the State level; creates districts; appoints and sets the terms of office of a board of three to five supervisors who are local resident land-owners to serve as the governing body of each district; assists each district in promoting its program; arranges for technical services and materials from local, State and Federal agencies; allocates to the districts State-appropriated funds; coordinates the activities of the several districts; represents the State's interest and responsibility in soil conservation, agricultural water management, etc. to other State, Federal and local agencies and groups.
- (2) The Soil Conservation Districts, which are created by the State Soil Conservation Committee as legal subdivisions of the State, administer the program at the local level and formulate comprehensive plans and procedures for controlling and preventing damage to local soil and water resources. They carry out their programs by utilizing funds and technical assistance provided to them by cooperating agencies and the State.
- (3) The Cooperating Agencies and Organizations supply the district with funds, materials and technical assistance for accomplishing the district's program.
- (4) The Landowners may be Federal, State, County, municipal agencies or private property holders who voluntarily agree to cooperate with the district by applying needed conservation practices to their land.

Accomplishments, 1965-1966

In the final analysis, progress in conservation of the natural resources is measured by on the ground accomplishment. Naturally, there must be supporting programs of information-education, research and planning, but these activities must result in conservation or management projects in order to achieve the objectives of the soil conservation program.

The "on the ground" accomplishments of the State Soil Conservation Committee must be measured in terms of achievements at the district level, since the State body serves a supportive role to the districts in this regard. Other types of accomplishments will be noted later in this report.

TABLE 1, SUMMARY OF STATISTICAL DATA FOR YEAR 1965-66

Item	Unit	Number
Farms serviced	no.	4,347
New cooperators	no.	531
Ponds constructed	no.	245
Open drains	feet	176,759
Tile drains	feet	102,200
Land shaping	acres	792
Terracing	feet	37,728
Strip cropping	acres	1,025
Contour plowing	acres	1,019
Windbreaks	feet	29,210
Stream channel improvement	feet	20,480
Recreational roads and trails	feet	42,710
Wildlife area improvement	acres	2,219
Dikes and levees	feet	15,065
Water outlets soil survey <u>1/</u>	acres	370,157
Basic plans	no.	186
Revision of old plans	no.	43

TABLE 2, SUMMARY OF FOREST MANAGEMENT WORK ACCOMPLISHED USING TECHNICAL ASSISTANCE OF THE STATE BUREAU OF FORESTRY, 1965-66

Item	Unit	Number	Acres
Timber marked for Cutting - sawtimber,	owners	65	1,190
pulpwood	owners	42	424
Tree planting plans	owners	175	2,325
Area planted	no.	--	627
Products harvested Under improved management,			
sawtimber	owners	35	774
pulpwood	owners	20	1,166
Woodlots examined	--	380	20,806
Requests for assistance	no.	1,130	

TABLE 3, SUMMARY OF ADDITIONAL WORKLOAD PROJECTS, 1965-66

Item	Unit	Number	Acres
Nonfarm basic plans	no.	51	--
Consultative services	no.	4,743	--
Properties receiving conservation treatment <u>2/</u>	no.	38	22,360
Sand dunes stabilized	no.	--	20

1/ These items cover agricultural and nonagricultural lands.

2/ Incomplete record, as noted in text.

Nonagricultural Lands

Technical assistance for the conservation of natural resources on nonagricultural lands continues to gain in importance in the activities of the soil conservation districts. This year, one county unit of the Soil Conservation Service recorded 28 per cent of its workload in this category. Because of the nature of this work, however, it is not possible to fully report "on the ground" accomplishments. The technicians often provide consultative assistance to engineers, architects, planning boards and other nonlandowners who are in turn responsible for supervision or control of the necessary conservation practices. The district technician, therefore, is removed from the district supervision of establishment and often is not able to record actual accomplishment.

The following table is the record of activities in the above category:

Nonfarm basic plans	51	
Consultative services	4,743	
Properties receiving conservation treatment ^{1/}	38	22,360 acres
Sand dunes stabilized	20	acres

Because of their experience in the management of soil, water and other natural resources, soil conservation district supervisors and the technical staff are often asked to serve on various resource committees, planning boards and other local organizations. This day-by-day transfer of knowledge and of concepts into decision-making bodies results in achievement of objectives in the best possible manner.

Watershed Protection and Flood Prevention

Under the Watershed Protection and Flood Prevention Act (P.L. 566), local people through group action can obtain assistance on problems of water control which cannot be handled individually. Since its inception in 1954, great interest in watershed projects has been stimulated by the soil conservation districts. Watershed work plans include such features as flood prevention to reduce floodwater and sediment damage and erosion, agricultural water development for municipal or industrial supply, fish and wildlife, recreation and other nonagricultural water development. Conservation planning through the watershed approach combines a well-balanced upland control program with the downstream control program of stream channel work and flood control structures.

Eleven watershed projects in New Jersey are in the operational or maintenance stage. The total cost of these projects is \$6,009,259. Of this total, 82 per cent is being paid by the United States Soil Conservation Service. In addition, all of the planning funds and installation costs are paid by the Federal Service.

Three projects have been completed:

Pequest River --- Sussex and Warren Counties
Silver Lake-Locust Island --- Salem County
Town Bank --- Salem County

Eight are under construction:

Stony Brook --- Mercer and Hunterdon Counties
Assunpink -- Mercer and Monmouth Counties

^{1/} Incomplete record, as noted above.

Parkers Creek --- Burlington County
 Paulins Kill --- Warren and Sussex Counties
 Maurice River Cove --- Cumberland County
 Pine Mount-Mill Creek --- Cumberland County
 Repaupo --- Gloucester County
 Middle Neck --- Salem County

Three are in final planning stage:

Furnace Brook --- Warren County
 Dennis Creek-Bidwells Ditch --- Cape May County
 Riggins Ditch --- Cumberland County

Seven more are in preliminary planning stage:

Salem River --- Salem County
 Oldman's Creek --- Salem and Gloucester Counties
 Navasink --- Monmouth County
 Rock Creek --- Somerset and Hunterdon Counties
 Merrill Creek --- Warren County
 Shabakong --- Warren County
 Bear Creek --- Warren County

Research

Since 1963, the State Soil Conservation Committee has cooperated in a water quality study with the New Jersey Department of Health, the New Jersey Department of Conservation and Economic Development, and the United States Geological Survey.

One part of the project is the establishment of a basic water quality network. This network will provide a source of continuing information on stream quality and its variation with season, streamflow and other natural and man-made factors.

Another phase of the program is a sedimentation study throughout the State. The locations are Baldwin's Lake in the Stony Brook Watershed, the Passaic River Basin, Great Egg Harbor River and the Mullica River. The Baldwin's Lake study is particularly interesting because the trap efficiency of this watershed project reservoir can be evaluated.

Information-Education

An exhibit on "Agriculture is Important" was shown 14 times, at county fairs, planning conferences, on television and at other public affairs. It depicted the importance of retaining agricultural lands in New Jersey for water conservation, recreation, food production and open space.

The State Committee published two guidebooks for governing and administering soil conservation districts. These were distributed to district supervisors and clerks. A statewide training session was held to further explain and discuss their contents. A reprinting of the State Committee's leaflet "Conservation Plantings Make Homes for Birds" was made.

The soil conservation districts with the assistance of the Rutgers Cooperative Extension Service and others carried on a wide range of informational and educational activities in the field of conservation of natural resources. These included 33 conservation tours for school children, government and planning officials, teachers, landowners and others; 33 editions of newsletters; 11 television programs.

There were also many spot radio announcements and longer programs, talks, news releases and news articles; however, because of the large number of agencies and individuals cooperating in this effort, a tabulation of these latter items has not been possible.

To supplement the increasing concern with the eroding of New Jersey's coastline, the districts and the State Committee gave greater attention to this phase of their work. Two films were made of the beach erosion problem by Philadelphia television stations. These were shown as a half-hour show and as three 15-minute programs. Additional television time was devoted to this subject by the Cape May station. The State Committee printed 500 plastic signs for use in some of the critical areas of erosion. These are being erected under sponsorship of soil conservation districts, the Extension Service and private conservation groups.

Administration

Acting upon the recommendations of the county boards of agriculture, the State Committee reappointed 14 supervisors. Their terms of office commenced July 1, 1965, and will continue through June 30, 1968.

The State Committee members are:

Phillip Alampi, Chairman	Charles Q. Oldis
Alfred F. Baylor	Selden L. Tinsley
Jacob A. Blakeslee	Fred H. Totten
Roeland deWilde, III	John R. Traino
Dr. John L. Gerwig	Robert A. Roe
Edward J. Lenihan	
Dr. Leland G. Merrill, Jr.	

Eleven meetings were held during the fiscal year. They included an air tour in October to look at watershed projects throughout the State and to observe effects of the drought.

The State Soil Conservation Committee continues to work very closely with the 14 soil conservation districts in the State. In addition to providing financial support for clerical workers and other funds to the districts, the Committee also maintained close liaison with other State and Federal agencies with delegated conservation responsibilities. The Committee was represented on various conservation boards and committees.

D I V I S I O N O F A N I M A L I N D U S T R Y

Dr. E. L. Brower, Director

BUREAU OF LIVESTOCK DISEASE CONTROL

Bovine Brucellosis

The incidence of brucellosis declined to an alltime low in 1965-1966. During the year, blood tests were made on 3,267 herds containing 65,908 animals, of which only 16 herds were found to be infected. These 16 herds contained only 25 reactors. Sixteen reactors were found in previously infected herds, making a total of 41 reactors. Because of the low incidence of infection, two more counties were prepared to become eligible for certification. These counties are Somerset and Middlesex.

Only eight herds were listed as infected with brucellosis at the end of the fiscal year.

The brucellosis ring test continued to play a very important role in surveying dairy herds for brucellosis infection. Milk from all New Jersey dairy herds is sampled three times a year at creameries and the samples are tested in the Division laboratory. Serious consideration is being given to testing all dairies four times a year and curtailing the down-the-road testing of dairy herds.

This year, 6,903 milk samples were taken, of which 19 samples were found to be suspicious. The total includes 1,504 samples of milk from out-of-state herds whose milk is sold in New Jersey. Two of these were suspicious. The 17 suspicious samples of New Jersey-produced milk came from 14 herds. These herds were immediately blood tested, and four reactors were found, distributed among three herds.

All reactors to the brucellosis tube test were closely scrutinized with supplemental blood tests by the laboratory. These supplemental tests help to determine if the animal is infected or is reacting because of vaccination interference or some other cause.

The Division vaccinated 11,913 calves this past year. Less emphasis was placed on urging farmers to vaccinate their calves. Experience has shown that vaccination causes many varied problems and will be one of the chief obstacles to final total eradication. If vaccination is to be continued, it must be done at the early age of four to five months, or younger when research proves it to be feasible.

Swine Brucellosis

A new service was added to the brucellosis eradication program. Swine may now be tested by Division and Federal personnel. A new agglutination card test that can be made right on the farm has been developed. A few drops of blood obtained from the ear or tail veins is all that is necessary to perform the test. In the past, the swine had to be physically restrained and a 5 cc. sample of blood secured. This was difficult and very time consuming.

Mr. W. H. Leming, Chief, Bureau of Farm Operations, State Department of Institutions and Agencies, has agreed to have all institutions that are raising swine participate in this program. After the institutions have been tested, the testing will be offered to swine raisers on a voluntary basis. All of the breeding swine at the Mercer County Workhouse were tested with negative results.

Swine brucellosis is now the main source of undulant fever in humans. Farmers, packing house workers and veterinarians are most often affected.

Bovine Tuberculosis

Thirty-nine herds were found to be infected with tuberculosis this past year and 87 animals were classified reactors to the tuberculosis test and sent to slaughter. No reactors showed gross lesions of tuberculosis. This was very encouraging as such lesions are evident in the more advanced cases of tuberculosis, usually the cases that spread the disease.

One hundred and fifty-four animals were classified as suspects; on retest, 10 were reactors. All herds that had suspects or reactors last year were retested this year. Fourteen reactors were found in these herds, eight in the suspect herds and six in the reactor herds.

There was some criticism of the new program of tuberculosis testing dairy herds one year and brucellosis testing them the following year. Some felt that both tests should be conducted the same year. Serious thought was given to this problem and veterinarians and farmers were contacted to get their views. It was felt that this method of testing could seriously hamper our programs. As stated earlier, serious consideration is being given to dropping the blood testing of dairy herds in 1967 and increasing the brucellosis ring testing to four times a year. This would mean that dairy herds would be tuberculosis tested every two years and brucellosis tested only when they were suspicious to the brucellosis ring test. Small herds, goat herds and beef herds would be tested every two years for brucellosis and tuberculosis.

Leptospirosis

Tests for leptospirosis were conducted on a request basis this year. A total of 2,132 samples was tested, of which 86 showed titres of 1:10 through 1:40, 23 showed titres of 1:160 or higher, and 2,023 were negative.

Anthrax

This is the fourth year that not a single case of anthrax has been reported in New Jersey!

In an effort to prevent this disease from reappearing, livestock owners in the endemic areas of Salem County were offered free vaccination once again. To date, 604 animals on 16 premises have been vaccinated.

Sheep Scabies

The entire sheep population of New Jersey was inspected for scabies during December and January. Five hundred and fifty-five flocks containing 9,273 head were examined, no scabies was found.

Contagious Ecthyma

A small flock of sheep was found to be infected with contagious ecthyma, more commonly known as sore mouth. This condition is caused by a virus that affects sheep and goats. Lambs and kids are most seriously affected. The infected flock has been in contact with other sheep at a show.

As a precaution and to prevent the spread of this disease, all sheep and goats entering the county fairs were examined by State and Federal veterinarians. All sheep and goats found to be infected were denied entry into the fair. The program was well received and will be conducted each year.

Chorioptic Mange

A herd of Charolais cattle was found to be infested with chorioptic mange. The owner was advised that the only approved method of treatment was to dip the entire herd in toxaphene. He immediately built a concrete dipping vat, 8 feet deep and 20 feet long. The entire herd of 55 head was dipped twice at 10-day intervals without incidence. Followup surveillance has showed no recurrence of the infestation.

Cleaning and Disinfecting

The Federal power spray equipment was used to disinfect six premises that were infected with either tuberculosis or brucellosis. One other farm was disinfected for another livestock disease. It is the farmer's responsibility to clean his barns thoroughly and supply the necessary disinfectant.

Auction Markets

Eight livestock auction markets are under the supervision of area veterinarians. The main duty of the auction market veterinarian is to see that all animals weighing over 200 pounds are sent to slaughter. The number of livestock that passed through these markets totaled 147,247 head.

There has been a continued demand for veal calves to be shipped to foreign countries. Forty-four lots containing 1,973 calves were flown to Italy. Area veterinarians at the markets inspected these calves for shipment.

Violations

Hearings for five violations of the law governing garbage-fed swine and one violation by a disposal plant owner were held before the assistant secretary of agriculture.

On July 6, a hearing was held for James M. Lewis, Atco, Camden County, who had been found to be feeding raw garbage to his swine. A 30-day quarantine was placed on Mr. Lewis' farm and a \$25 settlement was made.

On July 9, a hearing was held for James and Charles Price, Price's Livestock Farm, Sewell, Gloucester County, who had been found to be feeding improperly cooked garbage. A guilty plea was entered and a settlement of \$50 was made.

On August 17, a hearing was held for John Carter of Neptune. He was denied a license to feed garbage to his swine and ordered to cease his garbage-feeding operations with the recommendation that he completely abandon his pig business to avoid penalty action. Mr. Carter had failed to comply with the garbage cooking and sanitary requirements necessary to be licensed.

On January 7, a hearing was held for Samuel and Robert Price of Woodbine, who were detected feeding raw garbage to their swine. A settlement in the amount of \$25 for the violation was agreed upon.

On February 14, a hearing was held for Elbert W. Ramsey of Farmingdale, who was detected feeding raw garbage. It was determined that Mr. Ramsey should give up his small pig feeding business because of his apparent inability to carry out proper cooking operations and meet the necessary sanitary requirements of the rules and regulations. It was, therefore, ordered that Mr. Ramsey cease his garbage-feeding operation and dispose of all pigs, except two sows, by February 19. He was permitted to keep two sows until March 15, for personal use, provided they were fed solely on grain or grain products.

On December 20, a hearing was held for Dominic Gambino, D. & N. Dead Stock Service, Long Valley, who was charged with violation of the Disposal Plant Licensing Law. A guilty plea was entered and a settlement of \$100 was made in lieu of court prosecution.

Swine Disease Control

New Jersey continues to maintain the largest garbage-feeding swine industry in the United States. All garbage-feeding farms must be inspected and licensed annually. Two hundred and six licenses were issued to garbage-feeding swine farms this year. Eighteen of these farms depopulated or switched to grain feeding during the year, leaving a total of 188 licensed garbage-feeding farms containing 100,747 swine.

The garbage-cooking law requires that these farms be maintained in a sanitary condition and that garbage fed to swine be properly heat treated. Bi-weekly inspections are made of all garbage-feeding farms and temperatures of cooking garbage are taken at least monthly. This work is done by Division and Federal livestock inspectors. From July 1, 1965, to June 30, 1966, 4,357 inspections were made.

The cooking of garbage is very vital to control of swine diseases like foot-and-mouth disease, hog cholera, vesicular exanthema and trichinosis, which may be spread through raw garbage.

Swine inspectors are constantly on the lookout for any disease condition in swine. These diseases are reported to area veterinarians who then make an investigation.

Hog Cholera Eradication

A four-phase program for the eradication of hog cholera, as proposed by the Agricultural Research Service, United States Department of Agriculture, was approved by the New Jersey Hog Cholera Eradication Committee and the Department.

Phase one is the establishment of a hog cholera committee, development of a system for prompt reporting, complete investigation of all outbreaks, and reemphasis on garbage cooking and inspection.

Phase two is the reduction of the incidence of hog cholera by quarantine of infected and exposed herds, proper disposal of infected and exposed animals, and increased vaccination of swine.

Phase three provides for indemnity payments for the loss of swine infected with or exposed to this disease.

Phase four becomes effective when no hog cholera has been diagnosed for a year and there is protection against reinfection. The State may then be declared hog cholera free.

New Jersey is preparing to go into phase three of the program. New regulations have been prepared which will permit the State to indemnify swine farmers for the loss and depopulation of a herd due to hog cholera.

Four confirmed cases of hog cholera, involving about 500 head of swine, were diagnosed during the fiscal year. These swine had not been vaccinated or were recently vaccinated and were mixed with susceptible pigs which contracted the disease. Under the present plan, those animals in the herds that were not vaccinated were treated and portions of the herds were salvaged. Under the

proposed new regulations, these herds would have been completely depopulated, the animals destroyed and indemnity paid. This will prevent any reservoirs of infection being allowed to remain on the farms as the premises will be cleaned and disinfected following depopulation.

Vaccination is mandatory for swine moving through the States's livestock markets, unless they are going to immediate slaughter. Animals consigned to markets must have been vaccinated at least 21 days prior to sale, or be vaccinated at the sale and held in quarantine by the buyer for 21 days.

Swine coming into New Jersey from other states must have been vaccinated for hog cholera at least 21 days prior to shipment.

The record, then, is very good. The low incidence of hog cholera reported reflects the high percentage of swine vaccinated. While reports from veterinarians of official vaccination of swine is low, the sale of vaccine in New Jersey is high, indicating that the swine farmer is still vaccinating his own swine. A survey by Division inspectors showed that more than 80 per cent of the swine are vaccinated.

Eighty-two lots of 2,794 swine were officially vaccinated by veterinarians on farms and 1,422 swine were vaccinated at auction markets.

Inspection of Disposal Plants

Division personnel inspected 40 animal disposal plants prior to licensing, as required by State law.

Viral Encephalitis

The Division cooperated with the State Department of Health in securing specimens and reporting all cases of encephalitis in horses and pheasants. Eight cases were reported in horses, of which five were found to be positive. All of these positive cases were in a small area in the upper part of Cape May County and lower part of Cumberland County. Incidentally, the only case of Eastern encephalitis in humans was found in this area.

Several outbreaks in pheasants were reported to the Department of Health which uses these reports and the cases reported in horses as sentinels of virus activity. Thus, the Department of Health is alerted to possible human involvement.

Although vaccination of horses for encephalitis is urged, few vaccinations were reported. As with most diseases in which a vaccination program is urged for the protection of animals, the number of vaccinations decrease when the disease is not prevalent.

Emergency Animal Disease Program

Many diseases of animals that are endemic in foreign countries are not known to exist in this country today. With the rapid means of transportation and the world tensions of today, disease could be spread over the whole country in a matter of days, especially by the use of biological warfare.

The Division of Animal Industry, in cooperation with the Animal Health Division, United States Department of Agriculture, is organized to combat any introduction of a foreign disease that could be a very serious problem to the livestock of the State and the Nation.

Cooperation With Federal Government

The Division of Animal Industry cooperates with the Animal Health Division of the Federal government in certain programs that are not formally assigned to this Department. These include the examination of animals for export and the collection of information and specimens when disease conditions are suspected.

Inspection of Turkeys for 'State Seal of Quality'

Each year, in cooperation with the Poultry Products Promotion Council of the Division of Markets, the Division of Animal Industry has its area veterinarians conduct antemortem and postmortem inspections of turkeys which are to be marketed under the Department's Seal of Quality program.

TABLE 1. INSPECTION OF TURKEYS FOR SEAL OF QUALITY, 1965

<u>Month</u>	<u>Antemortem Inspection</u>			
	<u>Birds Inspected</u> --number--	<u>Approx. Weight</u> --pounds--	<u>Birds Condemned</u> --number--	<u>Amount Condemned</u> --pounds--
September	665	13,180	--	--
October	3,765	73,278	--	--
November	12,138	259,493	3	66
December	<u>10,489</u>	<u>233,092</u>	<u>--</u>	<u>--</u>
Total	27,057	579,043	3	66

<u>Month</u>	<u>Postmortem Inspection</u>			
	<u>Birds Inspected</u> --number--	<u>Approx. Weight</u> --pounds--	<u>Birds Condemned</u> --number--	<u>Amount Condemned</u> --pounds--
September	665	10,085	--	--
October	3,765	60,402	2	40
November	12,135	216,496	1	25
December	<u>10,489</u>	<u>195,604</u>	<u>3</u>	<u>65</u>
Total	27,054	482,587	6	130

POULTRY DISEASE CONTROL

Pullorum Disease

One case of pullorum disease was found this year on a farm not under the National Poultry Improvement Program. The disease was eradicated on the two farms involved last year and the premises were cleaned and disinfected. The pullorum-typhoid blood testing program for poultry was completed with no reactors being found.

Fowl Typhoid

No reports of fowl typhoid were received during the year. Three farms are being maintained with special sanitary measures and medication.

It is believed that progress has been made in the control of this disease. The present method of cooperation between the poultrymen and the Depart-

ment has been very successful. It appears that this disease has been slowed down considerably due to poultry health education, and the cleaning and disinfecting program.

Avian Tuberculosis

One case of avian tuberculosis was reported by a Federal slaughtering and dressing plant in which the entire flock had been sent to slaughter. Arrangements were made to clean and disinfect the premises.

Paratyphoid

Twenty-four cases of paratyphoid were reported since July 1, 1965:

18 cases - chickens
3 cases - pigeon
1 case - turkey poults
1 case - canary
1 case - sparrow

All 24 cases were diagnosed by routine laboratory examinations. This disease is still causing much concern among avian disease workers and is being investigated continually.

Cleaning and Disinfecting

Cooperation continued with the Animal Health Division, United States Department of Agriculture, in disinfecting poultry houses where avian diseases such as pullorum, fowl typhoid and paratyphoid were present. The poultry farmer purchases the approved disinfectant. Both State and Federal personnel operate the Federal disinfecting equipment. Twenty-five poultry farms were disinfected during the year.

Cooperation With Other Agencies

The cooperative reporting system with the Animal Health Division, United States Department of Agriculture, on avian disease investigations has progressed satisfactorily.

Reports at the various poultry meetings indicate more accurate knowledge of the health status of the nation's poultry. Poultry diagnostic laboratories in and out of the State continued their fine cooperation in reporting avian diseases.

Mycoplasma Gallisepticum (PPL0)

The Mycoplasma gallisepticum (PPL0) program was confined mainly to broiler breeders by the planned exposure or vaccination method. Two large operations in South Jersey were involved.

The vaccine was produced by the Vineland Poultry Laboratories, Vineland, New Jersey, on a special permit obtained from the Veterinary Licensing Section of the United States Department of Agriculture for experimental use only.

Thousands of chickens on both farms were vaccinated and checked by blood testing. Before the end of the fiscal year, one farm had discontinued vaccination. The chickens are grown there, then shipped to Delaware and Maryland where they are vaccinated on the breeding farm. The other farm also

discontinued vaccination, at least for the present, and has been able to maintain a status accepted in the state where the hatching eggs are sold. Work must continue in an effort to assist these broiler growers to maintain a flock status for Mycoplasma gallisepticum acceptable to the state where their breeding chickens or hatching eggs are sold.

It was reported at the recent Avian Disease Conference in Delaware that chicks from clean Mycoplasma gallisepticum breeders are superior to planned exposure breeder chicks. It appears that the goal will be eradication of Mycoplasma gallisepticum.

Poultry Standardization

This is the 43rd year of Department service to the poultry industry of New Jersey in poultry standardization work and the 31st year of such service under the identity of the National Poultry and Turkey Improvement Plans. Fiscal 1965-66 was the fourth year in which all chickens and turkeys tested maintained their N.J.-U.S. Pullorum-Typhoid Clean status.

The Division certified 229,613 birds from 67 flocks in 12 counties. The number of birds in participating flocks was 4.2 per cent less than the 1964-65 total of 239,596 birds in 90 flocks. Twenty-four hatcheries cooperated in the 1965-66 program. Four of the hatcheries did not set any eggs. To save labor, their eggs were set in other hatcheries.

Thirty privately employed workers were certified as flock selectors and 31 as pullorum-typhoid testing agents working in various phases of the N.J.-U.S. National Poultry Improvement Plan.

Department personnel selected and blood-tested 98,778 birds, 43 per cent of the total; 130,835 birds were handled by field agents. The agents were closely supervised and found satisfactory by the inspectors of the Division of Animal Industry.

Participating flocks averaged 3,428 birds last year compared with the 2,104-bird flock average of 10 years ago. Total capacity of the participating hatcheries is 3,087,000 eggs per setting. This is about 70 per cent of the total hatchery capacity for New Jersey. The average capacity of participating hatcheries is about 128,000 eggs.

The trend since 1953 toward fewer hatching egg flocks and hatcheries in New Jersey continued in 1965-66. Seventeen New Jersey hatcheries and flock owners have franchise breeding contracts with 20 out-of-state breeders. Three New Jersey breeders are selling their replacement stock in other states and countries on a non-franchise basis.

The breeding and health classifications used were:

Breeding States

N.J.-U.S. Certified
N.J.-U.S. Approved

Pullorum-Typhoid Classes

N.J.-U.S. Pullorum-Typhoid Clean

TABLE 2. POULTRY STANDARDIZATION PROGRAM, 1964-65 AND 1965-66

<u>N.J.-U.S. Improvement Plans</u>	<u>1964-65</u>	<u>1965-66</u>
Number of flocks cooperating.	90	67
Total number of breeders.	239,575	229,596
Number of hatcheries cooperating	31	24
Hatchery capacity cooperating	4,109,000	3,087,000
Number of birds in pullorum-typhoid classes only.	66	395
Number of birds in Approved stages.	160,309	171,454
Number of birds in Certified stages	76,529	57,747
Percentage of birds reacting to the pullorum-typhoid test	0.00	0.00
Number of flock inspections	82	58
Number of hatchery inspections.	27	17

Table 4 gives the classification and distribution of birds under supervision, and the number of birds banded by breeds and by counties. Salem County leads in the number of breeding birds, following by Monmouth, Cumberland, Middlesex, Hunterdon, Atlantic and Mercer counties.

The 111,724 White Leghorns accounted for 48.7 per cent of the total of all varieties enrolled in the State program. Rhode Island Reds numbered 1,186 and White Rocks, 8,985. Crosses numbered 89,878 and Incross mated numbered 8,660.

Participation in the Turkey Improvement Program totaled 4,545 birds, a 70.2 per cent increase from 1964-65.

The annual school for flock selectors and pullorum-typhoid was not held, as there was no demand for it this year.

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

Registered Poultry Vaccinators

The regulation of poultry lay vaccinators has been under discussion and study for the last 10 years or more. Many meetings have been held with the poultry industry, veterinarians and the New Jersey Board of Veterinary Medical Examiners. The poultry industry was interested in experienced help for vaccinating their flocks. Those doing the vaccinating wanted some way to do this service without being in violation of the veterinary practice regulations. The Division of Animal Industry was concerned about sanitation and spread of disease by those making the vaccinations. Also, the quality of work was a factor.

Registration of poultry lay vaccinators was started for the first time during the 1965-66 fiscal year. A regulation passed by the Board of Agriculture on July 27, 1965, requires that vaccinators of poultry, other than the owner of the flock or any veterinarian, register with the New Jersey Department of Agriculture.

The New Jersey Board of Veterinary Medical Examiners and the Rutgers College of Agriculture and Environmental Science are cooperating with the Department in the registration of the poultry vaccinators.

The first review session and written examination on poultry vaccination were held at Rutgers University on September 30, 1965. Twenty-five took the examination and became eligible to be registered. Instructions, report forms and registration cards have been presented to each vaccinator.

TABLE 3. SUMMARY OF REPORTED VACCINATIONS, 1965-66

<u>Month</u>	<u>Pigeon</u>		<u>Fowl</u>		<u>Laryngo-</u>		<u>New-</u>		<u>Other</u>	
	<u>Pox</u>		<u>Pox</u>		<u>tracheitis</u>		<u>castle</u>		<u>Diseases</u>	
	lots	birds	lots	birds	lots	birds	lots	birds	lots	birds
March	1	2,000	4	15,958	4	13,358	--	--	--	--
April	14	59,462	2	2,739	27	78,941	--	--	--	--
May	24	96,654	13	77,154	41	191,403	2	19,000	8	36,753
June	<u>18</u>	<u>100,530</u>	<u>5</u>	<u>25,097</u>	<u>22</u>	<u>128,827</u>	<u>2</u>	<u>21,800</u>	<u>--</u>	<u>--</u>
Total	57	258,646	24	120,948	94	412,529	4	40,800	8	36,753

TABLE 4. NUMBER OF BREEDERS, BY COUNTIES, BREEDS OR VARIETIES, 1965-66

County	Single Comb White Leghorns	New Hamp- shires	Rhode Island Reds	White Rocks	Crosses	In- cross	Others	Turkeys			Total
								Broad Breasted Bronze	Broad Breasted White	Others	
Atlantic	6,478	--	--	--	6,033	--	156	--	--	--	12,667
Burlington	--	--	--	--	--	--	3	--	--	--	3
Camden	--	--	--	--	--	--	2	--	--	--	2
Cape May	8,851	--	--	--	--	--	--	--	--	--	8,851
Cumberland	12,748	--	886	1,056	15,082	7,166	957	--	--	--	37,895
Hunterdon	15,847	--	--	--	--	--	25	--	--	--	15,872
Mercer	--	--	300	--	5,844	--	388	3,197	436	--	10,165
Middlesex	16,941	--	--	--	--	--	--	--	--	--	16,941
Monmouth	38,031	--	--	--	6,614	--	135	--	341	--	45,121
Ocean	7,509	--	--	--	--	--	341	--	--	--	7,850
Salem	1,882	206	--	7,929	56,305	--	2,405	--	--	74	68,801
Warren	3,437	--	--	--	--	1,494	--	--	497	--	5,428
Total	111,724	206	1,186	8,985	89,878	8,660	4,412	3,197	1,274	74	229,596
1964-65	156,192	230	1,179	6,293	57,393	13,744	1,873	1,670	940	61	239,575

TABLE 5. CATTLE UNDER SUPERVISION 1956-66

	<u>Herds</u>	<u>Animals</u>	<u>Tuberculosis Reactors Indemnified</u> --number--	<u>Brucellosis Reactors Indemnified</u>	<u>Calves Officially Brucella Vaccinated</u>
1956-1957	8,014	185,327	162	1,830	16,179
1957-1958	6,987	175,026	175	1,224	15,665
1958-1959	6,771	174,203	150	759	16,305
1959-1960	5,717	173,532	148	440	18,033
1960-1961	6,327	175,278	230	418	17,655
1961-1962	5,921	172,363	296	267	16,494
1962-1963	5,502	153,804	274	211	15,935
1963-1964	4,714	143,653	147	155	13,402
1964-1965	4,305	134,423	146	83	14,009
1965-1966	3,806	119,462	58	31	11,913

TABLE 6. CATTLE AND GOAT SURVEY, 1965-66

<u>County</u>	<u>Cattle</u>			<u>Goats</u>	
	<u>Herds</u>	<u>Adults</u>	<u>Heifers</u> --number--	<u>Herds</u>	<u>Animals</u>
Atlantic	23	56	20	6	30
Bergen	24	324	19	12	39
Burlington	318	11,203	2,712	5	22
Camden	37	301	123	5	57
Cape May	16	71	46	--	--
Cumberland	172	2,849	807	10	16
Essex	7	98	--	3	17
Gloucester	146	1,855	327	13	24
Hudson	--	--	--	1	21
Hunterdon	670	16,755	2,396	36	261
Mercer	139	2,564	722	--	--
Middlesex	99	3,420	107	8	22
Monmouth	161	3,403	547	15	44
Morris	197	4,237	143	25	278
Ocean	30	372	77	5	10
Passaic	12	87	11	7	23
Salem	391	9,701	3,045	5	30
Somerset	235	5,648	1,086	32	100
Sussex	560	20,261	3,559	3	9
Union	10	30	2	2	19
Warren	<u>559</u>	<u>18,866</u>	<u>1,612</u>	<u>19</u>	<u>58</u>
Total	3,806	102,101	17,361	212	1,080

TABLE 7. SUMMARY OF TESTING, 1965-66

Tuberculosis Eradication Program

<u>Veterinarians Testing</u>	<u>Cattle</u>		<u>Goats</u>		<u>Misc.</u>	
	<u>Lots</u>	<u>Animals</u>	<u>Lots</u>	<u>Animals</u>	<u>Lots</u>	<u>Animals</u>
State	608	10,896	41	120	--	--
Federal	221	4,873	43	180	--	--
Practitioner (State expense)	1,610	51,057	39	253	--	--
Practitioner (Owner's expense)	670	9,932	36	339	--	--
Auction markets (Owner's expense)	<u>53</u>	<u>92</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>
Total	3,162	76,850	159	892	--	--

Suspects - 154 (Of this number, 10 were classified as reactors upon retest)

Reactors - 87 - 0.11%

Brucellosis Eradication Program, Blood Testing

State	828	15,972	44	141	--	--
Federal	350	7,122	41	173	--	--
Practitioner (State expense)	1,031	29,314	48	291	5	205
Practitioner (Federal expense)	149	3,129	--	--	--	--
Practitioner (Owner's expense)	846	10,273	22	113	13	54
Auction markets (Owner's expense)	<u>63</u>	<u>98</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>
Total	3,267	65,908	155	718	18	259

Reactors - 41 - 0.06%

Miscellaneous includes 16 lots containing 257 swine and two lots of two horses.

Brucellosis Eradication Program, Milk Ring Testing

	<u>Division of Animal Industry Laboratory</u>	<u>Out-of-State Laboratories</u>	<u>Total</u>
Herds tested (includes retests)	5,275	306	5,581
Animals in tested herds	254,457	12,781	267,238
Clean herds	5,258	306	5,564
Animals in clean herds	253,853	12,781	266,634
Suspicious herds	17	--	17
Animals in suspicious herds	604	--	604

Brucellosis Tests of Imported Animals

<u>Veterinarians Testing</u>	<u>Cattle</u>	
	<u>Lots</u>	<u>Animals</u>
State	11	83
Federal	11	111
Accredited	<u>170</u>	<u>3,854</u>
Total	192	4,048

TABLE 8. SUMMARY OF TUBERCULOSIS REACTORS INDEMNIFIED, 1965-66

	<u>Registered</u> --dollars--	<u>Average per Head</u>	<u>Grade</u> --dollars--	<u>Average per Head</u>	<u>Total</u> --dollars--	<u>Average per Head</u>
Salvage	1,169.56	167.08	9,090.09	178.24	10,259.65	176.89
State indemnity ^{1/}	1,050.00	150.00	3,825.00	75.00	4,875.00	84.05
Federal indemnity	350.00	50.00	1,275.00	25.00	1,625.00	28.02
Total	2,569.56	367.08	14,190.09	278.24	16,759.65	288.96
Cattle appraised, number		7		51		58

^{1/} Total State indemnity paid for tuberculosis test reactors from the beginning of this work in 1916 to June 30, 1966, \$4,245,436.62

TABLE 9. SUMMARY OF BRUCELLOSIS REACTORS INDEMNIFIED, 1965-66

	<u>Registered</u>	<u>Average per Head</u>	<u>Grade</u>	<u>Average per Head</u>	<u>Total</u>	<u>Average per Head</u>
	--dollars--			--dollars--		
Salvage	1,433.02	179.13	3,899.21	169.44	5,330.23	171.94
State indemnity ^{1/}	1,200.00	150.00	1,723.34	74.93	2,923.34	94.30
Federal indemnity	400.00	50.00	575.00	25.00	975.00	31.45
Total	3,033.02	379.13	6,197.55	269.37	9,228.57	297.69
Cattle appraised, number		8		23		31

^{1/}Total State indemnity paid for brucellosis test reactors from the beginning of this work in 1940 to June 30, 1966, \$1,148,893.01

TABLE 10. BRUCELLOSIS SERVICE FEES AND INDEMNITY PAID, 1956-1966

<u>Year</u>	<u>State Indemnity Paid</u>	<u>Federal Indemnity Paid</u>	<u>State Veterinary Service Fees for Testing</u>	<u>Federal Veterinary Service Fees for Testing</u>	<u>State Veterinary Service Fees for Vaccination</u>	<u>Federal Veterinary Service Fees for Vaccination</u>
				--dollars--		
1956-1957	143,400.01	48,048.65	8,542.85	47,336.63	9,636.50	10,173.50
1957-1958	98,268.10	33,164.99	2,279.90	37,373.95	1,051.95	17,242.50
1958-1959	61,368.35	20,559.71	543.75	34,004.10	1,292.50	17,370.50
1959-1960	34,878.77	11,647.20	15,761.75	13,735.45	10,862.40	10,488.50
1960-1961	33,069.20	11,025.00	8,105.50	17,473.75	11,014.15	8,589.50
1961-1962	21,412.85	7,148.84	17,514.00	6,980.35	11,956.90	6,674.00
1962-1963	16,290.70	5,425.00	13,602.65	6,365.35	13,580.25	4,017.00
1963-1964	12,701.51	4,246.01	13,615.90	4,542.35	10,387.05	4,489.00
1964-1965	6,895.09	2,300.00	18,401.60	4,363.10	20,441.10	2,611.50
1965-1966	2,923.34	975.00	20,309.45	2,309.50	17,472.50	3,690.00

TABLE 11. CATTLE, GOATS AND SHEEP IMPORTED AND RELEASED, 1965-66

<u>Origin</u>	<u>Cattle</u>	<u>Feeder Steers</u>	<u>Goats</u>	<u>Sheep</u>
		--number--		
California	18	--	23	1
Canada	2,162	--	--	--
Connecticut	6	5	--	--
Delaware	143	--	--	--
Florida	95	--	--	--
Illinois	1	--	--	--
Indiana	3	--	--	--
Iowa	135	25	--	--
Kansas	--	--	--	70
Maine	44	--	--	--
Maryland	129	25	--	--
Massachusetts	5	--	--	13
Michigan	747	--	--	--
Minnesota	764	--	--	--
New Hampshire	--	--	--	10
New York	3,262	169	--	--
North Carolina	7	--	--	--
Ohio	129	40	--	--
Oklahoma	136	--	--	6
Pennsylvania	722	383	--	28
South Carolina	1	--	--	--
Texas	68	--	--	--
Vermont	34	--	--	--
Virginia	15	100	--	2
Wisconsin	4,624	--	--	--
Wyoming	40	--	--	--
Total	13,290	747	23	130

TABLE 12. CATTLE, GOATS, SHEEP AND SWINE SHIPPED OUT OF NEW JERSEY, 1965-66

<u>Destination</u>	<u>Cattle</u>		<u>Goats</u>		<u>Sheep</u>		<u>Swine</u>	
	<u>Lots</u>	<u>Animals</u>	<u>Lots</u>	<u>Animals</u>	<u>Lots</u>	<u>Animals</u>	<u>Lots</u>	<u>Animals</u>
			--number--					
Arkansas	2	32	--	--	--	--	--	--
Brazil, S.A.	2	2	--	--	--	--	--	--
California	6	124	1	1	--	--	--	--
Canada	5	10	--	--	--	--	--	--
Colorado	5	32	--	--	--	--	--	--
Connecticut	16	188	--	--	--	--	--	--
Costa Rica, C.A.	5	15	--	--	--	--	--	--
Delaware	44	137	--	--	1	1	1	14
Florida	3	37	--	--	--	--	--	--
Georgia	8	23	--	--	--	--	--	--
Guatemala, C.A.	3	4	--	--	--	--	--	--
Idaho	2	2	--	--	--	--	--	--
Illinois	7	8	--	--	--	--	--	--
Indiana	5	9	--	--	--	--	--	--
Iowa	3	3	--	--	--	--	--	--
Italy	44	1,973	--	--	--	--	--	--
Kansas	1	1	--	--	--	--	--	--
Kentucky	10	26	--	--	--	--	--	--
Maryland	90	709	--	--	1	2	4	39
Massachusetts	2	6	--	--	--	--	--	--
Michigan	2	2	--	--	--	--	--	--
Minnesota	2	33	--	--	--	--	--	--
Mississippi	3	19	--	--	--	--	--	--
Missouri	3	3	--	--	--	--	--	--
Montana	1	5	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	1	3
New York	84	515	--	--	3	34	3	315
Nicaragua, C.A.	1	13	--	--	--	--	--	--
North Carolina	64	770	--	--	--	--	--	--
Ohio	18	27	--	--	--	--	--	--
Oklahoma	3	4	--	--	--	--	--	--
Oregon	5	5	--	--	--	--	--	--
Pennsylvania	605	3,123	--	--	4	15	2	203
Peru, S.A.	14	32	--	--	--	--	--	--
Puerto Rico	2	19	--	--	--	--	--	--
Rhode Island	1	1	1	2	--	--	--	--
South Africa	2	4	--	--	1	1	--	--
South Carolina	11	64	--	--	--	--	--	--
South Dakota	1	24	--	--	--	--	--	--
Tennessee	2	20	--	--	--	--	--	--
Texas	10	30	--	--	--	--	--	--
Utah	1	1	--	--	--	--	--	--
Vermont	1	2	--	--	--	--	--	--
Virginia	29	205	--	--	--	--	--	--
Virgin Islands	1	1	--	--	--	--	--	--
Washington	1	1	--	--	--	--	--	--
West Virginia	8	85	--	--	--	--	--	--
Wisconsin	8	44	--	--	--	--	--	--
Total	1,146	8,393	2	3	10	53	11	574

TABLE 13. SUMMARY OF SHEEP INSPECTION FOR SCABIES, 1965-66

<u>Item</u>	<u>Flocks</u> --number--	<u>Sheep</u> --number--
Farms under supervision.	552	9,292
Annual inspection.	555	9,273
Other inspections during year.	33	831
Farms infected.	--	--
Farms exposed.	--	--
Farms suspicious.	--	--
Dippings for year.	--	--
Farms remaining under quarantine at end of year.	--	--

Included in above figures are 21 lots of inships with 130 sheep.

TABLE 14. SUMMARY OF INSPECTION OF SWINE HERDS, 1965-66

<u>Item</u>	<u>State</u> --number--	<u>Federal</u> --number--	<u>Total</u> --number--
Inspection of farms feeding grain.	46	36	82
Inspection of farms feeding heat-treated garbage.	<u>1,824</u>	<u>2,451</u>	<u>4,275</u>
Total.	1,870	2,487	4,357

SUMMARY OF SWINE IMPORTED FOR FEEDING AND BREEDING, 1965-66

Feeders	49,065
Breeders.	<u>206</u>
Total	49,271

TABLE 15. SURVEY OF GARBAGE-FED SWINE, 1965-66

<u>County</u>	<u>Licensed</u>	
	<u>Herds</u>	<u>Animals</u>
	--number--	
Atlantic	31	3,245
Bergen	1	270
Burlington	20	12,826
Camden	6	1,645
Cape May	14	4,798
Cumberland	5	721
Essex	1	400
Gloucester	73	58,430
Hudson	--	--
Hunterdon	3	2,780
Mercer	5	1,500
Middlesex	4	749
Monmouth	13	8,458
Morris	5	1,229
Ocean	3	2,825
Passaic	--	--
Salem	1	51
Somerset	3	820
Sussex	--	--
Union	--	--
Warren	--	--
Total	188	100,747

TABLE 16. PULLORUM-TYPHOID CONTROL, 1965-66

Number fowl tested in field	225,063
Number reacting	--
Per cent reacting	--
Number fowl tested in laboratory.	4,550
Number reacting	--
Per cent reacting	--
Total fowl tested	229,613
Total fowl reacting	--
Per cent reacting	--
Retest of fowl typhoid suspects by field tests.	--
Total fowl reacting	--

TABLE 17. NEW JERSEY EXPORTS OF HATCHING EGGS AND POULTRY, 1965-66

<u>Destination</u>	<u>Permits Issued</u>	<u>Baby Chicks</u>	<u>Cockerels</u> --number--	<u>Hatching Eggs</u>	<u>Pullets</u>
Argentina	2	--	--	10,436	--
Belgium	24	--	5,461	--	11,350
Bermuda	8	--	--	--	4,900
British West Indies	12	3,300	11,950	--	5,100
Canada	48	--	70,530	5,760	1,100
Chile	1	--	100	--	900
Congo	3	2,200	100	--	700
Dominican Republic	16	8,500	--	--	37,700
Dutch Guiana	91	33,520	222,640	--	5,860
Ecuador	2	--	--	1,284	--
Formosa	4	--	410	--	2,955
Germany	11	--	216	62,180	2,160
Ghana	2	--	40	--	200
Greece	14	--	2,980	--	19,980
Guatemala	1	--	33	--	279
Italy	27	--	7,570	--	48,350
Japan	17	--	4,685	--	29,180
Kuwait	1	--	30	--	200
Lebanon	1	--	300	--	2,200
Malaya	1	--	11	--	900
Mexico	11	--	4,057	--	29,688
Paraguay	1	--	75	--	600
Peru	7	--	1,252	--	9,500
Phillipines	4	--	560	--	3,550
Portugal	10	--	3,265	--	23,250
Puerto Rico	134	87,600	127,700	--	4,600
Spain	25	--	8,008	--	58,650
Thailand	1	--	50	--	400
Trinidad	1	--	400	--	2,500
West Africa	2	300	--	--	--
West Germany	10	--	--	144,000	--
West Indies	<u>3</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>5,800</u>
Total	495	135,420	472,423	223,660	312,552

BUREAU OF VETERINARY DIAGNOSTIC LABORATORY

The diagnostic laboratory is vital in all of the programs of the Division of Animal Industry.

This year, 73,066 plate and tube blood tests were conducted for brucellosis and leptospirosis of cattle and goats, and 5,346 tests, for pullorum-typhoid disease of chickens.

The laboratory also received samples of tissue, milk and other specimens submitted for diagnostic purposes by veterinary practitioners. Such diseases as mastitis, anthrax and encephalitis are reported. The use of the laboratory by veterinarians for the benefit of the farmer has steadily increased.

TABLE 18. SUMMARY OF LABORATORY TESTING, 1965-66

BLOOD TESTS MADE FOR BRUCELLOSIS ON INSHIPPED ANIMALS

<u>Item</u>	<u>Number</u>
Samples received	4,049
Unfit for test	1
Samples tested	4,048
Suspicious	27
Reactors	3
Negative	4,018

BLOOD TESTS MADE FOR BRUCELLOSIS ON ANIMALS IN HERDS
UNDER SUPERVISION

Samples received	66,980
Unfit for test	95
Samples tested	66,885
reactors	50 ^{1/}
Suspicious	1,525
Negative	65,310

MILK RING (BRT) TESTS FOR BRUCELLOSIS

Samples received	6,903
Unfit for test	37
Samples tested	6,866
Suspicious	19
Negative	6,847

^{1/}Nine animals were found to be vaccinated and classification was changed to suspicious.

BLOOD TESTS MADE FOR LEPTOSPIROSIS OF ANIMALS

<u>Item</u>	<u>Number</u>
Samples received	2,133
Unfit for test	1
Samples tested	2,132
1:10 - 1:40 titres	86
1:160 or higher titres	23
Negative	2,023

BLOOD TESTS FOR "Q" FEVER OF ANIMALS

Samples received	8
Unfit for test	--
Samples tested	8
Positive	2
Negative	6

BLOOD TEST FOR VIBRIO OF ANIMALS

Samples received	400
Unfit for test	--
Samples tested	400
Reactors	--
Suspicious	--
Negative	400

MILK TEST FOR MASTITIS OF ANIMALS

Number of animals	246
Number of samples	800
Streptococci	153
Staphylococci	284
Other organisms	252
Negative	200

BLOOD TESTS MADE FOR PULLORUM DISEASE OF POULTRY

Samples received	5,346
Unfit for test	--
Samples tested	5,346
Reactors	--
Suspicious	--
Negative	5,346

BLOOD TESTS FOR PARATYPHOID (st.paul) OF POULTRY

Samples received	1,252
Unfit for test	--
Samples tested	1,252
Reactors	--
Negative	1,252

TABLE 19.
SUMMARY OF BACTERIOLOGICAL, MICROSCOPIC AND POSTMORTEM EXAMINATIONS, 1965-66

<u>Lots</u>	<u>Animals</u>	<u>No.</u>	<u>Material</u>	<u>Condition Suspected</u>	<u>Findings</u>
1	Avian	1	Abdominal exudate	Culture	<u>E. coli</u>
1	Avian	4	Airsac, lung, trachea, swabs (turkey)	<u>Mycoplasma gallisepticum</u>	Negative
6	Avian	8	Chickens	<u>S. pullorum</u> or fowl typhoid	Negative
1	Avian	4	Chickens	Cause of death	Visceral leukosis
1	Avian	1	Chicken	<u>S. pullorum</u> or fowl typhoid	<u>S. typhimurium</u> variant copenhagen
30	Avian	34	Feed samples	Salmonellae	Negative
1	Avian	120	Feed samples	Salmonellae	<u>S. oranienburg</u>
1	Avian	38 2 1	Fecal samples Dust Laying mash	Salmonellae	Negative
1	Avian	130	Fecal & dust samples	Salmonellae	<u>S. thompson</u> <u>S. oranienburg</u> <u>S. typhimurium</u>
1	Avian	1	Pigeon	Pathogens	<u>S. typhimurium</u> variant copenhagen
1	Avian	2	Pigeons	Salmonella and capillaria	Negative Canker present
1	Avian	1	Sinus exudate	Pleuropneumonia-like organisms	Negative
3	Bovine	3	Blood samples	Anthrax	Negative
2	Bovine	4	Blood samples	Brucellosis	Negative
1	Bovine	1	Blood sample	Brucellosis	<u>Brucella abortus</u>
1	Bovine	5	Blood samples	Culture	Streptococcus Gram-positive Gram-negative
1	Bovine	1	Calf	Culture	Non-hemolytic <u>E. coli</u>
2	Bovine	2	Ears	Anthrax	Negative
1	Bovine	1	Feces	Salmonella Parasites	Negative

<u>Lots</u>	<u>Animals</u>	<u>No.</u>	<u>Material</u>	<u>Condition Suspected</u>	<u>Findings</u>
1	Bovine	1	Fetus	Brucellosis	Negative
1	Bovine	1	Fetus	Culture	Negative
1	Bovine	1	Fetus	Pathogens	Negative
1	Bovine	1	Lymph tissue	Lymph-sarcoma	Lymph-sarcoma
13	Bovine	83	Milk samples	Brucellosis	Negative
7	Bovine	45	Milk samples	Brucellosis	Brucella abortus
1	Bovine	1	Milk sample	Culture	Staphylococcus
1	Bovine		Rumen contents	Poison	Belledonna or similar alkaloid
1	Bovine	2 1 1	Rinse water Swab Milk sample	Culture	Hemolytic Streptococcus
1	Bovine	1	Skin scraping	Scabies	<u>Chorioptes bovis</u>
1	Bovine	1	Smegma sample	Trichomonas fetus vibrio fetus	Negative
1	Bovine		Tissue	Brucellosis	Negative
6	Canine	6	Blood samples	Hemoglobin leukocyte count erythrocyte count hematocrit	
2	Canine	2	Blood samples	Hemobartonella	Negative
1	Canine	1	Blood sample	Culture	Negative
1	Canine	1	Blood sample	Culture	Gram-positive spore forming rods Gram-negative rod
2	Canine	2	Blood samples	Microfilariae	Negative
1	Canine	1	Culture plate	Identify	Staphylococcus
1	Canine	1	Culture plate	Identify	<u>Proteus</u> spp. Staphylococcus
1	Canine	1	Culture	Pathogens	Hemolytic Staphylococcus
1	Canine	1	Fecal sample	Salmonella	Negative
2	Canine	3	Feces samples	Salmonella	<u>S. typhimurium</u>

<u>Lots</u>	<u>Animals</u>	<u>No.</u>	<u>Material</u>	<u>Condition Suspected</u>	<u>Findings</u>
1	Canine	1	Fungus	Culture	Gram-positive rod Gram-negative rod
1	Canine	1	Swab from lesion	Culture	<u>Pseudomonas</u> spp.
1	Canine	1	Urine sample	Analyses	Normal
4	Canine	4	Vaginal smear	Culture	<u>E. coli</u> Hemolytic Staphylococcus Negative Gram-negative rod
1	Caprine		Internal organs	Salmonella, Johne's disease	Negative
1	Caprine	1	Milk	Culture	<u>Pseudomonas</u> spp.
1	Caprine	1	Sample fluid from cyst	Culture	Staphylococcus
1	Caprine	1	Stomach contents	Poison	Negative
1	Caprine	1	Udder secretion	Culture	Negative
66	Equine	105	Blood samples	Pregnancy	43-Negative 62-Positive
117	Equine	346	Blood samples	Hemoglobin leukocyte count erythrocyte count hematocrit	
1	Equine	1	Blood sample	C-Reactive Protein	Negative
1	Equine	1	Blood sample	Leucocyte count Erythrocyte count	
24	Equine	52	Blood samples	Hemoglobin Leucocyte count Erythrocyte count Hematocrit Differential	
2	Equine	2	Brains	Encephalitis	Negative
3	Equine	3	Brains	Encephalitis	Eastern Encephalitis
7	Equine	8	Broth	Culture	5-Negative 1- <u>E. coli</u> 1- <u>Pseudomonas</u> spp. 1-Staphylococcus

<u>Lots</u>	<u>Animals</u>	<u>No.</u>	<u>Material</u>	<u>Condition Suspected</u>	<u>Findings</u>
1	Equine	2	Broth	Culture	Streptococcus Staphlococcus
3	Equine	3	Soy broth	Cultures	Staphlococcus
2	Equine	2	Soy broth	Cultures	Negative
63	Equine	114	Cervical swabs	Cultures	Negative
4	Equine	4	Cervical swabs	Cultures	<u>E. coli</u>
6	Equine	6	Cervical swabs	Cultures	Hemolytic- streptococcus
9	Equine	16	Cervical swabs	Cultures	Streptococcus
2	Equine	5	Cervical swabs	Cultures	Staphlococcus
1	Equine	1	Cervical swab	Culture	Gram-Negative rods
4	Equine	8	Cervical swabs	Cultures	Gram-Positive rods
1	Equine	3	Cervical swabs	Cultures	Yeast
2	Equine	3	Cervical swabs	Cultures	<u>Pseudomonas</u> spp. & staphlococcus
1	Equine	1	Cervical swab	Culture	<u>Corynebacterium</u>
1	Equine	1	Cervical swab	Culture	<u>B. subtilis</u>
66	Equine	82	Cervical slants	Cultures	65-Negative 5-Streptococcus 2- <u>B. subtilis</u> 2- <u>E. coli</u> 4-Staphlococcus 3-Yeast 1-Hemolytic- Streptococcus
14	Equine	14	Dry cervical swabs	Cultures	4-Negative 1-Coliform 2- <u>E. coli</u> 6-Staphlococcus 1-Proteus spp.
2	Equine	2	Pharyneal swab	Culture	Staphylococcus Streptococcus
1	Equine	1	Fecal sample	Pathogens	Negative
1	Equine	1	Kidney & liver	Metals	Negative
1	Equine		Kidney, liver vaginal swab	Pathogens	Negative
1	Equine	2	Semen samples	Count & culture	Staphylococcus Corynebacterium

<u>Lots</u>	<u>Animals</u>	<u>No.</u>	<u>Material</u>	<u>Condition Suspected</u>	<u>Findings</u>
2	Equine	2	Semen samples	Count	
1	Equine	1	Skin tumor	Identify	Melonoma
3	Equine	3	Urine samples	Urinalysis	
7	Feline	7	Blood samples	Hemoglobin leucocyte count erythrocyte count hematocrit	
1	Feline	2	Blood samples	Differentials	
1	Feline	2	Blood smears	Parasites	<u>Haemabartonella felis</u>
2	Feline	2	Blood slides	Differentials	
3	Feline	6	Blood slides	Haembartonella	Negative
2	Feline	2	Blood samples	Haembartonella	<u>Haemabartonella felis</u>
2	Ovine	2	Skin scrapings	Scabies	Negative
1	Ovine	1	Skin scraping	Scabies	<u>Bovicola ovis</u>
1	Ovine	1	Nasal secretion	Listeriosis	<u>B. subtilis</u>
1	Ovine	1	Tick	Identify	<u>Melophagus ovinus</u>
3	Porcine	8	Brains	Hog cholera	Hog cholera
1	Porcine	2	Brain & blood	Hog cholera	Hog cholera
1	Porcine	3	Blood samples	Leucocyte count Hematocrit	
1	Porcine	12	Blood samples	Leucocyte count	
1	Porcine	1	Blood sample	Hemoglobin Leucocyte count Erythrocyte count Hematocrit	
1	Porcine	1	Brain, liver lymph glands	Hog cholera	Hog cholera
1	Porcine	2	Blood samples	Encephalitis	Negative
1	Porcine	1	Dead hog	Cause of death	Pneumonia
2	Porcine	2	Fecal samples	Parasites	Negative
1	Porcine	1	Feed sample	Salmonella	Negative

<u>Lots</u>	<u>Animals</u>	<u>No.</u>	<u>Material</u>	<u>Condition Suspected</u>	<u>Findings</u>
1	Porcine	1	Fecal sample	Ova	Negative
1	Porcine		Heart, hock joints	Pathogens	Streptococcal Septicemia
1	Porcine	1	Liver	Salmonella	<u>S. typhimurium</u>
1	Porcine	1	Lymph nodes		Lancefield, Group E. Streptococcus
1	Porcine		Nasal swabs	Bordetella bronchiseptica	Negative
1	Porcine	1	Organs & fecal samples	Gut edema	<u>E. coli</u> & Klebsiella type 25
1	Porcine	1	Urine sample	Thallium	Negative
1	Porcine	1	Uterus	Examination	Normal
2	Porcine	5	Brains	Hog cholera	Hog cholera

Sensitivity tests - 607

Leptospirosis group antigen tests - 206

Brucellosis supplemental tests

Acid plate antigen	3,640
Rivanol	670
Mercaptoethanol	602
Heat inhibition test	350

Plate tests

Routine checks, infected herds	8,650
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PPLO (Pleuropneumonia-like Organisms)

	<u>No. tested</u>	<u>Negative</u>	<u>Positive</u>
Chickens			
Plate	6,837	4,467	2,370
Turkeys			
Plate	2,279	2,179	100

D I V I S I O N O F I N F O R M A T I O N

Fred W. Jackson, Director

PRESS SERVICES

To keep the public informed about Department activities and to bring to their attention the importance of agriculture in the New Jersey economy, 232 press releases were issued during the year. Mailed at least once a week to a list of about 375, the releases are used by daily and weekly newspapers in New Jersey and nearby cities, radio and television stations, and farm magazines and trade publications. Members of the press corps at the State House, who represent the major wire services and metropolitan daily newspapers, are serviced by messenger.

Special events for which press and photographic coverage was provided included the annual convention of the National Association of State Departments of Agriculture at Princeton, New Jersey Farmers Week, the 1965 New Jersey Marketing Institute, the annual meeting of the New Jersey Agricultural Society, and the annual convention of the New Jersey Chapter of the Future Farmers of America. Many other smaller meetings and conferences were also serviced.

In addition to the regular release service, special articles were written for a number of publications, and several authors and editors were aided by furnishing source material and editorial help for articles prepared by them. A monthly editorial was prepared for the State's farm magazine, BUSINESS FARMING.

Almost 300 photographs were taken during the year. Many were used to supplement press releases or Department publications. Numerous requests for pictures and other illustrative materials were serviced.

RADIO SERVICES

Sixty-three five-minute "Let's Look at Agriculture" reports were produced in cooperation with the Communications Center of the Rutgers College of Agriculture and Environmental Science. They were sent to 25 radio stations in New Jersey, New York City and Philadelphia.

The programs featured interviews with the Secretary of Agriculture, Governor Richard J. Hughes and visitors to New Jersey whose comments would be of interest to the radio audience. Special interviews were recorded during the October meeting of the National Association of State Departments of Agriculture, and during Farmers Week.

A daily beeper phone advisory service was maintained during the period when spraying for gypsy moth control was in progress. Listeners to six radio stations in the spray area were kept informed of the daily schedule of the spray planes.

TELEVISION SERVICES

Forty-four six-minute television segments were produced for the Bill Bennett Show on WCAU-TV, Channel 10, Philadelphia. Guest appearances were made by staff members with information concerning their programs of work and Department functions.

Fourteen three-minute agricultural news telecasts were produced and delivered over WNJU-TV, Channel 47, Newark.

Two half-hour special television programs were produced. A Thanksgiving special, featuring the Secretary of Agriculture, was used on the Helen Meyner Show, WNJU-TV. The second, telecast by the same station, concerned Governor Hughes' Natural Beauty Conference and was produced jointly with the State Department of Conservation and Economic Development.

PUBLICATIONS

Regular Series

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

Six issues of Farm Service News are published 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 8,500 farm and rural readers in New Jersey.

The following circulars, reports and special publications were issued during fiscal 1965-66:

- | | |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Circular 432 | - "1964 New Jersey Agricultural Statistics" |
| Circular 433 | - "1965-66 List of Licensed Agricultural Dealers" |
| Circular 434 | - "Commercial Flower, Plant and Nursery Products Grown in New Jersey, 1964" |
| Circular 435 | - "American Fowl Brood and Its Treatment" |
| Reports | - "Highlights of the 50th Annual Report of the New Jersey Department of Agriculture" |
| | - Annual reports for 1964 for four soil conservation districts: Burlington County, Sussex County, Salem-Cumberland and Ocean County |
| | - Annual reports for 1965 for seven soil conservation districts: Somerset-Union, Warren County, Morris County, Cape-Atlantic, Camden County, Northeast Jersey and Hunterdon County |
| Proceedings | - 1965 New Jersey Marketing Institute |
| Other | - Marketing Eggs in New Jersey |
| | - New Jersey Potato Labeling Law |

- New Jersey Agricultural Fairs, 1966
- Reprint - Conservation Plantings Make Homes for Birds

Publications issued in connection with the 1966 New Jersey Farmers Week were:

- Abbreviated Program
- Complete Program
- "Highlights of Your Convention, 1966"
- "Citations for Distinguished Service to New Jersey Agriculture, 1966"

Special Publications

Work was begun on a circular marking the Department's 50th anniversary, to be printed during the coming fiscal year. Under the title "Fertile Furrow -- 50 Years Long," and subtitle "The Grassroots Government of New Jersey Agriculture," this 40-page publication will report selected highlights of the development of the services and regulatory work of the Department, giving the reasons for the various projects, laws and regulations, and benefits derived by both farmers and the general public. The uniquely democratic system of agricultural government in New Jersey, arising from the farmers and County Boards of Agriculture and other organizations, through the State Board of Agriculture, is to be stressed. Preliminary to this publication, a more detailed chronology of agricultural events will be prepared as a basis for the material to be selected for popular presentation.

An eight-page souvenir newspaper was published for the 50th anniversary convention of the National Association of State Departments of Agriculture. The organization's history, biographies of the members from the 50 states, and highlights of the program were featured. The convention program was printed separately.

Publications Printed Internally

In addition to the above items published or to be published commercially, several other publications were printed by the Health-Agriculture Print Shop. Prepared in this Division were six issues of Agri-gram, the Department's staff news letter; a leaflet on the "Duties and Functions of the Department of Agriculture;" two editions of "New Jersey Farm Facts;" and a leaflet describing the woods that are used in the gavels presented to retiring members of the State Board of Agriculture.

Since January, this office has been responsible for handling all Department printing to be done in the Print Shop with the exception of forms and very simple material which meets the requirements for "rapid duplicating." During the last six months of the fiscal year, 45 print jobs were processed. These include last year's complete annual report, three lengthy marketing summaries and a reprint of the report of the New Jersey Poultry Industry Steering Committee.

SPECIAL SERVICES

Text was prepared for a joint resolution of the State Senate and General Assembly commemorating the Department's Golden Anniversary, which was unanimously adopted. This document became the text of an anniversary proclamation by the Governor, which was reproduced on parchment and distributed to the 76 organizations represented in the State Agricultural Convention, and otherwise used to promote public recognition of the event.

For use on letters and other documents, 25,000 copies of a Golden Anniversary medallion, embossed on gold foil with adhesive backing, were produced. The design simulated a two-sided coin, whose obverse showed the Department's seal, and whose reverse pictured the State Health-Agriculture Building.

The activities of the New Jersey Dairy Princess Committee were coordinated. Promotional services were provided for six county contests and the State Contest. The public appearances of the Princess were arranged.

Assistance was given to many members of the Department's staff in writing reports of their activities, in furnishing sources of information and advice on written and spoken communications, and related matters.

More than 1,500 routine requests for information, many of them from school children, were handled by the clerical staff. A large additional number were serviced by professional and technical staff members.

D I V I S I O N O F M A R K E T S

Francis A. Raymaley, Director

FOREWORD

The Division of Markets is composed of four main Bureaus which conduct development, service and regulatory programs to serve all sectors of the market chain from the producer on the farm to the final consumer.

Several acts of the New Jersey Legislature materially assisted this Division and its work during the year here reported. Awaiting the Governor's signature at this writing are a bill revising the cooperative law to create a better environment for farm cooperative organizations to conduct modern business, and a second creating a New Jersey Sweet Potato Industry Commission to improve and expand the market for this promising but presently waning crop. Already enacted is a law which expands and strengthens the provisions of the act requiring the licensing and bonding of dealers who buy perishable agricultural commodities from New Jersey farmers.

During this year, the guidelines established by the model egg law enacted one year ago were put into effect. Meetings were held in all producing and marketing areas of the State on the provisions of this act. Methods, policies and regulations were described fully so that all concerned would know how this law would be administered. The advantages of this act to the producer and consumer are evident even in the first year.

Two extracurricular activities are receiving high priority in the interest of better New Jersey marketing. These are: (1) Implementation of the report of the Poultry Industry Steering Committee; and (2) Work with the Food Processing Development Committee. The director is chairman of both committees.

In the first committee, an aggressive program has been pursued within the State to put into practice the recommendations of the Poultry Industry Steering Committee. All organizations concerned have been enrolled in the effort. Solutions to credit problems have been resolutely sought. An earnest attempt has been made to stress the new image of the modern poultry industry in New Jersey. Beyond this, existing marketing concepts have been prodded into modernization and improved efficiency. One new marketing cooperative has been structured to meet current needs in a broader spectrum of total egg marketing. While progress is slow, it is gratifying to note a 26 per cent increase in birds reared for housing in laying houses in the year ahead. Perhaps the downward trend is being reversed.

Food processing in New Jersey is vital to consumers and farmers alike --- and to all in between whose jobs, business and skill depend on this business for a livelihood. Some 50 per cent of all vegetables and 33 per cent of fruits reach the consumer via processing plants. Competing states, who desire factories and firms located here to leave New Jersey for their areas, offer attractive financial inducements. The Food Processing Development Committee, market oriented, is working to refute the erroneous impression that New Jersey is not a good place to work, live and process food. The Committee is working on five fronts and results to date are tangible. The impact on leadership is positive. Business climate, labor and raw materials are three areas of special accomplishment.

The Division's statistical services include market news and crop reporting. Correct data and figures are vital factors in sound decisions. Publication and dissemination of facts via the market news service, using all modern communication facilities, is standard procedure. In this area the Division works closely with the United States Department of Agriculture and its interrelated sections.

Similarly, the Division relies on communications and publications to focus attention of all market factors from producer to consumer on the total marketing program. Two publications were issued on specifics during the year; one on the new egg law and the other on the potato labeling law.

Incipient drought conditions began in New Jersey in August 1961, according to the drought severity index developed by the Weather Bureau's office of climatology in Washington, D. C. These conditions have persisted up to the end of this fiscal year. North Jersey is now in its 58th month of drought. The Division is concerned with this problem since quantity and quality of farm products are determined by rainfall or, if this is lacking, irrigation. An adequate supply of high quality products is a significant factor in any marketing program.

Equally, the Division has been concerned with wise use of New Jersey farm land because, in order to meet consumer needs for food, a production and market complex requires land. With both farms and farm land declining, the wise use of existing land and some effort to preserve farm land for the public good, are genuine concerns in Division objectives and marketing goals.

Specific reports follow:

Market Development Services

(a) Product

(b) Complex

Cooperative Services

Statistical Services

Regulatory Services

MARKET DEVELOPMENT SERVICES

Some development work exists in all aspects of the Division's program, whether it be regulation or service. But true development per se takes two main directions. One market coordinator works on market development and promotion activity centered entirely around individual products. The second market coordinator puts his effort into development of market facilities on a broad spectrum --- i.e., more than just one commodity --- the complex. This report on development embraces both sectors and, hopefully, reduces repetition.

Market Development (Product) Activities

Work with retail store organizations, both corporate chains and voluntary groups, was expanded during the year. An additional farm products marketing specialist was appointed to the staff. He is devoting his time to developing markets for New Jersey products through the "big customers," including the chain store organizations and the mass feeding groups. He is calling at chain headquarters and at retail stores where he is evaluating the products and services being offered by New Jersey's competitors and determining what New Jersey producers and marketing organizations can do to capture a larger proportion of the business.

Several members of the staff were involved in the development and introduction of a smaller retail unit of fresh New Jersey asparagus. A plastic cup

which will hold 1-1/2 pounds was devised and made available. Growers and packers were found who would pack a 1-1/2-pound package of long green, high quality asparagus. Standards for Seal of Quality fresh asparagus were revised. A fiberboard master container for marketing the smaller bunches was developed. Retailing organizations were contacted before, during and after the season to obtain their cooperation and their reactions to the new package. It was generally well received. Customers, both at retail and wholesale, who purchased the units, came back for more.

In a special and independent run of this new package, two producers and a service wholesaler worked closely with this Division on a pilot sale. At season's end, their price data became documentary proof of trade acceptance of the packaging in 1-1/2-pound units. The fresh asparagus industry in New Jersey is, therefore, after many trials and years on the verge of major package and marketing improvement.

A bill creating a New Jersey Sweet Potato Industry Commission was passed by the Legislature during the year. This Commission will conduct programs of advertising, promotion and research for the benefit of the industry and will be supported by a mandatory assessment on all growers. The act contains a provision for a referendum to determine its continuation after three years.

The staff assisted the fruit industry of the State in planning and conducting the 1965 and 1966 Food Editors Tour, both of which occurred during the fiscal period covered in this report. The 1965 tour featured peaches and was held in August. The emphasis in 1966 was on strawberries. Approximately 90 people attended this June conference and were provided a comprehensive kit of information on the availability and use of New Jersey fruits.

The Eighth New Jersey Marketing Institute was held in November. Approximately 225 farm and market leaders were in attendance. The theme "Marketing Through the Big Customer" attracted widespread interest. Papers were presented by outstanding distributors, retailers and institutional feeders. The content of the subject matter stimulated vigorous discussion and interest. The Marketing Institute is now a fixed event with prestige beyond New Jersey. It keynotes progressive thinking in farm marketing in the entire metropolitan area.

After encouragement by this Division and the Secretary's office, Howell Foods, Inc., a New Jersey pioneer firm, has developed and is now marketing a number of frozen egg products. Several national firms are feverishly working on this same concept, i.e., to "do something with the egg." Howell Foods has a process and a method to offer "ready to cook" frozen egg products which, on cooking, do not develop a heretofore characteristic toughness. Development members of the staff have helped introduce both the products and the producers to representatives of large food firms, the military, the airlines, and several large nearby institutional cafeterias. The success of this venture means wider and a varied distribution of New Jersey eggs.

Individual product council reports by their respective managers follow:

New Jersey Apple Industry Council

The Council year began with the traditional green apple promotion. This included recipe releases to food editors, green apple pies delivered to communications people, television appearances, price card distribution, and radio spots on local radio stations.

During the fall harvest season, advertisements were taken in local newspapers in New Jersey calling attention to local orchard and roadside markets. Point-of-sale material was distributed through Certified Market personnel as well as to our own growers. During National Apple Week and Halloween, 3,000 National Apple Week kits were distributed to chain stores and other outlets.

The annual Orange Savings Bank Apple Harvest Festival was held during National Apple Week. One hundred boxes of apples were supplied by the Council for giveaway. A Guess-the-Apple-Contest, an art contest and the Apple Princess Contest were part of the Apple Harvest Festival. The 1966 New Jersey Apple Princess is Miss Beverly Jane Kraus of Fair Haven. She is a junior at Monmouth College, majoring in elementary education.

The Trenton Saving Fund Society also held an apple festival with apples and recipes given away and a Guess-the-Apple-Contest.

The Council participated in a cooperative exhibit of all four councils at the New Jersey Education Association Convention in November. Over 3,000 kits containing recipes and teaching aids were mailed to teachers who asked for them at the booth.

Throughout the storage marketing season, a continuous radio advertising program was conducted. This is a first for the Council. Merchandisers visited retail outlets in the area of each radio station and cooperating chains were mentioned in the commercials. Another tie-in which appears to have some promise is an apple giveaway at store openings. Two ACME stores received this treatment this year. The manager and Apple Princess participated. The result was a feature of New Jersey Stayman apples in the chain that week.

Full cooperation with National Apple Institute personnel and programs was carried out during the year. This involved attendance at all secretary-managers meetings and other functions, including the annual convention in Traverse City, Michigan.

New Jersey Asparagus Industry Council

Improved asparagus seed is now available from the plots established by the Council. This year, 1,145 pounds of seed produced by the selected plants were cleaned, treated, packaged and sold to New Jersey producers. This should result in increased yields and should make possible the elimination of fields in which production has declined seriously.

Progress in the development of a selective mechanical harvester can be reported. Two harvesters were field tested in New Jersey this year, and several others were in operation in California and Washington. It appears likely that a satisfactory machine will be available in one or two years.

A "Farm Kitchen Asparagus Recipe Contest" was conducted, with 1,500 recipes submitted. Copies of the prize-winning recipes were sent to 350 major metropolitan newspapers. Other recipes and food photographs were provided to newspapers and magazines and to 154 radio and television farm program directors. Recipes and recipe booklets were also supplied to home economists and for use in cooking classes conducted by utility companies.

Half-crate samples of fine New Jersey asparagus were delivered to food editors and radio and television food communicators in New York, New Jersey, Philadelphia, Baltimore and Washington, D. C. This and other contacts with these people resulted in considerable publicity for the asparagus industry. The Council manager and members of the Council appeared on several radio and television programs, mostly on Philadelphia stations.

An Appreciation Award was presented to the Fleischmann's Margarine Division of Standard Brands for their outstanding use of asparagus in their advertisements and television commercials. A tile trivet with an asparagus plant decor was devised and sent as a gift mailing to food editors, chain buyers of fresh and processed asparagus, home economists, and others in the communications field who have assisted in promoting the use of New Jersey asparagus.

The Council exhibited at several county fairs, supplied publications for the Department's exhibit at the New York World's Fair, and participated in a cooperative promotion council exhibit at the annual convention of the New Jersey Education Association.

The production and distribution of fresh market point-of-sale material followed a series of discussions with chain store merchandisers and advertising managers. Ten thousand kits were assembled and supplied to retail outlets in areas of heavy distribution of New Jersey asparagus. A retail store asparagus display contest was conducted this year with U. S. Savings Bonds as prizes.

New Jersey Poultry Products Promotion Council

July through September saw the continuance of the successful billboard campaign of previous years. One of the most attractive billboards so far designed appeared at 135 locations on heavily traveled highways of the State. Many in the trade commented on its excellence.

The 1965 fall turkey promotion program was handled differently than in previous years. Because only a small percentage of Council funds are derived from the turkey industry, funds for advertising and promoting Seal of Quality turkeys must be apportioned accordingly. Therefore, at the October 1965 Turkey Growers Association meeting, the members were offered the choice of two weeks of newspaper advertising just before Thanksgiving week, or one week at that time and one week before Christmas and New Year's Day. Members voted overwhelmingly for two before Thanksgiving because the largest percentage of birds are sold at that time. Following this suggestion, the Council had advertisements inserted in newspapers of each grower's choice, giving his name and address. As in previous years, consumers were urged to go out to the farm and purchase their turkeys fresh for the holiday meal. New turkey booklets with up-to-date cooking and carving information plus more realistic time charts were purchased from the Poultry and Egg National Board. These were distributed to consumers through producer-retailers.

Local radio carried the message of New Jersey Seal of Quality eggs through the October to December 1965 period. The names of stores carrying Seal of Quality eggs were mentioned in the messages. The stations used cover all of New Jersey; station WOR in New York completed the metropolitan coverage.

Newspapers were utilized from January through March 1966 for advertising Seal of Quality eggs. It was during this period that discussion started on the adoption of a uniform Seal of Quality egg carton.

On March 16, the Council entertained at dinner the egg buyers from all major chains. The Secretary of Agriculture spoke and explained the Poultry Council's hopes and plans for the future. The following May, the Seal of Quality licensees were invited to a meeting in Trenton. At that time, the Secretary addressed the group --- the theme being "Here Is Our Future!"

In the past, the summer billboard campaign has been a July to September endeavor. However, considering summer travel trends of metropolitan residents, the time was moved up to June 15, giving Poultry Council billboard advertising one month extra mileage.

TABLE 1. SUMMARY OF POULTRY PRODUCTS PROMOTION COUNCIL, FIELD REPRESENTATIVE ACTIVITIES, 1965-1966

<u>Item</u>	<u>Number</u>
On-farm surveys	96
Visits to producers	931
Visits to licensed distributors	454
Visits to egg dealers	127
Visits to feed dealers	14
Visits to turkey growers	37
Visits to county agents	47
Visits to retail outlets	181
Visits connected with distribution of promotional material	24
Exhibits.....	3
 Total	 1,914

The Council has also been active in various promotions including the scholarship fund-raising campaign of the Morristown Women's Club, the New Jersey Education Association convention in Atlantic City, and the Future Homemakers of America fund towards which the Council contributed \$100.

The Council's interim progress report to the industry, Promotion Matters, was issued three times during the year to a mailing list of approximately 2,000.

White Potato Industry Council

At its first meeting of the fiscal year, the New Jersey White Potato Industry Council arranged its advertising and promotion program for the coming marketing season. Daily radio commercials featuring "fresh crop, delicious, nutritious New Jersey potatoes" were scheduled for September and October. The radio stations chosen for airing the commercials were in principal cities in New Jersey, Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, Georgia and Tennessee, and in Washington, D. C.

To bolster the radio campaign, the Council manager made trade calls in the areas. He reported that reception was good and all were willing to cooperate with the forthcoming advertising campaign.

During the time he was in the southern states, the advertising campaign was in full swing. The manager was pleased with the cooperation of all contacted.

In his store visits during the southern tour, he observed several good displays of New Jersey potatoes. In the Washington, D. C. area, for example, Grand Union had floor pyramid displays of ten-pound bags of New Jersey washed potatoes. A & P had attractive displays of both five-pound and ten-pound bags. These potatoes had also been washed. All produce managers contacted said New Jersey potatoes had good consumer acceptance.

At the request of the Council, the manager attended the National Potato Council meeting held in Idaho Falls, November 14, 15 and 16, 1965, where he was asked to give a resume of promotional activity in New Jersey. He stated that New Jersey marketers are always seeking outlets for New Jersey farm products. He further stated that one of the oldest and most reliable methods is personal contact. After the resume was completed, he received many inquiries on New Jersey activities.

Trade contacts were continued for the balance of 1965. As 1966 came in, approximately 175,000 hundredweight of potatoes were left in storage for marketing.

During February and the first two weeks of March, much time was spent in introducing the new manager of the Gloucester County Agricultural Cooperative Association, Inc., Glassboro, to the trade.

A 50-store survey was made in North Jersey and the New York metropolitan area, to evaluate the fresh market asparagus program. At the completion of the survey, the manager was asked to assist in field activity for the 1966 fresh asparagus marketing program. The assignment consisted of the distribution of fresh market point-of-sale material, registering complaints, and store visits.

Horse and Pony Promotion

The distribution of \$100,000 in Breeder Incentive Awards to homebred participants in open races at New Jersey race tracks during the 1965-1966 year is the first step in a program designed to encourage the production of quality homebred stock for competition in the racing sport in New Jersey.

The homebred participation exceeded the expectations based on the experience of the past three years and it became necessary to adjust downward the percentage of the purse being paid to owners and breeders, in an effort to spread the money through the season. The figures indicated that New Jersey-bred horses won more races and earned money in more races than in the previous seasons.

A series of awards were presented to the winners of shows held by the various pony and pleasure horse groups. These awards, totaling \$1,500, were presented at the Horse and Pony Interests Dinner held during Farmers Week. Interest in pleasure horses is increasing rapidly in the State and it is anticipated that the awards will stimulate the breeding of animals of higher quality.

The New Jersey Equine Advisory Board has been exerting leadership in several activities of vital interest to the horse and pony industry of the State. A horse facilities development committee has been established and has been encouraging the development of riding trails, stables, and horse show facilities throughout the State. Excellent cooperation has been obtained from the Department of Conservation and Economic Development which has been represented at all the recent meetings of the Board. A survey of riding trails and other horse facilities available on State-owned lands has been conducted and the provision of such facilities in areas under development is part of the planning.

A horse health committee has also been appointed and considerable interest in research into horse nutrition and health has been stimulated. During June, a delegation visited the New Bolton Center of the School of Veterinary Medicine of the University of Pennsylvania. They were advised of the types of work being conducted there and of the need for much more extensive research.

Market Development (Complex) Activities

Activity in development of the market complex is broad. It embraces structure, facilities and disciplines wider than single products. Examples are grade inspection, expansion and improvement; roadside marketing improvement; military procurement; packaging; transportation; and assistance to marketing organizations.

A portion of fiscal 1965-66 was devoted to an investigation of alleged fraud in asparagus grade determinations by graders at processing plants involving federally licensed inspectors and New Jersey asparagus growers. The investigation was initiated by the New Jersey Department of Agriculture during May 1965 and concluded with a presentment but not an indictment by the Salem County Grand Jury on September 14, 1965. Following this Grand Jury presentment, considerable time was spent in the development of reform measures and corrective methods involving short and long-range plans for the general improvement of the fruit and vegetable grading service as now performed in New Jersey. The service is operated under a cooperative agreement between the United States and New Jersey Departments of Agriculture and the New Jersey Agricultural Society. Damaged confidence in the fruit and vegetable inspection service has been largely restored within the year. A rigid rein has been maintained on administration. This will be continued.

Emphasis on roadside marketing has been accelerated as a modern arm of New Jersey farm marketing. At present, the traveling public is spending approximately \$20,000,000 annually for New Jersey products at our roadside markets. Producers have been encouraged to supply this type of market outlet.

Guaranteed product quality, added items, attractive surroundings and cheerful service are points being used in expanding customer acceptance. Two of the Division's farm products marketing representatives spent a large part of their time from June 1 to October 31 at roadside markets throughout the State where they observed products, methods and service and offered ideas for improvement. A census first and a survey in depth later of roadside marketing is another step under way in expanding the program. The survey will determine the location, number, kind of business, name and address of operator, and existing facilities of all roadside markets now in business in the State.

In some areas and among certain leaders, there is sentiment and pressure for legislation to require registration of all roadside markets so they can be upgraded and improved faster than the present voluntary approach. In this era of "image" and expanding competition, roadside market customers who are itinerants on our roads should receive fair treatment in their purchases and hold a good impression of New Jersey farm products rather than feel that, as out-of-state residents, in some cases they are being "cheated." All this leads to enhanced farmer and marketer image and to a satisfied customer --- the goal of all marketing.

Military procurement in New Jersey illustrates another area of market expansion. Dollar volume of purchases by the military continued to grow this fiscal year. This was true of fresh fruits and vegetables, poultry and eggs, dairy products and processed foods. In order to encourage wider purchase of New Jersey products, meetings were arranged between the military buyers and New Jersey vendors. One member of the staff specializes in such liaison. Other fresh vegetables from the State were added to procurement lists this year; \$3,500,000 worth of fruits and vegetables were sold, which with all other items, made New Jersey's take in gross sales equal approximately \$9,895,000 in 1965-66 fiscal year. A continuing growth at a rate of about 10 per cent per year is predicted. These products purchased are shipped for military consumption to bases all around the world.

Mass transportation of perishables to consumers is a vital factor in marketing. During the year, haulers were urged to improve their equipment and methods of preserving quality in transit. For example, the use of liquid nitrogen for cooling and preservation in existing refrigerated trucks is both possible and feasible. Vendors and those needing this improvement were brought together. Here, again, enhanced quality, as in roadside marketing, benefits both farmer and consumer.

Market facilities (complex) development also means close liaison with organizations and firms, cooperatives, and others (public and private) dedicated to the improvement of food products being produced, handled, packaged, transported,

serviced and otherwise marketed for benefit of both producer and consumer. The list of such groups is formidable and would constitute a directory of the food trade in New Jersey.

The diligent attempt to organize a regional metropolitan market center via the Hudson County Market Commission, originally established in 1959, was finally abandoned. This effort ran a full cycle, feasibility study, trial and now termination. The residual hope is the possibility of a similar but new approach on a broader base than a single county, i.e., the possibility of a northern New Jersey regional facility.

COOPERATIVE SERVICES

Many of the activities of this Bureau have been concerned with providing advice and direction to various agricultural cooperative associations on problems of organization, incorporation status, mergers, changes in by-laws, and dissolution of inactive and unnecessary associations, and with the supervision of filing the annual reports of the various cooperative associations with the Secretary of Agriculture.

TABLE 2. SUMMARY OF NEW JERSEY AGRICULTURAL COOPERATIVES, 1965-1966

Operating in New Jersey	Headquarters in New Jersey	Membership <u>1/</u>	Net annual business <u>2/</u>	Cooperatives organized	Cooperatives dissolved
-number-	-number-	-number-	-dollars-	-number-	-number
80	71	25,520	96,614,000	3	3

During the past year, three cooperative associations became inactive and were dissolved; during the same period, three new cooperative associations were organized.

Regulatory Services

Under the provisions of the New Jersey Agricultural Cooperative Associations Act, this Bureau maintains on file the certificate of incorporation for the 80 agricultural cooperatives operating in this State. Each of these is required to file an annual audit report and corporation questionnaire listing current information on association activities, membership, officers, directors and management. This Bureau received and reviewed such annual audits and corporation questionnaires for the agricultural cooperative associations operating under this act.

New Jersey Agricultural Cooperative Associations Act

A need for modernization of the New Jersey agricultural cooperative laws had become evident in recent years. The present statute, last amended in 1953, has at times proved insufficient to properly serve the needs of today's cooperatives. The tremendous rate of change in the cooperative business climate in recent years demanded that changes in the law be initiated.

1/ Inasmuch as many farmers belong to more than one cooperative and are counted two or more times, the membership figures contain some duplications.

2/ Latest data on membership and dollar business volume for the year 1963-64 from United States Department of Agriculture publications.

With this in mind, a working committee of cooperative leaders and attorneys was organized to develop the best possible revision of the New Jersey Agricultural Cooperative Associations Act and the program needed to implement its enactment.

The major portion of this work was completed during this past year. Following a general meeting to which all of the cooperative associations operating in the State were invited, the final version of the revision proposals was drafted and submitted as Senate Bill 296. This bill passed the Senate by a 27-0 vote and passed in the Assembly by a 50-0 vote. Pending approval and signature by the Governor, implementation of the new statute will begin.

Centralized Egg Marketing Cooperative

This Bureau assisted in the total Division effort of working with egg marketing and poultry feed cooperatives toward the implementation of the Poultry Industry Steering Committee recommendations.

This has resulted in the formation of a centralized egg marketing cooperative, named the New Jersey Poultry Products Cooperative Association, Inc. Much Bureau time was devoted to numerous meetings with this group during their organization, incorporation and by-law development.

Following its formal organization, the new centralized egg marketing cooperative purchased the existing egg marketing facility of the Vineland Egg Producers Cooperative Association (Vine-Co.) at Vineland. Eggs are being shipped to that plant from producers sponsored by the members of the central egg marketing cooperative. The member associations of the central agency are Delaware Valley Farmers Cooperative at Flemington, Central Jersey Farmers Cooperative at Hightstown, and Farmers Cooperative Association of Vineland at Norma.

Regional Artificial Breeders Cooperative

As a result of merger negotiations, a regional artificial breeders association for the dairy industry became a reality. The former New Jersey Cooperative Breeders Association of Annandale joined with three similar type associations located in Pennsylvania to form a new regional association, the Cooperative Northeastern Breeders Association, Inc. (NEBA). This new association of 18,000 members, 2,000 in New Jersey, is organized as a New Jersey corporation with its main business office in Pennsylvania. To date, the association is proving of great value to the dairy industry throughout its area of operation.

Oyster Farmers Cooperative

Working with Federal agencies, the Bureau assisted in the organization and incorporation of an oyster marketing cooperative among a group of low-income oyster farmers at Bivalve along the Delaware Bay.

Cooperatives concerned with fresh and salt water food products come within the definition of "agricultural products" under the New Jersey Agricultural Cooperative Associations Act.

With an economic opportunity loan from the Farmers Home Administration, this group of oyster tongs was assisted in the formation of the New Jersey Tongs Cooperative Association.

This association is providing the processing and marketing facilities needed by this economically depressed group to enable them to substantially raise their income level.

Miscellaneous Services

Bureau services have been available and utilized by a number of agricultural associations other than cooperatives in the incorporation, processing and development of by-laws. Assistance of this type has been provided to County Boards of Agriculture, as well as to educational and beneficial agricultural associations as requested.

New Jersey Council of Farmer Cooperatives

Working with the New Jersey Council of Farmer Cooperatives, this Bureau assembles and disseminates information on legislation, tax matters, member relations, etc., to agricultural cooperatives. This Council, composed of 26 marketing, purchasing and service cooperatives located throughout the State, is in its fifth year of existence.

In working with rural youth, assistance is provided to the Council in its programs on leadership development, as well as 4-H and FFA award programs for projects on cooperation.

STATISTICAL SERVICES

Market News

Eggs

The New Jersey market news service assists the United States Department of Agriculture Consumer and Marketing Service with daily information on the movement of eggs into retail as well as wholesale markets.

The market news reporter contacts various egg dealers daily to secure information concerning their supply of various sizes and the demand. This information is forwarded to the United States Department of Agriculture Dairy and Poultry Market News office in Philadelphia. Personnel there gather similar information from the eastern Pennsylvania area. The information from New Jersey and the Philadelphia office is combined and forwarded to New York to help establish prices on the New York egg market. A report on the New York egg market is released daily, nationwide, on the leased wire service to the market news offices.

Egg prices on a daily, weekly, and monthly comparison during the 1965-66 fiscal year were higher than during the previous fiscal year.

Poultry

The market news reporter contacts poultry slaughter plants twice weekly to secure information on the supply, demand and prices paid for various types of poultry. This information is forwarded to the Dairy and Poultry Market News office in Philadelphia and is released on the leased wire service as the Eastern Pennsylvania and New Jersey Live Poultry report.

The weekly Egg and Poultry report mailed each Monday to various agricultural interests includes the number of cases of eggs and prices from the cooperative egg markets in New Jersey; a report on the New York egg market for the previous week; cold storage holdings; the latest report of the Eastern Shore Poultry Growers Exchange; and the eastern Pennsylvania and New Jersey live poultry report.

Livestock

Weekly market reports from the eight cooperating livestock auction markets were received, giving the number and class of animals sold and prices received. The number of head sold decreased, but the total dollar value increased from the previous year.

TABLE 3. SUMMARY OF SALES AT LIVESTOCK AUCTION MARKETS

	Animals			Value		1963-64
	1965-66	1964-65	1963-64	1965-66	1964-65	
	-- number --			-- dollars --		
Flemington	11,103	12,836		489,382.29	485,801.59	
Hackettstown	49,443	50,070		4,364,086.84	3,437,716.33	
Mount Holly	3,817	4,133		158,378.75	110,574.36	
Freehold	2,107	2,755		124,408.81	163,345.03	
Sussex	37,365	38,736		2,836,710.76	2,257,636.26	
Woodstown(Harris)	24,840	24,576		1,639,316.65	1,412,517.14	
Woodstown(Community)	6,788	6,860		568,689.23	456,768.24	
Columbus(Tallman)	<u>11,784</u>	<u>13,318</u>		<u>711,480.56</u>	<u>682,180.62</u>	
Totals	147,247	153,284	159,983	10,892,453.89	9,006,539.57	9,702,825.91

The weekly Feed and Livestock report was issued each Thursday during the year. This report contains current feed and grain prices; a hay and straw report; the reports of the eight livestock auction markets; and wholesale meat prices on the New York market.

Fruits and Vegetables

The New Jersey Fruit and Vegetable Market News Service, in cooperation with the United States Department of Agriculture Consumer and Marketing Service, collects and disseminates wholesale price and supply information on the New Jersey fruit and vegetable industry.

During the 1965-66 season, daily shipping point fob prices were reported on nine New Jersey crops and auction prices on 25 other miscellaneous crops. A daily two-page report was mailed that contained all New Jersey fob and auction prices plus supply and price information pertaining to New Jersey produce on terminal markets around the country, and related prices on competing crops from other states. These reports were mailed daily from the end of April to early November with approximately 700 being sent each day.

Another and more rapid means of disseminating marketing information are the two answering phones maintained in the Bridgeton inspection office and one in the Hightstown inspection office where a three to five-minute tape-recorded message provides up-to-the-minute local and competing area price and supply information. A total of 4,652 calls was recorded on the two Bridgeton machines from July 1, 1965, to June 30, 1966. In Hightstown, where the phone service is discontinued from January to May, 2,186 calls were counted. Radio station WSNJ in Bridgeton provided five minutes of air time each noon, five days a week, throughout the year for market news information.

In response to industry's request in order to have more orderly marketing, daily carlot shipment reports were compiled on blueberries and white potatoes.

For New Jersey's nine fruit and vegetable auctions, a weekly report outlining the variety of crops available at each plus other pertinent information relative to selling hours and days of sales was mailed to chain store buyers, institutional buyers, brokers and others interested in New Jersey produce.

At the end of the season, booklets were prepared on 15 of the major New Jersey crops. They summarized, in 183 pages, the price and supply information as it developed during the season as well as charts and tables that showed distribution and New Jersey's rank or position in the national supply picture. Approximately 400 buyers, brokers, institutions and others received a copy of each of these four booklets.

Crop Reporting

The New Jersey Crop Reporting Service is a joint activity of the New Jersey Department of Agriculture and the Statistical Reporting Service, United States Department of Agriculture. Both the State and Federal Departments have been lawfully authorized to collect and compile information on crop and livestock products and related agricultural subjects. However, they have recognized that the goals of the State and national statistical programs can be most efficiently and economically accomplished by combining their efforts through a Memorandum of Understanding dated August 1, 1961.

Federal funds and personnel provide for a basic program of agricultural estimates for the State as a whole which are comparable with estimates for the 50 states in the national statistical program. State funds and personnel complement and supplement the Federal program by providing for agricultural estimates at the county level and in greater detail (kinds, varieties, and age of plantings) than provided for in the national estimating program, particularly for crops important to New Jersey. Also, State funds are matched with Federal Agricultural Marketing Act funds to provide detailed statistics on a variety of specialized agricultural enterprises important to New Jersey.

The New Jersey Crop Reporting Service moved, September 1965, from the Federal Post Office Building, Trenton, to Suite 203 in the Health and Agriculture Building.

TABLE 4. SUMMARY OF EMPLOYEES, NEW JERSEY CROP REPORTING SERVICE, 1965-66

	Federal	State	Total
Statistician in charge	1	-	1
Assistant statistician in charge	1	-	1
Administrative assistant and stenographer	1	1	2
Statisticians	3	2	5
Supervisory statistical assistant	1	-	1
Clerical	6	1	7
Student-trainees (intermittent)	2	-	2
Supervisory enumerators (intermittent)	3	-	3
Enumerators (intermittent)	<u>21</u>	<u>-</u>	<u>21</u>
Total	39	4	43

Although the agricultural estimating program is conducted by the professional staff, its success depends on the voluntary help of New Jersey's farmers and businessmen. About 6,000 of the State's 11,000 farmers voluntarily answer questionnaires used to obtain basic data for the crop and livestock reports. Approximately one in six farms provides monthly information for daily, poultry,

field, fruit and vegetable crop conditions on their individual farms as well as in their localities. The fidelity of some of the farmers to the idea of sharing information with compatriots in their locality, State and nation is remarkable --- during the past year, 15 were cited for over 20 years of consistent reporting. Nearly 300 "agribusinessmen" --- fruit and vegetable processors and distributors; hatcherymen; processors of dairy products; poultry, egg and livestock packers; etc. --- along with 1,200 feed, fertilizer, fuel, farm equipment, hardware, lumber, clothing and food merchants contribute or check data on production and prices received and paid by farmers for items used for production and farm family living. Altogether, voluntary reporters returned 30,000 questionnaires used as a basis for the release of 145,000 mimeographed copies of statistical reports to 8,500 persons and firms on our mailing lists. The professional and enumerator staff also drove 65,000 miles to interview informed persons, to observe crop and livestock conditions, and to appear either as a speaker or as a participant at 80 agricultural meetings. They serviced 1,000 mailed, telephoned and personal requests by other agencies of government, business and individual citizens for special compendiums of agricultural data.

In addition to the mailed surveys, New Jersey is included in a nationwide program of systematically sampling the use of farmland. The sample in New Jersey consists of 250 areas of land, averaging 750 acres and containing an average of four farms, scattered throughout the State, largely in agricultural areas. Two staff members were trained in procedures for conduct of the enumerative type surveys at regional schools conducted by Washington personnel of the Statistical Reporting Service. The staff members in turn conducted training sessions in Trenton for three supervisory enumerators and 21 enumerators. Each enumerator was equipped with aerial photographs of the selected land areas and persons within those areas were interviewed during early June and December to obtain the acreages of crops, numbers of livestock and farm labor used. The basic data was transmitted to the Crop Reporting Board, Washington, D. C., where it was processed on automatic data equipment within the time limits required for the usual program of mailed surveys and reports.

During the growing season, enumerators visited a systematic sample of the corn acreage enumerated during June. Counts of the stalks per row, measurements of row width, measurements of ear circumference and length, and weights of mature ears were obtained to measure objectively the yield of corn.

In addition to the foregoing activities, State and Federal funds were matched to conduct special surveys of the State's blueberry crop, continue research on objective measures of the cranberry yield, and initiate a special survey of roadside farm markets. A list of approximately 1,300 markets has been assembled from county agricultural agents, county and municipal supervisors of weights and measures, the field staff of the Division of Markets, as well as roadside market operators. About 75 per cent of the original list of market operators have either responded to one of three mailings of a screening inquiry or their mail has been returned as undeliverable by the Post Office Department. The next phase of the study will require screening of nonrespondents through field interviews, after which it will be possible to extrapolate some unique data on the location, type and size of the State's roadside farm markets.

Special publications made possible with State and Federal funds during the 1965-66 fiscal year are as follows:

Circular 434, "Commercial Flower, Plant and Nursery Products Grown in New Jersey - 1964," November 1965, 40 pages, 3,000 copies.

Mimeographed reports:

"Blueberry Report," December 1965

"Asparagus County Estimates," March 1966
"Tomato County Estimates," March 1966
"Annual Dairy Report," April 1966
"Annual Poultry Report," April 1966
"Meat Chicken Report," May 1966
"Blueberry Report," June 1966

Plans for fiscal 1966-67 include completion of the survey of roadside farm markets and initiation of a survey of fruit trees by age and variety. The latter is to integrate the New Jersey survey with a similar survey in a five-state region. The other states are Pennsylvania, Maryland, Delaware and West Virginia.

Plans for fiscal 1966-67 and 1967-68 include a proposal to train personnel in programming and operating automatic data processing equipment. A tentative agreement has been reached with the Division of Administration, Department of Agriculture, and the Bureau of Data Processing, Department of Health. Under its terms, (1) The Crop Reporting Service will detail a statistician for fulltime training under the direction of the Chief, Bureau of Data Processing, Department of Health, and will provide personnel to operate the key punch and verifier leased by the Department of Agriculture; (2) The Division of Administration will transfer equipment and funds to the Division of Markets for annual lease of the key punch and verifier; and (3) The Bureau of Data Processing will provide training and work station direction to develop and utilize the Crop Reporting Service statistician as a programmer. The programmer will coordinate and direct all Department data processing activities.

REGULATORY SERVICES

Fruit and Vegetable Standardization

The principal role of the Bureau of Fruit and Vegetable Service is to assist the industry in marketing its products in an orderly and efficient manner. Inspection and certification of fresh fruits and vegetables and the grading of raw products for processing are supervised by the Bureau. Of major importance is the service performed at processing plants where each grower's raw product delivery is classified as to the percentage meeting the various grades or contract specifications.

The volume of fresh market inspections is affected by such factors as production, quality, prices and marketing regulations. During this fiscal year, 3,458 lots, consisting of 1,119,119 packages of produce destined for fresh market consumption, were inspected for grade. This was an increase of 93 per cent in the number of inspections and an increase of 69.5 per cent in volume as compared with last year's figures. The principal commodities for which volume of inspections increased were potatoes, peaches, sweet corn and apples, in the order named.

Inspection of products moving into processing channels totaled 292,193 tons compared with 236,682 tons last year and 233,378 tons the year before.

The Bureau continued to provide technical assistance to New Jersey commodity councils, committees, fruit and vegetable auctions, growers and shippers.

During the fiscal year, 75 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.

TABLE 5. SUMMARY OF COMMODITIES INSPECTED AND VOLUME CERTIFIED FOR GRADE

Commodity and Type Inspections	Unit	1965-66 (Processing)	1964-65	Per cent Change 1965-66 1964-65
Tomatoes	ton	259,840	207,442	+ 25.3
Asparagus	ton	26,415	25,544	+ 3.4
Other vegetables ^{1/}	ton	5,938	3,696	+ 60.7
Total		292,193	236,682	+ 23.5
(Shipping Point Inspections - Fresh Market)				
Potatoes	cwt.	595,190	222,092	+268.0
Apples	bu.	130,927	56,750	+230.7
Peaches	3/4 bu.	182,422	83,938	+217.3
Lettuce	crates	52,325	88,527	- 40.9
Misc. fruits & vegetables ^{2/}	pkgs.	158,255	207,084	- 23.6
Total	pkgs.	1,119,119	658,391	+ 70.0
(Terminal Inspections)				
Potatoes	cwt.	91,467	273,816	- 66.6
Misc. fruits & vegetables ^{3/}	pkgs.	47,303	42,482	+ 11.3
Total	pkgs.	138,770	316,298	- 56.1
(Institution Supplies)				
Various commodities	lbs.	1,266,900	1,257,354	+ 0.8

The severe drought continued through 1965 and the first half of 1966, adversely affecting the production of all New Jersey fruit and vegetable crops. As a result, average prices were generally higher, especially in the spring of 1966. However, increased returns to growers for most crops were offset by higher costs of production. Most growers relied heavily on irrigation.

Certifying Fresh Products

Apples

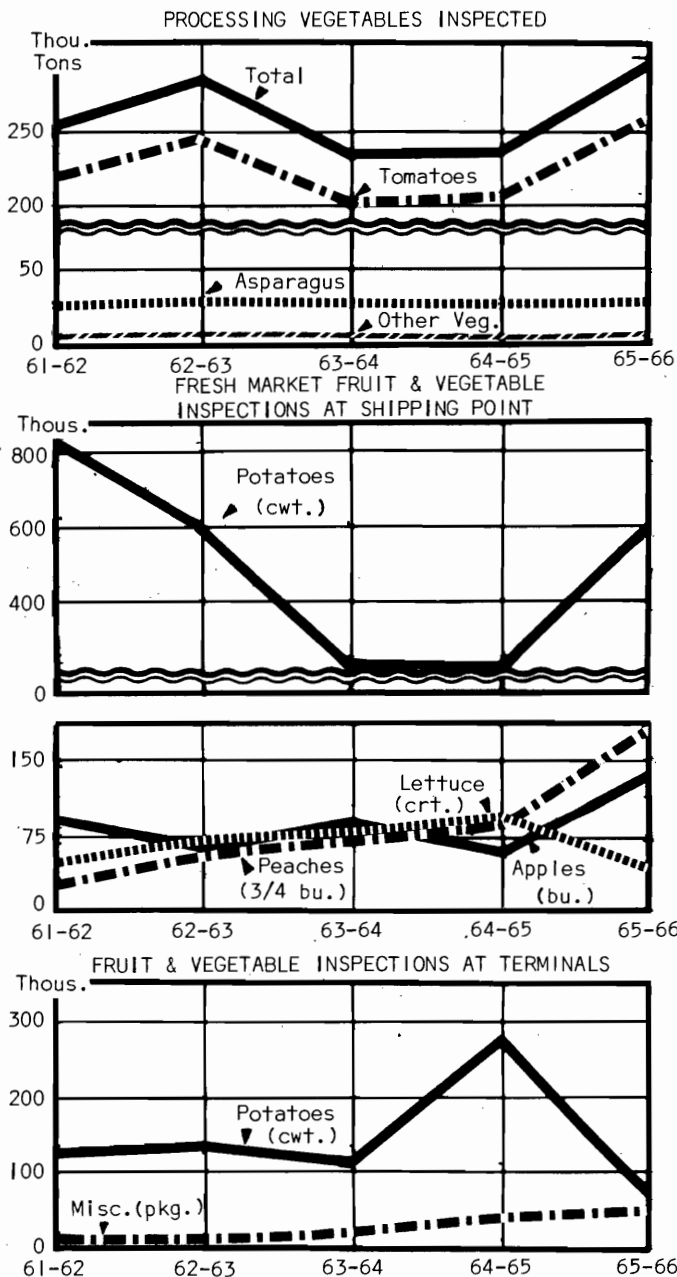
The volume of apples inspected this fiscal year was 2-1/3 greater than that of last year. The quality of the crop was good and apples held in controlled atmosphere storages were in fine condition throughout the late spring months. Apples removed from CA storages were exported to South America all during the spring. Inspection, which is mandatory under the United States Export Apple and Pear Act, indicated that the apples were in fine condition and met the United States Condition Standards for Export. This meant that not more than 5 per cent were further advanced in maturity than firm-ripe. This is the second year in which apples from New Jersey were exported so late in the season.

^{1/} Includes carrots, snap beans and other vegetables.

^{2/} Includes asparagus, sweet corn, sweet potatoes, peppers, eggplant, squash and other vegetables.

^{3/} Does not include 524,325 lbs. of grapefruit, oranges and apples in bulk and 2,165 watermelons.

Slightly more than 84 per cent of the 130,927 bushels inspected this fiscal year were exported. South and Central American countries were the principal destinations with many also going to Canada and Europe.



White Potatoes

The New Jersey white potato crop was affected less by the drought than most other crops. Potato growers are equipped for irrigation.

Production of white potatoes this year was 20 per cent above 1964. This was due to an average yield per acre of 250 hundredweight compared with an average of 200 last year. Sharply lower prices this year reduced the value of the total crop 3 per cent below 1964.

Quality of the 1965 crop was excellent and distribution was expanded. New Jersey potatoes received good acceptance from Maine to Florida, in the East, and in several midwestern states.

The volume of white potatoes inspected this fiscal year was 2-2/3 greater than that of last year. This year, 2,201 lots containing 595,190 hundredweight equivalents were inspected compared with 785 lots containing 222,092 hundredweight equivalents last year. Of the total volume inspected, 99 per cent graded U.S. No. 1 - Size A or better. Government purchases totaled 43,426 hundredweight.

New Jersey white potato acreage in 1965 was 16,600, 700 acres less than in 1964.

Sweet Corn

The Cooperative Growers' Association of Beverly again requested the services of the Bureau for inspection of sweet corn as part of their marketing program. Growers' lots totaling 61,541 crates were inspected and results made available to the sales personnel.

In addition, inspectors from the Bridgeton and Hightstown offices certified six lots of sweet corn containing 3,167 crates. See Table 6 for distribution.

Peaches

The Gloucester County Agricultural Cooperative Association, Inc., Glassboro, again requested fulltime inspection on peaches shipped under their special sales program. The inspectors also assisted grower members in improving their packing and grading operations by visiting farms and working with individual growers.

A summary of the 1965 peach season shows that peach inspections were higher this year than any previous year on record. Volume inspected was more than double that of last. Over 71 per cent of this volume was exported to Canada.

The inspector assigned to the Gloucester County Agricultural Cooperative Association certified 133 shipments of peaches containing 66,245 3/4-bushel containers.

Inspectors from the Bridgeton office inspected 325 lots containing 116,177 3/4-bushel containers. All lots graded U.S. Extra No. 1 or better. See Table 6 for distribution.

Lettuce

The 1965 fall crop of lettuce was subjected to unseasonably warm weather during a crucial period of growth. This resulted in the development of seed stems

before the crop matured. In addition, growers were unable to control a heavy insect infestation during the warm weather. Damage to the early crop was severe. Favorable weather helped late in the season but the overall crop was disappointing. Quality of the spring crop of 1966 was only fair.

The volume of lettuce inspected this fiscal year was 40 per cent less than last. One hundred and twenty-seven lots totaling 52,325 containers were certified, compared with 194 lots consisting of 88,527 containers in 1964-65. All packages contained 24 heads each. See Table 6 for distribution.

TABLE 6. DESTINATION AND VOLUME OF SPECIFIED COMMODITIES, 1965-66

Item	Unit	Military Purchases	Canada	Domestic
Sweet corn	crates	4,986	--	59,722
Lettuce	containers	47,550	4,775	--
Peaches	3/4 bu.	915	130,912	50,595

Cannery Crops

Asparagus and tomatoes are the two most important crops grown for processing. A considerable volume of carrots, snap beans, red and green sweet peppers, and green tomatoes is also graded. Occasional requests are received for inspection of trucklot shipments of apples, sweet potatoes, blueberries and other commodities for processing.

Products for processing are graded on the basis of processor-grower contracts which usually incorporate Federal or State standards. Inspectors analyze a representative sample from each load and record the results on an official certificate. Grading provides an equitable basis for payment for both processor and grower and is an inducement for growers to deliver higher quality.

Asparagus

In an effort to render a better and more uniform grading service to New Jersey processors and growers, it was decided to conduct a training program for all asparagus inspectors. It was further decided that the old system of assignment of the men for the season at a given station would be discontinued and a system of rotation of assignments instituted.

During the week of April 18 to 23, a training class was held in Bridgeton for 27 inspectors. The training was conducted by supervisory personnel of the New Jersey and United States Departments of Agriculture. All phases of the work were covered in detail, including specific instructions on all of the various contracts between processors and growers. This training resulted in making the personnel more proficient and provided a sound basis for carrying out the program of rotation of assignments with success.

Grading asparagus for processing is the largest single grading activity of the Bureau. During the spring of 1966, three processors and eight brokers operated 17 receiving stations in the producing areas. Thirty-one inspectors and three supervisors were required to handle the grading.

California is the only state that surpasses New Jersey in the production of asparagus. The estimated acreage for harvest in New Jersey this year was 25,200 acres compared with 27,400 acres in 1964. Two-thirds or more of the total acreage was estimated to be for processing.

This season, the contract price of N. J. No. 1 spears, 7 inches in length, 4-1/2 inches minimum green color, 3/8-inch minimum diameter measured at the butt, was 16 cents per pound. Last year, the contract price for the same specifications was 14.5 cents per pound. Most of the volume was purchased in accordance with these specifications known as the "regular contract."

Eight other contracts were used this season, three of which contained no particular reference to standards but specified maximum length and minimum diameter of spears.

Adverse weather conditions prevailed throughout the harvesting season. The early part of the season was cold. The balance of the season was extremely dry with intermittent periods of excessively hot and cool weather.

Volume graded under all contracts this season was 3.4 per cent above last year. Total 1966 volume was 52,830,080 pounds compared with 51,087,696 pounds graded in 1965.

This season, 40,650,498 pounds or about 77 per cent of the season's total were graded under the regular contract specifications. Grades averaged 73 per cent N. J. No. 1, 6 per cent culls and 21 per cent butts. In 1965, the averages were 72, 6 and 22 respectively.

TABLE 7. ASPARAGUS, SPECIFIED REQUIREMENTS, GROSS POUNDS, BY CONTRACTS, 1965-66

Contract	Maximum Spear Length (inches)	Minimum Green Color (inches)	Minimum Diameter	Point of Measurement (inches)	Tolerance for White (inch)	Gross Pounds
1	7	4½	3/8	base	--	40,650,498 ^{1/}
2	7	5	3/8	base	--	9,118,052 ^{2/}
3	10	5	1/4	base	1/2	1,852,218 ^{3/}
4	5¼	5¼	3/8	base	--	132,668
5	10	--	1/4	5	--	71,876
6	8	5½	3/8	5½	--	
		4½	5/16	5½	--	954,312
7	5¼	5¼	5/8	base	--	
			3/8	base	--	50,456
					Total	52,830,080

Tomatoes

In 1965, New Jersey ranked third in the nation in the production of tomatoes for processing, preceded only by California and Ohio. For the most part, weather conditions were favorable for good production and quality.

The 18,700 acres in New Jersey in 1965 was 14 per cent above the 16,400 acres in 1964. The average yield per acre this season was 18.7 tons as compared with 15.0 tons in 1964.

-
- 1/ One processor under this contract paid a premium price for asparagus 3/4 inch diameter and larger measured at 4-3/4 inches from the tip. Total volume meeting these specifications was 1,106,305 pounds.
 - 2/ Under this contract, a premium price was paid for asparagus 5/8 inch diameter and larger, measured at 5 inches from the tip. Total volume meeting these specifications was 2,026,597 pounds.
 - 3/ Under this contract, a premium price was paid for asparagus 5/8 inch diameter and larger, measured 5 inches from the tip. Total volume meeting these specifications was 13,562 pounds.

Volume graded this season was 259,839 tons with grade averages of 70 per cent U.S. No. 1, 28 per cent U.S. No 2 and 2 per cent culls. In 1964, the volume was 207,442 tons with averages of 70 per cent U.S. No. 1, 29 per cent U.S. No. 2 and 1 per cent culls.

At the peak of the season, 25 inspectors were assigned to tomato grading for seven processors.

TABLE 8. SUMMARY 1965 CANNERY TOMATO SEASON AND COMPARISON WITH PREVIOUS 10 YEARS

Season	Amount Graded (ton)	U.S. No. 1 (per cent)	U.S. No. 2 (per cent)	Culls (per cent)
1955	36,705	47	49	4
1956	157,464	64	33	3
1957	144,196	69	29	2
1958	150,659	64	34	2
1959	129,424	60	37	3
1960	202,154	63	34	3
1961	221,824	65	32	3
1962	246,258	66	32	2
1963	201,083	68	30	2
1964	207,442	70	29	1
1965	259,839	70	28	2

Other Cannery Crops

TABLE 9. SUMMARY, OTHER VEGETABLES FOR PROCESSING, POUNDS, 1965-66, 1964-65

Crop	1965-66	1964-65	Per cent Change	1965-66
	--- pounds ---			1964-65
Carrots	6,144,185	2,403,750	+ 255.6	
Snap beans	--	1,921,734	--	
Sweet peppers	2,100,090	2,919,570	- 28.1	
Green tomatoes	222,000	145,200	+ 152.9	

Shipping Point and Miscellaneous Inspections

In addition to the commodities covered in detail in this report, others, such as asparagus, beets, cabbage, cucumbers, squash, onions, peppers, eggplant, sweet potatoes and leafy vegetables, were inspected and certified for fresh market shipment or for processing. Inspections on miscellaneous products this year totaled 451 consisting of 158,255 packages. In addition to the packaged commodities, 40,000 pounds of apples and 7,000 pounds of spinach were inspected in bulk.

The number of inspections on all products exported to Canada this fiscal year was 549. They included 159,511 packages for fresh market and 31,137 bushel baskets of asparagus for processing.

Since 1960, one inspector has been assigned to the P. J. Ritter Company, Bridgeton, each season to inspect and certify processed asparagus packed in accordance with the New Jersey Seal of Quality specifications. The volume certified this year under the seal was 209,472 cases containing 2,798,148 13-ounce glass jars. Last year's pack totaled 173,457 cases containing 2,253,468 13-ounce jars.

TABLE 10. TEN-YEAR RECORD, PRODUCTS AND NUMBER OF SHIPPING POINT INSPECTIONS,
1956-57, 1965-66

	56-57	57-58	58-59	59-60	60-61	61-62	62-63	63-64	64-65	65-66
	--- number ---									
Apples	191	336	107	241	138	243	156	134	112	222
Asparagus	32	6	1	1	1	42	47	72	65	76
Beans	..	..	1	..	..	..	..	1	..	38
Beets	..	1	4	2	3	..	1	8	7	4
Blueberries	..	..	..	..	31	..	..	..	11	..
Cabbage	6	8	10	21	22	11	48	62	67	36
Cantaloupe	..	..	..	..	..	..	2	..	..	1
Carrots	10	..	..	1	..	..	..	10	..	..
Celery	..	..	1	..	..	..	..	..	..	..
Chicory	..	..	..	2	..	..	..	..	..	..
Collards	..	2	..	..	..	..	..	..	..	..
Corn	35	17	26	36	187	239	232	38	22	152
Cranberries	..	..	..	..	..	19	37	1	..	..
Cucumbers	..	7	2	14	6	4	8	7	22	23
Eggplant	..	..	..	1	..	..	..	25	34	..
Endive	..	..	..	..	..	..	..	17	26	..
Escarole	..	..	..	1	..	..	..	19	25	1
Lettuce	36	14	48	49	79	116	166	174	194	127
Onions	9	6	14	10	..	8	9	12	41	22
Onions, green	..	..	..	5	..	..	..	33	..	..
Parsley	..	..	..	..	..	..	..	26	30	5
Parsnips	..	..	..	..	..	..	..	12	..	..
Peaches	2	..	4	13	31	85	140	157	204	457
Pears	..	..	..	..	..	..	..	..	..	1
Peppers	..	3	..	10	3	14	13	49	44	11
Plums	..	..	..	..	..	..	..	..	..	1
Potatoes	1,858	3,007	3,109	3,079	2,251	3,092	2,164	802	785	2,201
Pumpkins	..	..	..	..	..	..	..	3	2	2
Radishes	..	..	..	..	..	..	..	..	5	..
Romaine	..	..	..	..	..	..	..	6	21	4
Rutabagas	..	..	..	..	..	2	..	..	..	..
Squash	..	..	..	..	1	..	9	32	54	12
Sweet potatoes	2	1	1	108	18	..	127	12	3	44
Tomatoes	12	10	..	..	7	2	..	6	9	7
Turnips	..	..	..	..	1	..	..	7	5	11
Total	2,193	3,418	3,328	3,594	2,779	3,877	3,159	1,725	1,788	3,458

Terminal Inspections

Terminal inspections are also an important part of the Bureau's activities. At the request of receivers, inspections are made on products shipped to New Jersey terminals in interstate commerce. The majority of applications received are for potato inspections. Inspections made for hospitals and institutions are classified under terminal work. Most of this work is on fresh supplies purchased by the Trenton and Marlboro State Hospitals and the New Jersey State Home for Girls.

Only inspectors appointed by the United States Department of Agriculture as collaborators can make terminal inspections. The Bureau chief, three State supervisors and three Agricultural Society inspectors are authorized for this work.

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

Product	Unit	Volume 1965-66
Apples	cartons	280
Bananas	cartons	742
Carrots	packages	6,351
Cranberries	bags	1,222
Grapefruit	cartons	2,865
Onions	50-lb. bags	7,120
Oranges	cartons	22,369
Potatoes	hundredweight	91,467
Raspberries	crates	20
Tangerines	cartons	1,800
Tomatoes	cartons	2,163
Tomato plants	crates	2,371
Watermelons	melons	2,165

Inspections of fresh products delivered to institutions totaled 205, including inspection of items for replacement of rejections on original deliveries. Volume totaled 1,251,772 pounds.

Potato Labeling Law

Enforcement of the Potato Labeling Law was continued this fiscal year as a function of the Bureau of Fruit and Vegetable Service. This bill was introduced April 22, 1963, and was approved June 25, 1963. The State Board of Agriculture adopted rules and regulations for its enforcement on October 22, 1963.

The purpose of this law is to promote the development of the potato industry in New Jersey. It prohibits the misbranding of packages of potatoes produced in New Jersey (or any other state) and subsequently offered for sale in New Jersey. It provides an opportunity for the public to purchase potatoes properly identified as to quality, condition and grade.

During this fiscal year, the two enforcement agents of the Bureau made 2,402 visits to wholesale and retail potato outlets in New Jersey. Out of the 8,913 inspections made, only 64 violations were noted. Most violations consisted of cases of packages not being marked in accordance with the marking requirements specified in the law. Of the 64 violations, all were corrected in the presence of the investigator and appropriate warnings were issued.

Hearings were held in Trenton on two previous violations by the hearing officer of the Department. The result was an assessment of penalties totaling \$75.

Poultry Products Standardization

The responsibility of this bureau is to assist the poultry industry in marketing its products in an orderly manner; maintain supervision of firms marketing products under the Department's official emblem; perform grading services in determining conformity of the product to contract specifications and official grades; make inspections of eggs as required in conducting enforcement of the egg law and advise on the practices and procedures related to the law; and cooperate with regional and national groups in the interest of New Jersey poultrymen.

TABLE 11. SUMMARY OF SALES AT FRUIT AND VEGETABLE MARKETS

Market	Season of 1965 ^{1/}				Season of 1964 ^{2/}				Per cent Change ¹⁹⁶⁵ ¹⁹⁶⁴			
	Auction Sales Packages -No.-	Value -dollars-	Special Sales ^{3/} Packages -No.-	Value -dollars-	Auction Sales Packages -No.-	Value -dollars-	Special Sales ^{3/} Packages -No.-	Value -dollars-	Number Pkgs. at Auction	No. Pkgs. Special Sales	Value Auction Sales	Value Special Sales
Atlantic	...	...	652,084	1,557,982.87	...	...	660,561	1,488,502.54	...	- 1.3	...	+ 4.7
Beverly	76,328	76,746.00	199,549	441,543.00	54,636	59,340.00	173,269	404,818.00	+39.7	+15.2	+29.3	+ 9.1
Cedarville	217,491	611,013.55	...	...	293,110	750,128.00	...	...	- 7.4	...	-18.5	...
Glassboro	373,895	893,703.29	137,588	384,886.80	299,340	753,140.88	109,272	287,342.95	+24.9	+25.9	+18.7	+33.9
Hammonton	136,614	650,804.80	210,159	685,805.42	142,687	647,028.40	170,194	560,008.62	- 4.3	+23.5	+ 0.6	+22.5
Hightstown	385,840	467,765.93	2,643	4,654.00	423,083	504,932.28	17,410	42,861.33	- 8.8	-84.8	- 7.4	-89.1
Landisville	415,760	1,026,640.21	37,247	45,218.50	357,000	686,715.62	34,490	45,427.10	+16.5	+ 8.0	+49.5	- 0.5
Pedricktown	117,455	412,923.40	...	...	137,738	474,829.90	...	...	-14.7	...	-13.0	...
Swedesboro	428,583	1,278,194.45	...	...	414,522	1,313,246.10	...	...	- 3.4	...	- 2.7	...
Vineland	2,161,995	4,570,497.59	...	...	1,875,524	3,569,300.29	...	...	+15.3	...	+28.1	...
Total	4,313,961	9,988,289.22	1,239,270	3,120,090.59	3,997,640	8,758,661.47	1,165,196	2,828,960.54	+ 7.9	+ 6.4	+14.0	+10.3
			-pounds-	-dollars-			-pounds-	-dollars-				
Hammonton:												
Blueberries												
Processing	...	...	17,640	3,714.40	...	...	51,602	10,320.40	...	-65.8	...	-64.0
Swedesboro:												
Asparagus												
Processing	...	...	1,171,426	174,730.21	...	...	882,651	101,446.86	...	+32.7	...	+72.2
Total			1,189,066	178,444.61			934,253	111,767.26	...	+27.3	...	+59.7

This table includes the data from 10 fruit and vegetable markets for the major marketing season, 1965 compared with 1964. The number of markets reporting a decline in number of packages in 1965 was more than offset by those reporting an increase. The net increase totaled 7.9 per cent. For those markets reporting special sales, the number of packages sold in that category in 1965 was 6.4 per cent above 1964. The value of auction sales in 1965 was 14.0 per cent above 1964, while value of special sales was up 10.3 per cent.

^{1/} Market year November 1, 1964 to October 31, 1965.

^{2/} Market year November 1, 1963 to October 31, 1964.

^{3/} Includes sales other than at auction.

New Jersey's laying hen population is about half that of five or six years ago. Small flocks are gradually disappearing and larger, high density operations are developing. Although the numbers of laying hens in the State continues to decline, the rate of decline is considerably lessened. The shift from small flocks to larger flocks is occurring throughout the country and no doubt will continue for some time. This change progresses in relation to the poultryman's financial ability to reinvest or secure credit for expanding present facilities. Mingled with the poultrymen who are expanding their operations, however, are those whose credit is exhausted and are simply awaiting the opportunity to retire on Social Security.

According to figures compiled by the New Jersey Crop Reporting Service, New Jersey farms had an average of 7,355,000 layers during the calendar year 1965 compared with 8,214,000 during 1964, a decrease of 10.5 per cent compared with an 11 per cent decrease the previous year. Nationally, the average number of layers on farms in the calendar year 1965 was 296,622,000 compared with 297,529,000 in 1964.

The rate of lay during the calendar year 1965 on New Jersey farms was 204 eggs per bird compared with 199 eggs per bird the previous year.

Cooperative Marketing

Cooperative marketing associations referred to here are those which sell by the auction method the eggs and, in some instances, the live poultry produced by their members. These cooperatives marketed products valued at \$3,635,990.49 during the fiscal year 1965-66 compared with a total value of \$4,006,834.84 the year before.

Table 12 is a summary of eggs and poultry auction markets and shows the volume and value of eggs and poultry handled by each cooperative and the total thereof as well as a comparison of the price per unit for both eggs and poultry.

Table 13 shows the average price per dozen eggs each month for all eggs marketed by the five New Jersey cooperatives and a comparison with the previous fiscal year.

Table 14 is a 10-year summary of sales made by these New Jersey poultry and egg cooperatives.

Cooperative Markets Egg-Feed Ratio

The egg-feed ratio is an indication of the egg producers prosperity. It is the relation between one major production cost item and the price received for eggs. Table 15 shows the volume of all eggs sold by the five cooperatives for each month and the average price received by the producer, the average cost of the laying ration and the resulting ratios for the current fiscal year compared with the previous fiscal year.

The number of pounds of feed a dozen eggs would buy was lowest in the months of July and May. An egg-feed ratio of 8.5 is about marginal and is so indicated by the average price per dozen.

Poultry feed cost during 1965-1966 averaged \$3.72 per hundredweight compared with \$3.67 the previous year. The average price per dozen was \$0.4028 or 0.0721 cents higher than in 1964-1965.

The average New Jersey hen is estimated to have produced 17 dozen eggs, which earned a gross income of \$6.85. With an average feed cost of \$3.72, a balance of \$3.13 per bird was left for all other costs.

TABLE 12.

SUMMARY OF EGG AND POULTRY AUCTION MARKETS
July 1, 1965 to June 30, 1966

Market	Cases of Eggs	Value of Eggs	Crates of Poultry	Pounds of Poultry	Value of Poultry	Total Value
Flemington	66,667	\$ 840,227.55	..	..	..	\$ 840,227.55
Hackettstown	25,504	316,164.59	2,151	114,376	\$11,986.85	328,151.44
Mount Holly	15,566	175,192.54	1,266	72,103	3,530.58	178,728.12
Paterson	23,049	286,277.51	..	..	..	286,277.51
Vineland	<u>172,782</u>	<u>2,002,605.87</u>	<u>..</u>	<u>..</u>	<u>..</u>	<u>2,002,605.87</u>
Totals	303,568	\$3,620,468.06	3,417	186,479	\$15,517.43	\$3,635,990.49

Average price per case 1965-1966 \$11.92 Average price per pound of live poultry 1965-1966 \$0.083

Average price per case 1964-1965 \$10.04 Average price per pound of live poultry 1964-1965 \$0.092

TABLE 13.
AVERAGE PRICE PER DOZEN EGGS ON FIVE NEW JERSEY AUCTION MARKETS

Month	1965	1964	1963
July	\$0.3180	\$0.3322	\$0.3362
August	.3567	.3498	.3511
September	.3852	.3494	.4065
October	.3804	.3512	.3664
November	.4257	.3428	.3707
December	.4473	.3442	.3907
	1966	1965	1964
January	\$0.4109	\$0.3010	\$0.4327
February	.4519	.3117	.3668
March	.5559	.3311	.3637
April	.4272	.3591	.3090
May	.3328	.2927	.2969
June	.3421	.3027	.3110

TABLE 14
TEN-YEAR SUMMARY OF NEW JERSEY POULTRY AND EGG AUCTION SALES

Year	Number Cases of Eggs	Number Crates of Poultry	Pounds of Poultry	Total Combined Value Eggs and Poultry
1965-66	303,568	3,417	186,479	\$ 3,635,990.49
1964-65	396,532	5,419	275,268	4,006,834.84
1963-64	447,687	8,943	466,567	4,842,621.55
1962-63	469,146	11,723	614,537	5,282,611.04
1961-62	535,012	17,383	927,351	6,109,591.38
1960-61	528,863	21,156	1,110,913	7,144,660.91
1959-60	756,047	42,071	1,542,364	8,551,099.31
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
Totals	6,665,922	304,971	15,017,499	\$81,873,966.10

TABLE 15.

NEW JERSEY EGG AUCTIONS -- EGG-FEED RATIO

EGGS	J U L Y			A U G U S T			S E P T E M B E R		
	1965	1964	1939	1965	1964	1939	1965	1964	1939
Total dozens sold	981,660	1,091,490	891,300	912,570	1,115,560	900,540	847,980	1,105,110	855,660
Total price paid (dollars)	312,198.55	362,645.85	235,920	325,571.59	390,279.03	241,138	326,643.92	386,146.32	252,290
Average price per dozen	\$0.3180	\$0.3322	\$0.2647	\$0.3567	\$0.3498	\$0.2678	\$0.3852	\$0.3494	\$0.2948
FEED									
Average 100 lbs. scratch	\$3.40	\$3.55	\$1.60	\$3.40	\$3.50	\$1.50	\$3.35	\$3.50	\$1.86
Average 100 lbs. mash	3.95	3.90	2.18	3.90	3.85	2.16	3.90	3.90	2.02
Average laying ration	3.68	3.72	1.89	3.65	3.67	1.83	3.63	3.70	1.94
RATIO									
Dozen eggs required to buy 100 lbs. feed	11.57	11.20	7.1	10.23	10.4	6.8	9.42	10.87	6.6
No. lbs. feed one dozen eggs will buy	8.64	8.93	14.0	9.77	9.53	14.6	10.6	9.44	15.2
EGGS	O C T O B E R			N O V E M B E R			D E C E M B E R		
	1965	1964	1939	1965	1964	1939	1965	1964	1939
Total dozens sold	804,600	1,118,070	955,430	788,640	962,017	969,330	735,240	1,044,720	1,135,350
Total price paid(dollars)	306,156.74	392,671.68	301,571	335,784.90	329,831.99	302,285	328,939.06	359,633.17	278,465
Average price per dozen	\$0.3804	\$0.3512	\$0.3029	\$0.4257	\$0.3428	\$0.3118	\$0.4473	\$0.3442	\$0.2453
FEED									
Average 100 lbs. scratch	\$3.35	\$3.45	\$1.78	\$3.95	\$3.45	\$1.77	\$3.35	\$3.40	\$1.83
Average 100 lbs. mash	3.90	3.95	2.54	3.40	3.90	2.25	3.80	3.85	2.58
Average laying ration	3.63	3.70	2.16	3.68	3.68	2.14	3.58	3.63	2.20
RATIO									
Dozen eggs required to buy 100 lbs. feed	9.54	10.53	7.1	8.64	10.73	6.9	8	10.54	9.0
No. lbs. feed one dozen eggs will buy	10.4	9.49	14.0	11.5	9.03	14.6	12.4	9.48	11.2

TABLE 15. - continued

NEW JERSEY EGG AUCTIONS -- EGG-FEED RATIO

EGGS	J A N U A R Y			F E B R U A R Y			M A R C H		
	1966	1965	1939	1966	1965	1939	1966	1965	1939
Total dozens sold	652,980	894,270	1,099,080	578,040	829,980	1,085,550	727,200	953,500	1,372,230
Total price paid(dollars)	268,350.04	269,258.63	260,807	261,265.35	258,749.22	245,377	404,288.78	315,420.89	316,304
Average price per dozen	\$0.4109	\$0.3010	\$0.2373	\$0.4519	\$0.3117	\$0.2260	\$0.5559	\$0.3311	\$0.2395
FEED									
Average 100 lbs. scratch	\$3.45	\$3.45	\$1.54	\$3.55	\$3.40	\$1.54	\$3.50	\$3.40	\$1.56
Average 100 lbs. mash	3.95	3.80	2.04	4.05	3.95	2.04	4.05	3.85	2.06
Average laying ration	3.70	3.63	1.79	3.80	3.68	1.79	3.78	3.63	1.81
RATIO									
Dozen eggs required to buy 100 lbs. feed	9	12.05	7.5	8.40	11.79	7.9	6.79	10.96	7.9
No. lbs. feed one dozen eggs will buy	11.1	8.29	13.3	11.8	8.82	12.6	14.7	9.12	12.7
EGGS									
	A P R I L			M A Y			J U N E		
	1966	1965	1939	1966	1965	1939	1966	1965	1939
Total dozens sold	613,890	899,940	1,213,620	745,770	946,448	1,388,070	703,650	998,220	1,117,170
Total price paid(dollars)	262,304.49	323,277.97	269,177	248,248.04	277,115.99	297,863	240,721.60	302,250.34	266,289
Average price per dozen	\$0.4272	\$0.3591	\$0.2218	\$0.3328	\$0.2927	\$0.2146	\$0.3421	\$0.3027	\$0.2384
FEED									
Average 100 lbs. scratch	\$3.55	\$3.40	\$1.58	\$3.55	\$3.45	\$1.64	\$3.55	\$3.45	\$1.69
Average 100 lbs. mash	4.05	3.90	2.11	4.10	3.95	2.18	4.15	3.95	2.18
Average laying ration	3.80	3.65	1.84	3.82	3.70	1.91	3.85	3.70	1.94
RATIO									
Dozen eggs required to buy 100 lbs. feed	8.8	10.16	8.3	11.4	12.64	8.9	11.2	12.22	8.1
No. lbs. feed one dozen eggs will buy	11.2	9.83	12.1	8.7	7.91	11.2	8.8	8.18	12.3

Grading and Inspection Service

The packaging of eggs under the New Jersey Seal of Quality is done by firms licensed to do so. The year concluded with 26 licensees consisting of nine producers, four cooperatives and 13 dealers, four of whom also possess sizeable egg production units. Any firm which also handles out-of-state eggs must have an egg inspector of the Department in the plant when New Jersey eggs are packaged under the Seal of Quality. There are five such licensees and the Seals of Quality and cartons on which the Seal is imprinted are kept under lock and key in custody of the inspector.

Firms licensed to use the Seal of Quality packaged 12,405,510 dozens under this official emblem. License fees based on the volume so identified amounted to \$13,059.60.

New Jersey State institutions and agencies purchased 657,990 30-dozen cases of eggs identified with the Seal of Quality. There were 1,373 grade certificates issued representing the number of inspections and lots delivered. The hourly fee charges for these inspections amounted to \$3,651.30 based on 1,014¼ hours.

Regulations governing the use of the Seal of Quality were revised. The revision effects a reduction in the cost of the license, recovery of the cost of having an inspector in the licensee's plant based on actual time used; closer producer association with the licensee as a source of eggs and use of retail containers on which the official emblem is imprinted.

Table 16 shows the monthly totals of field activities performed under grading and inspection service.

TABLE 16
GRADING AND INSPECTION SERVICE

1965-66 (month)	Firms Licensed (number)	Supervisory Visits (number)	Cases ^{1/} Under Seal of Quality Reported Quarterly (number)	Packaged to State Institutions (number)	Certificates Issued (number)
July	29	45		1,614	104
August	29	51		1,774	115
September	29	55	114,929	1,771	117
October	29	43		1,786	117
November	27	44		2,185	137
December	26	45	107,973	1,901	117
January	26	51		1,629	102
February	26	57		1,654	108
March	26	61	97,979	1,840	114
April	26	58		1,655	102
May	26	35		2,004	128
June	26	34	92,636	2,120	112
Totals		579	413,517	21,933	1,373

^{1/} 30-dozen cases

Egg Law Enforcement

The new egg law became effective January 1, 1966. Regulations necessary to implement this law were proposed prior to January 1 and were developed through several meetings with producers, dealers and retailers prior to presenting them for public hearing. This law is concerned with all phases of egg marketing. Consumers, retailers, restaurants and institutional users of shell eggs are benefited in that only edible eggs conforming to a designated grade and size may be sold to them. New Jersey egg producers, having the advantage of time and distance over their competitors, are presented an opportunity to capture the consumer's favor. Eggs which are marketed to persons other than retailers, consumers and institutional consumers must conform to a wholesale grade or be sold on the basis of yield. In all cases, the identification of the packer or distributor must be shown.

Enforcement procedure under this new law is a matter of being active where it will serve the most people; however, specific complaints are handled as received. Inspection of eggs at the retail level serves to reveal infractions where consumer graded eggs are marketed. From this, the problems of the packer are usually revealed as he procures eggs from producers.

Table 17 shows the detail of field activities under egg law enforcement. Inasmuch as the two egg laws enforced during the first half of the year were less encompassing than the one effective January 1, the details are given accordingly. A total of 23,560 inspections was made during the year, including inspections of eggs in retail outlets which were packaged under the New Jersey Seal of Quality. A total of 1,091 violations was found. In 566 instances, warnings were issued. Penalties were imposed in 49 instances.

Licensing and Bonding

This Bureau issues licenses to commission merchants, dealers, brokers and agents, milk dealers purchasing from New Jersey dairymen, cattle dealers and agents, garbage-feeding hog farm operators, disposal plant operators, controlled atmosphere storage plant operators (apples) and nutria farm operators.

In accordance with provisions of the various State laws under which the Bureau functions, three field investigators examine the records of applicants and license holders in order to determine continuation of good business practice, to ascertain payments to growers, or to verify disputes of nonpayment or underpayment for agricultural commodities received by the license holder.

For the most part such disputes are generally resolved to the satisfaction of all parties concerned following contacts by the field representatives. If not, a hearing is held by the Assistant Secretary of Agriculture.

Commission Merchants, Dealers and Brokers Licensing and Bonding Act

Licenses and surety bonds are required of persons or firms who purchase fruits, vegetables, live poultry, eggs, hay, grain or straw from New Jersey farmers on a wholesale credit basis.

During the period May 1, 1965, to April 30, 1966, licenses were issued to 543 applicants who deposited surety bonds with the Secretary totaling \$4,204,500.

The individual applicant's bond requirement is based upon the average of his outstanding obligations to growers during his month of maximum dollar purchase volume. Such information is provided in the application for license.

TABLE 17
EGG LAW ENFORCEMENT

Month	In-store Egg		Source Identification		Warnings	Penalties
	Inspections	Violations ----- number -----	Inspections	Violations		
July	2,229	17	29	7	24	0
August	2,358	24	23	4	26	2
September	2,171	13	31	9	21	1
October	1,787	7	27	7	13	1
November	1,754	26	19	4	30	0
December	<u>2,009</u>	<u>31</u>	<u>22</u>	<u>6</u>	<u>32</u>	<u>5</u>
Totals	12,308	118	151	37	146	9

New Egg Law Effective January 1, 1966

	Reports Filed of Inspections at			Warnings Issued on Inspections at			Penalties Imposed on Inspections at		
	Retail Outlets	Warehouse Dealer	Producer	Retail Outlets	Warehouse Dealer	Producer	Retail Outlets	Warehouse Dealer	Producer
January	1,817	31	2	0	0	0	0	0	0
February	1,409	57	37	0	0	0	0	0	0
March	2,187	147	41	31	0	0	13	0	0
April	1,132	101	28	82	0	0	11	0	0
May	1,635	98	24	130	6	5	8	0	0
June	2,238	88	29	164	1	1	7	1	0
Totals	10,418	522	161	407	7	6	39	1	0

Nature of Violations Revealed Since January 1, 1966

	Eggs Failed to Meet		Failed to Show		No Invoice Given		Poor Holding Conditions		No Identification		Incorrect Advertising
	Grade	Size	Grade	Size	Given	Sanitary	Number	Number	Misbranded (Source)		
January	0	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0	0	0
March	74	9	0	0	0	1	0	0	0	0	0
April	53	8	43	43	2	0	13	35	0	0	5
May	45	12	74	63	10	6	33	37	10	10	1
June	63	13	84	74	7	0	36	54	26	26	2
Totals	235	42	201	180	19	7	82	126	36	36	8

During this fiscal period, three claims against the bonds of three dealers were paid by the Secretary. As a result, New Jersey growers recovered \$5,531.10 from the proceeds of bonds sufficient to cover \$15,000 in unpaid obligations.

At the time of writing this report, the period for filing claims has not expired for the 1965-66 licensing period. Consequently, we are unable to report the pending claims against one licensee in bankruptcy. It is quite certain, however, that his unpaid obligations to New Jersey farmers are covered in full by the bond on file.

Formal Hearings

Two formal hearings were held concerning disputes in licensee payments to growers. The licensees observed the decisions rendered which resulted in their paying \$8,001.04 to the growers.

Penalty Action

One penalty hearing was conducted concerning an individual who was operating without a license and also failing to pay for commodities received from one grower. This person failed to accept the hearing decision and the matter was pursued in district court. As a result, the grower was paid \$750. The Department is awaiting transmittal of \$63.40 penalty and costs from the violator through the Office of the Attorney General.

Amendment to Law

Legislation was effected during the fiscal year which amended the agricultural dealer's law to remove the exemption from license formerly granted to cash buyers of farm commodities.

Fees for license were increased to \$15.00 from the \$5.00 now in effect, and are nonreturnable if a license is not granted. The State Board of Agriculture is empowered to promulgate regulations necessary to enforce any of the provisions of the amended law, which becomes effective May 1, 1967.

Milk Dealers License and Bonding Act

Under the statute, licenses are issued to persons or firms who purchase raw fluid milk or cream from New Jersey dairy farmers for sale or shipment. Such transactions must take place inside the State in order to make such a license mandatory. Out-of-state purchasers who arrange for delivery of milk to their establishment from a New Jersey milk producer are exempt from license.

For the period July 1, 1965, to June 30, 1966, 55 applicants were issued licenses and provided deposit of bonds totaling \$3,650,500.

Bond size requirements of those dealers operating under Federal Milk Marketing Order 2 are based upon twice the dollar value of milk received during a maximum purchase month. Those of dealers operating under Order 4 are based upon 1-2/3 the dollar value of their maximum purchase month.

No statements of claim against a milk dealer's bond have been received from producers for the fiscal license period; however, the period for filing such claims does not expire until September 28.

Licensing of Cattle, Sheep or Swine Dealers; Disposal Plant Operators

Licenses in both categories expire June 30 each year. For the period ending June 30, 1966, 108 cattle dealers and 40 disposal plant operators were licensed. Effective July 1, 1966, licenses will also be required, by amendment, of persons dealing in sheep or swine. The fee was increased from \$10 to \$15 and is nonreturnable in the event a license is not granted. By regulation, cattle, sheep or swine transactions are to be entered in a record book provided by the Department as a convenience to the license holder. Such records provide a ready reference in establishing the origin and disposition of the animals handled. Failure to maintain such records up to date is basis for a license revocation hearing.

All disposal plant facilities and the trucks used to transport dead animals or packing house refuse over public roads must be inspected before a license is issued to the operator. Inspections are made by Division of Animal Industry personnel. Approval or disapproval of the applicant's equipment or plant determines issuance of a license upon payment of the \$10 fee.

Garbage-Feeding Hog Farm Operators

This is the only license issued on a calendar year basis and concerns only those persons who feed garbage to swine. Grain-fed hog farm operators are excluded from license but are supervised by animal health inspection authorities.

As a disease control measure, the statute requires inspection of farm and cooking equipment necessary to render garbage free of disease organisms. The Division of Animal Industry makes the inspections and advises this Bureau to issue or deny each license.

During the period ending December 31, 1965, 220 operators obtained licenses in this category.

Controlled Atmosphere Storage (Apples)

After inspection and approval by the Fruit and Vegetable Standardization Service, the Bureau of Licensing and Bonding issues a license to an operator of a controlled atmosphere storage plant following receipt of a fee of \$5 for each room to be operated.

During the period ending June 30, 1966, nine licenses were issued. Each license expires one year from the date of issuance.

Nutria Farm Registry

No additional certificates of registry have been issued since they were first required of nutria farm operators in 1962. As of July 1, 1966, four of the seven registered operators have sold their nutria and retired from business in New Jersey.

Agricultural Promotion Taxes

The apple, asparagus, white potato and poultry product growers of the State, in cooperation with the Department, have programs of self-help to help promote and market their particular agricultural product. The laws which were passed creating councils for these products also levied a tax on the sale of the product. This tax is collected by the Department and administered by the councils for the benefit of the grower.

TABLE 18. SUMMARY OF APPLE TAX DOLLARS COLLECTED, FRESH MARKET, PROCESSING, TOTAL AND NUMBER OF SOURCES, 1961-1965

1961 Apple Crop				
Period	Fresh Market	Processed --- dollars ---	Total	Sources Making Payment --- number ---
1	\$11,620.71	\$ 918.98	\$12,539.69	193
2	12,066.29	5,389.83	17,456.12	194
3	8,208.71	2,657.96	10,866.67	126
4	4,719.45	1,748.27	6,467.72	78
Total	\$36,615.16	\$10,715.04	\$47,330.20	
Number Bushels	1,220,505	892,920	2,113,425	
1962 Apple Crop				
1	\$15,258.41	\$1,393.23	\$16,651.64	196
2	12,752.79	5,431.00	18,183.79	185
3	10,670.64	2,718.98	13,389.62	121
4	3,693.44	714.79	4,408.23	56
Total	\$42,375.28	\$10,258.00	\$52,633.28	
Number Bushels	1,412,509	854,833	2,267,342	
1963 Apple Crop				
1	\$12,530.78	\$1,227.81	\$13,758.59	190
2	8,719.01	3,757.31	12,476.32	166
3	7,260.30	2,128.04	9,388.34	106
4	4,875.07	854.80	5,729.87	53
Total	\$33,385.16	\$7,967.96	\$41,353.12	
Number Bushels	1,112,839	633,997	1,776,836	
1964 Apple Crop				
1	\$12,303.31	\$1,514.48	\$13,817.79	180
2	9,384.13	4,793.73	14,177.86	160
3	8,134.45	2,710.72	10,845.17	96
4	6,899.91	960.88	7,860.79	49
Total	\$36,721.80	\$9,979.81	\$46,701.61	
Number Bushels	1,224,060	831,651	2,055,711	
1965 Apple Crop				
1	\$11,761.01	\$1,200.22	\$12,961.23	182
2	10,340.61	4,894.76	15,235.37	168
3	7,577.43	1,247.17	8,824.60	101
4	Collections for the period not due until July 15, 1966			
Total	\$29,679.05	\$7,342.15	\$37,021.20	
Number Bushels	989,302	611,846	1,601,148	

Apple Industry Promotion Tax

A tax of three cents a bushel on apples sold for marketing as fresh apples and three cents per hundredweight on apples sold for processing, other than for cider or apple juice, is imposed by a law which became effective July 1, 1959. This tax is collected four times a year, on the 15th of July, October, January and April, on apples sold during the previous three-month period. The yield from the tax varies with the size of the crop and proportions used for processing.

Asparagus Industry Promotion Tax

The law, which became effective in 1959, imposes a tax upon growers and processors of New Jersey asparagus. This tax is at the rate of \$0.002 for each pound of pay weight, of which \$0.001 is paid by the grower and \$0.001 paid by the processor for processed asparagus. The fresh market asparagus tax is paid by the grower at the rate of \$0.002 for each standard crate.

TABLE 19. SUMMARY OF ASPARAGUS TAX DOLLARS COLLECTED, FRESH MARKET, PROCESSING, TOTAL, AND NUMBER OF SOURCES, 1961-1965

Taxing Period	Amount Collected			Number Sources Making Payment
	Fresh Market	Processed	Total	
1961	\$13,271.52	\$69,256.22	\$82,527.74	368
1962	11,946.81	63,964.09	75,910.90	323
1963	12,502.38	72,159.59	84,661.97	271
1964	11,427.96	61,492.99	72,920.95	245
1965	9,422.32	61,446.02	70,868.34	228

Poultry Products Promotion Tax

Since the beginning of this tax in 1957, there has been a steady decline in the total amount of tax received on poultry feed sold, delivered or used in New Jersey. This decline is the result of failure in the poultry industry. This tax of \$0.001 per 100 pounds of poultry feed is due on or before February 1 and August 1 of each year and covers the six-month period immediately preceding January 1 and July 1.

TABLE 20. SUMMARY OF POULTRY FEED TAX DOLLARS COLLECTED, AND NUMBER OF SOURCES 1961-1965

Taxing Period	Amount	Number Sources Making Payment
January 1 - June 30, 1961	\$67,123.82	256
July 1 - December 31, 1961	68,104.84	251
January 1 - June 30, 1962	62,565.20	240
July 1 - December 31, 1962	63,184.60	234
January 1 - June 30, 1963	58,448.03	221
July 1 - December 31, 1963	56,345.03	217
January 1 - June 30, 1964 ^{1/}	46,049.73	201
July 1 - December 31, 1964 ^{1/}	45,901.55	196
January 1 - June 30, 1965 ^{1/}	39,664.36	182
July 1 - December 31, 1965 ^{1/}	38,025.66	172

^{1/} Collections incomplete; matter referred to the Office of the Attorney General.

White Potato Industry Promotion Tax

A tax of \$0.05 per 100 pounds of seed potatoes planted in New Jersey is due on or before August 1 in each year for the 12-month period immediately preceding July 1. The proceeds are used to promote the sale of New Jersey-produced white potatoes.

TABLE 21. SUMMARY OF POTATO SEED TAX DOLLARS COLLECTED, AND NUMBER OF SOURCES
1961-1965

Taxing Season	Amount Collected	Number Sources Paying Tax
1961	\$17,065.56	61
1962	14,897.93	59
1963	14,720.15	60
1964	15,074.75	60
1965	14,521.75	61

D I V I S I O N O F P L A N T I N D U S T R Y

F. A. Soraci, Director

BUREAU OF ENTOMOLOGY

Nursery Inspection

During the year, 1,242 nurseries were inspected for issuance of the nursery certificate of this Department. This is a decrease of 51 from last year. Infestations which required control measures before qualification for certification were found in 216 nurseries, 62 less than last year.

TABLE 1. INFESTATIONS MOST COMMONLY FOUND DURING NURSERY INSPECTIONS, 1965-66

<u>Insect</u>	<u>Number of Finds</u>
Red spider mites, <u>Tetranychus telarius</u> and <u>Metatetranychus ulmi</u>	57
Holly leaf miner, <u>Phytomyza ilicia</u> , <u>P. ilicicola</u> , <u>P. weidhausii</u>	45
Andromeda lace bug, <u>Stephanitis globulifera</u>	45
Azalea lace bug, <u>Stephanitis pyrioides</u>	41
Juniper scale, <u>Diaspis carueli</u>	36
Scales (misc.)	36
Spruce gall aphid, <u>Chermes abietis</u> and <u>Chermes cooleyi</u>	34
European pine shoot and pine tip moth, <u>Rhyacionia buoliana</u> Schiff and <u>R. frustrana</u>	34
Oyster shell scale, <u>Lepidosaphes ulmi</u>	32
Euonymus scale, <u>Unaspis euonymi</u>	31
Pine needle scale, <u>Phenacaspis pinifoliae</u>	31
Taxus mealybug, <u>Pseudococcus cuspidatae</u>	24
Bagworm, <u>Thyridopteryx ephemeraeformis</u>	19
Aphids (misc.)	17
Sycamore lace bug, <u>Corythucha ciliata</u>	16
Rhododendron lace bug, <u>Stephanitis rhododendri</u>	14
Birch leaf miner, <u>Fenusa pusilla</u>	13
Lace bugs (misc.)	12
White fly (azalea) <u>Aleyrodes azaleae</u>	11
Borers (misc.)	9

Dealers Certificates

Certificates were issued to 373 dealers in nursery stock, an increase of 21 over last year. Dealer certification is granted only when the Department is satisfied that the nursery stock obtained from listed sources is certified.

During the spring and fall, 380 inspections were made of dealer establishments to determine whether held-over stock was free of plant pests and diseases. Infested plant material requiring control measures was found on the premises of 16 dealers.

Special Certificates

Special certificates were issued to 408 residents of New Jersey desiring to ship plant material out of the State, in accordance with special regulations of other states and foreign countries.

Canadian Certificates

A total of 240 special certificates was issued for the movement of plant material to Canada, in accordance with the requirements of that Dominion.

Special Corn Borer Certificates

Seventy special corn borer certificates were issued for the shipment of herbaceous plants into states having such requirements.

Domestic Inspections

Six inspections were made of plant materials shipped into New Jersey from other states. Such inspections are made as a check on the efficiency of the inspection services of other states. No infested plant material was found.

Special Request Inspections

Ninety inspections were made at the request of New Jersey residents desiring information about control of insects and diseases affecting their premises.

Winter Inspections

During the winter months, the premises of 1,025 nurserymen were inspected for the presence of overwintering insects. Control measures were required at 29 establishments.

Gypsy Moth Inspections

During the year, 1,444 nursery and dealer establishments were inspected for gypsy moth egg masses. Egg masses were found in the environs of 12 establishments in Monmouth County; 10, in Bergen; 3, in Morris; and 1, in Passaic counties.

Vegetable Plant Inspection

Four nursery inspectors spent a total of 87-1/2 days inspecting vegetable plants imported into the State for proper certification and freedom from injurious insect pests and diseases.

Alfalfa Weevil Parasite Collection

One man spent a total of 16 days during May and June collecting alfalfa weevil parasites for redistribution purposes.

European Chafer Survey

From mid-June to mid-July, nursery inspectors spent a total of 8-1/2 days making visual observation for possible European chafer infestations in the vicinity of their homes.

Post-Entry Quarantine Inspection

During the year, 152 inspections were made of plant materials imported under permit from foreign countries and growing under the supervision of this Department, in cooperation with the United States Department of Agriculture.

TABLE 2. PLANT MATERIAL IMPORTED, BY GENUS, 1965-66

<u>Genus of plants</u>	<u>Number imported</u>
<u>Acer</u>	440
<u>Aesculus</u>	25
<u>Anthurium</u>	800
<u>Artocarpus</u>	1
<u>Euonymus</u>	36
<u>Crataegus</u>	96
<u>Cystisus</u>	40
<u>Ilex</u>	5
<u>Juniperus</u>	29
<u>Rosa</u>	45
<u>Sorbus</u>	<u>113</u>
Total	1,630

TABLE 3. PLANT MATERIAL RELEASED, BY GENUS, 1965-66

<u>Genus of plants</u>	<u>Plants originally imported</u>	<u>Plants released</u>
	-- number --	-- number --
<u>Acer</u>	575	390
<u>Aesculus</u>	177	28
<u>Anthurium</u>	1,000	498
<u>Artocarpus</u>	3	0
<u>Berberis</u>	50	47
<u>Castanea</u>	5	0
<u>Corylus</u>	800	750
<u>Diospyros</u>	32	2
<u>Ilex</u>	2	2
<u>Juniperus</u>	503	432
<u>Quercus</u>	5	4
<u>Rosa</u>	<u>35</u>	<u>34</u>
Total	3,187	2,187

Blueberry Plant Certification

Certification of blueberry plants and cutting wood for freedom from stunt disease and other viruses is based on two inspections. Cutting beds, nursery plants, and enough mother plants to supply cutting wood are inspected in the spring and again in the fall. Plants showing symptoms of the various virus diseases are tagged by inspectors of this Department and must be removed by the grower.

During the calendar year 1965, 13 growers entered plantings for certification. After the fall inspection, 59,435 mother plants, 1,085,796 nursery plants and 2,246,830 rooted cuttings were certifiable. During both inspections, 347 diseased plants were found. Twenty-two were infected with stunt disease, 16 with mosaic, 1 with shoestring and 308 with ringspot.

TABLE 4. SUMMARY OF BLUEBERRY PLANT CERTIFICATION, 1964-1965

(Certifiable Blueberry Plants)

<u>Growers</u>		<u>Mother plants</u>		<u>Nursery plants</u>		<u>Rooted cuttings</u>	
<u>1964</u>	<u>1965</u>	<u>1964</u>	<u>1965</u>	<u>1964</u>	<u>1965</u>	<u>1964</u>	<u>1965</u>
-- number --				-- number --			
15	13	41,356	59,435	997,750	1,085,796	1,535,360	2,246,830

(Incidence of Virus Disease)

<u>Disease</u>	<u>Mother plants</u>				<u>Isolation plants</u>			
	<u>Spring</u>		<u>Fall</u>		<u>Spring</u>		<u>Fall</u>	
	<u>1964</u>	<u>1965</u>	<u>1964</u>	<u>1965</u>	<u>1964</u>	<u>1965</u>	<u>1964</u>	<u>1965</u>
	-- number --				-- number --			
Stunt	8	13	0	4	23	3	20	2
Mosaic	1	1	0	5	0	5	0	5
Shoestring	0	1	0	0	0	0	0	0
Ringspot	<u>0</u>	<u>0</u>	<u>565</u>	<u>244</u>	<u>0</u>	<u>0</u>	<u>82</u>	<u>64</u>
Total	9	15	565	253	23	8	102	71

Red Stele Disease of Strawberries

During March, strawberry plantings of 14 growers, representing a total of 50.75 acres, were inspected.

TABLE 5. RED STELE DISEASE CERTIFICATION PROGRAM, 1966

<u>County</u>	<u>Number of growers</u>	<u>Acreage</u>
Atlantic	3	24.50
Burlington	1	6.00
Cape May	1	2.25
Cumberland	1	1.50
Gloucester	3	9.00
Hunterdon	1	1.50
Mercer	2	4.25
Monmouth	1	0.25 ¹
Sussex	<u>1</u>	<u>1.50</u>
Total	14	50.75

A total of 50.50 acres was certified free of red stele disease for 13 growers.

Bee Culture

Frame by frame inspections were made throughout the warm months in 20 of the 21 counties during the fiscal year. During the winter months, new and abandoned apiaries were scouted in order to locate and eradicate American foulbrood.

A total of 624 apiaries was visited and 5,819 colonies were inspected. Of these, 511 apiaries were owned by registered beekeepers and 113 by new beekeepers. The registered beekeepers maintained 5,315 colonies of bees and the new beekeepers operated 504 colonies. A total of 175 nuclei was inspected, all of which were found in queen-rearing yards.

¹One planting of 0.25 acres, rejected.

Seventy-five apiaries containing 175 colonies were found to be infected with American foulbrood. Of the infected colonies, 20 colonies were found in 10 new apiaries. A total of 68 colonies was burned by the inspectors. In 84 apiaries, 270 colonies were found to be infected with European foulbrood, a common brood disease found mostly in southern New Jersey.

Twenty-nine microscopic determinations were made. Six specimens were positive for American foulbrood; 18, for European foulbrood; and five were negative for disease. Thirteen certificates of transfer and three queen-rearing certificates were issued.

During July and August, the nectar flow was spotty throughout the State due to the drought. In sections of the State where sweet corn is grown, beekeepers lost bees through dustings of Sevin for control of corn earworm. Dry weather curbed the amount of nectar gathered from goldenrod. White and purple asters yielded nectar until the end of October in northern New Jersey; to the middle of November, in the southern part of the State.

Brood rearing continued into the first part of November, assuring good clusters of bees to go into winter. Colonies formed their winter clusters in November in preparation for cold weather. As a result of the winter survey, work was started in Cape May and Warren counties. Also, apiaries previously found to be infected with American foulbrood were rechecked to ascertain whether owners had disposed of them as recommended. Nine colonies were burned as a result of this reinspection.

Food consumption per colony was high during December, January and February. Because of high temperatures, more brood was reared, thus consuming more honey. Many colonies needed supplemental feeding to support the amount of brood raised. The winter loss was 9 per cent this year compared with last winter's 20 per cent loss. However, during April and May, adverse weather conditions retarded plant growth, causing many colonies of bees to starve. In June, when new sources of nectar and pollen were available, colony buildup was rapid. More colonies than usual swarmed this year because of lack of room and the bees being restricted in the hive during most of April and May.

TABLE 6. SUMMARY OF BEE INSPECTIONS

1965 - 1966

County	<u>Apiaries</u>		<u>Colonies</u>		Nu- clei	Crossed comb	<u>American fowlbrood</u>				<u>European fowlbrood</u>				Colonies burned	<u>Microscopic determination</u>		
	Regis- tered	New	Regis- tered	New			Regis- tered	New	Regis- tered	New	Regis- tered	New	Regis- tered	New		Afb	Efb	Neq.
Atlantic	49	15	652	42	--	--	10	1	14	2	22	2	68	2	1	2	4	--
Bergen	15	2	51	16	--	--	3	--	4	--	--	--	--	--	--	--	--	--
Burlington	18	4	198	18	90	5	2	--	2	--	4	--	11	--	--	--	8	--
Camden	15	1	189	1	--	--	4	--	6	--	6	--	12	--	--	--	--	--
Cape May	15	--	70	--	--	--	1	--	2	--	2	--	2	--	1	--	--	--
Cumberland	61	15	543	91	Essex	34	7	2	20	8	18	2	73	2	4	2	1	--
Essex	15	--	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Gloucester	25	7	349	31	--	1	2	1	11	1	4	1	12	1	5	--	1	1
Hudson	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hunterdon	67	14	771	56	85	6	2	1	3	1	1	--	1	--	--	--	1	1
Mercer	12	5	315	13	--	--	4	--	5	--	5	--	13	--	1	1	2	--
Middlesex	16	10	109	30	--	--	3	2	5	2	3	--	3	--	3	--	--	--
Monmouth	47	6	558	21	--	--	--	1	--	1	11	--	41	--	--	1	--	1
Morris	25	10	198	72	--	--	6	1	13	4	--	--	--	--	--	--	1	2
Ocean	12	--	97	--	--	--	1	--	9	--	1	--	27	--	--	--	--	--
Passaic	4	1	23	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Salem	15	5	114	13	--	--	--	--	--	--	1	--	1	--	--	--	--	--
Somerset	30	5	229	17	--	--	4	--	24	--	--	--	--	--	12	--	--	--
Sussex	18	6	269	40	--	--	10	--	30	--	--	--	--	--	37	--	--	--
Union	12	2	48	7	--	--	4	--	4	--	1	--	1	--	4	--	--	--
Warren	40	5	287	34	--	--	2	1	3	1	--	--	--	--	--	--	--	--
Total	511	113	5,140	504	175	46	65	10	155	20	79	5	265	5	68	6	18	5

Certificates of transfer issued: 13

Queen-rearing certificates issued: 3

Japanese Beetle Quarantine Enforcement

Japanese beetle regulatory work is a year-round activity. Soil, plant products and certain other materials are restricted in movement to nonregulated areas, under present quarantine regulations. In addition, summer regulations are in force, designed to control the spread of adult beetles during the flight season through common carriers and the movement of hazardous materials.

Such actions are put into effect only when and where infestations warrant them. Particular attention is given to airports, both military and civilian, from which flights are made throughout the United States and Europe. This year, aircraft originating at Newark Airport and landing at Akron-Canton and Youngstown, Ohio airports received residual treatments. This involved one flight daily during the month of August.

During the fiscal year, 3,232,047 plants were certified, either through treatment or inspection. In addition, 1,868 cubic yards of bulk soil and 547 acres of surface soil were treated. The estimated value of all materials certified was \$1,724,372. In the course of this work, 2,146 visits were made to 1,831 establishments.

Golden Nematode

A joint State-Federal survey of potato growing areas was again conducted during the year. A total of 849 soil samples was obtained from potato fields and grader sites in Atlantic, Burlington, Camden, Cumberland, Gloucester, Mercer, Middlesex and Monmouth counties. These samples represented 4,330 acres of potato land from 107 properties. No golden nematodes were found when these samples were processed.

Gypsy Moth Control

The gypsy moth program consisted of trapping for male moths during the summer of 1965, scouting of positive trap sites during the winter and early spring months, and the control operations of May and June 1966.

Gypsy Moth Trapping

Trapping began on June 21, 1965, with a total of 7,881 traps being used. Initial placement was completed by July 16. A 5/8-mile modified grid pattern for trap placement was used surrounding generally infested areas and all areas where aerial control had been applied in 1965. A 7/8-mile modified grid pattern was used for a reasonable distance south of primary suspect areas. Selected site trapping consisted of groups of traps placed at possible points of introduction in the southernmost counties.

A total of 26 men was used for the program. The first male moths emerged by July 5, and the first male was recovered on July 17 from a trap in Franklin Township, Somerset County. A total of 81 gypsy moth males was recovered from 59 traps in 11 counties.

TABLE 7. GYPSY MOTH RECOVERIES FROM TRAPPING PROGRAM, BY COUNTIES, 1965

<u>County</u>	<u>Number of moths</u>	<u>Number of sites</u>
Burlington	1	1
Camden	1	1
Hunterdon	2	2
Middlesex	4	4
Monmouth	20	18
Ocean	4	4
Passaic	1	1
Somerset	2	2
Sussex	29	16
Union	1	1
Warren	16	9

All traps were removed from the field by September 24.

Gypsy Moth Male Annihilation Program

This program was attempted again in 1965, with some modification from the previous year. Two one-mile-square areas were selected as test blocks. These blocks were located within the Jockey Hollow area of the National Historic Park near Morristown. The traps in these two areas were placed by hand on a preassigned grid. One area was trapped with a 1/16-mile grid and the other with a 1/32-mile grid.

TABLE 8. GYPSY MOTH MALE ANNIHILATION PROGRAM, 1965

<u>1/16-Mile Grid</u>			
<u>Operation</u>	<u>Date</u>	<u>Number of traps</u>	<u>Number of moths</u>
Rebaiting	7/8	3	3
1st inspection	7/19-20	130	334
2nd inspection	7/23-26	146	737
3rd inspection	7/30-8/3	146	926
4th inspection	8/10-11	63	182
5th inspection	8/18-20	<u>35</u>	<u>83</u>
Total		523	2,265
<u>1/32-Mile Grid</u>			
<u>Operation</u>	<u>Date</u>	<u>Number of traps</u>	<u>Number of moths</u>
Rebaiting	7/12-16	59	140
1st inspection	7/21-23	324	977
2nd inspection	7/27-30	252	1,163
3rd inspection	8/4-12	148	524
4th inspection	8/12-18	77	168
5th inspection	8/25-30	4	8
Test traps		<u>8</u>	<u>19</u>
Total		872	2,999

The aerial drop portion of the program was conducted over 46,843 acres of infested land in Morris and Somerset counties. A 1/16-mile grid interval was used for this operation.

Trap assembly began June 17 at Basking Ridge Airport and was completed on August 6, 1965. A total of five men was used. Thirty working days were needed to complete the assembly operation.

The first drop was initiated on June 29; the second, July 13. The third and last was completed on August 6. A total of 56,632 traps was used for the three drops.

A total of 227 traps was recovered. Three traps contained single moths. The remaining 224 traps were empty. A trap containing six male moths was recovered several weeks after the formal search.

Gypsy Moth Scouting

The scouting program began January 24 and ceased April 12. Scouting was done on a 1/2-mile grid around each positive site. An additional five men were hired for the scouting in Monmouth County. One additional man was hired to work with the two permanent inspectors in Sussex and Warren counties. The Federal inspectors scouted positive sites in the southern counties of the State. The following counties had positive sites scouted:

<u>County</u>	<u>Number of sites</u>
Burlington	1)
Camden	1) - Federal
Middlesex	4)
Ocean	4)
Monmouth	18)
Somerset	2)
Hunterdon	2) - State
Warren	9)
Sussex	16)

Approximately 6,955 acres were scouted at 57 positive trap sites. Approximately 98 egg clusters were found plus three infestations ranging in size from 250 to 500 egg clusters. These large infestations were in Hunterdon, Warren and Sussex counties.

1966 Spray Program

The 1966 program was conducted on 23,060 gross acres of land. Thirteen control blocks were treated by aircraft. The dosage used was one pound of actual carbaryl (Sevin) per acre. Treatment was begun on May 20 and was completed on June 2.

Treatment was conducted in the counties of Hunterdon, Warren and Sussex:

<u>County</u>	<u>Gross acres</u>	<u>Net acres</u>
Hunterdon	1,370	995
Warren	7,220	6,520
Sussex	<u>14,470</u>	<u>12,390</u>
Total	23,060	19,905

An additional six assistant inspectors were hired to assist the permanent men with contacting residents of the spray blocks. This was begun on April 12 and completed on April 28. Approximately 724 occupants were contacted.

All hazardous areas were marked for the pilots' guidance. Any bees in the blocks were noted and removed before treatment began. The bees were returned approximately 10 days following treatment.

The Federal contract was awarded to Mr. Hines of H & W Spraying of Midland, Texas. He reported on May 16 with three Piper Pawnees and a Cherokee 180 for the observation plane. The remainder of Mr. Hines' equipment had arrived by May 18.

The Environmental Health Division of the New Jersey Health Department had representatives in the field to obtain blood samples from the mixing crews and the ground crews. Results recorded for all personnel were negative for insecticide.

European Chafer Control

Trapping was continued during the summer of 1965. Primary consideration was given to sites in the Hudson, Essex, Bergen and Union county areas. This was adjacent to areas where infestations had been found in previous years. Also, portions of Monmouth and Middlesex counties nearest to Staten Island were trapped. Traps were also placed and visual scouting was performed at selected sites throughout the State. Special emphasis was placed on transportation sites, such as railroad yards, airports and highway interchanges. Parks and tourist attractions were also scouted and trapped.

The program was initiated on May 25. All blacklight traps were in the field by June 10. All chemical traps had been placed by June 14.

Three seasonal Federal workers were hired to assist one permanent inspector. This Department supplied four inspectors on a part-time basis to assist with visual scouting.

A total of 91 blacklight traps and 71 chemical traps was placed in the field. In all, 1,277 sites were surveyed by all methods, with a total of 36 chafers being collected from 14 locations in Hudson and Essex counties.

TABLE 9. CATCHES OF EUROPEAN CHAFER, SUMMER, 1965-66

<u>County</u>	<u>City</u>	<u>Location</u>	<u>Method^{1/}</u>	<u>Number of chafers</u>	<u>Date</u>
Essex	Newark	Marine Reserve (Center Port Newark)	B	1	June 8
Essex	Newark	Port Avenue at Terminal Drive (Center Port Newark)	V	1	June 23
Essex	Newark	Turnpike Exit 14 Cloverleaf	V	1	June 23
Essex	Newark	Turnpike Exit 14 Toll Booth	V	1	June 25
Essex	Newark	Route 19 at Delancy Street	V	1	July 1
Essex	Newark	Route 19 at Wilson Avenue	V	1	July 1
Essex	Newark	Ripley Lumber Company (Port Newark)	V	1	July 2
Hudson	Bayonne	Hudson County Park	B	2	June 9
Hudson	Hoboken	Sewerage Treatment Plant	B	3	June 10
Hudson	Jersey City	Turnpike Exit 14B (East Side)	C	10	June 11
Hudson	Jersey City	Turnpike Exit 14B (East Side)	C	5	June 22
Hudson	Jersey City	Paterson Plank Road at Congress Avenue	V	2	June 17
Hudson	Secaucus	Route 3 at Paterson Plank Road	C	1	July 1
Hudson	Union City	Washington Park (Cliff)	V	4	June 8
Hudson	Union City	18th Street at Mt. Road	V	2	June 18
Total				36	

^{1/} B - Blacklight Trap
C - Chemical Trap
V - Visual Survey

Forest Pest Surveys

Cooperative Forest Pest Detection Surveys

The cooperative forest pest detection program was initiated in New Jersey in April 1964. This program is conducted under a cooperative agreement, financed by State and Federal funds. The program is planned by representatives of this Department, the State Department of Conservation and Economic Development, and the United States Forest Service. The primary objective of the program is to get better, more complete information on injurious forest pest populations in the State. Such information will permit evaluation, prediction and, consequently, prevention of undue damage and loss to forest resources as a result of insect and disease outbreaks. This fiscal year New Jersey received \$15,000 of United States Forest Service funds for support of this program. The results of these efforts are summarized in the following report.

Forest Insect Surveys

Major Summer Insect Damage

(1) Orange-Striped Oakworm, *Anisota senatoria*

Increased populations of this insect pest were observed this year in the southeastern part of the State. Severe defoliation occurred on several thousand acres of scarlet, black, and white oaks near Brookville in Ocean County. In addition, generally light to moderate populations were found in southeastern Ocean and Burlington counties. In these areas, many thousands of acres of oaks were attacked.

(2) White Pine Weevil, *Pissodes strobi*

Sixteen white pine plantations totaling 70 acres were inspected this year for white pine weevil infestations in the northern counties. Weeviling was found to average about 4 per cent of the stand during August 1965. This was the same level of infestation as was observed in August 1964. The degree of weeviling ranged from 0 per cent to as high as 20 per cent in the plantations inspected.

Although weeviling in the southern counties is considered to be a rare occurrence, several infested trees were observed near Mount Misery in Burlington County. This was the farthest south weevil damage was observed since this survey was initiated.

(3) Other Insect Pests

Other insect pests causing, for the most part, only minor damage to hardwoods include the tulip tree scale, *Toumeyella liriodendri*, on tulip poplar; locust borer, *Megacyllene robiniae*, on black locust; birch leaf miner, *Fenusa pusilla*, on birch; and the fall webworm, *Hyphantria cunea*, on ash and walnut.

Insects found causing some damage to softwoods include the Ips engraver beetle, *Ips pini*, on pitch pine; the pine tortoise scale, *Toumeyella numismaticum*, on Scotch pine; the white pine shoot moth, *Eucosma gloriola*, on white pine; the red-headed pine sawfly, *Neodiprion lecontei*, on pitch and Scotch pines; and the pine tip moths, *Rhyacionia frustrana* and *Rhyacionia rigidana*, on pitch and Virginia pines.

Major Spring Insect Damage

Hardwood defoliation in the northern and central counties of the State once again has not only been extensive, but extremely damaging to an already drought-weakened oak forest. The aerial sketch mapping survey, followed by ground checking, showed that the following insects were primarily responsible for this devastation:

(1) Leaf Rollers, *Croesia semipurpurana* and *Archips argyrospilus*

This spring, generally moderate to heavy defoliation by the leaf rollers alone totaled nearly 70,250 acres in parts of Sussex, Passaic, and Bergen counties. This figure is slightly lower than the 80,670 acres mapped last year for this insect.

(2) Cankerworms, *Alsophila pometaria* and *Paleacrita vernata*

These insects alone contributed to about 15,790 acres of moderate to heavy defoliation in parts of Hunterdon, Mercer, Monmouth, and Ocean counties. This is a sizeable increase from the 9,070 acres seriously defoliated last year.

(3) Leaf Roller, Cankerworm Combinations

Nearly equal combinations of leaf rollers and cankerworms seriously damaged approximately 67,780 acres in Morris, Somerset, Essex, Warren, Union and Middlesex counties. This is significantly lower than the 136,890 acres mapped last year.

Combining the above estimates for all insects, we get a total of 153,820 acres of forests which were seriously damaged this year. This figure is much lower than the 226,630 acres mapped last year. A possible explanation of this reduction is discussed in the Oak Mortality and Decline section of this report.

In addition, a total of 137,140 acres had suffered some moderate damage but it was of a more scattered nature. Last year, estimates for this same class of damage was a lower 96,910 acres.

(4) European Pine Sawfly, *Neodiprion sertifer*

Sawfly egg count surveys were conducted again this spring on red and Scotch pine plantations in northern New Jersey. Approximately 390 acres of pine were inspected on 47 plantations. Of these plantations, 8 had no infestation, 15 had light infestations, 6 were moderately infested, and 18 were heavily infested. This is the third consecutive year that sawfly populations have increased sizeably. Control recommendations were made to 16 owners of pine plantations.

(5) Other Insect Pests

Associated insect pests causing, for the most part, only minor damage to hardwoods were the elm spanworm, *Ennomos subsignarius*, on maple and oak; the green fruitworm, *Lithophane antennata*, "a looper," *Phigalia titea*, linden looper, *Erranis tilaria*, and the forest tent caterpillar, *Malacosoma disstria*, on oak; and the elm leaf beetle, *Galerucella xanthomelaena*, on elm.

Insects found causing damage in varying degrees on softwoods include the pine bark aphid, *Pineus strobi*, and the white pine aphid, *Cinara strobi*, on white pine; pine needle scale, *Phenacaspis pinifoliae*, and European pine shoot moth, *Rhyacionia buoliana*, on red pine; and the pine twig gall scale, *Matsucoccus gallicola*, on pitch pine.

Forest Tree Diseases(1) Anthraxnose, *Gnomonia veneta*

The wet spring this year greatly encouraged the development of this leaf blight disease of sycamores. As a result, extensive statewide damage was observed on this species. However, many of the trees, suffering from the premature leaf drop, did re-foliate and apparently little permanent damage to the trees occurred.

(2) Fusarium Canker of Tulip-Poplar, *Fusarium solani*

This disease, first found in the State in the spring of 1965, has been found on small acreages in Mercer, Hunterdon and Somerset counties. Examinations indicate that this canker disease has been in the State for a number of years. Mortality of the affected trees at this time is not considered serious, and healing over of the cankered areas appears to be common.

Oak Mortality and Decline (Evaluation)

In conducting ground checks of defoliated areas this spring, it was observed in many cases that significant reductions in insect population levels occurred in areas where extensive mortality of the red oak group had taken place. This reduction is probably due to the fact that the red oak group, comprised of red, black, scarlet, and pin oaks, make up the insects' (especially leaf rollers) primary food source. When these species are killed, the insect population in these areas is naturally adversely affected. This hypothesis tends to be substantiated by the fact that although the total acreage seriously defoliated this year was much lower than last year, the total acreage less seriously defoliated this year, as compared with last year, was much higher. In addition, it is known from last September's aerial oak mortality survey that 157,530 acres of northern New Jersey's oak forests lost from 11 to 30 per cent of their trees, predominately of the red oak group. It is becoming increasingly more obvious each year that unless control measures are taken against these defoliating insects, much of New Jersey's forest resources will be sizeably reduced in quality (by decline) and in numbers (by mortality). Such control programs are being encouraged by this Department.

Forest Pest ControlRed Pine Scale, *Matsucoccus resinosae*

Surveys for this serious red pine insect pest were conducted this winter in parts of Somerset, Morris, Passaic and Bergen counties. In all, nearly 304 acres of red pine were examined for scale infestation. In addition, 398 ornamental red and black pines were also checked.

As a result of this year's surveys, a total of nearly 15 acres of red pine and two ornamental red pines was found to be infested, on the Wanaque Reservoir and in Erskine Lakes, respectively. A control program on the Wanaque Reservoir was organized in several "high priority" areas and a total of 4,400 red pines (four acres) were cut and burned. The remaining 11 acres of pine will be cut in October when crawler activity terminates. Both the ornamental red pines found infested on private property were cut by the owners.

Oak Leaf Roller, *Croesia semipurpurana*

In accordance with the Department's recommendation and under its supervision, 350 forested acres of the United Neighbors Organization of Bridgewater Township were treated with Sevin for control of leaf rollers. The forests were sprayed by helicopter on May 23, at the expense of the property owners. Post spray counts in the area indicated a 93 per cent control of the pest.

European Pine Sawfly, *Neodiprion sertifer*

As a result of this year's European pine sawfly egg counts, 16 property owners were notified they had a serious sawfly problem, and control measures were recommended. Seven of the owners treated their pines with the Department's sawfly virus or with insecticides. In all, a total of 140 acres of red and Scotch pines was treated.

Forest Pest Training Sessions

The annual Forest Pest Training Session, organized by the Department, was held this year in May. Those attending included many of New Jersey's forest resource managers and district foresters. The program included slides and talks on current forest pest problems of importance in the State. In addition, a field trip was conducted to familiarize the men with some of the forest pest problems that were discussed during the meeting.

BUREAU OF SEED CERTIFICATION

Grain Seed Certification

On November 16, 1965, the processing plant of the New Jersey Crop Improvement Association at Allentown caught fire and the entire structure, including six buildings, was completely destroyed. Sufficient quantities of seed were stored in other warehouses to satisfy the 1966 spring market. The directors of the Association quickly assessed their position and decided to rebuild a processing mill at the same location. The mill is presently being constructed and is expected to be in operation by November 1966.

Barley

A total of 776 acres was entered for certification, approximately 60 acres more than the previous year. Rejections, due mainly to mixtures of other crops, were higher than normal and amounted to 34 per cent of the total acreage.

Very little rainfall occurred during the growing and harvest seasons. However, yields were average and appearance was exceptionally good.

The Besbar variety contained a slight mixture of wheat and all fields had to be rogued in order to meet the certification requirements. This variety appears to be well adapted to New Jersey conditions.

The malt barley program was expanded. Ten thousand bushels of grain were accepted for malt. The administration and direction of malting barley has been placed in the hands of a grain broker. Seed stocks will be maintained by the New Jersey Crop Improvement Association.

Although the total amount of barley eligible for certification was about 3,000 bushels less than the previous year, the total sold for seed amounted to 13,000 bushels more. Actual sales in 1964 amounted to 21,991 bushels; in 1965, sales totaled 34,509 bushels.

TABLE 10. WINTER BARLEY PROGRAM, 1965

<u>Variety</u>	<u>Entered</u>	<u>Rejected</u> -- acres --	<u>Passed</u>	<u>Sealed</u> -- bushels --
Early Wong				
Foundation	1	--	1	102
Registered	14	--	14	934
Certified	79	36	43	2,945
Carry-over	--	--	--	4,572
Wong				
Foundation	2	--	2	282
Registered	31	3	28	1,557
Certified	330	97	233	13,950
Carry-over	--	--	--	1,740
Besbar	256	93	163	8,875
Penhrad	48	20	28	1,783
Tschermak				
Breeder	--	--	--	--
Foundation	<u>15</u>	<u>14</u>	<u>1</u>	<u>43</u>
Total	776	263	513	36,783

Field Corn

This was an unusual and difficult year for the production and processing of hybrid seed corn. Although the total amount of rainfall during the season was less than normal, the frequency produced adequate surface moisture and an abundant seed crop resulted. Large surpluses were anticipated and a portion of the crop was to be discarded. However, the surpluses were eliminated in the Allentown fire and the resulting crop was within a few bushels of the previous year.

Most of the seed corn drying was completed before the fire and the remaining quantities were dried on the farm.

The entire crop was processed at the Agway plant in Manheim, Pennsylvania. It was costly to transport this quantity of corn approximately 125 miles each way; however, it was necessary in order to supply farmers with New Jersey hybrid seed corn.

Two new hybrids were produced under the certification program: Agway 703 and Agway 800. An increase in these and other new hybrids is anticipated in the near future.

TABLE 11. SEED CORN PROGRAM, 1965

Hybrid	<u>Entered</u>	<u>Rejected</u>	<u>Passed</u>	<u>Sealed</u>	<u>Approved</u>	<u>Total</u>
New Jersey No. 8	109	--	109	3,296	--	3,296
New Jersey No. 9	374	15	359	9,078	--	9,078
New Jersey No. 10	56	--	56	821	--	821
New Jersey No. 11	17	17	--	--	--	--
Connecticut No. 554	24	--	24	459	--	459
Indiana No. 654	88	--	88	3,620	--	3,620
Agway No. 703	15	--	15	--	203	203
Agway No. 800	<u>48.5</u>	<u>--</u>	<u>48.5</u>	<u>--</u>	<u>2,497</u>	<u>2,497</u>
Total	731.5	32	699.5	17,274	2,700	19,974

Sweet Corn

One acre block of New Jersey No. 317 and a three-acre block of New Jersey No. 106 were produced. New Jersey No. 317 yielded 350 pounds of ungraded seed and the New Jersey No. 106 yielded 750 pounds of ungraded seed. An adequate amount of the male parent of each variety was saved. Adequate amounts of carry-over seed of New Jersey 209-A, New Jersey XP-222 and New Jersey XP-317 were available.

Carry-over seed, the 1965 crop of No. 106, No. 317 and the male parent lines were all lost in the New Jersey Crop Improvement Association fire.

However, this Department is extremely fortunate because Rutgers University has maintained the inbred material for these New Jersey hybrids. If the demand is present, these New Jersey hybrids could be produced again.

Oats

The oat acreage entered for certification was sharply reduced. Weather conditions were favorable with enough moisture to produce satisfactory returns. Yields averaged 62 bushels of the Norline variety and 43 bushels of the Beedee variety, which is 25 bushels per acre more than the previous year.

New Jersey winters are normally too cold for winter oats and the summers are too hot for spring oats; therefore, until varieties suitable to growing conditions here are available, the oat program will remain small.

TABLE 12. CERTIFIED OAT PROGRAM, 1965

Variety	<u>Entered</u>	<u>Rejected</u>	<u>Passed</u>	<u>Sealed</u>
Norline	27	8	19	1,194
Beedee	<u>22</u>	<u>--</u>	<u>22</u>	<u>954</u>
Total	49	8	41	2,148

Soybeans

A total of 17,634 bushels of soybean seed was approved compared with 4,680 bushels the previous year. Yields averaged 22 bushels per acre in 1965 and 14 bushels in 1964.

TABLE 13. SOYBEAN SEED PROGRAM, 1965

<u>Variety</u>	<u>Entered</u>	<u>Rejected</u>	<u>Fire loss</u>	<u>Passed</u>	<u>Sealed</u>	<u>Fire loss</u>
		-- acres --			-- bushels --	
Adelphia						
Breeder	0.5	--	0.5	--	--	18
Foundation	11	--	11	--	--	458
Certified	586	72	37	477	11,683.5	1,571
Clark						
Certified	114	58	21	35	264	544.5
Kent						
Certified	158	54	--	104	2,120	--
Hawkeye						
Certified	75	75	--	--	--	--
Harosoy 63						
Certified	<u>32</u>	<u>--</u>	<u>32</u>	<u>--</u>	<u>--</u>	<u>975</u>
Total	976.5	259	101.5	616	14,067.5	3,566.5

Both the breeder and foundation seed of the Adelphia variety were lost in the New Jersey Crop Improvement Association fire. Also lost were registered seed of Clark and Harosoy 63. It will take several years to rebuild the lost seed stock.

The demand for certified seed of all soybean varieties exceeded the supply despite a marked increase in production. An enlarged certified soybean program is anticipated in the future.

Wheat

Because of a sizeable carry-over of seed, the acres entered for certification were approximately 600 less than the previous year.

A cold April held the wheat plants back and then lack of rainfall during the growing season resulted in small unattractive kernels. Repeated rains at maturity delayed harvest and caused a dark kernel color.

TABLE 14. WINTER WHEAT PROGRAM, 1965

<u>Variety</u>	<u>Entered</u>	<u>Rejected</u>	<u>Passed</u>	<u>Sealed</u>
	-- acres --			-- bushels --
Redcoat				
Foundation (F-2)	30	--	30	1,170
Registered	79	--	79	2,396.5
Certified	638	9	629	20,591
Carry-over	--	--	--	878
Pennoll				
Foundation (F-2)	3	--	3	27
Registered	26	--	26	367.5
Certified	284	67	217	7,731
Carry-over	<u>--</u>	<u>--</u>	<u>--</u>	<u>229</u>
Total	1,060	76	984	33,390

Each year more wheat is being produced under contract with dealers. The farmer takes less money for his crop when contracting; however, he receives his money at harvest and is also guaranteed a certain price for his crop regardless of supply.

TABLE 15. CEREAL ACREAGE FOR CERTIFICATION, 1958-1965

<u>Year</u>	<u>Barley</u>	<u>Wheat</u>	<u>Oats</u>	<u>Corn</u>	<u>Soybeans</u>	<u>Total acres entered</u>
1965	776	1,060	49	731	976	3,592
1964	715	1,608	104	684	427	3,538
1963	434	939	38	541	258	2,210
1962	524	799	270	375	700	2,668
1961	656	616	175	547	594	2,588
1960	870	986	48	546	581	3,031
1959	475	862	13	437	642	2,429
1958	625	773	46	313	1,014	2,771

TABLE 16. CERTIFIED SEED GRAIN SEALED, 1957-1965

<u>Year</u>	<u>Corn</u>	<u>Oats</u>	<u>Wheat</u>	<u>Barley</u>	<u>Soybeans</u>	<u>Sweet corn</u>	<u>Total sealed</u>
			-- bushels --			-- bushels --	
1965	19,974	2,148	33,390	36,783	14,067	--	106,362
1964	21,278	3,423	38,802	39,751	4,680	--	107,934
1963	22,118	2,080	21,726	8,924	2,534	--	57,382
1962	20,374	9,842	15,680	29,942	5,242	41	81,121
1961	21,412	7,332	10,980	24,764	1,402	34	65,924
1960	15,063	2,980	11,069	28,411	2,067	95	59,685
1959	14,921	257	16,309	19,969	4,330	587	56,373
1958	14,654	1,275	16,583	22,659	10,854	226	66,251
1957	15,005	2,568	16,803	23,171	9,421	550	67,518

Sweet Potato Certification

The sweet potato certification program has been inactive because of the russet crack disease established in the breeding stock. Several lines of russet crack-free planting stock from the United States Department of Agriculture, Beltsville, Maryland, are being field tested. It is the intent of this Bureau to develop a program of plant production when improved planting stock is available. This Bureau will continue its work with the Bureau of Plant Pathology and the Horticulture and Forestry Department of Rutgers College of Agriculture and Environmental Science to develop a horticulturally acceptable selection.

Tomato Seed Certification

Following field inspections, 1,071 acres of tomatoes were approved for certification. This is 570 acres above the 1964 season. Also, 105 acres were approved for phytosanitary (disease content) standards. To be eligible for certification, tomato seed must be a recommended variety for New Jersey and must have an established and available source of breeder seed as well as disease freedom.

Again, irrigation was a necessity in many seed fields to obtain an average yield. This past year, dry growing conditions kept disease problems at a very low level.

The Heinz No. 1350 variety led the certified acreage with 22 per cent of the total. The next highest acreage inspected was Campbell selection No. 17. All the Heinz varieties, 1350, 1370 and 1409, first approved for certification in 1964, increased in seed acreage.

For the second year, tomato seed was processed in a barley debearder to remove pubescence from the seed. One thousand pounds of Campbell No. 17 were processed in this manner. Debearded tomato seed is easier to handle and pelletize.

TABLE 17. TOMATO SEED ACREAGE, 1965

<u>Seedsman</u>	<u>Certified</u>												<u>Total</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>135</u>	<u>721</u>	<u>1327</u>	<u>146</u>	<u>1370</u>	<u>1409</u>	<u>1350</u>	<u>Roma</u>		<u>Valiant</u>	<u>Homestead</u>
	-- acres --														
Campbell Soup Company	91	150	84	128	20	20	80	--	--	--	--	--	--	--	573
Ritter Seed Company	--	--	--	--	--	--	--	10	--	--	5	--	--	--	15
Francis C. Stokes Company	--	--	--	--	--	--	36	10	88½	28	149-1/3	3	6½	--	321-1/3
Swedesboro Seed Company	--	--	--	--	--	--	--	--	8	30	70	21	--	23	152
Total	91	150	84	128	20	20	116	20	96½	58	224-1/3	24	6½	23	1,061-1/3

PHYTOSANITARY INSPECTION

<u>Seedsman</u>	<u>Variety</u>						<u>Total</u>
	<u>1350</u>	<u>1370</u>	<u>E.S.24</u>	<u>1327</u>	<u>Homestead</u>	<u>6201</u>	
	-- acres --						
Ritter Seed Company	40	10	--	--	--	--	50
Swedesboro Seed Company	17	--	8	13	13	4	55
Total	57	10	8	13	13	4	105

TABLE 18. POUNDS OF SEED SAVED, 1965

Certified Seed

Variety

<u>Seedsman</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>135</u>	<u>721</u>	<u>1327</u>	<u>146</u>	<u>1370</u>	<u>1409</u>	<u>1350</u>	<u>Roma</u>	<u>Vali-</u> <u>ant</u>	<u>Home-</u> <u>stead</u>	<u>Total</u>
								-- pounds --							
Campbell Soup Company	1,125	5,365	250	4,450	1,200	300	2,400	--	--	--	--	--	--	--	15,090
Ritter Seed Company	--	--	--	--	--	--	--	415	--	--	350	--	--	--	765
Francis C. Stokes Company	--	--	--	--	--	--	800	0	700	580	1,800	0	420	--	4,300
Swedesboro Seed Company	--	--	--	--	--	--	--	--	690	1,625	2,700	650	--	1,280	6,945
Total	1,125	5,365	250	4,450	1,200	300	3,200	415	1,390	2,205	4,850	650	420	1,280	27,100

PHYTOSANITARY

Variety

<u>Seedsman</u>	<u>1350</u>	<u>E.S.24</u>	<u>1327</u>	<u>Homestead</u>	<u>6201</u>	<u>1370</u>	<u>Total</u>
			-- pounds --				
Ritter Seed Company	1,170	--	--	--	--	350	1,520
Swedesboro Seed Company	670	290	330	780	150	--	2,220
Total	1,840	290	330	780	150	350	3,740

TABLE 19. POUNDS OF NEW JERSEY VEGETABLE SEED EXPORTED FOR WHICH PHYTOSANITARY CERTIFICATES WERE ISSUED, 1965-1966

<u>1965</u>	<u>Columbia</u>	<u>Mauritius</u>	<u>S. Africa</u>	<u>Kenya</u> (E. Africa)	<u>Total</u>
September	11	1	--	--	12
October	--	2	--	--	2
December	--	7	--	--	7
<u>1966</u>					
March	--	--	120	100	220
May	<u>--</u>	<u>--</u>	<u>100</u>	<u>--</u>	<u>100</u>
Total	11	10	220	100	341

TABLE 20. POUNDS OF NEW JERSEY CERTIFIED TOMATO SEED VALIDATED FOR EXPORT SHIPMENT, 1965-1966

<u>1965</u>	FOR EXPORT								<u>Total</u>	
	<u>S.Africa</u>	<u>Mexico</u>	<u>India</u>	<u>Venezuela</u>	<u>(New York</u>	<u>Calif.</u>	<u>Texas</u>	<u>Conn.)</u>		<u>Ceylon</u>
August	20	--	--	--	--	--	--	--	--	20
October	--	20	2	--	--	--	--	--	--	22
November	--	105	--	12	3	--	--	--	--	120
December	105	--	--	--	--	225	--	--	--	330
<u>1966</u>										
January	300	--	--	--	--	--	--	--	--	300
March	15	--	--	--	--	--	--	--	--	15
April	--	--	--	--	--	--	--	--	75	75
May	--	--	--	--	--	--	25	--	--	25
June	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>6</u>	<u>3</u>	<u>--</u>	<u>9</u>
Total	440	125	2	12	3	225	31	3	75	916

Asparagus

The past growing season was the third asparagus seed harvest. The joint project, in cooperation with the Rutgers College of Agriculture and Environmental Science and the New Jersey Asparagus Industry Council, was maintained in a satisfactory manner.

The harvesting procedure was altered to handle the increased volume of seed. The following procedure was used for the 1965 harvest:

1. Ferns with mature berries were cut, leaving one fern per crown to allow a continuous supply of nutrients to the roots.
2. Harvested ferns were stacked in the field to dry for 10 to 20 days.
3. Ferns were threshed out over a small plot grain thresher.
4. Pulp and trash were separated and floated off from seed by a circulating water bath.
5. Seed was collected, bagged and placed in a centrifugal spinner to remove surface moisture.

6. Seed was spread on screens and artificially dried to 8 to 9 per cent moisture.
7. Fern fragments were removed by a final cleaning of seed on an air blast cleaner.
8. Seed was packaged in cotton bags of one- two- five- and ten-pound capacities, labeled and put into fireproof storage.

The seed block, maintained by the Department, produced 647 dried pounds of seed, compared with 111 pounds for the 1964 season. Another block of equal parentage produced by Alan Rook of Greenwich, was supervised by the Department. This block yielded 498 pounds of dried seed. Dried seed produced in the two blocks totaled 1,145 pounds.

Pepper Seed

The pepper seed program was initiated to make available pepper seed that had been grown and processed under regulations to assure maximum freedom from disease-producing organisms.

This past season 89 acres were entered for disease inspection. The acreage included two processing varieties and a new introduction, New Jersey No. 5, from Rutgers University. The acreage was inspected on a weekly basis during harvest.

Bacterial leaf spot, a seedborne disease, was of primary importance. No spot was found in the fields.

TABLE 21. PEPPER SEED PROGRAM, 1965

<u>Variety</u>	<u>Acreage</u>	<u>Seed saved</u> -- pounds --
Keystone Resistant Giant	23	1,150
New Jersey No. 5	5	50
Yolo Wonder	<u>61</u>	<u>2,250</u>
Total	89	3,450

Chemical treatment of pepper seed was supervised by this Department. After chemical treatment, seed samples were plated in the laboratory to detect the presence of bacterial colonies. All lots of seed were contaminant free.

Cultivated Sod

The sod certification program is progressing as expected. The acreage meeting the requirements for certification remains small; however, the high standards originally established are being maintained.

There has been a marked improvement in the quality of seed planted and the quality of sod lifted over the past three years. The producers are now aware that they must have certified sod in order to supply certain markets. In their attempt to produce certified sod, their entire operation is being upgraded. Producers are beginning to communicate with each other concerning common problems and a strong sod association may be the result.

A total of 505 acres was inspected with 211 acres rejected and 294 acres remaining in the program. Certified sod labels were issued for 180,938 square feet of sod.

Diseases such as fairy ring, weeds and mixtures of grasses were the main cause of rejections. Increased emphasis on education in the use of fungicides, herbicides and insecticides by the Rutgers College of Agriculture and Environmental Science and this Department should increase sod quality.

The New Jersey sod certification program is being used as a model for the initiation of sod programs in many other states. In a very few years, cultivated sod should completely replace the use of pasture sod.

Virus-Free Strawberry Plants

Virus-free strawberry plants were produced for the eighth year under the certification regulations. Again, demand for these superior plants increased. Four hundred thousand more plants were sold this year than last.

A total of 1,372,649 plants was certified for sale as follows:

<u>Variety</u>	<u>Plants</u> -- number --
Jerseybelle	844,450
Midway	114,424
Sparkle	29,550
Sunrise	252,225
Vesper	72,700
857	<u>59,300</u>
 Total	 1,372,649

Raspberry Plants

The Small Fruits Council, cooperating with Rutgers College of Agriculture and Environmental Science and the Department, is attempting to reactivate the raspberry industry of the State. At the present time, Maryland is taking the lead in a cooperative effort to develop acceptable stocks for New Jersey, Delaware, Maryland and Pennsylvania. Thirty thousand plants of virus-free stocks are presently being evaluated by New Jersey growers. Any stocks developed in this cooperative effort will be made available to New Jersey growers.

Soybean Cyst Nematode Survey

A total of 197 soil samples was collected from soybean fields in 11 counties for the detection of soybean cyst nematode. Soil samples were taken from all fields where symptoms similar to those produced by soybean cyst nematode were observed.

It is estimated that 33 per cent of the entire State's soybean acreage was surveyed. Soil samples were taken from 25 per cent of the soybean acreage inspected and analyzed in the laboratory. The results of the tests are found in the Bureau of Plant Laboratory report.

TABLE 22. SOYBEAN CYST NEMATODE SURVEY, 1965

<u>County</u>	<u>Acres surveyed</u>	<u>Fields surveyed</u>	<u>Acres sampled</u>	<u>Samples collected</u>
		-- number --		
Burlington	1,738	92	684	31
Camden	85	2	10	1
Cape May	95	5	50	3
Cumberland	190	20	190	20
Gloucester	227	20	227	20
Hunterdon	15	1	15	1
Mercer	4,801	152	863	34
Middlesex	2,732	75	463	20
Monmouth	5,006	167	959	29
Salem	1,905	84	685	27
Somerset	<u>836</u>	<u>24</u>	<u>329</u>	<u>11</u>
Total	17,630	642	4,475	197

Crown Vetch

This Bureau has entered into a seed production program at the Plant Materials Center, Cape May, in cooperation with the Soil Conservation Service. Two acres of Chemung foundation seed have been planted.

The purpose of the program is to supply foundation seed for certified seed fields to make large quantities available for conservation and forage purposes.

BUREAU OF PLANT PATHOLOGY

Activities were organized in three main areas: (1) Cooperative economic plant pest surveys, (2) shade tree pest surveys and (3) plant pathological diagnostic services.

Cooperative Economic Plant Pest Surveys

Surveys of two types were continued: (1) Detection---to find dangerous plant pests new to the State and (2) population---to probe initial potentials prior to the growing season (overwintering populations), and to determine first appearances and seasonal fluctuations (growing season populations) of major injurious plant pests well-known in the State.

Maize Dwarf Mosaic Detection

A first find in New Jersey of the maize dwarf mosaic virus disease of corn was made in September 1965. Potentially very destructive of sweet and field corn, the disease was first investigated in southern Ohio in 1962. In New Jersey, first finds were in sweet corn showing typical symptoms in five fields in Burlington County. Greenhouse studies at Rutgers University confirmed the identity of the virus. Little or no damage to the crops because of the disease was evident---presumably because of late infection dates. An article, "Maize Dwarf Mosaic - New Corn Disease in New Jersey" was published by Dr. Philip M. Halisky (Rutgers University) and L. Donald DeBlois (New Jersey Department of Agriculture) in the January-February 1966 issue of New Jersey Agriculture.

A survey to determine the possible presence of the disease in New Jersey had been started in mid-July 1965. Results in the State were negative until a Pennsylvania researcher on the disease sampled a suspected plant during a trip through the State. In 1965, a total of 192 corn fields was inspected in the corn-producing sections of New Jersey.

In early 1966, an intensive survey to determine the possible distribution of maize dwarf mosaic in New Jersey was planned, and in June, samples were collected from a number of suspect plants found during a survey of 34 corn fields. Greenhouse confirmation tests are in progress.

Spotted Alfalfa Aphid Detection

A statewide detection survey was conducted to determine possible spread of the spotted alfalfa aphid, Therioaphis maculata, from two isolated infestations detected in 1964. Positive finds in 13 of 127 alfalfa fields surveyed in the fall of 1965 indicated spread both within the original counties (Cumberland and Gloucester), and into adjacent counties, Salem and Cape May. The numbers of the aphid found in individual locations were considered to be small.

Detection Black Light Trapping

Black light traps were again operated near five major ports of entry: Camden, Hoboken, McGuire Air Force Base, Newark and Trenton. The insects trapped and additional specimens taken during population surveys (see below) were sorted and a total of 1,968 specimens was prepared for identification. Members of this Department, the Rutgers College of Agriculture and Environmental Science, and the United States Department of Agriculture identified many of the specimens for addition to our reference collection.

Fruit Fly Detection Trapping

Also in the vicinity of major ports of entry, trapping operations were again carried on to detect fruit flies new to the area. Sticky board, Steiner and McPhail traps were operated at 10 sites, including ship and air terminals in the New York and Philadelphia Port areas. No new species were found in a total of 270 collections forwarded to the United States Department of Agriculture for identification.

Efforts made to determine the host of Rhagoletotrypeta sp. resulted in the successful rearing of this fruit fly from hackberry fruits collected in Camden. Fruit of grape, apple, peach and wild cherry, also collected from Camden, failed to yield this insect.

Cereal Leaf Beetle

No cereal leaf beetle, Oulema melanopa, was detected in the course of inspections of a total of 305 sites throughout the State. Grain fields, corn fields and adjacent grassy areas were included in the survey.

White-Fringed Beetle

A survey for the destructive pest, white-fringed beetle, Graphognathus spp., indicated its continued absence from the State. The environs of 287 locations in the central and southern areas of New Jersey were scouted. Sites inspected included auction markets, feed mills, motels and gas stations along major highways and in municipalities.

Khapra Beetle Detection

No khapra beetles, Trogoderma granarium, were found in the course of inspections made for this serious grain pest in 86 grain-handling establishments throughout the State.

Witchweed

A total of 163 corn fields was examined for witchweed, Striga lutea, from July to October. No sign of this parasitic weed, so destructive in the Carolinas, was found.

Imported Vegetable Plant Inspection

During April and May, with help from the Bureau of Entomology, 516 lots of imported vegetable plants were inspected to determine if they were properly certified, free of important diseases and insects, and of satisfactory quality.

TABLE 23. VEGETABLE PLANT INSPECTION, 1965-66

<u>Plant type</u>	<u>Lots inspected</u>	<u>Containers in shipments</u>	<u>Containers inspected</u>
	-- number --		
Tomato	448	117,978	1,957
Pepper	50	20,016	428
Eggplant	10	381	27
Cabbage	6	249	13
Sweet potato	1	94	3
Collards	<u>1</u>	<u>80</u>	<u>4</u>
Total	516	138,798	2,432

With the exception of three shipments of tomato plants from Mississippi, all of the plants were from Georgia.

A shipment consisting of 125,000 cabbage plants and 80,000 collard plants was found to be uncertified and heavily infested with cabbage looper, diamond back moth and downy mildew. Destruction of the shipment was supervised by the Department

With a few minor exceptions, all other shipments were free of insects and diseases.

Freezing weather early in May destroyed a large percentage of planted transplants in New Jersey. A great demand for plants, in conjunction with unfavorable growing and labor conditions in the southern producing areas, resulted in more than the usual number of problems with plant quality and count. Loads of clipped plants were not uncommon.

Pear Sawfly Detection

The pear sawfly, Hoplocampa bervis, is an economically important pest of pears in Europe. It is now present in Canada and in some of the northeastern states, but is not known to be in New Jersey. Surveyed this year for the first time in the State, suspects of the sawfly were captured on yellow sticky board traps in 13 of 21 locations in central and northern sections. The specimens were forwarded to the United States Department of Agriculture for identification. Visual inspections for the sawfly at 23 sites were negative but attempts are in progress to rear adults from apples (also a host) collected during the European apple sawfly survey (see below).

Asparagus Beetle Overwintering Populations

Overwintering populations of common asparagus beetle, Crioceris asparagi, and spotted asparagus beetle, Crioceris duodecimpunctata, were determined in 53 asparagus fields in the five major asparagus-producing counties in the southern part of the State. Although counts of the beetles were found to be somewhat higher than last year, they were comparable to those encountered (except in 1964) during even-numbered years since 1957, date of the first survey.

European Corn Borer Overwintering Populations

Overwintering population and spring survival of European corn borer, Ostrinia nubilalis, were determined in fall and spring surveys respectively. The first generation infestation potential was estimated to be relatively high on the basis of the highest fall population since 1961 and low overwintering borer mortality in the 105 fields examined in March.

TABLE 24. AVERAGE NUMBER BORERS PER 100 PLANTS, FALL, 1960-1965

<u>Year</u>	<u>Borers</u>	<u>Year</u>	<u>Borers</u>
1960	176.3	1963	79.4
1961	158.4	1964	53.6
1962	110.8	1965	128.6

Meadow Spittlebug Overwintering Populations

Fall overwintering egg and spring nymphal population surveys made of meadow spittlebug, Philaenus spumarius, in 75 alfalfa fields indicated the insect to be in relatively high (overwintering), and moderate (spring) population levels, respectively.

Potato Aphid Overwintering Populations

The overwintering abundance of eggs of the potato aphid, Macrosiphum euphorbiae, was determined during January and February. In the course of inspections made in 27 sites in seven counties in the southern and central areas of the State, the number of viable eggs and, consequently, the expected initial threat of the pest were found to be low.

European Corn Borer Parasites

During the fall population survey, European corn borer larvae were collected for parasite studies. Approximately 800 larvae were obtained from 17 sites. Determinations of parasitism were made by the United States Department of Agriculture.

TABLE 25. EUROPEAN CORN BORER PARASITE RECOVERIES IN NEW JERSEY LARVAE COLLECTED, 1965

County	Borers	Borers parasitized by:			
	<u>observed</u>	<u>Macrocentrus gifuensis</u>		<u>Pyraustomyia penitalis</u>	
	-- number --	-- no. --	-- per cent --	-- no. --	-- per cent --
Warren	26	--	--	--	--
Sussex	30	3	10.0	--	--
Warren	41	1	2.4	--	--
Somerset	27	2	7.4	--	--
Hunterdon	40	--	--	--	--
Somerset	48	--	--	--	--
Middlesex	49	3	6.1	--	--
Burlington	45	5	11.1	--	--
Ocean	45	5	11.1	--	--
Camden	49	1	2.0	--	--
Burlington	52	4	7.7	--	--
Salem	52	--	--	1	1.9
Gloucester	47	4	8.5	--	--
Atlantic	46	1	2.2	--	--
Cumberland	52	--	--	--	--
Cape May	37	1	2.7	--	--
Cape May	<u>43</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>
Total	729	30	4.1	1	0.1

Alfalfa Weevil and Pea Aphid Growing Season Populations

Current growing season populations of alfalfa weevils, Hypera postica, and pea aphids, Macrosiphum pisi, were determined in 18 alfalfa fields during the spring to provide information relative to the need for and timing of control measures. Counts made in nine major alfalfa-producing counties in the State showed that pea aphid populations were relatively low. On the other hand, alfalfa weevil numbers were high, although the population peak was about a week later and somewhat lower than in the spring of 1965.

Growing Season Insect Population Black Light Trapping

Black light traps were operated in major agricultural areas in four counties to provide current growing season information on population fluctuations of several important crop pests including: Armyworm, Pseudaletia unipuncta; corn earworm, Heliothis zea; European corn borer, Ostrinia nubilalis; tobacco hornworm, Protoparce sexta; tomato hornworm, Protoparce quinquemaculata; and yellow-striped armyworm, Prodenia ornithogalli. The information obtained was forwarded to the Extension Service of the Rutgers College of Agriculture and Environmental Science for distribution to growers as an aid in achieving more effective and less expensive control through better timing of insecticide applications.

European Apple Sawfly Spread

The European apple sawfly, Hoplocampa testudinea, was found to have continued its spread in the State. Inspections of apple trees in 56 sites distributed throughout the State indicated new areas of infestation in the lower half of Warren County, the northern area of Hunterdon County, and the southern tip of Mercer County.

Plum Curculio Growing Season Populations

Semi-weekly counts were made of adult plum curculios, Conotrachelus nenuphar, during May and June. Results from two abandoned peach orchards in Gloucester County indicated populations slightly greater than last season.

Oriental Fruit Moth Growing Season Populations

Traps located in the same peach orchards examined for plum curculio were used to determine the abundance and seasonal activity of the Oriental fruit moth, Grapholitha molesta. In 1965, population peaks occurred about May 13 (first moth catch), June 25, during the first week in July, and again from July 26 to August 6. In 1966, the first moth was caught on April 27 and subsequent collections indicated a declining population during May and June to levels generally below those of 1965.

Codling Moth Growing Season Populations

Seasonal population fluctuations of codling moths, Carpocapsa pomonella, were recorded by means of traps in two abandoned apple orchards in Gloucester County. Populations in the summer of 1965 and spring of 1966 were similar to those of the year previous. They were generally below those of the Oriental fruit moth and showed less fluctuation.

Apple Maggot Growing Season Populations

Apple maggot, Rhagoletis pomonella, populations were followed by means of sticky board traps operated in three abandoned apple orchards in Gloucester and Middlesex counties. In 1965 in Gloucester County, trap catches were highest on July 2, about two weeks earlier than in 1964. In 1966, populations appeared somewhat lower than in 1965.

Cabbage and Onion Maggot Growing Season Populations

Information regarding initial appearance and subsequent abundance of cabbage maggots, Hylemya brassicae, and onion maggots, Hylemya antiqua, was obtained by operating sticky board traps in Cedarville, Great Meadows and Smithburg. No cabbage maggots were trapped in Cedarville and Smithburg during the spring of 1966. In Great Meadows on June 9, cabbage maggot flies were captured in numbers similar to 1965. In Cedarville, onion maggot populations appeared to peak on June 23 at a level somewhat higher than in 1965.

Pepper Maggot Growing Season Population

Pepper maggot, Zonosemata electa, activity during 1965 was recorded in Cedarville by means of yellow sticky board fly traps baited with ammonia. Flies were first caught on July 4 and increased in abundance quite rapidly until a peak was reached on July 30. Rapid population decline was indicated afterwards and no flies were caught in early September, just before termination of the relatively new but successful survey.

Potato Leafhopper Growing Season Populations

Weekly surveys of potato leafhoppers, Empoasca fabae, were made in the central part of the State to determine the need for and proper timing of control measures. Ten alfalfa fields were checked during July, August and September 1965. Populations were much higher than the past two seasons and growers were reminded to be sure to apply control measures.

Tomato Fruit Fly Growing Season Populations

Egg deposition counts of Drosophila fruit flies (using slit tomato fruit as indicator bait) were made in seven major tomato-producing areas to provide information for timely control of the tomato contaminant. As in 1964, 1965 weekly egg counts indicated populations sufficiently high to require control measures by August 9.

Sweet Potato Russet Crack Disease Incidence

In the fall of 1965, the survey was continued to determine the severity and distribution of the russet crack virus disease in the major sweet potato production areas in southern New Jersey. The examination included 89 sweet potato fields in five counties and indicated that the disease occurred in about the same percentage of fields as last season. However, increases were found in the incidence of russet crack in Jersey-type varieties and in disease severity within infected fields (as high as 20 per cent infected potatoes) this year. The incidence of inspected fields found to be infected ranged from 42 per cent in Gloucester County to 100 per cent in Camden County.

Peach Tree Decline Growing Season and Grower Interview Survey

Decline and death of peach trees alarmed the industry in the spring and early summer of 1965. Research and extension personnel of Rutgers University asked the Department to survey the condition. In an initial phase of survey during July and August, a total of 200 blocks representing about 75,000 peach trees was examined in 63 orchards in Atlantic, Burlington and Gloucester counties. Tree deaths averaged 15 per cent in all blocks, and in Atlantic County almost one-third of the trees in "problem" blocks were found dead. Winter injury was present on 59 per cent of all trees examined, and averaged as high as 87 per cent of the trees in Camden County problem blocks. Seventy-seven per cent of all trees were infected with Cytospora type canker; problem blocks in Atlantic, Burlington and Camden counties averaged 90 to 94 per cent cankered trees. Peach tree borers were found in 59 per cent of all blocks.

In the second, grower-interview, phase of the survey (conducted in February), detailed information was obtained on cultural and pest control practices followed in 113 of the blocks which had been inspected the previous summer. Detailed data sheets prepared for each orchard and block surveyed were made available to Rutgers research personnel for their further investigation of the tree decline.

Shade Tree Pest Surveys

Dutch Elm Disease (Calendar Year 1965)

In New Jersey localities where no control measures were applied, Dutch elm disease (caused by the fungus Ceratocystis ulmi and transmitted by elm bark beetles and through root grafts) continued to take a heavy toll of elm shade trees.

There is no known cure for Dutch elm disease, but annual losses have been greatly reduced in localities where the necessary funds have been available and proper control measures have been persistently applied.

Since discontinuation of the statewide Dutch elm disease eradication program in 1941, the Department has not been required to remove diseased elms. However with improved control methods available, Departmental Dutch elm disease control activities continued along three lines: (1) Issuance of control recommendations, (2) provision, upon request, of scouting and related diagnostic services, and (3) supervision, as required by law, of disposition of elm wood encountered by State highway contracts. Responsibility for control operations was left to local governments and private owners.

Issuance of 1965 Recommendations for Dutch Elm Disease Control in New Jersey was completed in late February. Approximately 600 copies were distributed to State institutions, county agricultural agents, shade tree commissions, certified tree experts, and others concerned with the control of Dutch elm disease.

TABLE 26. DUTCH ELM DISEASE SCOUTING, 1965

<u>County and property</u>	<u>Scouted</u>	<u>Found diseased</u>
	-- number --	
Camden		
County Institutions at Lakeland		
Spring inspection	87	10
Fall inspection	80	2
Essex		
County Parks	95	4
Burlington		
Mount Holly	<u>12</u>	<u>5</u>
Total	274	21

In addition, upon request, 60 elm trees on small private properties were inspected and 43 were found to have Dutch elm disease.

Inspections of disposition of elm wood encountered by State highway contracts were provided as follows:

<u>County</u>	<u>Vicinity</u>
Essex	Livingston Township and Milburn Township: South Orange Avenue (Section SU-187 (6))
Hudson	Bayonne and Jersey City: between 58th Street, Bayonne, and Harrison Avenue, Jersey City
Hunterdon	Raven Rock: Route New Jersey 29 (Section 5A-6A)
Somerset	Basking Ridge: Interstate Route 287 (Section 7C)

Overall, survey results indicated that good Dutch elm disease control followed proper application of the program recommended by the Department.

London Plane Canker Stain Disease (Calendar Year 1965)

As Dutch elm disease took elms, so canker stain disease continued to take heavy toll of London plane trees in localities where control measures were absent or inadequate. The disease, caused by the fungus, Ceratocystis fimbriata f. platani, is a highly contagious and lethal disease of the London plane tree.

In recent years, manpower requirements of higher priority have limited scouting for canker stain to (1) Northern New Jersey areas of recent disease activity, and (2) municipalities specifically requesting scouting during the season. Limitations along these lines were greater during 1965 than in any year since 1947, first year of the survey.

TABLE 27. LONDON PLANE DISEASE SCOUTING, 1965

<u>County and property</u>	<u>Scouted</u> -- number --	<u>Diseased newly located</u>
Camden Hi-Nella	104	10
Mercer Ewing Township	<u>598</u>	<u>0</u>
Total	702	10

Request Inspections

Special request inspections of shade tree problems other than Dutch elm disease or canker stain disease indicated the following to be among the more common tree disorders troubling the property owner:

<u>Pest or condition</u>	<u>Type tree involved</u>	<u>County</u>	<u>Month</u>
Drought and poor site (leaf scorch and dieback)	Sugar maple Red maple Norway maple	Burlington Camden Middlesex	June through September
Putnam scale insect, <u>Aspidiotus ancylus</u>	Pin oak	Burlington	July
<u>Armillaria</u> root rot <u>A. mellea</u>	London plane tree	Mercer	August
Landfill damage	Red oak	Camden	September
European elm scale insect, <u>Gossyparia spuria</u>	American elm	Bergen	March

Altogether, 20 such special inspections were made.

Plant Pathological Diagnostic Services

A total of 22 determinations was made. The following are representative:

<u>Diagnosis</u>	<u>Host plant</u>	<u>County</u>	<u>Month</u>
Dutch elm disease, <u>Ceratocystis ulmi</u> fungus	Elm	Bergen	July
Leaf scorch (Non-parasitic)	Sugar maple	Burlington	July
Wetwood (Physiological)	London plane tree	Mercer	August
<u>Cytospora</u> canker <u>Cytospora chrysosperma</u> fungus	Golden willow	Camden	September
Canker stain disease, <u>Ceratocystis fimbriata</u> f. <u>platani</u> fungus	London plane tree	Camden	October

<u>Diagnosis</u>	<u>Host plant</u>	<u>County</u>	<u>Month</u>
Bitter pit (Non-parasitic)	Apple (storage)	Atlantic	February
Downy mildew, <u>Peronospora parasitica</u> fungus	Cabbage and collards	Burlington	May
Negative for early blight <u>Alternaria solani</u> fungus	Tomato trans- plants	Burlington and Gloucester	May
<u>Sclerotinia</u> damping-off	Cabbage transplants	Cumberland	June

Seed and Certification Stock Disease Examination

Cooperating in a new sweet potato seed program, shoots and cuttings from roots of four special sweet potato stocks obtained from Dr. E. M. Hildebrand, United States Department of Agriculture sweet potato pathologist, were examined for symptoms of sweet potato russet crack virus at four- to six-week intervals during the spring of 1966. Results up to June 6, 1966, were negative for the virus, although symptoms of the internal cork virus syndrome (a less serious sweet potato virus in New Jersey) were found to be generally present in the material.

BUREAU OF PLANT LABORATORY

Bee Disease Examination

During the year, apiary inspectors and beekeepers submitted 42 suspected bee disease samples for microscopical examination. Of the total number of specimens examined, 24 were positive for European foulbrood, nine were positive for American foulbrood and nine were negative for disease. Results of examinations were submitted to the supervisor of bee culture for appropriate action.

Certified Seed Testing

Twenty-three lots of officially certified tomato seed, 10 lots of pepper seed and one lot of eggplant seed were tested to determine adequacy of chemical treatment. All lots of seed were found to be satisfactorily treated.

Strawberry Plant Examination for Nematodes

Strawberry plants grown under the virus-free certification program were sampled for plant parasitic nematodes. In accordance with certification requirements, plants are to be treated with a nematocide. One planting was found to be infected with meadow nematode and was disqualified for certification. All other plantings were found to be satisfactorily treated and no nematode problems were encountered.

Soybean Cyst Nematode Survey

Soybean cyst nematode, Heterodera glycines, an extremely injurious pest of soybeans, is found in many areas of the southern United States. For the 10th year, a systematic survey of soybean fields in this State conducted by inspectors of the Bureau of Seed Certification has failed to disclose evidence of the nematode. Of 202 soil samples processed by the laboratory, 41 samples were found to contain cysts, all of which were identified as either Heterodera weissi, the smartweed cyst nematode, or the clover cyst nematode, Heterodera trifolii. Neither of these nematodes is of agricultural significance in this State.

Request Sampling for Plant Parasitic Nematodes

During the year, 30 nurserymen requested sampling of their plantings for plant parasitic nematodes. Nematode problems were recognized in 20 nurseries and disease problems in three nurseries. In all cases, corrective measures were recommended. Five nurseries were found to have no problems.

Sod Soil Bioassay

Upon request, 176 sod samples were collected and tested to determine adequacy of chemical soil treatments. This service was provided to those sod growers desiring certification for the shipment of sod into the State of New York. Of the total number of samples tested, 89 samples were found to be unsatisfactorily treated, therefore requiring retreatment before issuance of certification. This program having been in operation for only one year, it can be expected that the number of retreatments will diminish as the growers become acquainted with the techniques of chemical application.

Sawflies in Native Pine

For the past seven years, the native sawfly populations of Neodiprion pini-rigidiae, Neodiprion pratti-paradoxicus and Neodiprion lecontei have been low. A survey conducted this past year indicated that a complex of insect parasites and disease is apparently responsible for control. The cocoon parasite, Dahlbominus fuscipennis, released by this laboratory in past years is the predominant parasite and continues to maintain an effective suppressive population.

European Pine Sawfly Virus Program

For the past six years, Neodiprion sertifer virus has been made available to red pine plantation owners for control of European pine sawfly. Upon request, prepared virus suspension was supplied to six growers. Laboratory personnel also applied virus on infested trees along roadsides in Washington Crossing State Park.

In addition, one small red pine planting in Mercer County and two plantings in Hunterdon County were virus sprayed for the purpose of virus recovery. A sufficient supply of virus material was collected to meet next year's demands.

Nursery Nematode Survey

During the summer of 1965, soil samples were collected from nurseries throughout the State for the purpose of determining the species of plant parasitic nematodes associated with the cone-bearing plants, Abies, Cedrus, Juniperus, Picea, Pinus, Pseudotsuga, Taxus, Thuja, and Tsuga.

A total of 122 samples was collected, processed and examined. The entire sampling represents 49 species of cone-bearing plants from which 21 species of plant parasitic nematodes were recovered.

TABLE 28. OCCURRENCE OF PLANT PARASITIC NEMATODES ON CONE-BEARING PLANTS, 1965-1966

<u>Nematode</u>	<u>Times recovered</u>
<u>Criconemoides annulatum</u>	1
<u>C. curvatum</u>	23
<u>C. lobatum</u>	5
<u>C. mutabile</u>	1
<u>C. xenoplax</u>	3
<u>Helicotylenchus digonicus</u>	1
<u>H. dihystra</u>	8
<u>H. platyurus</u>	1
<u>Hoplolaimus galeatus</u>	23
<u>Longidorus elongatus</u>	1
<u>Paratylenchus projectus</u>	61
<u>P. spp.</u>	4
<u>Pratylenchus convallariae</u>	1
<u>P. crenatus</u>	39
<u>P. neglectus</u>	1
<u>P. penetrans</u>	15
<u>P. vulnus</u>	5
<u>P. spp.</u>	3
<u>Rotylenchus uniformis</u>	9
<u>Trichodorus christiei</u>	3
<u>T. spp.</u>	3
<u>Tylenchorhynchus claytoni</u>	8
<u>T. dubius</u>	1
<u>Xiphinema americanum</u>	13
<u>X. sp.</u>	1

TABLE 29. NEMATODES RECOVERED FROM SPECIFIED CONE-BEARING PLANTS, 1965-66

<u>Host plant</u>	<u>No. of samples</u>	<u>Nematodes recovered</u>	<u>Frequency</u>
<u>Abies balsamea</u>	2	<u>Paratylenchus projectus</u>	1 H ^{1/}
		<u>Pratylenchus penetrans</u>	1
<u>Cedrus atlantica</u>	1	<u>Paratylenchus projectus</u>	1
		<u>Pratylenchus crenatus</u>	1
<u>C. atlantica glauca</u>	1	<u>Pratylenchus neglectus</u>	1 H
<u>C. deodara</u>	1	<u>Paratylenchus projectus</u>	1
<u>Chamaecyparis obtusa</u>	2	<u>Helicotylenchus dihytera</u>	1
		<u>Pratylenchus crenatus</u>	2
		<u>Xiphinema sp.</u>	1
<u>C. pisifera</u>	2	<u>Criconemoides curvatum</u>	1
		<u>Rotylenchus uniformis</u>	1 H
		<u>Xiphinema americanum</u>	1
<u>C. pisifera plumosa aurea</u>	4	<u>Helicotylenchus dihytera</u>	3
		<u>Paratylenchus projectus</u>	3
		<u>Pratylenchus crenatus</u>	1
<u>Juniperus chinensis pfitzeriana</u>	3	<u>Criconemoides curvatum</u>	1
		<u>C. lobatum</u>	1
		<u>C. xenoplax</u>	1
		<u>Helicotylenchus dihytera</u>	1
		<u>Hoplolaimus galeatus</u>	1
		<u>Pratylenchus crenatus</u>	2
		<u>P. penetrans</u>	1
		<u>Trichodorus christiei</u>	1
<u>J. chinensis glauca hetzi</u>	2	<u>Criconemoides curvatum</u>	1
		<u>Paratylenchus projectus</u>	1
		<u>Pratylenchus penetrans</u>	1
		<u>Trichodorus christiei</u>	1 H
		<u>Xiphinema americanum</u>	1
<u>J. excelsa stricta</u>	1	<u>Paratylenchus projectus</u>	1
		<u>Pratylenchus crenatus</u>	1
<u>J. virginia glauca</u>	1	<u>Paratylenchus projectus</u>	1
		<u>Pratylenchus vulnus</u>	1 H
<u>J. virginia keteleeri</u>	1	<u>Paratylenchus sp.</u>	1
		<u>Pratylenchus vulnus</u>	1 H
<u>J. virginia pyramidalis</u>	1	<u>Helicotylenchus platyurus</u>	1
		<u>Pratylenchus vulnus</u>	1
<u>J. virginia schottii</u>	1	<u>Criconemoides curvatum</u>	1
		<u>Helicotylenchus dihytera</u>	1
		<u>Pratylenchus crenatus</u>	1
		<u>P. vulnus</u>	1 M ^{2/}

1/ Heavy
2/ Moderate

<u>Host Plant</u>	<u>No. of samples</u>	<u>Nematodes recovered</u>	<u>Frequency</u>
<u>Picea abies</u>	9	<u>Criconemoides curvatum</u>	4 1 M
		<u>Hoplolaimus galeatus</u>	2
		<u>Paratylenchus projectus</u>	5 1 M
		<u>Pratylenchus crenatus</u>	3 1 H
		<u>P. penetrans</u>	1
		<u>Rotylenchus uniformis</u>	1
		<u>Trichodorus</u> sp.	1
		<u>Tylenchorhynchus claytoni</u>	1 M
		<u>Xiphinema americanum</u>	1
<u>P. glauca</u>	4	<u>Criconemoides curvatum</u>	1
		<u>Helicotylenchus digonicus</u>	1 H
		<u>Paratylenchus projectus</u>	2
		<u>Pratylenchus crenatus</u>	2
		<u>P. penetrans</u>	1
		<u>Tylenchorhynchus claytoni</u>	1
<u>P. glauca albertiana</u>	1	<u>Rotylenchus uniformis</u>	1
<u>P. glauca densata</u>	3	<u>Criconemoides xenoplax</u>	1
		<u>Paratylenchus projectus</u>	2
		<u>Pratylenchus crenatus</u>	1
		<u>Xiphinema americanum</u>	1
<u>P. pungens glauca</u>	4	<u>Criconemoides curvatum</u>	2
		<u>Hoplolaimus galeatus</u>	2
		<u>Paratylenchus projectus</u>	2 1 H
		<u>P. sp.</u>	1
		<u>Pratylenchus crenatus</u>	1
		<u>P. sp.</u>	1
		<u>Tylenchorhynchus claytoni</u>	1
		<u>Xiphinema americanum</u>	1 H
<u>Pinus muco mughus</u>	4	<u>Criconemoides annulatum</u>	1
		<u>C. curvatum</u>	3 1 H
		<u>C. lobatum</u>	1
		<u>C. mutable</u>	1
		<u>C. xenoplax</u>	1
		<u>Hoplolaimus galeatus</u>	1
		<u>Pratylenchus crenatus</u>	1
		<u>P. penetrans</u>	1
		<u>P. sp.</u>	1
		<u>Rotylenchus uniformis</u>	1
		<u>P. nigra</u>	2	Hoplolaimus galeatus	1
<u>Pratylenchus vulnus</u>	1		
<u>P. strobus</u>	4	<u>Paratylenchus projectus</u>	1
		<u>Pratylenchus crenatus</u>	1
		<u>P. penetrans</u>	1
		<u>P. sp.</u>	1
		<u>Tylenchorhynchus claytoni</u>	1

<u>Host plant</u>	<u>No. of samples</u>	<u>Nematodes recovered</u>	<u>Frequency</u>
<u>P. sylvestris</u>	5	<u>Criconemoides curvatum</u>	2
		<u>Hoplolaimus galeatus</u>	3
		<u>Paratylenchus projectus</u>	2
		<u>P. sp.</u>	1
		<u>Tylenchorhynchus claytoni</u>	2 H
		<u>Xiphinema americanum</u>	1 H
		<u>P. thumbergi</u>	1
<u>Pseudotsuga taxifolia</u>	5	<u>Hoplolaimus galeatus</u>	1
		<u>Paratylenchus projectus</u>	1 M
		<u>Pratylenchus crenatus</u>	2 1 M
		<u>P. penetrans</u>	1
		<u>Tylenchorhynchus dubius</u>	1
		<u>Xiphinema americanum</u>	1
<u>Taxus baccata repandens</u>	1	<u>Hoplolaimus galeatus</u>	1
		<u>Paratylenchus projectus</u>	1
		<u>Pratylenchus crenatus</u>	1 H
<u>T. "Clifton"</u>	1	<u>Paratylenchus projectus</u>	1
		<u>Pratylenchus crenatus</u>	1
<u>T. cuspidata capitata</u>	7	<u>Paratylenchus projectus</u>	4 2 M
		<u>Pratylenchus penetrans</u>	1 M
		<u>Rotylenchus uniformis</u>	1
		<u>Tylenchorhynchus claytoni</u>	1
<u>T. cuspidata "Vermeuleni"</u>	1	<u>Paratylenchus projectus</u>	1
		<u>Pratylenchus crenatus</u>	1
<u>T. "Devermann"</u>	1	<u>Paratylenchus projectus</u>	1 M
		<u>Pratylenchus crenatus</u>	1
		<u>Xiphinema americanum</u>	1
<u>T. hibernica</u>	1	<u>Paratylenchus projectus</u>	1
<u>T. intermedia</u>	1	<u>Helicotylenchus dihystra</u>	1 H
		<u>Paratylenchus projectus</u>	1
		<u>Pratylenchus crenatus</u>	1
<u>T. media "Browni"</u>	6	<u>Criconemoides lobatum</u>	1
		<u>Hoplolaimus galeatus</u>	1
		<u>Paratylenchus projectus</u>	3 1 M
			1 H
		<u>Pratylenchus crenatus</u>	1
		<u>P. penetrans</u>	1
		<u>Trichodorus sp.</u>	1
		<u>Tylenchorhynchus claytoni</u>	1
<u>Xiphinema americanum</u>	1		
<u>T. media "Hatfieldi"</u>	6	<u>Criconemoides curvatum</u>	1 H
		<u>C. lobatum</u>	1
		<u>Hoplolaimus galeatus</u>	2
		<u>Paratylenchus projectus</u>	4 1 H
		<u>Pratylenchus crenatus</u>	1
		<u>P. penetrans</u>	1
		<u>Trichodorus christiei</u>	1
<u>Xiphinema americanum</u>	1 M		

<u>Host plant</u>	<u>No. of samples</u>	<u>Nematodes recovered</u>	<u>Frequency</u>
<u>T. media</u> " <u>Hicksi</u> "	4	<u>Paratylenchus projectus</u> <u>Pratylenchus penetrans</u> <u>Rotylenchus uniformis</u>	3 1 H 1 H 1
<u>T. media</u> " <u>Wardi</u> "	5	<u>Hoplolaimus galeatus</u> <u>Longidorus elongatus</u> <u>Paratylenchus projectus</u> <u>Pratylenchus crenatus</u> <u>P. penetrans</u> <u>Xiphinema americanum</u>	1 1 4 1 H 1 1 H 1
<u>Thuja occidentalis</u>	5	<u>Criconemoides curvatum</u> <u>Helicotylenchus dihystra</u> <u>Hoplolaimus galeatus</u> <u>Paratylenchus projectus</u> <u>Pratylenchus crenatus</u> <u>Rotylenchus uniformis</u>	2 1 1 2 1 H 3 1 H 1
<u>T. occidentalis</u> " <u>Baker</u> "	1	<u>Criconemoides curvatum</u> <u>Paratylenchus projectus</u> <u>Pratylenchus penetrans</u>	1 1 1
<u>T. occidentalis</u> " <u>Berkmans</u> "	1	<u>Paratylenchus projectus</u> <u>Pratylenchus penetrans</u>	1 1
<u>T. occidentalis</u> " <u>Berryhill</u> "	1	<u>Pratylenchus crenatus</u> <u>Rotylenchus uniformis</u>	1 1
<u>T. occidentalis</u> " <u>Bushgold</u> "	3	<u>Criconemoides curvatum</u> <u>Hoplolaimus galeatus</u> <u>Paratylenchus projectus</u> <u>Pratylenchus convallariae</u> <u>P. crenatus</u> <u>Xiphinema americanum</u>	2 1 M 1 2 1 M 1 1 1
<u>T. occidentalis</u> " <u>George Peabody</u> "	1	<u>Paratylenchus projectus</u> <u>Rotylenchus uniformis</u>	1 1
<u>T. occidentalis</u> " <u>Rosenthal</u> "	1	<u>Hoplolaimus galeatus</u> <u>Paratylenchus projectus</u> <u>Pratylenchus crenatus</u>	1 1 1
<u>T. occidentalis</u> " <u>Ware</u> "	1	<u>Hoplolaimus galeatus</u> <u>Paratylenchus projectus</u> <u>Pratylenchus crenatus</u>	1 1 1
<u>T. occidentalis</u> " <u>Wintergreen Pyramidal</u> "	2	<u>Hoplolaimus galeatus</u> <u>Paratylenchus projectus</u> <u>Pratylenchus crenatus</u> <u>Xiphinema americanum</u>	1 1 2 1 M 1
<u>T. occidentalis</u> " <u>Woodward</u> "	1	<u>Pratylenchus penetrans</u>	1 M
<u>T. occidentalis</u> <u>compacta erecta</u>	2	<u>Criconemoides curvatum</u> <u>Paratylenchus projectus</u> <u>P. sp.</u> <u>Pratylenchus crenatus</u>	1 1 1 2

<u>Host plant</u>	<u>No. of samples</u>	<u>Nematodes recovered</u>	<u>Frequency</u>
<u>T. occidentalis spiralis</u>	1	<u>Criconemoides lobatum</u>	1
		<u>Paratylenchus projectus</u>	1
<u>Tsuga canadensis</u>	3	<u>Criconemoides curvatum</u>	2
		<u>Hoplolaimus galeatus</u>	1
		<u>Paratylenchus projectus</u>	1

Corn Borer Parasite Program

European corn borer continues to be an important pest of both sweet and field corn. For the past two years, the laboratory has undertaken the rearing and releasing of Bracon brevicornis, a larval parasite imported from India by the United States Department of Agriculture Agricultural Research Service, Moorestown. Although this parasite was released in this State in 1940, it did not become established. The present Bracon has been secured from a different area in India and is believed to be different in behavior.

TABLE 30. CORN BORER PARASITES RELEASED, 1965-66

<u>County</u>	<u>Bracon brevicornis</u> -- number --
Burlington	1,518
Hunterdon	340
Mercer	1,056
Middlesex	1,020
Monmouth	<u>2,886</u>
Total	6,820

It is planned to continue the rearing of Bracon as well as other corn borer parasites that can be procured from the United States Department of Agriculture.

Alfalfa Weevil Parasite Program

Since the introduction of alfalfa weevil in this State in 1951, this insect has now become the number one pest of alfalfa. With the use of insecticides limited because of residue tolerance, the farmer is provided with few tools with which to fight the weevil. For the past five years, this laboratory, in cooperation with the Agricultural Research Service, United States Department of Agriculture, has undertaken the rearing and releasing of Bathyplectes curculionis and Tetrastichus incertus, both imported larval parasites of the alfalfa weevil. As a result of this effort, both parasites are now established in all the alfalfa-growing areas of the State. In some areas of the State, Bathyplectes has attained 80 per cent parasitism on weevil larvae of first-cutting alfalfa and Tetrastichus, 95 per cent parasitism on weevil larvae of second cutting. This past year, the laboratory has undertaken the rearing and releasing of Bathyplectes anurus, another larval parasite, and Microctonus aethiops, an adult weevil parasite. With the complex of parasites, the control of alfalfa weevil looks encouraging.

TABLE 31. ALFALFA WEEVIL PARASITES RELEASED, 1965-66

County	<u>Bathyplectes</u>	<u>Bathyplectes</u>	<u>Tetrastichus</u>	<u>Microctonus</u>
	<u>curculionis</u>	<u>anurus</u>	<u>incertus</u>	<u>aethiops</u>
	-- number --			
Burlington	55	3,832	6,150	50
Cumberland	285	--	354,945	--
Hunterdon	2,271	10,052	--	700
Mercer	--	3,460	200	53
Middlesex	--	--	8,000	--
Monmouth	305	17,410	33,462	278
Salem	80	400	24,837	53
Warren	<u>4,420</u>	<u>--</u>	<u>--</u>	<u>1,120</u>
Total	7,416	35,154	427,594	2,254

Gypsy Moth Parasite Program

Over the past four years, seven species of gypsy moth parasites have been released in an effort to establish all known effective parasites into gypsy moth populations in this State. During this past year, 5,235,000 Ooencyrtus kuwanae, a hymenopterous egg parasite of the gypsy moth; 2,359 Sturmia scutellata, a tachinid larval parasite; 137 Apanteles melanoscelus, a hymenopterous larval parasite; and 338 Calosoma sycophanta, a beetle larva predaceous on gypsy moth larvae and pupae, were released at positive gypsy moth trap sites. The parasites were received from the Plant Pest Control Laboratory, United States Department of Agriculture, Naugatuck, Connecticut, and were released in the following counties:

TABLE 32. GYPSY MOTH PARASITES RELEASED, 1965-66

County	<u>Ooencyrtus</u>	<u>Sturmia</u>	<u>Apanteles</u>	<u>Calosoma</u>
	<u>kuwanae</u>	<u>scutellata</u>	<u>melanoscelus</u>	<u>sycophanta</u>
	-- number --			
Burlington	200,000	--	--	--
Camden	200,000	--	--	--
Hunterdon	148,000	--	--	--
Middlesex	286,000	--	--	--
Monmouth	1,795,000	--	--	--
Morris	--	474	--	--
Ocean	564,000	1,885	137	--
Passaic	100,000	--	--	--
Somerset	54,000	--	--	338
Sussex	1,400,000	--	--	--
Union	100,000	--	--	--
Warren	<u>388,000</u>	<u>--</u>	<u>--</u>	<u>--</u>
Total	5,235,000	2,359	137	338

During the spring of 1966, a temporary laboratory was equipped in rented garage space at Jockey Hollow, Morristown, for the rearing of collected gypsy moth larvae and pupae in an effort to determine establishment of parasites. Those parasites recovered were two tachinid parasites, Sturmia scutellata and compsilura concinnata; a hymenopterous larval parasite, Apanteles melanoscelus; a predaceous beetle larvae, Calosoma sycophanta; and a pupa parasite, Brachymeria intermedia. The recovery of Brachymeria is the first known establishment of this parasite in the State since its release two years ago. Ooencyrtus kuwanae, the egg parasite, has been recovered from egg masses collected the past winter at seven different locations.

Gypsy moth, now established, can be expected to spread throughout the State. Because of widespread establishment, chemical insecticides cannot be applied except to relatively few wooded areas on the edge of the infestation, to prevent further spread. To keep the insect under control over the rest of the State, a new approach is needed. It is now the plan of the laboratory to initiate a program of mass parasite rearing and releasing. The objective of this program would be to introduce large numbers of parasites into the gypsy moth population, where parasite populations have reached a low suppression level, thus preventing moth outbreaks.

Cabbage Looper Virus Program

Cabbage looper, because of its tolerance to insecticides, has become one of the more important insect pests of cruciferous crops. For the past two years, the laboratory has applied looper virus on small cabbage plantings in an effort to determine effectiveness of cabbage looper control. During the past year, one cabbage planting in Mercer County, two plantings in Middlesex County, and one planting in Monmouth County were virus-sprayed at regular intervals. Results had shown that the virus provides 97 per cent control of looper. As soon as the United States Department of Agriculture can provide a label of use, it is planned to make the virus available to interested growers.

Also during the year, looper larvae were laboratory reared on prepared diet for the purpose of virus propagation. This work was discontinued, however, until such time that a label of use is acquired.

Greenhouse Programs

During the spring of 1966, the new laboratory greenhouse was made ready and placed in operation. Grown for use in the alfalfa weevil parasite program were 1,500 potted alfalfa plants. In addition, corn and cruciferous plants were grown for use in other biological control and disease detection programs.

O F F I C E O F M I L K I N D U S T R Y

Floyd R. Hoffman, Director

SUMMARY OF ACTIVITIES

Establishment and Maintenance of Producer Prices

The level of fluid milk prices moved up for the first time in several years as Federal officials took emergency action to prevent threatening milk shortages. Increased price supports for manufacturing milk accompanied the increases.

The Market Administrator of the New York-New Jersey Order called for an intensive study of the advisability of using a Class I base plan. Use of a base plan was permitted by the Food and Agriculture Act of 1965.

Decisions on cooperative payments in the New York-New Jersey Order and the type of pooling in the Delaware Valley Order were still pending at the end of the fiscal year. Both issues involved voluminous testimony and required extensive study.

Establishment and Maintenance of Resale Prices

Union negotiations resulted in increased labor costs; dealer and producer organizations petitioned for a hearing to increase resale margins. On the basis of increased labor costs, Order 66-1 increased resale prices by one-half cent a quart. The Order was stayed by the Appellate Division of the New Jersey Superior Court and finally "set aside" by the New Jersey Supreme Court; Order 64-1 continues in effect.

The Office of Milk Industry cost program got underway as auditors began collecting detailed cost data; approval was received for a chief accountant to head the program.

Prevention of Unfair Business Practices

The level of school milk bids became a controversial issue. The director called for inclusion of an escalator clause in each bid; industry and State Department of Education cooperation was excellent.

Despite increases in sales, the number of producing and processing units in the State declined. Ten-year trends are shown in Tables 1 and 2.

ADMINISTRATION

Establishment and Maintenance of Producer Prices

In Federal order matters which effect New Jersey, the Office of Milk Industry maintains a memorandum of agreement with the United States Department of Agriculture. This agreement permits Federal officials to act in behalf of the Office of Milk Industry and enables use of the licensing powers of the Office of Milk Industry to strengthen enforcement of Federal order provisions within the State.

TABLE 1. TRENDS IN LICENSES, 1955-66^{1/}

	Producer Dealers (excluding raw milk)	Dealers	Processors	Manufacturers	Subdealers	Stores ^{2/}	Vending Machines ^{3/}
	-- number --						
1955-56	93	222	18	37	1,674	14,100	
1956-57	87	213	17	34	1,748	12,930	
1957-58	70	189	20	32	1,751	12,279	
1958-59	59	177	22	31	1,767	12,647	
1959-60	50	177	24	29	1,757	14,286	
1960-61	42	173	23	26	1,717	14,673	1,441
1961-62	44	164	24	25	1,674	14,679	1,229
1962-63	42	154	24	20	1,587	14,181	1,341
1963-64	32	145	23	18	1,511	13,528	1,108
1964-65	26	130	23	17	1,373	13,559	1,211
1965-66	17	120	24	16	1,244	12,796	1,384

^{1/} Stores and vending machines are licenses issued; all other data are licenses in effect at the end of the fiscal year.

^{2/} The variation in store numbers is due in part to increases in licensing fees.

^{3/} Prior to 1960-61 vending machines were not licensed.

TABLE 2. TRENDS IN PRODUCTION, PRICES AND DISTRIBUTION, 1955-66^{1/}

	Average No. Producers	Milk Purchased from N.J. Producers -- pounds --	Average Price Cwt.	Sales of Milk in N.J. -- pounds --	Production as a per cent of Sales
1955-56	3,740	1,042,919,219	\$5.16	1,975,195,130	52.8
1956-57	3,522	1,003,028,940	5.40	1,985,283,672	50.5
1957-58	3,345	1,033,743,758	5.55	1,997,633,871	51.7
1958-59	3,222	1,017,010,693	5.45	2,016,407,829	50.4
1959-60	3,100	1,080,481,000	5.44	2,066,673,151	52.3
1960-61	2,948	1,086,123,959	5.32	2,034,207,143	53.4
1961-62	2,757	1,067,017,406	5.15	2,098,528,569	50.8
1962-63	2,490	1,061,238,931	5.05	2,107,847,841	50.3
1963-64	2,298	1,013,916,416	5.11	2,164,523,183	46.8
1964-65	2,153	997,694,179	5.01	2,171,067,332	46.0
1965-66	1,841	913,162,224	5.27	2,184,593,797	41.8

^{1/} Based on reports of Office of Milk Industry licensees. Figures prior to 1961 include shipments from approximately 100 out-of-state producers.

General

In the last fiscal year, the effect of economic forces at long last turned the tide for dairymen; prices moved up. On March 1, the United States Department of Agriculture took emergency action; certain provisions of Federal orders were suspended to increase minimum Class I prices paid to dairy farmers. In some markets, the changes were effective immediately; in others, they became effective on April 1.

The action was necessary to avert milk shortages which could develop because of the continuing decline in production, officials said. They associated the drop in production with the reduction in the number of milk cows -- 4 per cent less in January 1966 than in January 1965. The drop in cow numbers resulted from several factors; these included better returns for meat production, high wages for farm labor, and excellent off-farm opportunities. Adding to the effect of falling cow numbers was the failure of production per cow to increase at its usual rate. The national average output per cow in February 1966 was two pounds less than a year earlier.

The action of the United States Department of Agriculture was expected to reverse the production trend; Federal milk orders account for about 70 per cent of the milk eligible for fluid use in the United States and the price levels effective under such orders have a highly significant effect upon the level of milk production and dairy farmer incomes.

These economic forces in the dairy industry reached a peak at a time when the government was making a genuine effort to hold down the spiraling effect of price increases. Even though prices in the agricultural sector lagged behind the rest of the economy, permitting them to catch up was expected to effect further price increases in other sectors of the economy.

The suspension of the seasonal adjustment factor in the New York-New Jersey order resulted in a preliminary Class I price for April of \$5.54 per hundredweight, 33 cents higher than would have prevailed otherwise, and 63 cents more than the price last year. The Delaware Valley Class I price was set at \$6.00 per hundredweight, the same as it had been since July 1965, and 60 cents above the April-May-June price last year.

At the time the emergency action was taken, Federal authorities announced that regional public hearings would be held to consider the appropriate levels of Class I prices to be effective during the next several months in all Federal order markets. The hearing for the New York-New Jersey and Delaware Valley orders was held in Washington, D. C., on March 10, 11 and 12, and included 24 other milk marketing orders.

As soon as the Office of Milk Industry was notified of the action taken, the provisions of the concurrent State orders, 57-3 (North Jersey) and 63-1 (South Jersey) were suspended simultaneously, and the emergency hearing in Washington announced.

Following the regional price hearings, the United States Secretary of Agriculture terminated the suspension action and instituted his decision, effective April 10. The New York-New Jersey Order returned to normal operation of its pricing formula, but with 22 cents per hundredweight added during the period from April 10 to June 30, 1966. The amended price for April 10 to 30 was \$5.43 per hundredweight, 11 cents less than the price for the first nine days of the month. The 22-cent increase in price continued through May and June. A portion of the pricing formula in the Delaware Valley Order was suspended to achieve a Class I price level of \$5.80 per hundredweight for the period from April 10 to June 30. This provided a price increase of substantially the same amount as in

other orders, but 20 cents less than the previously announced price. The Office of Milk Industry made comparable changes in each of its concurrent orders.

Despite the increases in prices, some producers were unhappy. Originally the United States Department of Agriculture contended that increases of approximately 45 cents were justified, but testimony at the hearing revealed a complicating factor. Many dealers were already committed to contracts for sales to schools and government agencies based on the normally anticipated prices. A sudden increase in price could cause substantial loss and might put some dealers in the position of selling below cost.

A telegram signed by 20 northeastern cooperatives was sent to the United States Secretary of Agriculture in April demanding a public hearing to consider increasing the Class I price levels, beginning July 1. The cooperatives represent about 40,000 producers in the New York-New Jersey and New England milk markets. On May 27, the United States Department of Agriculture announced that a series of public hearings would be held for all Federal milk marketing orders. The hearing for the New York-New Jersey, Delaware Valley and six other Federal orders was held in Washington, D. C., on June 9. In order to avert further declines in milk supplies throughout the nation, the United States Department of Agriculture took emergency action in the latter part of June to assure higher milk price levels beginning July 1 and continuing through March 1967. The amendment to the New York-New Jersey order called for a Class I milk price of \$5.50 per hundredweight, beginning July 5, 20 cents higher than the price originally announced for July. The change in the Delaware Valley order increased the Class I milk price to \$6.40 per hundredweight beginning July 1, 20 cents over the previously announced price for the month. The Office of Milk Industry was represented at the June 9 hearing and the concurrent State orders were appropriately revised.

Earlier, the United States Department of Agriculture had granted additional relief by increasing the dairy price support level, effective April 1, to \$3.50 per hundredweight. This was 26 cents over the \$3.24 price in effect for the previous year. Simultaneous with the July price changes, price supports for manufacturing milk were raised again, to \$4.00 per hundredweight.

Staff members met with United States Department of Agriculture officials to discuss Federal order matters on several occasions. Issues concerned the proposed termination of Order 4, cooperative payments in Order 2, the pricing level of the orders, the budget for Order 2 and the Class I base plan. In addition to participating in Federal hearings members of the staff served on the Order 2 Class I Base Plan Committee, met with dairy leaders to discuss order matters, and attended New Jersey Dairymen's Council meetings and special New Jersey Farm Bureau dairy meetings.

The director attended two meetings with the State Secretary of Agriculture regarding Chapters 193 and 194, P.L. 1964. These laws require that milk sold on bids to schools and State institutions be New Jersey produced milk. Enforcement of these laws is a difficult proposition: There are over 500 school boards in the State. Auditing to assure that the milk covered by a single contract is New Jersey produced can be a time-consuming proposition. At the end of the fiscal year, enforcement auditing was limited to bids for which audit requests were received.

The New York-New Jersey Order

The Order 2 hearing concerning cooperative payment provisions closed at the end of August 1965, following six weeks of testimony. Dairymen's League Cooperative Association, Inc., and the Northeast Dairy Cooperative Federation, Inc., supported the cooperative payment provisions as an essential element of their strength. Throughout the hearing, dealers contended that cooperative payments had not been

used entirely for marketwide services. The time for filing written arguments, briefs and conclusions on proposed amendments to the cooperative payment provisions of Federal Order 2 was extended to late November. At the end of the fiscal year, no findings in the matter had been announced.

The Market Administrator of Order 2 organized a committee to make an intensive study of the desirability of a Class I base plan. Representatives of the four major cooperatives, specialists in milk marketing, and industry leaders met in Syracuse on several occasions. Two major subgroups were established -- a policy group and an advisory group. The policy group must decide what recommendations to bring before producers; the advisory group evaluates alternative programs emphasizing the difficulties likely to be encountered. Seven subcommittees were established and each one was assigned a different aspect of the problem for consideration. Each subcommittee consisted of both policy and advisory members. The impact of legislation permitting the use of the base plan (The Food and Agriculture Act of 1965) was substantially reduced as a result of price increases in order prices.

Dr. Anson J. Pollard, who had been serving as acting market administrator of the New York-New Jersey order, was officially appointed administrator in September, 1965. The following prices were announced by the market administrator for milk testing 3.5 per cent butterfat.

NEW YORK-NEW JERSEY

1965	Uniform Price (per cwt.)	-- dollars --	Class I Price (per cwt.)
July	\$4.10		\$5.00
August	4.44		5.36
September	4.61		5.57
October	4.69		5.71
November	4.79		5.84
December	4.66		5.69
1966			
January	4.60		5.65
February	4.60		5.63
March	4.50		5.51
April	4.35		5.46 ^{1/}
May	4.16		5.12
June	4.22		5.12

The Delaware Valley Order

At the beginning of the fiscal year, United States Department of Agriculture officials were seriously considering termination of the Delaware Valley Order because of enforcement barriers. In lieu of termination action, a hearing was held from early October to early November.

^{1/} Pro-rated price.

Prior to the hearing, the effect on New Jersey producers of alternative Order 4 proposals was the subject of two producer meetings sponsored by the New Jersey Farm Bureau on August 25 in North Jersey and on August 27 in South Jersey. The program was the same for both meetings. Dr. William L. Park, associate professor of dairy science at Rutgers University, explained the differences in marketwide pooling as in Order 2, and individual handler pooling as in Order 4, as well as other aspects of Federal orders. United Milk Producers Cooperative Association of New Jersey supported a proposal for a Mid-Atlantic order. Inter-State Milk Producers' Cooperative, Inc., supported a proposal to keep the present order and improve its enforcement regulations.

Conflicting viewpoints on appropriate solutions to overcome the Order 4 difficulties brought about frequent heated and prolonged discussions during the hearings. The proponents for retaining the individual handler pool took a strong position to support the continuance of this type of pool. They suggested the order be amended to provide proper regulation of the cooperatives which might be involved in price-cutting practices, and stronger enforcement. Although the United States Secretary of Agriculture indicated prior to the hearing that proposals to extend the marketing area or to combine it with another Federal milk marketing area would not be considered at this hearing, testimony of this nature was presented by major New Jersey cooperatives in opposition to proposals to maintain the present order. The Office of Milk Industry was represented at all 19 sessions of the hearing, since action concerning Federal Order 4 affects the concurrent State Order 63-1. At the end of the fiscal year, findings were still pending.

The Delaware Valley Order prices for Class I milk and the average of the uniform prices paid by handlers for milk testing 3.5 per cent butterfat are shown in the following schedule.

DELAWARE VALLEY			
	Uniform Price (per cwt.)		Class I Price (per cwt.)
1965		-- dollars --	
July	\$5.50		\$6.00
August	5.43		6.00
September	5.58		6.00
October	5.59		6.00
November	5.63		6.00
December	5.59		6.00
1966			
January	5.61		6.00
February	5.54		6.00
March	5.53		6.00
April	5.36		5.86 ^{1/}
May	5.21		5.80
June	5.33		5.80

^{1/} Pro-rated price.

Establishment and Maintenance of Resale PricesGeneral

Bargaining to avert a milk strike in North and Central Jersey began on October 25 in Newark. Forty-five milk companies, Local 680 in Newark and the New Jersey Branch of Teamster Local 607 in New York were involved in the negotiations. The union, representing about 3,200 milk drivers and processing plant men, threatened to strike unless major issues were settled before midnight October 31, when the existing contract was to expire. Union and management teams met daily, and the existing contract had to be extended on a day-to-day basis until a settlement was reached on November 10. The new contract included raises amounting to about \$12 a week and a \$25 monthly increase in pension payments.

At the end of November, the director received petitions for a public hearing to consider adjusting the fixed resale prices in New Jersey because of these increased labor costs and associated changes in the rate of Social Security and Medicare. Petitions were received from two producer cooperatives and from three dealer associations:

United Milk Producers Cooperative Association of New Jersey
Inter-State Milk Producers' Cooperative, Inc.
Dairy Processors and Handlers of New Jersey, Inc.
Milk Dealers' Association of Northern New Jersey
South Jersey Milk Dealers' Association

The director announced a hearing on the matter to begin on December 27. Case and Company, Inc., which did the original Order 64-1 cost study, was retained to evaluate the impact of the cost increases; its representative presented the principal testimony for the State. Testimony of industry leaders ranged from concurrence with that of the Case and Company representative to contradiction of it.

Official Order 66-1 resulted from the hearing; it was filed with the Secretary of State on January 13, and was to become effective February 1. The new order was to increase the minimum resale prices for milk sold in New Jersey at the rate of one-half cent per quart above the minimum prices fixed in Order 64-1. The 64-1 margins were based on the cost of transportation, processing and distribution of milk; the resale prices of milk are adjusted in proportion to changes in farm prices. Order 66-1 amended the margin for the two sections of the State to reflect the increased labor rates and other associated expenses during the last two years. The one-half cent increase was actually less than that justified by the new Case and Company study.

On January 26, Garden State Farms, a firm specializing in gallon and half-gallon bottles of milk, filed an appeal with the Appellate Division of the New Jersey Superior Court, challenging the price increase. This firm contended that the increase was unwarranted because labor cost increases were offset by more efficient methods adopted by the industry. Judge Sidney Goldmann granted a temporary stay to the effectiveness of Order 66-1 until February 14. The Office of Milk Industry filed a motion to dissolve the stay, but it was turned down by the same court. Therefore, notices were sent to all licensees that the price schedules in Order 66-1 were suspended until further notice.

For the second time, court action continued the stay against the Office of Milk Industry order which would have increased the minimum resale milk prices. The petition to have the stay removed and to permit the new price order to take effect was heard by the Supreme Court of New Jersey on February 14. The injunction against the order was continued and a hearing on the appeal was scheduled for March 7.

At the hearing on the appeal, attorneys representing jug dealers argued that the Office of Milk Industry price hearing should not have been limited to changes in labor costs; all cost factors should have been taken into account. The order was defended by First Assistant State Attorney General Alan B. Handler, who represented the Office of Milk Industry and by attorneys for the Dairy Processors and Handlers of New Jersey, Inc., and the South Jersey Milk Dealers' Association.

Finally, in April, Order 66-1 was "set aside" by the Supreme Court. The Court questioned the reason for basing the increases in resale minimums solely on the grounds of increased labor costs, rather than taking testimony on all costs. As a result of this action, Order 64-1, which was issued in February 1964, continues in effect.

Meanwhile, the Office of Milk Industry cost program, designed to consider all cost factors, got underway. Seven members of the Auditing Bureau, the principal auditor, supervising auditor, a senior auditor and four auditors, began collecting detailed cost data in March. The program took a giant step forward when approval was received for three cost program positions: chief accountant, auditor and statistician. At the end of the fiscal year, a chief accountant had been employed, but the other positions remained open. A 32-page progress report on the cost program was completed in June.

The director met with representatives of the New York Department of Agriculture and Markets to discuss inter-state shipments of milk which result in circumvention of price controls. Accompanied by other staff members, he met with industry leaders on several occasions to discuss development of a cost analysis program and to review milk pricing problems.

The minimum prices established by the Office of Milk Industry during the year appear in Table Three.

Prevention of Unfair Business Practices

School Bids

An increasing number of complaints contending that school milk bids were below cost led to several conferences with milk industry representatives. Finally, the director asked all licensed dealers and processors to a meeting in May to discuss prices bid for milk sold to schools and governmental agencies and other alleged violations creating unfair competition.

At the meeting, it was suggested that an escalator clause be included in bids for milk sold to schools and governmental agencies, in order to avoid below-cost sales when raw milk prices increased during the term of the contract. The director pointed out that below-cost sales, rebates or discounts resulting in sales below the fixed minimum prices, and raiding of customers by means of unfair trade practices are violations of the regulations; licensees found guilty are to be more harshly penalized than in the past. Letters concerning these issues were mailed to all milk distributors.

The director also contacted the State Departments of Education and Treasury asking their cooperation regarding sales of milk on bids. Two representatives from the Department of Education met with the director, after which a notice was sent by them to school boards throughout the State, regarding the suggested adjustment clause in contracts. The excellent cooperation of school officials resulted in a significant decrease in bidding difficulties; at the end of the fiscal year, complaints were negligible.

TABLE 3.

SUMMARY OF MINIMUM PRICES FOR SALES OF FLUID MILK: HOME DELIVERED,
DELIVERED TO STORES (WHOLESALE), SOLD OUT OF STORES
AND DELIVERED TO SUBDEALERS, 1965-66

(MILK MARKETING AREA I, NORTH JERSEY)

	Home Delivered			Delivered to Stores (Wholesale)			Sold Out of Stores			Delivered to Subdealers -- Quart Units --					
	Qt.	Half Gal.	Gal.	Qt.	Half Gal.	Gal.	Qt.	Half Gal.	Gal.	0- 400	401- 1,200	1,201- 2,000	2,001- more	Half Gal.	Gal.
	-- cents --			-- cents --			-- cents --			-- cents --					
July 1965	.27	.49	.92	.22	.40	.75	.24	.43	.80	.20	.19 7/8	.19 3/4	.19	.37½	.72
Aug. 1965	.28	.51	.96	.23	.42	.79	.25	.45	.84	.21	.20 7/8	.20 3/4	.20	.39½	.76
Sept. and Oct. 1965	.28½	.52	.98	.23½	.43	.81	.25½	.46	.86	.21½	.21 3/8	.21 1/4	.20½	.40½	.78
Nov. 1965	.29	.53	1.00	.24	.44	.83	.26	.47	.88	.22	.21 7/8	.21 3/4	.21	.41½	.80
Dec. 1965 to Feb. 1966	.28½	.52	.98	.23½	.43	.81	.25½	.46	.86	.21½	.21 3/8	.21 1/4	.20½	.40½	.78
Mar. 1966	.28	.51	.96	.23	.42	.79	.25	.45	.84	.21	.20 7/8	.20 3/4	.20	.39½	.76
Apr. 1-9 1966	.28½	.52	.98	.23½	.43	.81	.25½	.46	.86	.21½	.21 3/8	.21 1/4	.20½	.40½	.78
Apr.10-30 1966	.28	.51	.96	.23	.42	.79	.25	.45	.84	.21	.20 7/8	.20 3/4	.20	.39½	.76
May and June 1966	.27½	.50	.94	.22½	.41	.77	.24½	.44	.82	.20½	.20 3/8	.20 1/4	.19½	.38½	.74

(MILK MARKETING AREAS II AND III, SOUTH JERSEY)

July '65 thru Apr. 9, 1966	.28½	.52	.98	.23½	.43	.81	.25½	.46	.86	.21½	.21 3/8	.21 1/4	.20½	.40½	.78
Apr. 10 thru June 1966	.28	.51	.96	.23	.42	.79	.25	.45	.84	.21	.20 7/8	.20 3/4	.20	.39½	.76

Public Information Activity

In addition to preparing the regular monthly reports and the annual reports, special reports were prepared concerning prices and margins in New Jersey and adjoining states, the cost analysis program, a ten-year summary of accomplishments and other industry and Office of Milk Industry matters.

Eight annual meetings and the opening of two new plants were attended by members of the staff. In addition, meetings of the Northeast Section of the Dairy Division of the National Association of State Departments of Agriculture, the Garden State Milk Council and the State Dairy Princess Committee were attended.

Administrative Activities

The total receipts transmitted to the General Treasury of the State of New Jersey during the period July 1, 1965 to June 30, 1966, by the Office of Milk Industry were \$354,891.55.

TABLE 4. SUMMARY OF DOLLAR RECEIPTS COLLECTED BY SOURCES, 1965-66

<u>Source</u>	<u>Receipts</u>
	-- dollars --
1. License fees, 1964-65	
After July 1, 1965.....	3,984.00
2. License fees, 1965-66	
July 1, 1965 to June 30, 1966...	61,609.00
3. License fees, 1966-67	
Prior to June 30, 1966.....	283,513.00
License fee total.....	349,106.00
4. Penalties paid for violations of orders and regulations ^{1/}	5,560.00
5. Fees for calibration of glassware.	225.55
Total all receipts	354,891.55

The budget for the Office of Milk Industry is separate from that of the Department of Agriculture. The appropriation for the fiscal year 1965-66 was \$244,035. In accordance with provisions set forth in the budget, approval was obtained for additional funds out of receipts for cost of administration in addition to those specified in the budget. The Division requested and received \$31,300 out of receipts in addition to the original appropriation to cover the additional costs. Therefore, the total funds available amounted to \$275,335. The total expenditures during the period July 1, 1965, through June 30, 1966 amounted to \$266,814.99.

^{1/} This includes penalties assessed in the previous fiscal year.

LICENSING AND ENFORCEMENT

TABLE 5. I. SUMMARY OF CALLS IN THE FIELD BY INVESTIGATORS ON LICENSEES AND OTHERS, 1965-66.

Item	Calls -- number --
A. Consumers.....	584
B. Dealers.....	389
C. Stores.....	8,851
D. Subdealers.....	162
E. Others.....	37
 Total	 10,023

II. SUMMARY OF CALLS, PERMIT HOLDERS, BY MILK TEST INSPECTORS, TO PLANT LABORATORIES, BULK TANK HAULERS, FARMS AND OTHERS, 1965-66.

Item	Calls -- number --
A. Dealer inspections.....	288
B. Plant inspections.....	253
C. Farm inspections.....	314
D. Weigher and sampler inspections.....	128
E. Other calls.....	56
 Total	 1,050

III. SUMMARY OF ADDITIONAL FUNCTIONS PERFORMED, 1965-66.

Function	Number
A. Permits to purchase issued.....	79
B. Weigher and sampler certificates issued.....	401
C. Tester licenses issued.....	343
D. Tester examinations held.....	20
E. Glassware calibrated.....	5,887 (262 rejected)
F. Fresh and composite milk samples picked up and tested for butterfat content.....	7,061
G. Bulk tanks checked for proper agitation.....	79

Nine formal hearings and 29 informal hearings were held; three scheduled hearings were cancelled. Thirty informal hearings were scheduled for violations found during June. Penalties assessed during the year were \$4,680.

Establishment and Maintenance of Producer Prices

In a matter carried over from the previous fiscal year, two dealers, Stanley Zambek and Walter Thermann, were charged with failure to make the required payments to the Market Administrator Fund and Producer Settlement Fund. Following formal hearings, orders were issued revoking their licenses if payments were not made as required and reports filed; all conditions were met and the cases were closed.

During the year, nine producers were paid an additional \$176 by three milk dealers as a result of discrepancies found in the check testing of butterfat samples reported.

Establishment and Maintenance of Resale Prices

Each dealer and subdealer is required to report information relating to the accounts he services each month. The form used for this purpose was changed in April 1966 to a data processing card. During the year, approximately 18,000 of these forms were processed.

Violations of resale price laws reported during the year involved 12 dealers, 7 subdealers and 8 stores selling milk below the established minimum prices, and 3 dealers and 8 subdealers giving free merchandise to customers or those solicited to be customers.

As a result of a formal hearing held during 1964-65, Terwilleger and Wakefield, Inc., a dealer charged with selling milk to retail customers at less than minimum prices, was ordered to pay a penalty of \$1,500 or lose his license. The penalty was paid.

As the result of informal hearings held during 1965-66, two milk dealers charged with giving or lending something of value were assessed penalties by the director. They requested time to consult with company officials; these matters were pending at the close of the fiscal year. Determination of the formal hearing on Cream-O-Land Dairy's application for store milk licenses was also pending at the close of the fiscal year. The alleged violation is that applications for store milk licenses have been applied for, and some already obtained, as a subterfuge to circumvent fixed prices for milk sold by dealers to stores.

Prevention of Unfair Business Practices

Over 4,500 forms relating to changes in source of supply of milk were processed during the year; 359 refrigeration equipment seals were issued after approval of rental contracts and 26 bills of sale for refrigeration equipment were approved.

General Supermarkets, Inc., a store, was charged with changing source of supply without proper notice; following a formal hearing the licensees involved reached an agreement and the charges were withdrawn.

Joseph Ferrarella, a subdealer, was charged with transferring a route of customers to another licensed subdealer without complying with the required notice. He failed to appear for a formal hearing and his license was revoked.

Angelina Barbarula, a subdealer, was charged with acquiring a route of customers without complying with the required notice. Determination of the formal hearing was revocation of her license unless she reverted to the proper source of supply for the period required for proper notice. The conditions were met.

Frederick Brauer, a subdealer, was also charged with acquiring a route of customers without complying with the required notice. The licensees involved settled the matter and the charges were withdrawn.

Two formal hearings were held on subdealer applications because of suspicion of intent to circumvent the regulations relating to source of supply and credit matters: Stoneleigh Dairy, Inc., was granted a subdealer's license provided conditions stipulated by the director were met. The conditions were met and the license granted. Certified Farms, Inc., applied for a subdealer's license during 1964-65. The formal hearing was held in 1965-66 at which time the applicant was given an opportunity to make an agreement with other licensees involved. The application is pending.

The 1964-65 determination that a subdealer, Robert B. Harrison had legally changed his source of supply was affirmed by the Superior Court. The losing supplier, Woodruff Dairy, appealed to the Supreme Court of New Jersey; however, at the end of the fiscal year decision of the high court to review the case was still pending.

Administrative Activities

The major source of funds for the Office of Milk Industry is licensing fees. The number of licenses issued for 1965-66 was 15,831.

Dealers	133	Subdealers	1,409
Processors	24	Stores	12,796
Producer dealers	29	Vending machines	1,384
Manufacturers	16		

Total license fees collected for 1965-66 were \$335,737. License applications and fees amounting to \$9,270 were collected from 927 delinquent stores and \$180 was collected from 14 persons for bad checks submitted with license applications; 1,865 stores formerly licensed were reported out of business. Investigators cited 12 dealers, 18 subdealers and 30 stores for sales to or from stores not properly licensed.

Whitehouse Dairy, Inc., was charged with selling milk to an unlicensed subdealer and assisting an unlicensed subdealer to change brands of milk. Determination of the formal hearing regarding the matter was revocation of the firm's license or payment of a \$1,500 penalty. After the parties involved reached an agreement, the director reduced the penalty to \$200.

AUDITING

A total of 2,074 monthly reports was audited during the past fiscal year; 173 dealer and producer dealer applications and 1,400 subdealer applications were reviewed, and 18 field audits were made.

Two formal hearings and three informal hearings resulted directly from audits. Ninety-five statistical tables were prepared for monthly and annual reports and several specialized tables were prepared.

Establishment and Maintenance of Producer Prices

Statistical tabulations on production, purchases and sales were prepared monthly: Purchases of milk from producers, average price paid, number of producers, per cent utilization, imports, exports and dealer transactions, and milk available for New Jersey sales. This information is considered at hearings involving establishment of producer prices.

Each month during the year, butterfat reports were checked for nearly 1,800 New Jersey producers to assure that proper payment was made. The Licensing and Bonding Bureau of the Department was notified if a dealer began purchasing from producers for the first time and the money value of the dealer's producer purchases was provided. If the adequacy of a bond was in question or if claims were initiated, detailed information was provided. Two cases from the previous year were closed. These involved dealers who were charged with failure to pay their producers properly and with failure to make required payments to Federal-State order funds.

Establishment and Maintenance of Resale Prices

Data which are considered in establishment of resale prices were prepared: Sales according to type of product and comparison with previous years, sales according to type of outlet, and sales according to package size and type. Eleven field audits concerned possible violations of resale price laws.

Prevention of Unfair Business Practices

Over 300 forms for subdealer changes in source of supply were distributed; 81 were processed, 27 were cancelled or withdrawn; 7 were approved following hearings; 41 were approved following release from the dealer who was to lose the subdealer; and 6 were pending at the end of the year. Seven field audits concerned possible violations of unfair business practice regulations.

Public Information Activity

In addition to preparing statistics for monthly reports, data on producers, production, and sales of fluid milk, cream, chocolate milk, chocolate drink, skim milk and buttermilk were prepared monthly for the United States Department of Agriculture; an annual summary was also furnished. The New Jersey Crop Reporting Service was supplied data on producers and production and special information was prepared upon request. Members of the Bureau had frequent contact with licensees regarding auditing matters.

Administrative Activities

The Bureau assisted in processing and recording license fees. Sales data for each dealer and producer dealer were compiled for use in determining fees, and dealer and producer dealer applications were reviewed for compliance with license requirements. All subdealer applications were reviewed to assure that the sources of supply shown conformed with regulations.

MILK PRODUCTION, DISPOSITION AND INCOME

Milk production in New Jersey as reported by dealers and producer dealers fell 8.11 per cent below 1964-65 (Table 7). This was the fifth consecutive year of production decline. Order 4 producers received significantly more for their milk than Order 2 producers, the average price paid in South Jersey was \$5.84 compared with the \$5.15 average price paid in North Jersey (Tables 8 and 9).

The number of producers in the State, as reported by licensees, continued to decline despite a 5.19 per cent increase in average price per hundred-weight received (Table 10). The difference in the average uniform prices in the orders was substantially greater than the differences in average prices received (Table 11). Sales of fluid milk by New Jersey handlers increased 1.13 per cent as increasing sales in North Jersey offset decreases in South Jersey (Table 12). The opposite was true for cream sales. Decreased sales in North Jersey offset increased sales in South Jersey resulting in a net decrease of 2.91 per cent (Table 13).

Sales in quart containers fell 13.58 per cent while quart equivalent sales in all other container sizes increased (Table 14). Half-gallon containers represented only a slightly smaller per cent of total sales than quarts; little doubt is left that they will dominate the market.

TABLE 6. SUMMARY OF MILK SALES, PERCENTAGE BY VOLUME AND UNITS IN WHICH SOLD, 1965-66

<u>Units</u>	<u>Percentage of all sales</u> <u>(quart equivalent)</u>
1. Half-pints.....	6.75
2. Pints.....	1.01
3. Quarts.....	38.00
4. Half-gallons.....	36.10
5. Gallons.....	18.14
Total	100.00

Exports of milk from New Jersey increased 1.23 per cent; imports of milk increased 13.55 per cent but imports of cream fell 8.91 per cent (Tables 15, 16 and 17).

TABLE 7. PRODUCTION OF MILK AS REPORTED BY DEALERS AND
PRODUCER-DEALERS IN NEW JERSEY, 1965-66

1965	North Jersey	South Jersey	New Jersey Total
		-- pounds --	
July.....	64,834,806	12,865,144	77,699,950
August.....	64,241,025	13,316,271	77,557,296
September.....	61,928,839	12,300,627	74,229,466
October.....	62,642,046	12,666,626	75,308,672
November.....	61,050,632	12,395,048	73,445,680
December.....	65,493,271	13,591,043	79,084,314
1966			
January.....	66,276,753	13,836,404	80,113,157
February.....	63,448,204	14,114,747	77,562,951
March.....	72,656,628	14,539,840	87,196,468
April.....	71,373,913	14,057,999	85,431,912
May.....	74,570,378	14,422,342	88,992,720
June.....	<u>66,140,928</u>	<u>12,411,736</u>	<u>78,552,664</u>
Total 1965-66	794,657,423	160,517,827	955,175,250
Monthly average 1965-66	66,221,452	13,376,485	79,597,937
Total 1964-65	874,991,620	164,431,635	1,039,423,255
Per cent change 1965-66 com- pared with 1964-65	-9.18	-2.38	-8.11

TABLE 8. NUMBER OF PRODUCERS, TOTAL AMOUNT OF MILK DELIVERED,
TOTAL AMOUNT OF MONEY PAID AND AVERAGE PRICE PER MONTH
NORTH JERSEY, 1965-66

1965	Producers	Amount of Milk	Amount of Money	Price Per Hundredweight
	-- number --	-- pounds --	-- dollars --	
July.....	1,619	61,765,474	\$2,906,205.14	\$4.71
August.....	1,616	61,238,936	3,083,275.00	5.04
September....	1,601	59,025,692	3,090,714.53	5.24
October.....	1,589	59,400,651	3,191,349.13	5.37
November.....	1,567	57,752,916	3,170,260.16	5.49
December.....	1,538	62,119,027	3,331,306.48	5.36
1966				
January.....	1,517	62,691,806	3,305,651.73	5.27
February.....	1,507	60,172,973	3,202,509.51	5.32
March.....	1,530	69,063,220	3,605,258.16	5.22
April.....	1,481	67,796,369	3,431,987.64	5.06
May.....	1,473	71,093,139	3,463,391.86	4.87
June.....	<u>1,459</u>	<u>62,886,496</u>	<u>3,041,265.26</u>	<u>4.84</u>
Total 1965-66		755,006,699	\$38,823,174.60	
Monthly average 1965-66	1,541	62,917,225	3,235,264.55	\$5.15
Total 1964-65	1,814	835,926,363	40,571,750.43	4.88
Per cent change 1965-66 com- pared with 1964-65	-15.05	-9.68	-4.31	+5.53

TABLE 9. NUMBER OF PRODUCERS, TOTAL AMOUNT OF MILK DELIVERED,
TOTAL AMOUNT OF MONEY PAID AND AVERAGE PRICE PER MONTH
SOUTH JERSEY, 1965-66

1965	Producers	Amount of Milk	Amount of Money	Price Per Hundredweight
	-- number --	-- pounds --	-- dollars --	
July.....	309	12,637,010	\$728,612.30	\$5.77
August.....	304	13,111,143	747,617.10	5.70
September.....	299	12,103,431	707,959.39	5.85
October.....	302	12,477,501	744,406.68	5.97
November.....	302	12,205,992	736,784.21	6.04
December.....	314	13,400,697	807,031.40	6.02
1966				
January.....	303	13,631,268	815,855.66	5.99
February.....	300	13,916,874	820,820.29	5.90
March.....	299	14,348,896	853,560.44	5.95
April.....	292	13,864,626	796,280.28	5.74
May.....	286	14,230,932	798,544.45	5.61
June.....	<u>281</u>	<u>12,227,155</u>	<u>679,115.50</u>	<u>5.55</u>
Total 1965-66		158,155,525	\$9,236,587.70	
Monthly average 1965-66	299	13,179,627	769,715.64	\$5.84
Total 1964-65	339	161,767,816	9,180,746.44	5.68
Per cent change 1965-66 com- pared with 1964-65	-11.80	-2.23	+0.61	+2.82

TABLE 10. NUMBER OF PRODUCERS, TOTAL AMOUNT OF MILK DELIVERED, TOTAL AMOUNT OF MONEY PAID AND AVERAGE PRICE PER MONTH NEW JERSEY, 1965-66

1965	Producers	Amount of Milk	Amount of Money	Price Per Hundredweight
	-- number --	-- pounds --	-- dollars --	
July.....	1,928	74,402,484	\$3,634,817.44	\$4.89
August.....	1,920	74,350,079	3,830,892.10	5.15
September..	1,900	71,129,123	3,798,673.92	5.34
October....	1,891	71,878,152	3,935,755.81	5.48
November...	1,869	69,958,908	3,907,044.37	5.59
December...	1,852	75,519,724	4,138,337.88	5.48
1966				
January....	1,820	76,323,074	4,121,507.39	5.40
February...	1,807	74,089,847	4,023,329.80	5.43
March.....	1,829	83,412,116	4,458,818.60	5.35
April.....	1,773	81,660,995	4,228,267.92	5.18
May.....	1,759	85,324,071	4,261,936.31	5.00
June.....	<u>1,740</u>	<u>75,113,651</u>	<u>3,720,380.76</u>	<u>4.95</u>
Total 1965-66		913,162,224	\$48,059,762.30	
Monthly Average 1965-66	1,841	76,096,852	4,004,980.19	\$5.27
Total 1964-65	2,153	997,694,179	\$49,752,496.87	5.01
Per cent change 1965-66 com- pared with 1964-65	-14.49	-8.47	-3.40	+5.19

TABLE 11. MINIMUM PRICES PAID TO PRODUCERS, BY HANDLERS UNDER FEDERAL ORDERS 2 AND 4 FOR 3.5 PER CENT BUTTERFAT MILK, 1965-66

	O R D E R N O. 2				O R D E R N O. 4		
1965	Class I	Class II	Class III	Average Uniform Price	Class I	Class II	Average Uniform Price
	-- dollars per 100 pounds --				-- dollars per 100 pounds --		
July.....	\$5.00	\$3.764	\$3.210	\$4.10	\$6.00	\$3.290	\$5.50
August.....	5.36	3.914	3.310	4.44	6.00	3.390	5.43
September..	5.57	3.917	3.298	4.61	6.00	3.378	5.58
October....	5.71	3.922	3.340	4.69	6.00	3.420	5.59
November...	5.84	4.072	3.386	4.79	6.00	3.466	5.63
December...	5.69	4.072	3.480	4.66	6.00	3.560	5.59
1966							
January....	5.65	4.072	3.438	4.60	6.00	3.518	5.61
February...	5.63	3.922	3.578	4.60	6.00	3.658	5.54
March.....	5.51	3.878	3.622	4.50	6.00	3.702	5.53
April.....	5.46	4.161	3.515	4.35	5.86 ^{1/}	3.595	5.36
May.....	5.12	4.029	3.459	4.16	5.80	3.539	5.21
June.....	<u>5.12</u>	<u>4.175</u>	<u>3.583</u>	<u>4.22</u>	<u>5.80</u>	<u>3.663</u>	<u>5.33</u>
Monthly average 1965-66	5.47	3.992	3.435	4.48	5.96	3.515	5.49

^{1/} Order No. 2 Class I price April 1-9, \$5.54; April 10-30, \$5.43; Average for period, \$5.45. Order No. 4 Class I price April 1-9, \$6.00; April 10-30, \$5.80; Average for period, \$5.86.

TABLE 12. SALES OF FLUID MILK BY NEW JERSEY HANDLERS, 1965-66

1965	North Jersey	South Jersey	New Jersey Total
		-- quarts --	
July.....	56,262,779	17,156,200	73,418,979
August.....	55,682,539	17,073,229	72,755,768
September.....	58,140,093	16,540,111	74,680,204
October.....	60,421,725	17,078,259	77,499,984
November.....	58,431,353	16,569,473	75,000,826
December.....	60,165,705	16,999,619	77,165,324
1966			
January.....	59,043,793	16,632,989	75,676,782
February.....	53,925,760	15,465,180	69,390,940
March.....	60,397,601	17,325,523	77,723,124
April.....	57,759,659	16,845,097	74,604,756
May.....	56,980,196	16,294,058	73,274,254
June.....	<u>54,749,187</u>	<u>16,194,902</u>	<u>70,944,089</u>
Total 1965-66	691,960,390	200,174,640	892,135,030
Monthly average 1965-66	57,663,366	16,681,220	74,344,586
Total 1964-65	680,184,536	201,949,353	882,133,889
Per cent change 1965-66 com- pared with 1964-65	+1.73	-.88	+1.13

TABLE 13. SALES OF CREAM AS REPORTED BY NEW JERSEY HANDLERS^{1/}
1965-66

1965	North Jersey	South Jersey	New Jersey Total
		-- quarts --	
July.....	8,544,114	1,935,878	10,479,992
August.....	7,903,167	1,823,292	9,726,459
September.....	7,545,251	1,523,063	9,068,314
October.....	8,032,333	1,414,743	9,447,076
November.....	9,098,047	1,669,894	10,767,941
December.....	11,921,559	2,019,259	13,940,817
1966			
January.....	7,926,319	1,576,764	9,503,083
February.....	7,587,220	1,557,737	9,144,957
March.....	8,285,250	1,623,110	9,908,360
April.....	8,670,733	2,145,334	10,816,067
May.....	8,415,488	1,759,094	10,174,582
June.....	<u>8,908,964</u>	<u>1,813,356</u>	<u>10,722,320</u>
Total 1965-66	102,838,444	20,861,524	123,699,968
Monthly average 1965-66	8,569,870	1,738,460	10,308,331
Total 1964-65	107,152,492	20,258,818	127,411,310
Per cent change 1965-66 com- pared with 1964-65	-4.03	+2.98	-2.91

^{1/} Reported in fluid milk quart equivalents.

TABLE 14. PACKAGED SALES OF FLUID MILK REPORTED BY NEW JERSEY HANDLERS^{1/}
1965-66

Sales						
1965	Half-pints	Pints	Quarts	Half-gallons	Gallons	Total Quarts
July.....	1,592,373	651,472	28,768,824	25,419,080	12,292,716	68,724,465
August....	1,653,353	749,725	28,137,131	25,403,338	11,965,340	67,908,887
September.	4,788,830	774,023	27,731,622	25,009,700	11,957,884	70,262,059
October...	6,019,528	758,990	28,075,972	25,348,244	12,650,628	72,853,362
November..	5,416,009	701,168	26,862,267	25,098,836	12,147,408	70,225,688
December..	4,926,051	641,381	27,775,892	26,435,244	12,805,996	72,584,564
1966						
January...	5,743,179	668,918	26,381,462	25,424,268	12,946,672	71,164,499
February..	5,133,795	588,713	23,636,549	23,491,536	12,154,956	65,005,549
March.....	6,535,543	741,647	25,961,356	25,633,142	13,596,408	72,468,096
April.....	4,790,678	656,375	25,606,218	25,307,980	13,523,008	69,884,259
May.....	5,829,589	717,842	24,541,586	24,623,914	12,954,148	68,667,079
June.....	<u>3,965,426</u>	<u>774,074</u>	<u>24,114,311</u>	<u>24,547,304</u>	<u>12,627,564</u>	<u>66,028,679</u>
Total						
1965-66	56,394,354	8,424,328	317,593,190	301,742,586	151,622,728	835,777,186
Monthly average						
1965-66	4,699,530	702,027	26,466,099	25,145,216	12,635,227	69,648,099
Total						
1964-65	52,798,560	8,302,720	367,506,102	289,323,258	115,927,624	833,858,264
Per cent change						
1965-66 com- pared with						
1964-65	+6.81	+1.46	-13.58	+4.29	+30.79	+.23

^{1/} Dealer-to-dealer sales and bulk milk sales are excluded. All sizes are in quart equivalents.

TABLE 15. EXPORTS OF NEW JERSEY PRODUCED MILK, 1965-66

1965	North Jersey	South Jersey	New Jersey Total
		-- pounds --	
July.....	12,064,064	3,272,808	15,336,872
August.....	13,718,473	2,991,261	16,709,734
September.....	9,833,852	3,370,639	13,204,491
October.....	10,093,767	3,569,554	13,663,321
November.....	11,483,653	2,869,136	14,352,789
December.....	12,131,019	4,176,751	16,307,770
1966			
January.....	11,453,838	3,641,192	15,095,030
February.....	12,158,006	3,883,467	16,041,473
March.....	17,069,677	3,733,886	20,803,563
April.....	16,655,913	4,394,686	21,050,599
May.....	18,233,367	4,308,142	22,541,509
June.....	<u>15,548,939</u>	<u>3,566,665</u>	<u>19,115,604</u>
Total 1965-66	160,444,568	43,778,187	204,222,755
Monthly average 1965-66	13,370,381	3,648,182	17,018,563
Total 1964-65	173,380,145	28,367,023	201,747,168
Per cent change 1965-66 com- pared with 1964-65	-7.46	+54.33	+1.23

TABLE 16. IMPORTS OF MILK FOR NEW JERSEY UTILIZATION, 1965-66

1965	North Jersey	South Jersey	New Jersey Total
		-- pounds --	
July.....	83,867,569	30,072,297	113,939,866
August.....	84,572,981	32,703,724	117,276,705
September.....	86,864,528	31,270,006	118,134,534
October.....	88,909,011	32,365,589	121,274,600
November.....	86,478,911	30,911,012	117,389,923
December.....	87,136,412	33,518,959	120,655,371
1966			
January.....	86,344,784	32,810,675	119,155,459
February.....	75,662,957	31,899,131	107,562,088
March.....	86,301,232	33,371,181	119,672,413
April.....	79,187,835	33,272,588	112,460,423
May.....	78,334,346	34,562,980	112,897,326
June.....	<u>79,601,473</u>	<u>33,353,027</u>	<u>112,954,500</u>
Total 1965-66	1,003,262,039	390,111,169	1,393,373,208
Monthly average 1965-66	83,605,170	32,509,264	116,114,434
Total 1964-65	957,136,689	269,986,252	1,227,122,941
Per cent change 1965-66 com- pared with 1964-65	+4.82	+44.49	+13.55

TABLE 17. CREAM IMPORTED FOR USE IN NEW JERSEY, 1965-66

1965	North Jersey	South Jersey	New Jersey Total
		-- pounds --	
July.....	15,622,705	2,928,631	18,551,336
August.....	14,648,386	2,686,687	17,335,073
September.....	12,202,083	2,109,972	14,312,055
October.....	9,923,247	1,224,019	11,147,266
November.....	14,348,739	2,034,931	16,383,670
December.....	17,586,265	2,489,721	20,075,986
1966			
January.....	10,972,718	2,329,719	13,302,437
February.....	11,005,678	2,002,193	13,007,871
March.....	12,381,363	1,919,897	14,301,260
April.....	11,878,200	2,264,366	14,142,566
May.....	12,947,292	2,410,777	15,358,069
June.....	<u>14,501,698</u>	<u>2,638,517</u>	<u>17,140,215</u>
Total 1965-66	158,018,374	27,039,430	185,057,804
Monthly average 1965-66	13,168,198	2,253,286	15,421,484
Total 1964-65	172,380,766	30,778,199	203,158,965
Per cent change 1965-66 com- pared with 1964-65	-8.33	-12.15	-8.91

OFFICIAL PROCEEDINGS OF THE 51ST
ANNUAL STATE AGRICULTURAL CONVENTION

The 51st annual State Agricultural Convention was held in the Assembly Chamber of the State Capitol in Trenton, on Thursday, January 27, 1966. The meeting was called to order at 9:30 a.m. by Charles T. Pratschler, president of the State Board of Agriculture. The invocation was offered by the Reverend James H. Ainsworth, pastor of the Minisink Reformed Church, Montague.

The roll of delegates was called by Secretary of Agriculture Phillip Alampi. Those in attendance were:

DELEGATES TO THE STATE AGRICULTURAL CONVENTION

From County Boards of Agriculture

<u>Name</u>	<u>Address</u>	<u>County</u>
Angelo J. Bylone	Vineland	Atlantic
Russell Clark	Hammonton	Atlantic
Harry L. Marek	Westwood	Bergen
Jack Wellenkamp	Rivervale	Bergen
C. William Haines, Jr.	Masonville	Burlington
Lester C. Jones, Sr.	Medford	Burlington
Dan DeSilvio	Cedar Brook	Camden
Paul N. Rodio	Hammonton	Camden
Walter Betts	Woodbine	Cape May
Vincent DiLuzio	Tuckahoe	Cape May
Joseph K. Hepner, Jr.	Cedarville	Cumberland
James Manetas	Bridgeton	Cumberland
Harry L. Birdsall, Jr.	North Caldwell	Essex
Carl R. Bottone	Livingston	Essex
George C. Fabrizio	Newfield	Gloucester
Harry C. Lentz	Thorofare	Gloucester
		Hudson
		Hudson
Richard Gulick	Lambertville	Hunterdon
Robert M. Manners	Ringoes	Hunterdon
Clarence H. Steelman, Jr.	Princeton	Mercer
Harold S. Tindall	Mercerville	Mercer
Raymond Baker	Deans	Middlesex
Chester A. Steen	Plainsboro	Middlesex
John L. Hendrickson, Jr.	Middleton	Monmouth
Robert Herman	Freehold	Monmouth
Harold Farrand	Long Valley	Morris
Robert G. Weber	Dover	Morris
Daniel M. Crabbe	Toms River	Ocean
Abe Millenky	Toms River	Ocean
Harold J. Quazza	Wayne	Passaic
Leonard Reinhardt	Clifton	Passaic
Walter J. Kern, Jr.	Monroeville	Salem
Roeland deWilde, III	Bridgeton	Salem

Russell E. Hill	Neshanic Station	Somerset
Gilbert I. Runyon	Belle Mead	Somerset
		Sussex
John C. Snook, Sr.	Augusta	Sussex
Gilbert S. Bischoff	Berkeley Heights	Union
Walter M. Ritchie	Colonia	Union
Stewart S. Johnson	Great Meadows	Warren
Walton J. Kostenbader	Blairstown	Warren

From State and Pomona Granges

<u>Name</u>	<u>Address</u>	<u>County</u>
William A. Schlechtweg, Sr.	Freehold	State Grange
Martin Decker	Hammonton	Atlantic
John Claus	Fairlawn	Bergen-Passaic
C. Harold Joyce	Jobstown	Burlington
Reuben H. Dobbs	Marlton	Camden
Allan McClain	Green Creek	Cape May
Karl Wentorf	Whippany	Central District
Leon Spencer	Millville	Cumberland
Kenneth T. Stretch	Mullica Hill	Gloucester
William P. Stamets, Sr.	Milford	Hunterdon
Wilbert T. Overholt	Titusville	Mercer
		Middlesex-Somerset
Albert Kniesser	Freehold	Monmouth
Alvin L. Yeagle	Elmer	Salem
George Gass	Augusta	Sussex
Edgar Woolf	Asbury	Warren

From Breed and Commodity Organizations

American Cranberry Growers' Association, Edward V. Lipman, Bordentown.

Board of Managers, College of Agriculture, Rutgers University, J. Lee Womack, Swedesboro.

College of Agriculture, Rutgers University, Dr. Leland G. Merrill, Jr., New Brunswick.

Cooperative Marketing Associations in New Jersey, Inc., Clayton H. Stains, Flemington.

Garden State Dairy Goat Association, Mrs. John M. Richardson, Glen Gardner.

Garden State Service Cooperative Association.

Jersey Cattle Cooperative Association of New Jersey, Louis M. Kiesling, Sr., Bordentown.

Jersey Chick Association, William D. Rapp, Farmingdale.

New Jersey Aberdeen Angus Association, Dr. George W. Irmisch, Columbus.

New Jersey Agricultural Society, Michael Klein, Blairstown.

New Jersey Association of Agricultural Fairs, William J. Kinnamon, Flemington.

New Jersey Association of Nurserymen, Joseph L. Moreau, Colts Neck.

New Jersey Beekeepers' Association, Paul Yos, Lambertville.

New Jersey Brown Swiss Breeders' Association.

New Jersey Crop Improvement Cooperative Association, Inc., John H. Carson, Moorestown.

New Jersey Dairymen's Council, Herman Durr, Jr., Wrightstown.

New Jersey Farm Bureau, Arthur H. West, Allentown.

New Jersey Fur Breeders' Association.

New Jersey Guernsey Breeders' Association, Inc.

New Jersey Hereford Association.

New Jersey Holstein-Friesian Association, Inc., Charles H. Kirby, Harrisonville.

New Jersey Livestock Cooperative Association, Inc., Nicholas Super, Westville.

New Jersey Plant and Flower Growers' Association, Inc., Lester G. Pyle, Gillette.

New Jersey Pony Breeders' Association, Mrs. Lawrence Yetter, Newton.

New Jersey Sheep and Wool Cooperative Association, Thomas N. Wright, Neshanic.

New Jersey State Florists' Association, Inc., Carl J. Klotz, Robbinsville.

New Jersey State Horticultural Society, Charles E. Maier, Pine Brook.

New Jersey State Potato Association, Robert H. Reed, Cranbury.

New Jersey State Poultry Association, John Vaccaro, Princeton.

New Jersey State Rabbit and Cavy Breeders' Association.

New Jersey State Sweet Potato Industry Association, Inc., Delmo Muzzarelli, Vineland.

New Jersey Turkey Association, Richard Hinck, Neptune.

North Jersey Metropolitan Association of Nurserymen, Charles Ur, Montville.

Standardbred Breeders' and Owners' Association, John A. Homlish, Lincroft.

Thoroughbred Breeders' Association of New Jersey.

Tru-Blu Cooperative Association, C. Edman Budd, Mount Holly.

United Milk Producers Cooperative Association of New Jersey, Henry Zdancewic, Freehold.

Vegetable Growers' Association of New Jersey, Inc., Henry Becker, Freehold.

E. B. Voorhees Agricultural Society, William M. Nulton, Jr., Somerset.

APPOINTMENT OF COMMITTEES

The following committees were appointed by President Pratschler.

Nominating Committee for Members of the
State Board of Agriculture

Carl R. Bottone Chairman	Essex County Board of Agriculture
Reuben H. Dobbs Vice-Chairman	Camden County Pomona Grange
Delmo Muzzarelli	New Jersey State Sweet Potato Industry Association, Inc.
Henry Becker	Vegetable Growers Association of New Jersey, Inc.
John Claus	Bergen-Passaic Pomona Grange
George Gass	Sussex County Pomona Grange
William J. Kinnamon	New Jersey Association of Agricultural Fairs
Charles H. Kirby	New Jersey Holstein-Friesian Association, Inc.
Walton J. Kostenbader	Warren County Board of Agriculture
C. William Haines, Jr.	Burlington County Board of Agriculture
Allan Mc Clain	Cape May County Pomona Grange
Abe Millenky	Ocean County Board of Agriculture
Roeland deWilde, III	Salem County Board of Agriculture
Lester G. Pyle	New Jersey Plant and Flower Growers' Association, Inc.
Robert H. Reed	New Jersey State Potato Association
Leonard Reinhardt	Passaic County Board of Agriculture
Walter M. Ritchie	Union County Board of Agriculture
Clarence H. Steelman, Jr.	Mercer County Board of Agriculture

Nominating Committee for Election of One Member
to the Fish and Game Council

Dan DeSilvio	Camden County Board of Agriculture
Walter Betts	Cape May County Board of Agriculture

C. Edman Budd	Tru-Blu Cooperative Association
Angelo J. Bylone	Atlantic County Board of Agriculture
Joseph K. Hepner, Jr.	Cumberland County Board of Agriculture
Nicholas Super	New Jersey Livestock Cooperative Association, Inc.
Alvin L. Yeagle	Salem County Pomona Grange

Committee on Resolutions

Harry C. Lentz Chairman	Gloucester County Board of Agriculture
John H. Carson	New Jersey Crop Improvement Cooperative Association, Inc.
Richard Gulick	Hunterdon County Board of Agriculture
John L. Hendrickson, Jr.	Monmouth County Board of Agriculture
Charles E. Maier	New Jersey State Horticultural Society
Gilbert I. Runyon	Somerset County Board of Agriculture
Leon Spencer	Cumberland County Pomona Grange
Henry Zdancewic	United Milk Producers Cooperative Association of New Jersey, Inc.

Committee on Credentials

Harry L. Marek	Bergen County Board of Agriculture
William D. Rapp	Jersey Chick Association
Chester A. Steen	Middlesex County Board of Agriculture
Mrs. Lawrence Yetter	New Jersey Pony Breeders' Association

Committee to Escort the Governor

Dr. Leland G. Merrill, Jr. Chairman	College of Agriculture and Environmental Science, Rutgers University
Arthur H. West	New Jersey Farm Bureau
Michael Klein	New Jersey Agricultural Society
William M. Nulton, Jr.	E. B. Voorhees Agricultural Society
William A. Schlechtweg, Jr.	New Jersey State Grange

REPORT OF COMMITTEE ON CREDENTIALS

The credentials committee examined the certificates of the delegates and reported them to be in order.

ELECTION OF MEMBERS OF THE STATE BOARD OF AGRICULTURE

The chairman of the nominating committee placed the names of Oscar J. Grossman, a poultryman from Hunterdon County, and William P. Cadwallader, a dairyman from Salem County, 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 ONE MEMBER TO THE FISH AND GAME COUNCIL

The nominating committee placed the name of G. Albert Reid of Linwood, Atlantic County, to represent the farmers of the Southern region on the Fish and Game Council. There being no further nominations, the Secretary cast a ballot to make this election unanimous.

CITATIONS

Citations for distinguished service to agriculture were awarded to the following: The late Enoch F. Bills of Bordentown; Alvin W. String of Harrisonville; Herbert O. Wegner of Newfield; and Lloyd B. Wescott of Rosemont. A citation to Rutgers University on the occasion of its Bicentennial was received by Karl E. Metzger, secretary of the University.

The citations, read by Secretary of Agriculture Phillip Alampi, were as follows:

Citation of Enoch F. Bills

Your long career of service to New Jersey agriculture, particularly to your fellow cranberry growers, has won wide acclaim. Your lifetime dedication to the betterment of one of our oldest and most important crops is well known. As a grower, distributor, processor, engineer and plant manager you have contributed generously of your skill and ingenuity.

This is a significant occasion today. You are recognized as a worthy successor to your illustrious aunt, Elizabeth F. Lee, who pioneered so effectively in the processing of cranberries. She also was honored with a citation at the Agricultural Convention in 1941 here in this Chamber. With the same vision and initiative, you too have extended the market and created new ones, thus insuring better returns to our growers and greater renown to our State.

Your counsel and guidance have been sought by countless growers in their efforts to master the culture of this native fruit. You have inspired many to the attainment of new goals of yield and quality. You have helped to build for them a strong cooperative enterprise, itself a monument to your unselfish interest and able leadership.

Before this assembled group of delegates, the members of the State Board of Agriculture desire to express their gratitude to you for your many noteworthy contributions, and so award to you this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE.

Citation of Alvin W. String

New Jersey is proud to cite you as one of the outstanding sons of her soil. Among your neighbors and colleagues in your home county of Gloucester, you are acclaimed for your lifetime of service dedicated to others. Likewise, in State and regional farm organizations, your counsel and guidance are esteemed.

You have attained high stature as a successful dairyman, vegetable grower, farm leader and rural citizen. As a loyal and active member of the Executive Committee of your County Board of Agriculture, you have been honored repeatedly with high offices.

You have responded to frequent calls to assume leadership and responsibility in matters concerning the milk industry, the New Jersey Holstein-Friesian Association, farm labor, youth and Extension programs, farmer-sportsman relations and also as a delegate to the State Farm Bureau. In every instance you have won the gratitude and respect of your co-workers.

In the presence of these delegates, the members of the State Board of Agriculture, mindful of your recent term as a member and President of the State Board of Agriculture, express their appreciation of your worthwhile and enduring contributions by awarding to you this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE.

Citation of Herbert O. Wegner

For more than 40 years, you have been a prominent figure in the poultry industry of your adopted State, advancing from the ranks to high and important offices of responsibility. During periods of both prosperity and depression, you have spared no effort to aid your fellow poultrymen.

You have demonstrated a remarkable talent and capacity for leadership in a long roster of local, State and regional poultry organizations, always serving without compensation and often at great sacrifice. In addition to operating your own extensive enterprise, you are well known for your perseverance and dedication to the welfare of other producers.

You have devoted your best effort to building stronger and more efficient marketing agencies. The many handicaps you have so courageously faced during the difficult adjustment period currently confronting our poultrymen have never dulled your zeal for service to others. You have answered countless calls from your church, community and county government. Your neighbors and fellow citizens readily acknowledge their indebtedness.

The members of the State Board of Agriculture, grateful for your significant contributions to the welfare of our farm and rural people, and mindful of your recent term as a member and as President of this Board, award to you this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE.

Citation of Lloyd B. Wescott

Your distinguished career has embraced a broad field of service to your adopted State. We know you best as an outstanding dairy husbandman, a farm leader of rare talent, and a dedicated rural citizen. However, we are proud to acknowledge and to share with others your keen interest in education and in the well-being of all of our people.

Your Guernsey cattle have won high honors at home and throughout the nation. Thanks to your vision and generous aid, New Jersey dairy farmers were

the first to establish a cooperative artificial breeding program that has enriched the bloodlines of our cattle and inspired similar plans in other states.

With a zeal for helping your fellow dairymen, you have repeatedly guided contending groups toward compromise on difficult milk marketing problems. We also recall with gratitude your term as a member and officer of the State Board of Agriculture.

In the field of rural health and welfare, the Hunterdon County Medical Center has won nationwide recognition, thanks to your foresight and compassion. Your integrity and high purpose assured the completion of the Center, now a monument to your concept of service to mankind.

In behalf of the many who owe so much to you, the members of the State Board of Agriculture award to you this CITATION FOR DISTINGUISHED SERVICE TO NEW JERSEY AGRICULTURE.

Citation to Rutgers University

The New Jersey State Board of Agriculture, dedicated since its founding in 1872 to the betterment of living for the citizens of New Jersey, pays tribute to Rutgers University on the occasion of its Bicentennial Year and gratefully acknowledges the manifold contributions by the University, which for two centuries has devoted its energies to the advancement of scholarship, has rendered distinguished service to the agricultural and rural interests of our State, and now is responding to the new and widening demands of our dynamic society; and to Mason Welsh Gross, who as President of the University, is guiding it to an extraordinary period of growth and whose leadership in matters educational and cultural has been felt throughout the length and breadth of New Jersey.

REPORT OF THE COMMITTEE ON RESOLUTIONS

The following resolutions, presented by Harry C Lentz, and reported favorably by the Committee, were adopted by the State Agricultural Convention:

WHEREAS, the Honorable Richard J. Hughes, Governor of New Jersey, has demonstrated his interest in the agriculture and farmers of the Garden State by his signing of desirable legislation, by assisting in securing available Federal benefits during periods of drought, and in other ways; and

WHEREAS, in beginning his second term he expressed his faith in the future of New Jersey agriculture in positive fashion in his message to the Legislature two weeks ago; therefore

BE IT RESOLVED, that we, the delegates attending this Agricultural Convention of January 27, 1966, at Trenton, New Jersey, express our appreciation to Governor Hughes and commend him for his aid to agriculture in many ways, and direct that a copy of this expression be forwarded to him.

WHEREAS, the New Jersey Agricultural Experiment Station has developed off-campus research and development centers at Adelphia for work in soils and crops, at Cream Ridge for work in tree fruits, and at Oswego for work on blueberries and cranberries; and

WHEREAS, there is great need for similar research and development work on vegetable and other horticultural crops in the major area of production in southern New Jersey; therefore

BE IT RESOLVED, that we, the delegates attending this Agricultural Convention of January 27, 1966, at Trenton, New Jersey, urge that such a center be established in southern New Jersey as soon as possible; and be it

FURTHER RESOLVED, that both research and extension efforts be carried on at this location to solve and demonstrate solutions for the problems peculiar to this area; and be it

FURTHER RESOLVED, that the Executive and Legislative branches of State Government be urged to support the budgetary request of the Agricultural Experiment Station necessary to inaugurate and maintain this needed operation, and that copies of this resolution be directed to the Governor and the members of the Legislature.

WHEREAS, Governor Hughes has publicly announced the inclusion of the Food Science and Biochemistry Building in the building plans for Rutgers, the State University; and

WHEREAS, the food processing and food distribution industries in New Jersey constitute a major sector of the State's economy; and

WHEREAS, this industry contributes to the well-being of mankind everywhere; therefore

BE IT RESOLVED, that we, the delegates attending this Agricultural Convention of January 27, 1966, at Trenton, New Jersey, extend our thanks to Governor Hughes for his actions; and be it

FURTHER RESOLVED, that the President of Rutgers University and the Board of Governors of that organization be complimented for their support of education and research needs in this field of endeavor so important to New Jersey agriculture.

WHEREAS, Governor Hughes has indicated his desire to reactivate the Farmland Assessment Committee as the Rural Land Use Committee; and

WHEREAS, the benefits of the earlier committee accomplished much good for agriculture and rural areas of New Jersey; therefore

BE IT RESOLVED, that we, the delegates attending this Agricultural Convention of January 27, 1966, at Trenton, New Jersey, urge the Governor to reconstitute this committee without delay, and suggest that the composition of such committee include farmers, representatives of the New Jersey Department of Agriculture and the College of Agriculture and Environmental Science, Rutgers University.

WHEREAS, the great need for water in agricultural production has been emphasized in these last four years of drought; therefore

BE IT RESOLVED, that we, the delegates attending this Agricultural Convention of January 27, 1966, at Trenton, New Jersey, request that if it is at any time necessary to impose restrictions on the use of water, that agriculture and horticulture be recognized as basic industries of this State; and be it

FURTHER RESOLVED, that this expression be directed to Governor Hughes and to the Water Policy and Supply Council.

WHEREAS, the Honorable Raymond F. Male, Commissioner of the New Jersey Department of Labor and Industry, has long manifested a genuine interest in helping to meet the labor needs of New Jersey farmers; and

WHEREAS, he has just returned from Puerto Rico where he met with Puerto Rican officials and with the Puerto Rican Labor Negotiating Committee headed by Carleton E. Heritage, president of the New Jersey Farm Bureau, in the interest of all New Jersey users of agricultural labor; and

WHEREAS, he appeared before us this morning, only a few hours after his return, and gave a most enlightening, realistic and comprehensive description of the farm labor situation and future prospects; therefore

BE IT RESOLVED, that we, the delegates attending this Agricultural Convention of January 27, 1966 at Trenton, New Jersey, express our deep appreciation to Commissioner Male for the great service he has rendered through his interest, willingness, and talented ability to contribute so substantially to the negotiating process concerned with contracts for farm labor; and be it

FURTHER RESOLVED, that this expression of grateful appreciation be made a matter of record of this Convention and that copies be directed to the Honorable Richard J. Hughes, Governor of New Jersey, and to Commissioner Male.

WHEREAS, since this Convention of delegates last met in January, 1965, the Great Creator has called some of our active farm leaders and co-workers from our midst to their final rest, among whom are Edward H. Phillips, Jr., a member of the State Board of Agriculture from Cape May County from 1941 to 1945, and who was cited by the State Board of Agriculture in 1957 for outstanding service to New Jersey agriculture; and A. C. Schlott, longtime associate with New Jersey agriculture and in the past eight years the manager of the New Jersey Poultry Products Promotion Council, and who just last Farmers Week received the Golden Egg, the highest award of the New Jersey State Poultry Association; and

WHEREAS, the passing of these men and others of our friends is a grievous loss; therefore

BE IT RESOLVED, that it is fitting for us, the delegates to this annual Agricultural Convention on January 27, 1966 at Trenton, New Jersey, to pause in our deliberations for a moment of silence in respect to the memory of our departed friends; and be it

FURTHER RESOLVED, that this action be made a matter of record of these proceedings and that copies be sent to the respective families.

NEW JERSEY STATE LIBRARY