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New Mexico Department of Agriculture

# **BIENNIAL REPORT** 1960-61 1961-62



New Mexico State University University Park, New Mexico

New Mexico Department of Agriculture

# BIENNIAL REPORT 1960-61 1961-62



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New Mexico State University University Park, New Mexico

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# NEW MEXICO DEPARTMENT OF AGRICULTURE Office of the Director

December 1, 1962

The Hon. Edwin L. Mechem Governor of New Mexico Santa Fe, New Mexico

Dear Governor Mechem:

I have the pleasure of submitting the third biennial report of the State Department of Agriculture of the New Mexico State University for the fiscal years 1960-61 and 1961-62.

This report contains a brief record of the activities and functions performed by this Department. There is also included a financial statement of receipts and expenditures.

Respectfully submitted,

Dallas Rierson

DALLAS RIERSON, Director

DR/br

# STAFF ROSTER STATE DEPARTMENT OF AGRICULTURE NEW MEXICO STATE UNIVERSITY

# University Park, New Mexico (As of June 30, 1962)

# THE BOARD OF REGENTS OF THE UNIVERSITY

# Members Ex-Officio:

The Honorable Edwin L.	Mechem		Governor,	Santa	re
The Honorable Tom Wiley	y Supt.	of Public	Instruction,	Santa	Fe

# Members by Appointment:

Mr. Delmar Roberts, President	. Anthony
Mr. D. W. Reeves, Vice-President	Ibuquerque
Mrs. Earl Corn, Secretary-Treasurer	Dexter
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Mr. Robert O. Anderson	Roswel

#### ADMINISTRATIVE STAFF

Dr. R. B. Corbett	President, New Mexico State University
Mr. Dallas Rierson	Director, State Department of Agriculture
Mr. R. W. Ludwick	Asst. Director, State Dept. of Agriculture
	Chief, Division of Inspection
Mr. Charlie B. Whigham	Chief, Division of Markets, Weights
	and Measures
Mrs. Elizabeth B. Rutter	State Chemist
Miss Elizabeth McSwain	State Seed Analyst
Dr. Gerald L. Nielsen	Chief, Division of Plant Industry
Mr. Jack Greathouse	Inspector, Division of Inspection
Mr. Lyle A. Houk	Deputy Inspector, Division of Inspection
Mr. Emmit Brooks	Deputy Inspector, Division of Inspection
Mr. Charles W. Beer	Dairy Commissioner
Mr. Elmore S. Kelsay	Supervising Inspector, Fruits & Vegetables
Mr. Fred A. Gerk	Inspector, Egg Inspection
Mr. Bobby L. Gray	Grading & Marketing Specialist
Mr. Fred C. Wells	Deputy Inspector, Egg Inspection
Mr. Maurice J. Clevenger	Deputy Inspector, Egg Inspection
Mr. Robert Horne	Deputy Inspector, Egg Inspection
Mr. Jose Pedro Llanez	Deputy Inspector, Egg Inspection
Mr. James Storey	Deputy Inspector, Dairy
Mr. Robert L. Painter	Deputy Inspector, Dairy
Mr. John Lacy	Inspector, Weights & Measures
Mr. Osborn E. Witcher	. Deputy Inspector, Weights & Measures
Mr. Larry J. Klarstrom	Deputy Inspector, Weights & Measures
Mr. Carroll Craig	. Deputy Inspector, Weights & Measures
Mr. Warren L. Gustafson	Deputy Inspector, Weights & Measures
Mrs. Maurine E. Sorrell	Assistant State Chemist
Mr. Gilbert Marrujo	Laboratory Assistant
Mr. Glen E. Horton Dep	outy Inspector, Division of Plant Industry
Mr. D. Clayne Heninger Dep	outy Inspector, Division of Plant Industry
Mr. Carter D. Kloepfer Dep	outy Inspector, Division of Plant Industry
Mr. Bob G. Campbell E	Deputy Inspector, Khapra Beetle Inspection
Mr. Robert L. Todd	Agricultural Statistician
Dr. David W. Francis	Part-time Poultry Pathologist
Mrs. Isabella E. Riddle	Secretary to Director, Bookkeeper
Mrs. La Verne M. Guice	Secretary, Division of Inspection
Mrs. C. Louise Smith	Secretary, Div. of Markets, Wts. & Meas.
Mrs. Marjorie Hudgeons	Secretary, Div. of Markets, Wts. & Meas.
Mrs. Joyce Terry	Secretary, Division of Plant Industry
Miss Barbara Bailey	Technician, State Chemist
Mrs. Florence C. Kuhnley	Clerk, Agricultural Statistics

# NEW MEXICO DEPARTMENT OF AGRICULTURE

# FINANCIAL STATEMENT

1961-62

1960-61

lec	eipts:		
	Balance Forward, July 1, 1960		\$112,859.51
	State Appropriations		122,469.00
	Fees, Licenses and Permits		231,128.77
	Federal Grants		20,000.00
	TOTAL FUNDS AVAILABLE		\$486,457.28
,	1		
xp	S luis	\$104 748 08	
	Salaries	50 343 75	
	l ravel	6 074 42	
	Communications	0,074.42	
	Supplies and Materials	9,404.00	
	Printing and Binding	907.74	
	lax lags and Permits	9,199.54	
	Retirement and Insurance	16,640.36	
	Plant Operation and Maintenance	2,667.14	
	Capital Outlay	31,366.06	
	Contractural Work	4,777.87	
	TOTAL EXPENDITURES	\$335,249.84	
	Unexpended Balance, June 30, 1961	\$151,207.44	
ec	eints:		
	Balance Forward July 1 1061		\$151 207 44
	State Associations		150 853 00
	State Appropriations		221 267 24
	Fees, Licenses and Fermits		221,507.54
	rederal Grants		28,901.40
	TOTAL FUNDS AVAILABLE		\$561,389.24
Exp	enditures:		
	Salaries	\$227,175.60	
	Travel	66,867.61	
	Communications	6,197.36	
	Supplies and Materials	14,137.61	
	Printing and Binding	5,289.48	
	Tax Tags and Permits	12,535.35	
	Retirement and Insurance	19,723.41	
	Plant Operation and Maintenance	2,371.30	
	Capital Outlay	58,268.97	
	Contractural Work	701.70	
	TOTAL EXPENDITURES	\$413,268,39	
	Unexpended Balance June 30 1962	\$148 120 85	
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#### NEW MEXICO DEPARTMENT OF AGRICULTURE

#### BIENNIAL REPORT

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# ADMINISTRATIVE DIVISION

#### Dallas Rierson, Director

This third biennial report of the State Department of Agriculture of New Mexico State University is prepared for the information of the Governor, the legislature, and the people of New Mexico. It reports the functions of the department for the period July 1, 1960 through June 30, 1962. The report reflects a demand for services and regulatory activities which modern agriculture and the industrial economy of New Mexico have placed upon the department.

In 1962, New Mexico celebrated 50 years of statehood, but agriculture dates back many centuries before that. When Coronado visited the region more than 400 years ago, he found farmers and irrigation in many of the valleys that are highly productive today. Coronado, as well as our forefathers of only 50 years ago, would be surprised if they could see our modern farms and equipment. Also, the high quality food and fiber that is made available to the consumers of New Mexico, our nation, and foreign countries. Agriculture, as we know it today, is a complex operation including producers, processors, transportation companies, suppliers, marketing personnel, and facilities. The New Mexico Department of Agriculture works with all of these many branches of the industry to help the farmer produce and supply to the consumer the best and most economically abundant food and fiber supply in the world.

The Board of Regents of New Mexico State University is the administrative branch of the state government responsible for administering the department's laws and regulations which daily affect the lives of every citizen of this state. These laws and regulations concerning production, preparation, processing, sale, and use of agricultural commodities are designed to assist producers, processors, and consumers. In carrying out its responsibilities, the department works closely with other state and federal agencies.

It is hoped that this resume of activities of the department for the past two years, will assist those who have an interest in New Mexico's most important industry — agriculture.

# DIVISION OF INSPECTION FEED, FERTILIZER, PESTICIDES, and SEED

#### R. W. Ludwick, Chief

The Division of Inspection enforces laws relating to the manufacture, sale, distribution, registration, labeling, and use of commercial feeds, commercial fertilizers, agricultural and vegetable seeds, and economic poisons.

Samples of these products are taken by inspectors stationed over the state. All samples are taken by prescribed procedure, sealed, and sent to the State Chemist for analyses and examination. Results of these analyses are made available to the manufacturer, dealer, and consumer (if the sample is in his possession). Seed samples are sent to the State Seed Laboratory for examination and analyses.

Trips made by inspectors are planned to cover, with a minimum of expense, areas where these products are manufactured, sold, and used. Complaints are promptly and thoroughly investigated.

Most violations of the laws are handled by informing responsible persons of the law's requirements. Some circumstances warrant more formal action, such as delivery of written warning notices, "Stop sale orders" or, where necessary to secure compliance, by filing a criminal complaint.

The Division of Inspection has the cooperation and assistance of various agencies of the United States Department of Agriculture and the United States Food and Drug Administration. Federal action in any case does not prevent action also under the respective laws of New Mexico.

The following pages summarize the activities of each branch of this division during the period covered by this biennial report.

FEED CONTROL OFFICE. The New Mexico Commercial Feed Law is primarily a correct labeling act. All commercial feeds offered for sale in New Mexico must be labeled and registered with the Feed Control Office. A label facsimile is submitted with each application for registration for approval by the administrative officer. These labels are checked closely to see that no harmful materials are used and that the required information is given thereon. Applications bearing misleading information or not meeting the requirements of the law in any way are not registered until they have been corrected.

The Feed Control Office publishes an annual report each year which contains the results of the analyses of all official samples taken during the year. A list of feed registrants, explanation of the law, financial statement, and other important information are also placed in the annual report. This report is available to anyone who requests a copy.

The Commercial Feed Law makes the dealer directly responsible if feed in his possession fails to meet requirements of the law. The same penalty applies for exposing or offering for sale any unlabeled feeds or feeds not having the New Mexico inspection fee paid thereon. The dealer should always voluntarily withdraw from sale all feeds which he knows or suspects of being legally unsalable. Then he should write the Feed Control Office, giving details concerning the transaction and product.

The New Mexico Commercial Feed Law of 1961 provides for annual registrations of feed stuffs instead of permanent registration. Annually the office will be able to eliminate registrations by manufacturers who are no longer selling feed in the state. This new law also abandoned the tax tag and tax stamp method of paying inspection fees. All fees are now paid on a quarterly reporting basis, thereby facilitating interstate transportation of feed stuffs by the manufacturers, and relieving the Feed Control Office of the expense of providing such tags and stamps. Feed manufacturers and dealers welcome the new method as a major improvement.

Foods for pets were also included in the 1961 law, this creating a new responsibility for the Feed Control Office.

Inspectors have visited all feed manufacturers, dealers, super-markets and many farms and ranches to examine various commodities. Whenever a mislabeled or unlabeled feed was found, it was reported to the administrative officer for further action. Many samples were drawn from many lots of feed. These samples were taken according to prescribed procedure, sealed, and sent to the State Chemist for examination and analyses. After the samples were analyzed, the results were sent to the manufacturer, dealer, and consumer, if the sample was from a lot of feed in his possession.

Inspectors secured feed samples for analyses as follows:

/ /

# FEED CONTROL OFFICE ACTIVITIES, 1960-61, 61-62

Activities	1960-61	1961-62
Samples procured and analyzed	842	1,035
Samples below guarantee: Protein	181	261
Fat	142	44
Fiber	41	55
Manufacturers Registering Feed	409	259

# TOTAL TONNAGE OF COMMERCIAL FEEDING STUFFS TEN-YEAR PERIODS

- on Bo
57,840 tons
105,101 tons
187,166 tons
281,755 tons

FERTILIZER CONTROL OFFICE. Fertilizer regulatory work in New Mexico was authorized by Chapter 151 of the 1929 Session Laws and was amended in 1953.

The New Mexico Commercial Fertilizer Law is essentially a labeling law, requiring manufacturers to guarantee the accuracy of information on containers of fertilizer and in registrations filed in this office, so that each purchaser may determine for himself the value of the fertilizer. Solid and liquid forms of fertilizer are available in quantities of a few ounces to several tons. Inspection and analysis of fertilizer products by the Fertilizer Control Office at frequent intervals will give information about the reliability of labels which the manufacturer attaches or prints on each parcel.

The favorable response of crops to fertilizer has been a stimulating effect on the increased quantities of fertilizer sold in the state during recent years. The quantities of commercial fertilizers sold in New Mexico for a number of years are given in the table below. These figures are compiled from notices of shipments and quarterly tonnage reports made by the manufacturers.

# TOTAL TONNAGE OF COMMERCIAL FERTILIZERS SOLD IN NEW MEXICO

Year	Tonnage
1950	13,649.04 tons
1957	38,173.22 tons
1958	37,871.91 tons
1959	41,553.58 tons
1960	45,307.50 tons
1961	50,454.84 tons

The worth of a fertilizer can generally be judged from the amounts of three primary constituents guaranteed - nitrogen, available phosphoric acid, and potash. However, plant nutrients of a secondary nature (iron, etc.) may be important. Soils may require the application of definite quantities per acre of one or a combination of all three primary plant foods. Some soils may require the application of one or more plant foods of a secondary nature in combination with or without the primary plant foods. Purchasers of commercial fertilizers are advised to study their soil requirements and determine in advance of purchase the kind of fertilizer needed. Advice and assistance in such cases can always be obtained from county extension agents, the Agricultural Experiment Station, or the Extension Service at New Mexico State University. Although the Fertilizer Control Office does not make recommendations regarding the kinds, amounts to use, and values of commercial fertilizers, it will assist purchasers and users of fertilizers by answering questions about the guarantees and analyses of the different brands by securing and analyzing samples which are suspected of being below guarantee made by the manufacturer.

The inspection and analysis of fertilizer-insecticide-herbicide mixtures are shared with the Economic Poisons Control Office, Fertilizer—poisons products are subject to the provisions of both the New Mexico Commercial Fertilizer Law and the New Mexico Economic Poisons Act. (Fertilizer-poisons products are required to be registered both as commercial fertilizers and as economic poisons.)

# FERTILIZER CONTROL OFFICE ACTIVITIES 1960 - 1961

Activities	1960	1961	
Samples procured and analyzed	416	550	
Samples found deficient in guarantee: Nitrogen	57	97	
Phosphoric acid	49	119	
Potash	0	22	
Firms selling fertilizer in state	123	127	
Registrations on file	477	486	

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NEW MEXICO DEPARTMENT OF AGRICULTURE

Fertilizer Consumption by Counties in New Mexico January 1, 1960 to December 31, 1960



Note—The figures given for each county are according to Notice of Shipments made by manufacturers. This amounted to a total of 45,307.50 tons.

#### NEW MEXICO DEPARTMENT OF AGRICULTURE

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#### COMPLIANCE PERCENTAGE

Compliance Percentage	1960-61	1961-62	
Official samples from seed shipped interstate	353	353	
Official samples from seed shipped intrastate	193	225	
Total official samples	546	578	
Number of violations found	77	104	
Percent completely and accurately labeled	86%	78%	

**ECONOMIC POISONS CONTROL OFFICE.** The New Mexico Economic Poisons Act is a rather recent agricultural regulatory law enacted by the state legislature. It was patterned very closely to the "Uniform Act", which was approved by the Association of American Pesticide Control Officials as a "model bill". It also follows the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act. The federal act has jurisdiction over economic poisons which move across state borders. At present almost all states have pesticide laws of some kind, many of which are similar to the Federal Insecticide, Fungicide, and Rodenticide Act.

The directions and precautions on the labels of the more than two thousand pesticide products registered for sale in New Mexico give the necessary information as required by the New Mexico Economic Poisons Act.

The inspection work carried on by the Economic Poisons Control Office gives protection to the public of New Mexico by testing the chemical materials claimed to be present in the analysis statements, approving of labels on products, and preventing mislabeled products from being sold.

Pesticide products are poisonous. Danger to human life exists if a product is mislabeled or directions for use are not adequate. The directions must be followed by the consumer if he is to obtain optimum results and proper protection.

The office has virtually eliminated the sale of unlabeled pesticides in New Mexico, with a minimum of formal action, by explaining the potential dangers and liabilities to the persons involved. Cooperation by manufacturers and dealers has been gratifying.

Products eligible for registration under the Act must bear a label stating the directions for use, which, if complied with, are considered adequate. The label must contain, with few exceptions, a danger, warning, or caution statement, designed to prevent injury to humans, animals, vegetation, or other useful living things.

The label of the product must contain a guaranteed analysis which shows the name and percentage of each active ingredient, together with the total percentage of the inert ingredients. The ingredient statement for products containing highly toxic compounds must list the name and percentage of each active ingredient, also the skull and crossbones, the word "POISON" in red on a background of distinctly contrasting color, and a statement of an antidote for the economic poison. These materials may also be required to be colored or "discolored" to indicate their toxic nature.

The label also requires the name and address of the manufacturer or registrant, net weight or measure, and brand or trade-mark under which the product is sold.

The importance of obtaining quick and accurate information in the successful treatment of accidental farm and home poisonings is well known. The proposed

#### BIENNIAL REPORT

STATE SEED INSPECTION OFFICE. The State Seed Inspection Office, operating under the New Mexico State Seed Law, assists buyers, dealers, and users of agricultural and vegetable seed in obtaining high-quality seed and preventing the introduction of noxious weeds into our state. New Mexico, along with the other 49 states, makes use of the State Seed Law and the Federal Seed Act to control the sale of seed. New Mexico has five persons holding federal seed inspection cards.

The wonder and worth of a seed and the treasures of life it holds give inspiration to those who carry out the seed inspection work in New Mexico. This service is accomplished with the cooperation of seed dealers, processors, and consumers.

Every container of agricultural seed offered for sale in the state must bear a label or tag giving certain information. Such requirements for labeling are given in the New Mexico State Seed Law and in the Rules and Regulations Under the State Seed Law. The Seed Inspection Office and the inspectors assist those wishing to learn the labeling requirements.

Inspectors visit New Mexico seed dealers, processors, and other places where seed is being sold or handled. Labels and tags are checked for accuracy, and spot samples are taken of the various kinds of seeds found in our state. All regulatory samples are tested for the Seed Inspection Office by the State Seed Laboratory. If samples are found to be in violation of the Seed Law, warnings or "stop-sale" notices are issued until the seed is relabeled or returned for reprocessing or disposal other than for seed purposes. During the past two years official samples have been collected as follows:

# STATE SEED INSPECTION OFFICE ACTIVITIES 1960-61, 61-62 — INSPECTION SAMPLES

Fiscal Year	Field Seeds	Grass Seeds	Vegetable Seeds	TOTAL SAMPLES
Fiscal year 1960-61	367	51	128	546
Fiscal year 1961-62	372	64	141	578
		12-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		

#### VIOLATIONS

Violations	Field Seeds	Grass Seeds	Vegetable Seeds	Total Violations
Fiscal year 1960-61 Official samples from seed	15	2		
Official samples from seed shipped intrastate	4)	2	2	49
FF			_	20
TOTALS	67	3	7	77
iscal year 1961-62 Official samples from seed				
shipped interstate Official samples from seed	31	1	1	33
shipped intrastate	51	5	15	71
TOTALS	82	6	16	104

#### BIENNIAL REPORT

establishment of poison control centers in at least one hospital in each county in New Mexico will provide a source of information for New Mexico physicians in securing rapid toxicological information when poisonings occur.

To enforce adequately the provisions of the New Mexico Economic Poisons Act, field inspectors are authorized to collect samples of pesticides and to enter into any store, warehouse, car, or any place presumed to contain economic poisons for the purpose of inspection or sampling. They are also authorized to issue and enforce written or printed stop sale or removal orders of economic poisons when the product being offered for sale is in violation of any of the provisions of the Act.

# ECONOMIC POISONS CONTROL OFFICE ACTIVITIES 1960-61, 61-62

Activities	1960	1961	1962
Samples procured and analyzed	5	27	71
Samples found deficient in guarantee	1	7	11
Registrations on file	2,141	2,160	2,266
Firms registering products	284	277	311

# DIVISION OF MARKETS, WEIGHTS AND MEASURES

#### C. B. Whigham, Chief

The Division of Markets, Weights and Measures has four primary sections which deal with regulatory laws in agriculture and allied industries. Even though the division is charged with the enforcement of these regulatory laws, many of its functions are of a service nature rather than strictly regulatory. It has been a policy of the State Department of Agriculture, as a whole, to conduct its work as a service to the people rather than a strict law enforcement agency.

The four laws that are covered in the Division of Markets, Weights and Measures are: the New Mexico Weights and Measures Law, the Fruit and Vegetable Standardization Act, the New Mexico Egg Grading Act, and the New Mexico Dairy Law. In addition to these regulatory measures, the division is also engaged in a cooperative marketing program with the U.S. Department of Agriculture for the improvement of quality on fruits and vegetables and eggs and the expansion of more outlets for their production. Even though these regulatory laws are agricultural in nature, the most important benefactor is the consuming public of New Mexico.

In administering regulatory laws, the Division of Markets, Weights and Measures insures that:

1. Testing or grading of the producers product is accurate.

2. Products are correctly labeled for sale to consumers or that they are standardized so sales in interstate commerce are most easily made.

3. The consumer gets a product that is correctly labeled as to quantity or weight.

WEIGHTS AND MEASURES. The New Mexico Weights and Measures Law is one of the newest laws the Division of Markets has under its jurisdiction. Its effect is probably greater on the consumers of New Mexico than any law that has ever been passed in this state. The Weights and Measures Law was enacted during the 1959 session of the state legislation. With only a very few exceptions, this law is the same as the model law recommended by the United States Department of Commerce for uniformity between states. This act benefits both agriculture and consumers in New Mexico, and the effect has been increasing in the past two years of operation of the Weights and Measures Section of the Division of Markets.

The new program encountered many difficulties in obtaining equipment for its work. The equipment was expensive and took a great deal of time to acquire it before this section could function properly. Basically, the Weights and Measures Law provides that any commodity sold or offered for sale would have the net weight conspicuously marked on any package or container that is offered for sale and that any weighing or measuring device be accurate. Specifications and tolerances on weighing and measuring apparatus have been adopted from the U. S. Department of Commerce Handbook 44. The law also defined the method of sale of commodities and set up penalties for failure to comply with the regulations.

During the fiscal year 1960 and 1961, the Weights and Measures Section performed the following inspections:

# WEIGHTS AND MEASURES SERVICE ACTIVITIES 1960-61

Type of Scale	Approved	Condemned for Repair	Total
Retail scales	3,499	404	3,903
Motor truck scales	218	71	289
Livestock scales	369	52	421
TOTALS	4,086	527	4,613

The above figures show 10% of the retail scales, 25% of the motor truck scales, and 12% of the livestock scales tested were found to be inaccurate beyond the tolerances as specified in the U. S. Department of Commerce Handbook 44 and were condemned for repair. This amount of inaccurate devices was considerably less than for the previous past fiscal year.

The Weights and Measures Section also check-weighed 6,718 pre-packaged products representing an estimated 30,000 packages displayed for sale. Of these 6,718 packages weighed, 3,342 or approximately 50% were found to be short weight. These that were found to be short weight were mostly fresh meat packaged and labeled on the premises where sold. Even though the percentage here seems high, the amount of error encountered this fiscal year over the previous, was considerably less. Prepackagers in New Mexico have become much more aware of the fact that weights and measures inspection is a service to the consumers and that the weight of the package material and carelessness in the manner of reading the scale are not to be charged to the consumer.

The primary purpose of this law is to have the net weight or quantity correctly labeled for the consumer of this state on each package.

During the fiscal year 1961 and 1962, the Weights and Measures Section performed the following inspections:

# WEIGHTS AND MEASURES SERVICE ACTIVITIES 1961-62

Type of Scale	Approved	Condemned for Repair	Total
*Retail scales	3,437	602	4,039
Motor truck scales	196	59	255
Livestock scales	450	49	499
TOTALS	4,083	710	4,793

\*Retail scales include the following types: computing, pre-packaging, portable platform, overhead track, wall-hanging, hopper, candy, fancy nut, freight scales, and others.

The above figures show that 15% of the retail scales, 23% of the motor truck scales, and 10% of the livestock scales tested were found to be inaccurate beyond tolerance limits and were condemned for repair.

The continued high percentage of motor truck scales condemned for repair can probably be attributed to the fact that the test weight load of our motor truck scale test unit was increased from 10,000 to 20,000 pounds just prior to the fiscal year 1961-62. This gave us a test load more closely approaching the capacity limits of most motor truck scales and disclosed errors which were not apparent with the smaller, 10,000 pound load. This was particularly true in motor truck scales equipped with dial indicators.

The increase in percentage of retail scales condemned for repair can be partially attributed to the fact that most of the 136 scale increase in the year 1961-62 over the year 1960-61 were scales which had not previously been tested since the present Weights and Measures Law went into effect in 1959. This can be expected since during the first year the Weights and Measures Section was in operation, 57% of all scales tested were condemned for repair.

During the past fiscal year, the Weights and Measures Section check-weighed 10,317 different packages representing an estimated 100,000 packages displayed for sale. Of this 10,317 packages tested 3,893 or approximately 38% were found to be short weight. This shortage resulted in over 10,000 packages of various commodities being placed off sale and returned to the packer for relabeling. Prior to any effective control over packers of fresh meat items, our investigation showed that the consumer was paying more than \$3 million a year for packages and wrapping material paid for, by the pound, at meat prices. The past fiscal year showed much improvement in packages of this type, with very few cases of shortweight found in fresh meat products packaged, weighed, and labeled on the premises where sold. Most short weight was found in packages of the standard size type, processed in places other than where sold. Some of the commodities which were found to be short weight were: bacon, sausage, ham, lunch meats, bread, produce, peanuts, beans, chile, flour, mineral additives for livestock feeds, corn meal, livestock feed-stuffs, chemical fertilizer, and insecticides.

The importance of the package weighing program cannot be overstressed with the present trend toward prepackaging. Each year finds more commodities offered for sale in package form and less in the service counter. For this reason, the Weights and Measures Section devotes as much time as is available to the package checking program. With more experience, better equipment, which we now have, and more effective, and faster package checking techniques, the Weights and Measures Section is looking forward to more progress in this area of its work. 17

**FRUIT AND VEGETABLE SERVICE.** The present New Mexico Fruit and Vegetable Standardization Act was passed by the legislature in 1941. The purpose of the act was to promote development of the fruit and vegetable industry in the state and to establish standards and standard containers for fruits and vegetables, to prevent fraud and deception in receiving, packing, marketing, and accounting for sales of fruits and vegetables, and to provide for the bonding of farm produce dealers.

The primary objectives of the Fruit and Vegetable Standardization Act are:

1. The development of grades and standards, giving assistance to producers and shippers in grading and inspection, and to establish grades.

2. The development of methods of plans for harvesting and preparing fruits and vegetables for marketing, including grading and packaging.

3. The development of general information about marketing as requested by producers, shippers, and buyers.

Under cooperative agreement with the U. S. Department of Agriculture, the Fruit and Vegetable Service of the New Mexico Department of Agriculture, provides for inspection and certification on fruits and vegetables that are shipped from New Mexico. All inspectors employed by the Fruit and Vegetable Service are federal-state employees licensed by the U. S. Department of Agriculture to affix grades to produce that has been inspected. The cost of these inspections are borne by the people requesting certification of their produce. Whether it be grower or shipper, there are two basic functions: (1) to set a recognized grade on a product for a grower or shipper in terms that are descriptive to buyers on the receiving end, and (2) to provide information relative to the quality of the product to the grower or shipper so that he may determine whether it is worthwhile to continue shipping.

The grades used are federal standards that are recognized as being uniform throughout the country. By certification as to quality and grade, the shipper encounters very little trouble from the receiving buyers as to quality since the federal-state certificate indicates in detail the product that was purchased.

A smaller volume of fruits and vegetables has been shipped from the state over the past two years compared to the two years preceeding the biennial report. This is due primarily to the weak market conditions that existed up to and through 1960. Fruits and vegetables are highly perishable products, they have no price support, and the risk is high in their production. In previous years when low markets had prevailed, many growers felt that they could not continue losing money and taking such a big risk. There are few lending agencies that will lend money to growers of fruits and vegetables without ample collateral to cover losses that very frequently occur.

During the 1961 and 1962 season, New Mexico fruit and vegetable growers have enjoyed a more profitable operation than in any years since 1956, and there is interest in developing a larger volume of supply in the state.

In 1961 the Fruit and Vegetable Service took over the inspection program on peanuts which had previously been operating as a federal service in Texas. This was one of the biggest undertakings the service has encountered since its inception. Over 7,000 acres of peanuts are grown in New Mexico, practically all of which are the Valencia-type peanut, which grows extremely well in this area. These 7,000 acres of peanuts represent approximately 90% of all the Valencia-type peanuts grown in the United States. An interesting note, though, is that peanuts are grown on allotted acreages and are supported in price by the U. S. Department of Agriculture. However, the type of peanuts grown in the state almost always demand a premium above the loan price.

The following chart shows the amount of products inspected by the Fruit and Vegetable Service during this biennium.

#### FRUITS AND VEGETABLES INSPECTED in 1960-1962

Commodities	Number Certificates	Type Container	Number	Car Equivalents
Lettuce	520	Carton	274,472	410
Potatoes	62	100# sack	23,219	62
Cabbage	22	50# sack	13,062	22
Corn	3	25# sack	2,786	3
Apples	1	Box	369	
Squash	1	Bulk	3,000 lbs.	
Peanuts	852	Bulk	5,375,636 lbs.	
Onions	863	50# sack	703,562	1,173

EGG INSPECTION SERVICE. The Egg Inspection Service was created by the New Mexico legislature in 1951. The purpose of the act was to promote development of the egg industry in the state, to encourage more egg consumption, to adopt federal standards for individual shell eggs, and to provide proper marking, branding, and advertising.

When this program was initiated there were many misgivings as to what its effect would be. Those misgivings have been overcome by the giant strides that have been made in improving the quality of eggs the consumer may buy at retail outlets. This egg grading law in New Mexico is considered one of the best operated of any in effect in the United States at present.

Even so, in dealing with this highly perishable product, many errors can be made in the grading. They are very limited when an overall picture is taken of the industry.

New Mexico is no longer considered a dumping ground, but a place where a quality product is sold, and correct labeling is a must.

There have been many changes in the marketing of eggs in New Mexico. Larger production units have sprung up over areas of high production. The numbers of egg layers have not increased to any great extent. However, the small farm flock has become a thing of the past, and commercial producers have grown much larger in size. About 71% of the individual flocks now contain 400 or more per flock compared with only 35% five years ago. This is indicative that the trend is toward larger volume and more efficiency with less margin of profit than in previous years, and with these larger units, the quality of the product that is available to Mrs. Housewife in New Mexico is at an all time high.

Approximately 50% of the eggs used in the state are produced in other areas. It is a rare occasion when itinerant truckers bring in a truck load of unknown quality eggs into the state. Handlers within this state now are depending on quality controlled flocks in nearby states for a volume of products that are suitable for their distribution.

In 1960-61 there were 98 licensed handlers of eggs in New Mexico, and in 1961-62 this number had dropped to 96. The personnel in this department not only make inspections at retail for quality but perform a service to producers, handlers, and retailers in marketing practice, and the quality control of eggs throughout the channels of trade.

The following chart shows the results of the work performed by the service in the past two years.

# EGG INSPECTION SERVICE ACTIVITIES, 1960-1962

	1960-61	1961-62	Total
Number of stop sale notices	423	601	1.024
Number of cartons stopped	33,806	58,414	92,220
Number of advertising violations	47	44	91
Grocery stores inspected	3,481	3.546	7 027
Inspections at retail outlets	10,851	10,923	21,774

**STATE DAIRY INSPECTION.** The year 1960 was the first full year of operating under the Dairy Law passed by the 1959 legislature. This law brought all dairy products under the jurisdiction of the State Department of Agriculture as to standards of identity. Keeping up the standards of all dairy products sold in New Mexico requires a constant watch.

During this period, many cartons of ice cream, ice milk, and sherbet have been weighed. The number of lightweight cartons is diminishing. This is quite different from previous years when the market was flooded with lightweight products, as there was no control on the weight of the finished products. The customer is getting more for his money than in the past.

The Babcock method is used to determine the percentage of butterfat in most dairy products. However, the Mojonnier method is the official test for ice cream and ice milk.

Managerial efficiency is still the answer to profit making in the dairy industry whether it be production or manufacturing.

# DAIRY PRODUCTS TEST STATISTICS

State States and and set of the set of the	1960	1961
Producers Milk	1,331	1.269
Market Milk		-,
Raw	6	12
Pasteurized	24	9
Homogenized	241	361
Skimmed or non-fat	88	145
Buttermilk	96	182
Chocolate	87	211
Chocolate drink	16	211
Goat milk	5	2
Cream	Real and the second second second	2
Half & half	107	204
Light, table or coffee	32	204
Whipping	99	152
Whipped or gassed	0	175
Sour	57	12
Cottage cheese	108	80
Egg nog	11	10/
Yogurt	7	21
Cheese	0	4
Butter	58	1
Evaporated or condensed milk	15	39
Dry milk	9	/
Ice cream or ice cream mix	214	0
Ice milk or ice milk mix	85	. 323
Sherbet	11	70
1	11	3 .

# DAIRY PRODUCTS MANUFACTURED IN NEW MEXICO

	1960	1961
Buttor	84.184 lbs.	73,353 lbs.
	1.356.055 gal.	1,224,042 gal.
Ice milk	284.927 gal.	271,182 gal.
Ice groam and ice milk mix	953.164 gal.	729,934 gal.
Shorbor	151.143 gal.	83,481 gal.
Novelties	449,563 gal.	483,995 gal.
Cottage cheese	3.413.804 lbs.	3,107,538 lbs.
Fluid milk	19,735,190 gal.	17,325,775 gal.
Croam	176.122 gal.	1,224,042 gal.
Cream for manufacturing purpo	oses 10,177 gal.	17,138 gal.
CALLER AND		

# DAIRY PRODUCTS MANUFACTURED OUT OF STATE AND SHIPPED IN

	1960	)	1961
Butter	2.159.862	lbs.	1,900,847 lbs.
Ico cream	929,500	gal.	1,165,027 gal.
Ice milk	294,504	gal.	219,403 gal.
Ice cream and ice milk mix	169,685	gal.	78,888 gal.
Sherbet	80,071	gal.	63,506 gal.
Novelties	139,796	gal.	52,129 gal.
Cottage cheese	637,730	lbs.	828,764 lbs.
Other cheese	2,076,590	lbs.	3,440,942 lbs.
Fluid milk	4,924,556	gal.	5,313,184 gal.
Condensed or evaporated milk	3,610,205	Ibs.	5,771,080 lbs.
Dry milk	2,743,418	lbs.	2,500,907 lbs.
Cream	78,978	gal.	52,088 gal.
Cream for manufacturing purpo	ses 277,004	gal.	25,811 gal.

# MILK PRODUCERS DATA

, 10/	1960	1961
Producers selling to New Mexico plants	358	356
Producers selling to out of state plants	75	74
Producers out of state selling to	25	31
New Mexico plants	21 105 1671	20 134 175 mal
Milk produced for New Mexico plants	21,18),10/ gal.	20,154,175 gal.
Milk produced for out of state plants	5,908,612 gal.	5,467,007 gal.
Milk produced for out of state and purchased by New Mexico plants	1,284,325 gal.	9,012,520 gal.

# DAIRY PRODUCTS PLANTS

	1960	1961
Ice cream plants	3	3
Fluid milk plants	17	18
Fluid milk plants (Producer-Distributor)	16	18
Butter plants	1	1
Cream buying stations	6	4
Milk condensers	1	1
Cheese plant	1	1

LICENSES ISSUED

	1960	1961
Tester's license	29	19
Sampler's license	13	14
Combination license		2
All Handler's License	322	389
Instate plants	39	41
Out of state plants	22	25
Instate wholesale or distributor	36	29
Out of state wholesale or distributor	35	44
Soft serve stands	194	241
Mobile units	3	9

# FROZEN DESSERT WEIGHTS

	1960	1961
Ice cream weights checked	2,915	3,284
Ice cream underweight	526	398
Ice cream, percentage underweight	18.04	12.12
Ice milk weights checked	552	689
Ice milk underweight	71	51
Ice milk, percentage underweight	12.86	7.40
Sherbet weights checked	415	373
Sherbet underweight	113	114
Sherbet, percentage underweight	29.64	30.56
Total frozen dessert weights checked	3,882	4,346
Total frozen dessert underweight	710	563
Total frozen dessert, percentage underweight	18.28	12.95

FEDERAL-STATE COOPERATIVE MARKETING PROGRAM. Under the Federal-State Cooperative Marketing Program, a matching funds service program of assistance to agriculture is in operation in the State Department of Agriculture.

The purpose of this program is to maintain or improve quality of eggs that are sold in retail and help expand markets for the poultrymen in the state.

This program is also in effect along the same lines with fruit and vegetable growers and shippers. Quality improvement work has been very effective in the poultry industry in the state and has also been very beneficial during surplus seasons for assistance given to producers and retailers to move surplus stocks. In improving quality and expanding market outlets for New Mexico, fruits and vegetables have shown some success. However, there is a long way to go in marketing to bring repeat business to the growers and shippers of New Mexico fruits and vegetables. Quality is of the utmost importance if the fruit or vegetable grower of this state is to compete in areas of high consumption, and there are many quality problems that do exist in the industry at the present time. Many have been overcome, but to promote and expand markets for these fruits and vegetables, the calling card must be high quality.

Probably one of the greatest helps in marketing New Mexico vegetables and bringing the grower a better price for his products was initiated through this federal-state marketing program. That one project was to supply current, daily marketing information on vegetables during shipping season as to the price

received, quantity shipped, and apparent volume in areas competing against New Mexico for the consumer's dollar. By initiating this program, the grower was made more aware of receiving prices from competing areas, and this made better salesmen out of the shippers located in New Mexico. Promotional activities have been carried on through trade journals, newspapers that serve the industry, and through promotional material that has been prepared showing New Mexico as a fruit and vegetable producing area. More emphasis will be placed on this type of work in future years.

# DIVISION OF PLANT INDUSTRY

#### G. L. Nielsen, Chief

The Division of Plant Industry aims to assist growers in raising healthier plants and making sure that certain plants offered for sale in New Mexico are free from destructive insects and diseases. The inspectors assist growers, ranchers, nurserymen, and florists in becoming acquainted with harmful insects and diseases and help beekeepers to recognize diseases of brood and adult bees. When an inspector is unable to identify the insect or disease, the aid of specialists are sought, so that the disease or insect may be properly controlled.

**PLANT PROTECTION.** The number of certified nurseries and licensed florist and nursery dealers has remained about the same since 1960. However, because of increased interest in landscaping with native plants, the number of native plant certificates issued each year since 1960 has increased from two issued in 1960 to 17 issued during 1961-62. These native plants are collected in their native habitat and must have a tag attached to distinguish them from nursery-grown stock.

For this two-year period, 220 certificates of treatment were issued on nursery stock which had to be fumigated to meet the requirements of other states.

The intrastate pecan nut casebearer quarantine has been strictly enforced to prevent the shipment of infested nursery stock from the infested area in Eddy county to other pecan-growing areas of the state.

BEES. The beekeeping industry is important because of the benefits derived from pollination of crops, honey, and wax. This industry includes persons from all walks of life: the commercial beekeeper, who depends on his bees for his income through the honey and wax the bees produce; the side-line or part-time beekeeper, who uses his bees to supplement his income; the growers, who keeps bees to pollinate his crops and fruit trees; and the hobbyist, who keeps bees as a pastime.

Added effort has been made by the apiary inspectors to clean up bees in equipment which prevents proper inspection. All bees found in such equipment were transferred to hives with movable frames, or else the equipment and bees were destroyed. Colonies infected with American foulbrood were either destroyed or placed in a "hospital yard," where they could be treated properly. All diseased bees were inspected at least twice to make certain the disease had been controlled. Those colonies which did not respond to treatment were destroyed. Of the 15,681 colonies inspected between July, 1960, and June, 1962, there were 97 colonies found infected with American foulbrood and 279 colonies infected with European foulbrood. Of these colonies, 55 were destroyed by the owners, either because of the desire to destroy rather than treat or because bees did not respond to treatment.

KHAPRA BEETLE. The joint effort of the Division of Plant Industry of the New Mexico Department of Agriculture and the Plant Pest Control Division of the U. S. Department of Agriculture has shown gratifying results in the Khapra beetle eradication program. Inspection techniques have been improved and the public has become more aware that this pest constitutes a threat to one of New Mexico's important industries.

From July 1, 1960 to June 30, 1962 there were a total of 7,627 properties inspected and 2,967 specimens submitted for identification. All specimens submitted were reported as negative Khapra beetle. No infested properties were found between July 1, 1960 and June 30, 1962.

The importance of continuing careful efficient inspections is critical at this time if the world's worst grain storage pest is to be eradicated from New Mexico. Repeated inspections are necessary to find small incipient infestations before they can spread. From past experience we know that just one infested property can distribute infested grain and infested bags or sacks over a large area in a short time.

SURVEY AND DETECTION. Throughout the past two years inspectors of the State Department of Agriculture have been on the alert to find incipient infestations of pests not known to occur in New Mexico before they could become established and to watch out for the buildup of potential endemic species which would damage our crops. Since the revision of the survey and detection program in 1960 to include all inspectors in the division, instead of having one individual do all this work, a much more current report on insect conditions throughout the state has been obtained. The inspectors have surveyed the fields and contacted agricultural officials and fieldmen of chemical companies to obtain an accurate picture of insect conditions in their areas. This revision has also reduced the expense involved in obtaining current and accurate reports on insect conditions throughout the state. Each inspector planned his itinerary so he could inspect nursery and florist stock; inspect bees; enforce quarantines; make Khapra beetle inspections of commercial properties, farms, and ranches; and make special insect surveys, as well as doing the routine insect survey. In this way, travel has been held to a minimum and inspectors were able to work more efficiently.

The reports received from the inspectors were compiled each week and given to the extension entomologist, who included this report with his Insect Letter. The Insect Letter was sent to interested individuals throughout the state.

In cooperation with the State Grasshopper Control Board and the U.S.D.A. Plant Pest Control, surveys were made each summer to find grasshopper infestations which threatened rangeland. If the ranchers feel they will benefit by controlling these pests, a cooperative control program is undertaken. However, during the past two summers no rangeland was treated under this type of program, although ranchers were informed of threatening infestations and advised on methods of control.

When the boll weevil was found for the third consecutive year in cotton fields near El Paso, Texas, an added effort was initiated in 1962 to make surveys of cotton fields in Dona Ana and Eddy counties to determine if this pest had become established. As yet no boll weevil has been found in New Mexico, but it is at the "doors," and continued surveillance is essential to determine if this "unwanted alien" has slipped across the state line and if incipient infestations are to be found.

Extensive surveys were made throughout the state each fall to determine if the European corn borer, a serious pest of grain, had become established in our state. All suspected specimens were sent to the United States National Museum for positive identification. No European corn borer was found. Because of these surveys the grain grown in New Mexico was certified to be free of this destructive pest. There were 4,048 European corn borer certificates issued for the transporting of New Mexico grain into states which insist that only grain free from European corn borer may enter. 24

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By making extensive surveys in fruit-growing areas of the state for the apple maggot and plum curculio, the Division of Plant Industry can now certify that these pests are not known to occur in the state. Because of the interest taken in making these surveys by qualified inspectors, the regulatory officials of the state of California were able to amend their apple maggot and plum curculio quarantine by removing New Mexico from the list of quarantined states. Prior to April 28, 1962, only fruit shipped from areas in New Mexico west of the continental divide were allowed to enter California. Under the existing quarantine, all New Mexico fruit growers can now ship their fruit to California markets, if each shipment is accompanied by a certificate of origin stating that the fruit was grown in New Mexico where no apple maggot or plum curculio is known to exist. By being able to ship their fruit into California, New Mexico fruit growers: now have another good early market for their fruit for which they obtain premium prices.

Surveys conducted to determine if the poisonous weed alfombrilla had become established in New Mexico were all negative.

#### DIVISION OF PLANT INDUSTRY ACTIVITIES

ACTIVITIES	1960-61	1961-62	TOTALS
KHAPRA BEETLE			
Commercial inspections			
State	372	365	737
Federal	412	317	729
Specimens submitted			
State	253	272	525
Federal	243	381	624
On-the-farm inspections			
State Endowel	1,415	1,487	2,902
	1,749	1,/10	3,239
State	021	217	1 15 1
Federal	354	313	1,101
Total inspections	3.748	3.879	7.627
Total specimens	1,684	1,283	2,967
Properties infested	0	0	0
BEE INSPECTION			
Registered beekeepers	268	283	
Colonies inspected	8,630	7,885	15,681
Colonies infected (afb)	33	64	97
Colonies infected (efb)	163	116	279
Colonies destroyed	24	31	55
Wholesale honey permits	15	14	29
NURSERY & FLORIST INSPECTIONS	5		
Florist and nursery inspection	993	1,442	2,435
Post-entry inspections	2	6	8
Stop-movement orders	8	17	25
Notive plant certificates issued	123	139	262
Dealer licenses issued	371	1/	23
Agent licenses issued	5	+23	/94
Certificate of treatment issued	88	132	220
Fumigations of nursery stock	11	27	38
PLANT OUARANTINE			
Khapra beetle certificates issued	1 765	837	2 602
Pink bollworm certificates issued	157	60	2,002
European corn borer certificates issued	2,236	1,812	4.048
Ozonium root rot certificates issued	104	93	197
Ginner's licenses issued	56	60	116
SPECIAL SURVEYS			
European corn borer (man hours)	123	182	305
Pecan nut case bearer (man hours)	84	123	207
Alfombrilla (man hours)	70	114	184
Apple maggot and plum			
curculio (man hours)	82	96	178
European earwig (man hours)	62	30	92
Harvester ant (man hours)	24	38	62
rarvester ant (man hours)	07	>/	122

# STATE SEED LABORATORY

#### Elizabeth McSwain, State Seed Analyst

During the fiscal year 1960-61, the New Mexico State Seed Laboratory tested 546 samples for the Inspection Division of the State Department of Agriculture. Service samples tested for growers, dealers, processors, consumers, and various agencies numbered 3,515, making a total of 4,075 samples for the year. During the year 1961-62, the laboratory tested 578 inspection samples and 3,275 service samples, or a total of 3,855 samples.

The kinds of seeds tested during the biennium are shown in the table.

No. of Samples (two-year total)	Kinds of N Seeds (	No. of Samples two-year total)	Kinds of Seeds		
1.929	Cotton	59	Radish		
1.365	Sorghum	56	Carrot		
781	Alfalfa	54	Sorghum almum		
722	Sudangrass	49	Watermelon		
265	Wheat	48	Okra		
244	Pearl millet	47	Muskmelon		
231	Peanut	44	Bluegrasses, squash		
146	Barley	43	Cucumber		
118	Wheatgrasses	42	Lovegrasses		
109	Pepper	36	Sweetclover		
106	Gramas	32	Cabbage		
99	Onion	27	Mustards		
93	Oats	26	Beet		
91	Rve	25	Bluestems, ryegrass		
87	Corn	24	Broomcorn		
79	Foxtail millet	23	Cowpea		
76	Lettuce	22	Sorgrass, switchgrass		
74	Beans, Bermuda grass	21	Clovers		
71	Tomato	20	Turnip		

- Alkali sacaton, castorbean, dropseed, fescues, grass mix-10 through 19
- 1 through 9

tures, Johnsongrass, orchardgrass, pea, safflower, sorghum x sudangrass hybrid, soybean, spinach, wildrye.

Ageratum, aster, bells of Ireland, bentgrass, bristlegrass, broccoli, brome, Brussels sprouts, buffalo grass, canary grass, cauliflower, celery, chamiza, chard, chickpea, clarkia, collard, cypress, dallis grass, dichondra, dill, eggplant, endive, flax, galleta, gourd, guar, Indiangrass, kale, kohlrabi, larkspur, leek, lespedeza, proso millet, morning glory, muhley, needlegrass, oregano, panicum, pansy, parsley, parsnip, petunia, poppy, pumpkin, redtop, Indian ricegrass, rhubarb, rutabaga, St. Augustine grass, salsify, sand reed grass, sesbania, sourclover, spelt, sprangletop, New Zealand spinach, sunflower, sweetpea, timothy, trefoil, tobosa, vetch, vine mesquite, wolftail, zinnia.

# STATE CHEMIST LABORATORY

#### Elizabeth B. Rutter, State Chemist

The State Chemist Laboratory, under the direction of the State Chemist, analyzes all official samples sent to the laboratory by the offices of Feed and Fertilizer Control, Economic Poisons Control, and Dairy Inspection Service. This is to insure that all state requirements are met by the manufacturers and producers, for the protection of the consumers in New Mexico.

The laboratory also does a large number of service sample analyses for individuals, companies, and cooperating governmental and police agencies. Service work is done on a cost basis, for which fees have been established.

Laboratory personnel includes two fully qualified chemists and two technicians, plus two part-time student helpers.

Major pieces of laboratory equipment that have been added since July 1, 1960, include: Beckman DU spectrophotometer with flame attachment, constant temperature shaking bath, Coleman nitrogen analyzer, two Semi-micro Mettler balances, an Underwood Demisumma calculator, new bottle shakers, centrifuge, refrigerator and balances for the dairy laboratory, a Fisher-Johns melting point apparatus, a Beckman automatic titrator with dual type delivery units, and a Jarrell-Ash chromatograph with three detector units.

Data reported on the following table is by both number of individual samples and by number of actual tests performed, as tests on any one sample may run from one to eight, depending on the nature of the sample and the information required. Time involved in any specific test will vary from a few hours to several days.

TYPES OF SAMPLES		1960-61		1961-62
OFFICIAL SAMPLES				
Feeds				
Complete analysis (protein, fat,				
fiber, moisture, ash)		3.210		5,165
Protein (only)				72
Urea		112		23
Calcium		39		50
Potassium		39		48
Microscopic		2		8
Residue (pesticide)		13		25
Molasses (Brix)		24		15
Molasses (Brix) Total feed samples	920		1,141	
T 1 ( 1				
lotal feed tests		3,439		5,336
Fertilizers				
Nitrogen		401		467
Available phosphorus		297		445
Total phosphorus		422		134
Potash		112		174
Special		6		13
Total fertilizer samples	541		619	
Total familines tosts		1.220		
rotal fertilizer tests		1,258		1,233

(Continued on Page 28)

#### BIENNIAL REPORT

TYPES OF SAMPLES	in the later of the later	1960-61		1961-62
Economic Poisons				
Total samples	9		33	
Televe				30
1 otal tests		9		,,
Dairy				
Butterfat		2,344		2,672
Total solids		310		474
Cyroscope (added water)		48		72
Adulterations	2 2 4 4		2 6 2 2	c
Total dairy samples	2,544		2,022	
Total dairy tests		2,702		3,224
ERVICE SAMPLES				
Easda				
Protein (only)		28		69
Complete (protein, fat, fiber,		20		5)
moisture, ash)		145		510
Miscellaneous		37		18
Total feed samples	89		183	
Total feed tests		210		597
E		210		
rerunzers		10		20
Nitrogen		10		20
Potash		8		18
Special		1		5
Total fertilizer samples	16		30	
물건 대부가 잘 걸려 가지 않는 것 같아요. 요. 요.				
Total familians tosts				70
i otal lettilizer tests	1.1	,,,		10
Economic Poisons				
Total samples	14		136	
Total tests		19		139
Dairy				
Butterfat				3
Total solids				3
Adulteration				1
Cyroscope		39		74
Total samples	39		77	
Total tests		39		81
Nanatias				0.
T	12		20	
lotal samples	12		20	
Total tests		24		40
(Conti	nued on Pag	e 29)		
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TYPES OF SAMPLES		1960-61		1961-62
Miscellaneous				
Total samples	4		3	
Total tests		6		5
TOTAL ALL SAMPLES	3,988		4,864	
TOTAL ALL TESTS		7,721		10,764

# AGRICULTURAL STATISTICS

During the past years there has been a great need for county agricultural data. This is brought about by government programs, information needed by credit agencies, manufacturers, and program planning committees.

On July 1, 1961, the State Department of Agriculture entered into a cooperative program with the Agricultural Statistician of the U.S. Department of Agriculture to provide this information. The responsibility of the State Department of Agriculture is to take the figures collected by the U.S. Department of Agriculture, and used for their state report, and publish the information on a county basis.

The first publication should be available sometime after July 1, 1962.

# REALIZED GROSS INCOME AND NET INCOME OF NEW MEXICO FARM OPERATORS FROM FARMING, 1953 - 1961

	1953	1954	1955	1956	1957	1958	1959	1960	1961
	\$1M	\$1M	\$1M	\$1M	\$1M	\$1M	\$1M	\$1M	\$1M
REALIZED GROSS FARM									
INCOME:			1 60 5		100.0				
Cash receipts from farm marketings	192.8	187.9	162.5	202.0	189.0	230.0	259.6	235.2	240.4
Government payments	1.2	2.8	2.1	5.7	15.0	13.3	14.9	11.2	14.1
Value of home consumption	9.0	7.7	7.4	7.6	8.0	7.1	5.7	5.2	4.8
Gross rental value of farm dwellings	10.7-	10.3	10.1	7.7	6.5	7.3	7.3	6.4	6.3
TOTAL	213.7	208.7	182.2	223.0	218.5	257.7	287.5	258.0	265.7
Farm production expenses	143.1	134.5	145.2	150.9	159.1	195.4	193.1	172.7	192.5
REALIZED NET FARM									
INCOME	70.6	74.1	37.1	72.1	59.4	62.3	94.4	85.3	73.2
Net change in farm inventories	-15.9	-4.2	16.0	-24.1	.8	22.5	-6.3	-2.7	19.0
TOTAL NET FARM INCOME	54.7	69.9	53.1	48.0	60.1	84.8	88.0	82.6	92.1

Statistics: Office of the Agricultural Statistician United States Department of Agriculture Las Cruces, New Mexico

# NEW MEXICO CASH RECEIPTS, BY COMMODITIES, 1960-61

	Value	\$1,000		Value \$1,000		
COMMODITY	1960	1961	COMMODITY	1960	1961	
Livestock and Products	\$142,155	\$151,290	Fruits			
			Pecans	\$ 3,021	\$ 918	
Cattle and Calves	113,162	121,279	Apples	652	794	
Dairy Products	11,883	12,084	Other 3	142	124	
Sheep and Lambs	5,639	6,026				
Eggs	4,084	4,515	Other Products			
Wool	4,026	4,042	Forest	903	811	
Hogs	1,974	2,138	Greenhouse and			
Poultry	394	260	Nursery	815	838	
Honey and Beeswax	82	103				
Other 1	911	843	TOTAL ALL COMMODITIES	\$235,217	\$240,441	
Crops	93,062	89,151	Starting and the second second second second second	The second second second second	Marshall was the	
Field Crops:						
Cotton Lint	48,663	39,660				
Wheat	8,363	11,515	<sup>1</sup> Turkey eggs, oth	er poultry, mo	hair.	
Hav	8.270	7,791	,,			
Sorghum grain	6.421	6.418	<sup>2</sup> Rye, other grains	, wheatgrass see	ed, other seeds.	
Cottonseed	4.665	6,401	asparagus, snap	beans, cabbag	e, sweet corn.	
Onions	1.635	2,744	cucumbers, green	peppers, wat	ermelons, mis-	
Peanuts	1.209	1.892	cellaneous vegetal	oles, sugar bee	ts. other field	
Broomcorn	1.377	1.582	crops, alfalfa seed	l. corn. sudang	rass seed. oats.	
Potatoes	1,109	1.279	The second second second	,,	,	
Barley	676	1,136	3 Apricots, cherrie	es. grapes, p	eaches, pears.	
Lettuce	1.310	948	plums, prunes, str	rawberries, and	others.	
Sweetpotatoes	567	860	Franci, Franci, m			
Dry edible beans	535	583				
Misc. vegetables	601	549				
Other 2	2,128	2,308				

This compares with 246 million in 1960 and 274 million in 1959. Receipts from farm marketings, excluding government pay-ments, are valued at 240 million dollars in 1961, 2% more than receipts of 235 million in 1960. Government payments of 14.1 million dollars in 1961 compared with 11.2 million in 1960. Receipts for livestock and livestock products in 1961 of \$151,290,000 were 6% larger than receipts in 1960 of \$142,155,000. Receipts from crops of \$89,151,000 were 4% below the \$93,062,000 crops brought New Mexico farmers in 1960. Receipts from cotton and cottonseed of \$46,061,000 represented 52% of total receipts in 1961. In 1960 receipts for cotton and cottonseed totaled \$53,328,000 or 57% of total crop receipts.

In this report cash receipts represent quantities sold during the calendar year and should not be confused with value of production in a given year.

Statistics from: Office of the Agricultural Statistician, U. S. Department of Agriculture, Las Cruces, New Mexico.