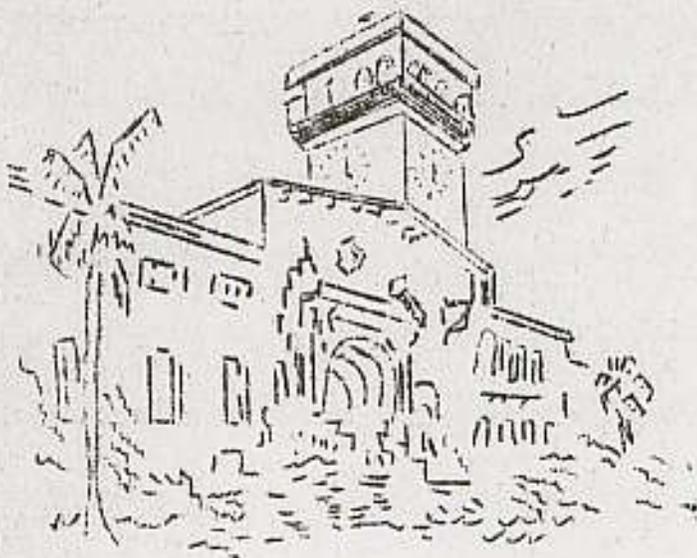


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Annual Report

1963



DEPARTMENT OF AGRICULTURE
Santa Barbara County

DEPARTMENT OF AGRICULTURE

COUNTY OF SANTA BARBARA

CALIFORNIA

Walter S. Cummings

Agricultural Commissioner

ANNUAL REPORT

1963

BOARD OF SUPERVISORS

Joe J. Callahan, Chairman

Curtis Tunnel

C. W. Bradbury

Daniel G. Grant

Veril C. Campbell

ADMINISTRATIVE OFFICER

David Watson

PERSONNEL

<u>Name</u>	<u>Title</u>	<u>District</u>
Walter S. Cummings	Agricultural Commissioner	Santa Barbara
Marcus E. Cravens	Deputy Agricultural Commissioner	Santa Barbara
Roger W. Allen	Deputy Agricultural Commissioner	Santa Maria
Joe Betz	Senior Agricultural Inspector	Santa Maria
William T. Jarvis	Senior Agricultural Inspector	Santa Maria
George Warren	Senior Agricultural Inspector	Santa Maria
Thomas G. Ritoch	Agricultural Inspector	Santa Maria
James Jones	Senior Agricultural Inspector, Rodents and Weeds	Santa Maria
Roscoe G. Cupp	Senior Agricultural Inspector	Santa Maria
Herbert C. Forst	Senior Agricultural Inspector	Santa Maria
William P. Silva	Agricultural Aide	Santa Maria
Stanley G. Trujillo	Senior Agricultural Inspector	Lompoc
Raymond F. Watson	Senior Agricultural Inspector	Santa Ynez
Edmond T. Fields, Jr.	Senior Agricultural Inspector	Cuyama
Clifford C. Benedict	Senior Agricultural Inspector	Carpinteria
Irving B. Treloar	Senior Agricultural Inspector	Santa Barbara
R. James Reid	Senior Agricultural Inspector	Goleta
Martin Suskin	Senior Agricultural Inspector	Santa Barbara
Everett F. Nickerson	Agricultural Inspector, Rodents and Apiary	Santa Barbara
William H. McCurdy	Agricultural Inspector, Weeds	Santa Barbara
Dorothy B. Seward	Steno Clerk III	Santa Barbara
Jane K. Scholl	Steno Clerk III	Santa Barbara
Annabel Bentson	Steno Clerk II	Santa Maria

District Offices

<u>Location</u>	<u>Address</u>	<u>Telephone</u>
Santa Barbara	County Office Building	Woodland 6-1611, Ext. 274
Carpinteria	Memorial Building	Carpinteria 43810
Goleta	County Office Building	Woodland 6-1611, Ext. 274
Lompoc	County Office Building	REgent 6-3411
Santa Maria	813 West Boone Street	WAlmrt 5-2784, Ext. 40
Santa Ynez	Main Street, Solvang	Santa Ynez 5281
Cuyama	County Office Building	SOuthfield 6-2210

During the year, several changes took place in the personnel of this office.

The first of June Annabel Bentson, Steno Clerk II, was hired to work in our Santa Maria office, replacing Sharon Silva who resigned.

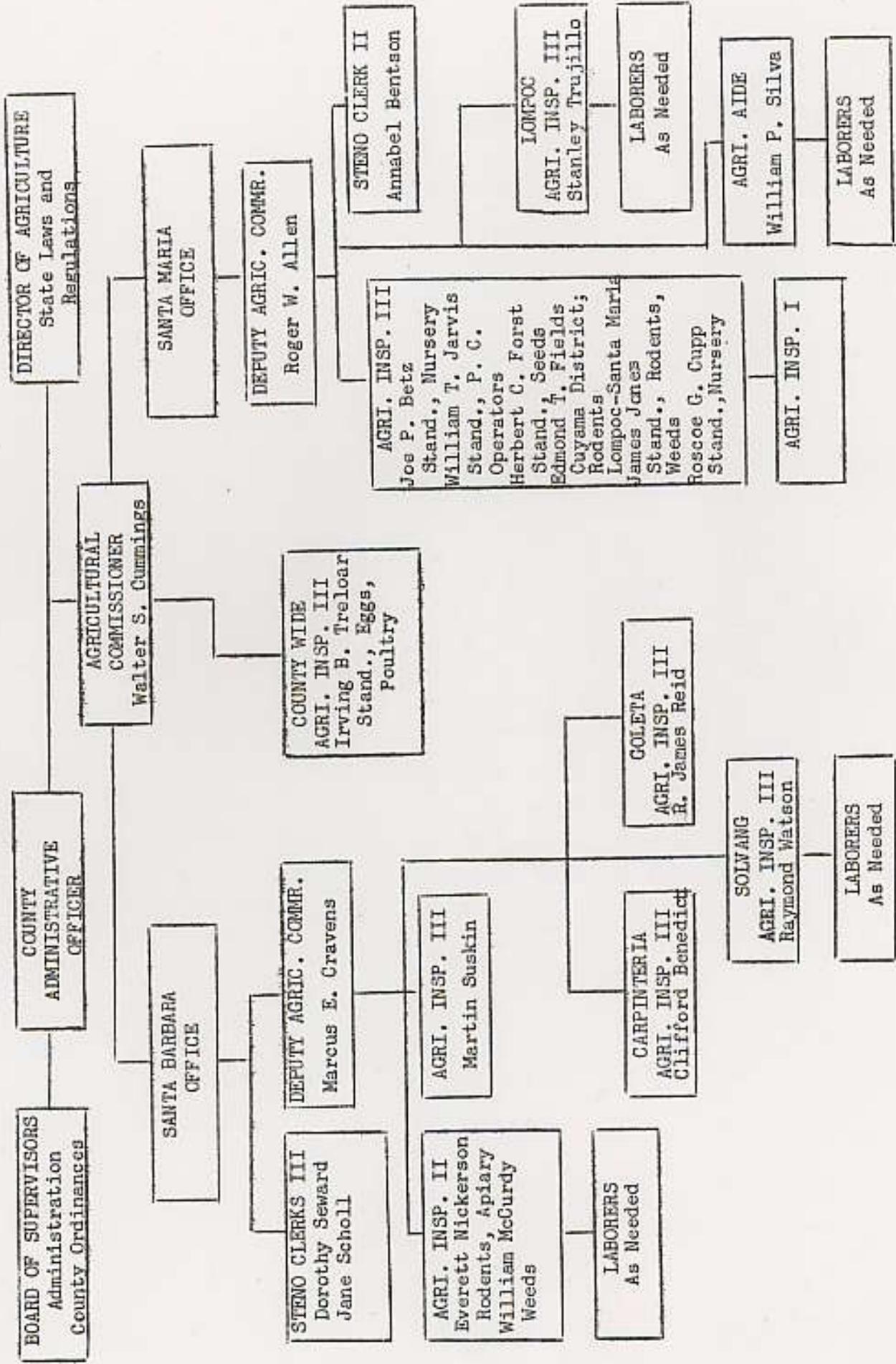
During March, George C. Warren and Thomas G. Ritoch in the Santa Maria district resigned.

In January, Roscoe G. Cupp was appointed as Agricultural Inspector in the Santa Maria district.

Herbert C. Forst was appointed as Agricultural Inspector in the Santa Maria district during September.

William H. McCurdy resigned December 31st as Agricultural Inspector in the Santa Santa Barbara district.

DEPARTMENT OF AGRICULTURE
County of Santa Barbara



Q U A R A N T I N E

One of the primary functions of this office is the enforcement of the laws, rules and regulations relative to plant quarantine. All Agricultural Commissioners, Deputy Commissioners and qualified inspectors are State Plant Quarantine Officers.

All shipments of nursery stock and plants, plant products including fruit, seed and grain, used agricultural implements and appliances, and household goods are required to be held for inspection upon first arrival in the county, in order to prevent the entry of plant diseases, insects, weeds or animals which might be detrimental to agriculture. All post offices, railroad express offices, freight yards and commercial trucking concerns are called upon daily by the inspectors of this office. In addition, many shipments of plants are inspected at nurseries and at private homes.

This office collaborates with the Bureau of Entomology and Plant Quarantine of the U. S. Department of Agriculture in the enforcement of Federal plant quarantines. The Federal regulations require that all vessels and planes, on arrival at the first United States port, be placed in quarantine and inspected for the presence of materials or pests in violation of United States plant quarantines. Arrangements were made with the authorities at Vandenberg Air Force Base for the quarantine inspection of planes landing there from foreign countries. During 1963, nine (9) ships and three (3) planes were inspected by this office.

The following is a report which has been compiled of the number of plants and shipments inspected on entering Santa Barbara County.

Interstate Quarantine

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Shipments inspected	2,998	3,834	3,472	3,758	3,438
Plants inspected	191,350	434,071	170,391	152,634	270,989
Shipments rejected	30	72	39	37	42
Plants rejected	238	138	167	230	236

Intrastate Quarantine

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Shipments inspected	2,530	1,637	1,721	1,622	1,313
Plants inspected	8,099,311	9,373,610	14,218,605	12,860,941	8,931,865
Shipments rejected	6	5	0	2	2
Plants rejected	959	52	0	6	4

Interstate rejections:

<u>No. State Exterior Quarantine Violated</u>	<u>Number of Violations</u>
Q. P. # 10 & Section 3258 C.A.C.	1
Section 110 C.A.C.	2
Sections 110 & 114 C.A.C.	1
Section 114 C.A.C.	16
Section 114 C.A.C. & Fed. Quar. #48	1
Section 115 C.A.C.	2
Sections 3250 & 3258 C.A.C.	1
Section 3250 C.A.C.	2
Section 3254 C.A.C.	4
Section 3256 C.A.C.	2
Section 3258 C.A.C.	2
Sections 3258, 3250 & 3271 C.A.C.	1
Section 3259 C.A.C.	2
Section 3260 C.A.C.	1
Section 3261 C.A.C.	1
Section 3263 C.A.C.	6
Section 3266 C.A.C.	2
Section 3267 C.A.C.	1
Section 3268 C.A.C.	1
Section 3269 C.A.C.	1
Section 3274 C.A.C.	3
Section 3275 C.A.C.	3

Intrastate rejections:

<u>No. State Interior Quarantine Violated</u>	<u>Number of Violations</u>
Quarantine Cir. #2	1
Quarantine Cir. #2 & Section 124 C.A.C.	1
Section 124 C.A.C.	15
Sections 124 & 125 C.A.C.	1
Sections 124 & 3273 C.A.C.	5
Section 125 C.A.C.	1
Section 154.3 C.A.C.	3
Section 3407 C.A.C.	1

Federal Domestic Quarantines

<u>Federal Domestic Quarantines</u>	<u>Number of Violations</u>
FQ #45, FQ #48, Section 114 C.A.C.	1
FQ #48	2
FQ #48 & FQ #77	2

QUARANTINE CERTIFICATION

In order to comply with requirements of foreign countries, 217 Export Certificates attesting to freedom from pests were issued on shipments of agricultural products. In addition 510 certificates were issued covering 431,693 containers of lemons for shipment to foreign countries.

NURSERY INSPECTION

All nurseries within the County were inspected at periodic intervals for the presence of pests and for compliance with Grades and Standards. If serious pests are found, eradication measures must be undertaken immediately by the nursery. Infestations of common pests must be kept to a light degree in all nurseries. All plants must be correctly labeled as to name.

There were 28 nurseries qualified to use Pinto Tags during 1963. These nurseries, maintaining a special degree of cleanliness, may ship plants to other places in California without further inspection of the plants at destination.

Nursery Inspections in Santa Barbara County

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
No. complete nursery inspections	192	186	209	197	246
No. re-inspections of nursery stock	67	125	118	82	116
No. man days used for nursery inspections	62.70	66.32	89.43	72.91	95.06
No. nurseries in which "A" pests were found	10	6	2	0	2
No. nurseries in which "B" pests were found	12	10	16	6	5

FIRST DETECTION

Detection surveys are important to determine the possible presence of new and dangerous agricultural pests. If pests can be found before they are too widely distributed, the possibility of eradication is greatly enhanced.

It is the duty of this office to enforce the provisions of the Agricultural Code requiring the control of insects and diseases which are a pest to agriculture. Many inspections were made during the year of various orchards and crops raised within the County for the purpose of finding pests and giving recommendations to the growers as to control methods. An increasing number of calls are also received from residents in the various cities, towns and subdivisions within the County for advice on control methods for pests. Through the cooperation of the growers, it was not necessary during the year to serve any abatement notices requiring the cleaning up of any premises.

SURVEYS CONDUCTED IN SANTA BARBARA COUNTY - 1963

	<u>Man-Hours County</u>	<u>Properties Inspected</u>	<u>Hosts</u>	<u>Acres</u>	<u>Traps</u>
Avocado Seed Weevil	12½	26	311		
Cereal Leaf Beetle	3½	3		6	
Citrus Whitefly	210	506	740		
Codling Moth	11				8
Japanese Beetle	189½				65
Khapra Beetle	133½	74			
Laurel Thrips	6	6	111		
Maple Bladder Gall Mite	34½	57	232		
Mexican Bean Beetle	29	14	211	2,259	
Multiple Fruit Fly	214				150 (50 Steiner 50 Frick 50 McPhail)
Podacarpus Scale	2	7	88		
Sadleria Mite	8½	15	63		
Scarab Beetle (Vardenberg)	57½	13			
Spruce Needle Miner	16½	21	90		
Striped Mealybug	8½	22	171		
Viburnum White Fly	16½	40	272		
Walnut Husk Fly	87½	1			106

ORCHARD PESTS

RED SCALE (*Aonidiella aurantii*): The population was slightly above normal except for a few orchards with very dense foliage where red scale became very heavy as a result of poor pesticide coverage.

BLACK SCALE (*Saissetia oleae*): Black Scale remains below normal. No special applications were made. However, rotenone was added to regular treatments in known infested areas. Ant control was also stressed.

CITRUS BUD MITE (*Aceria sheldoni*): Treatments for Red Scale and Red Spider kept this pest under control.

CITRUS MEALYBUG (*Pseudococcus citri*): This insect was more prevalent than usual in some foothill area orchards. Rotenone added to oil sprays, plus ant control kept this pest within bounds.

CITRUS RED MITE (*Panonychus citri*): This pest built up in areas with a dust problem.

SIX-SPOTTED MITE (*Eotetranychus sexmaculatus*): Was of no economic importance this season.

COTTONY-CUSHION SCALE (*Icerya purchasi*): Spotted light infestations were noticed in individual properties in Carpinteria Valley. They were apparently under biological control and were of no economic importance.

SILVER MITE (*Phyllocoptura oleivorus*): Continued light in all districts. Chlorobenzilate gave good control.

SLUGS AND SNAILS: Continued to be a serious problem along south coast areas.

ANTS: Heavy infestations on coastal areas required above normal acreage to be treated.

GREENHOUSE THRIPS (*Heliothrips haemorrhoidalis*): This avocado pest was light in all coastal areas.

AVOCADO BROWN MITE (*Paratetranychus coiti*): During late 1963 season this pest built to heavy populations. Beneficial insects were at a low level.

WALNUT APHID (*Chromaphis juglandicola*): This pest was held under good control with a maximum of two treatments.

WALNUT HUSK FLY (*Rhagoletis completa*): Populations appeared late in season with no real "peak" emergence. Some injury was sustained in cases of late or no treatment.

EUROPEAN RED MITE (*Panonychus ulmi*): This mite continues to be a serious pest. Treatments for walnut husk fly and codling moth have apparently increased the mite-pest problem, particularly in warm canyon areas.

FIELD AND TRUCK CROP PESTS

STEM NEMATODE: Serious in some alfalfa fields and generally established in most fields.

LYGUS BUGS: Serious in some lima bean fields. More treatments applied this past year. Also had in strawberries this past year, causing blossom drop and deformities of fruit.

SERPENTINE LEAFMINER: (*Liriomyza pusilla*): This pest affected young lettuce plants, celery, sugar beets and flowers in the Santa Maria area requiring some control measures.

APHIS: This group of insects continues to be the one of greatest concern for the vegetable and flower growers. There were periods during the year when control was poor no matter what material was used, resulting in serious damage in many cases.

CYCIAMEN MITE: (*Tarsonemus pallidus*): One of the worst insect pests of strawberries. Partial control with new insecticides and fumigation.

NEMOCESTES SP.: Less damage to berry plants during the year. Soil treatment before planting resulted in fairly good commercial control.

TWO-SPOTTED MITE & RED SPIDER: These two pests were of commercial importance on strawberries and beans during the year and caused considerable damage in large lima plantings.

TORTRIX: (Garden): This continued to be a major pest in strawberries, causing some damage to berries.

SUGAR BEET NEMATODE: This is always a serious pest on sugar beets in the Santa Maria area and cuts down production considerably. No practical control.

FLUME MOTH: This continued to be a very serious pest on artichokes, causing about a 37% crop loss. Parathion gave fair control.

POTATO TUBER MOTH: A heavy infestation occurred this past year in potatoes, causing considerable loss.

CORN EARWORM: Corn for silage showed considerable damage.

CUTWORMS: Various species did damage to various vegetable crops in valley. Broccoli, beans, artichokes and celery were crops most affected. Various insecticides and baits gave satisfactory control.

LOOPERS & WORMS: Various loopers and worms caused considerable damage to various crops. Lettuce and broccoli seriously damaged in some fields. These worms are hard to control.

SPOTTED ALFALFA APHID: Heavy build-up during the year in few fields caused some damage. Entomogenous fungus and parasite appeared to keep pest under control in most cases.

WIREWORMS & NEMATODES: For the control of these pests considerable materials are applied each year before the planting of crops. Wireworms are being effectively controlled and some of the newer materials have reduced the population of nematodes.

RED TURPENTINE BEETLE: This insect, due in a large measure to drouth conditions, caused severe damage to ornamental plantings and pines in the coastal area.

CRIBRATE WEEVIL: Did considerable damage to artichokes and young broccoli planting in early summer.

CODLING MOTH: In apples in Cuyama District, causing considerable damage.

SEED CORN MAGGOT: Caused considerable loss on beans, corn, broccoli and cauliflower.

ABANDONED ORCHARDS

The Agricultural Code provides that abandoned orchards are public nuisances and should be abated as such. During 1963, five (5) abandoned lemon orchards were caused to be removed.

AGRICULTURAL PEST CONTROL OPERATORS

All persons engaged in the business of agricultural pest control must be licensed by the State Department of Agriculture. The law also requires that before engaging in business in any particular county, pest control operators, after having first secured a license from the State, register to do business in each specific county. During 1963, registration certificates were issued to fifty-one (51) pest control operators engaged in the business of agricultural pest control in Santa Barbara County.

It is the duty of this office to enforce State regulations governing commercial pest control operators; to issue and enforce County regulations governing commercial pest control operators; and to regulate the use of "Injurious Materials" by means of permits for their application. During 1963, forty-four (44) singles and forty-four (44) seasonal Injurious Material permits were issued by this office.

One pest control operator was cited to court for engaging for hire in the business of Agricultural pest control without a license and failure to register with the Commissioner. He was convicted, fined \$ 25.00 and given a thirty (30) day suspended sentence on each count. Five (5) pest control operators were cited to appear at informal hearings for one or more of the following alleged violations: excessive drift of pesticides, failure to register with the Commissioner, careless application of pesticides too close to harvest, application of injurious pesticides without a permit. No further action was deemed necessary in these cases.

PLANT DISEASES

CELERY BLIGHT: There was very little celery blight in the Santa Maria District this past year. Preventive sprays were used throughout the celery season.

ASTER YELLOWS: This disease of celery was of no importance this year.

WESTERN CELERY MOSAIC: This was of minor importance in the district, however, it seems to be increasing.

PINK ROT OF CELERY: For a short period of time, this caused considerable loss.

CRACKED STEM OF CELERY: This was of no importance due to the heavy use of Boron sprays.

CRATER BLOTCH OF CELERY: 1963 was the first time this condition showed in celery in the Santa Maria District for several years and caused considerable loss.

CAULIFLOWER MOSAIC: This is of no commercial importance in the Valley, although it is widespread and causes some loss each year.

JUNE YELLOWS OR LETTUCE MOSAIC: This disease causes considerable loss in the valley each year in fields where certified mosaic free seed was not used, and in some fields using certified seed.

SCLEROTINIA: The disease was most prevalent on lettuce, bell peppers, and beans. It was heavier on beans than for several years with severe losses in some acreage of this crop.

BOTRYTIS: Heavier in 1963 on strawberries, artichokes and peppers than in the previous year.

DOWNY MILDEW: This is always a serious disease of lettuce in this area, and cuts production heavily. Various fungicides have not proven too effective over a long range program as yet. Scattered acreage of broccoli showed heavy infection.

POWDERY MILDEW: This caused some damage in strawberries during the year.

VERTICILLIUM: This is serious in some plantings of strawberries and causes the loss of many plants during the year, particularly the Lassen varieties. Considerable soil fumigation practiced with good results.

EARLY BLIGHT OF POTATOES: This disease of potatoes caused considerable early loss in some potato fields. It seems to be always present and varies in degrees of intensity from year to year.

ELEPHANT HIDE OF POTATOES: This is the first year that this showed up to any degree and caused some loss in the Kennebec and Russet varieties.

RHIZOCTONIA: Serious in some potato, pepper and bean fields. Showed heavy in beans and peppers during 1963.

SCAB: This disease of potatoes remains about the same in the district. Scab showed increased seriousness on carrots with considerable acreage lost. This accounted for a decreased harvest figure for carrots during the year.

BACTERIAL SOFT ROT OF BROCCOLI AND CAULIFLOWER: This was of not serious consequence except for a short period of time, most serious damage on cauliflower.

CORKY RING SPOT OF POTATOES: Serious in a couple of fields causing considerable loss, this is a physiological condition.

ALFALFA VIRUS OF POTATOES: This disease of potatoes caused minor loss this year.

TOBACCO MOSAIC: Heavier damage of chili peppers in 1963 than previous years and growers blame decreased yields to some degree on this disease.

YELLOW DWARF, RUST, BLOTCH AND SCALD OF GRAIN: These four diseases of grain were of a serious nature in Santa Maria District for 1963 and caused light to heavy losses.

LEMON COLLAPSE: No outbreak of this disease was noted in any lemon growing area of Santa Barbara County during 1963.

BROWN ROT: During spring this disease was very active and above normal. In some cases, two and three treatments were needed for adequate control.

OAK ROOT FUNGUS: This fungus disease continued to cause trouble in scattered spots in lemons, avocados and in backyards. Soil treatment with carbon bisulfide is the best known treatment to date.

WALNUT BLIGHT: Due to extensive periods of rainfall throughout the growing period, this bacterial disease was heavier and more wide spread than normal.

CINNAMON FUNGUS: This avocado root rot disease continued its spread within avocado growing areas.

NEMATODE SURVEY

A continuing sampling program was maintained during the year to develop information relative to the establishment of various species of nematodes in the county. Incoming shipments of nursery stock were sampled at random. All samples were processed in our laboratory before sending to State Department of Agriculture for final determination.

During December of 1963 an extensive cooperative Federal, State and County Burrowing Nematode (*Radopholus similis*) survey was conducted throughout the commercial plantings of citrus and avocados. County Department of Agriculture inspectors were assisted by two project men. 271 root samples were taken from 211 locations. 154 county man hours were expended and 723 miles were traveled. No burrowing nematode was found during the sampling of these properties.

Burrowing nematode is of utmost importance as it is a possible vector of serious citrus and avocado diseases.

Burrowing nematode was found in established plants in one nursery. The nursery was placed under a Hold Order until the pest was eradicated. A second nursery showed burrowing nematode in plants not established. These were destroyed and no further infestation has been found.

APIARY INSPECTION

It is the duty of this office to inspect all colonies of bees within the County and require the eradication of all bees infested with American Foulbrood.

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Total colonies registered in county	2,910	3,944	3,067	5,194	6,164
Number of apiaries inspected	83	64	67	81	73
Number of colonies inspected	2,772	2,032	1,157	2,630	2,992
Number of apiaries infested - American Foulbrood	2	3	1	5	3
Number of colonies infested - American Foulbrood	19	39	1	17	35
Number of colonies destroyed	4	0	1	9	33
Colonies sent to wax salvage plant	0	38	0	8	2
Number apiaries infested - European Foulbrood	0	0	1	0	0
Number of colonies infested - European Foulbrood	0	0	1	0	0

Two beekeepers were invited to appear before the District Attorney for an informal hearing, to show cause why a citation should not be issued, charging them with violations of Sections of the Agricultural Code pertaining to Apiary Laws and particularly to that section requiring the sending of movement notices when colonies of bees are moved.

One beekeeper appeared, it being his first appearance and on his promise of compliance and cooperation in the future, no citation was issued. The other beekeeper failed to appear for the informal hearing. This beekeeper had on previous occasion appeared for hearing on violation of the Agricultural Code and been warned and had at that time promised in the future to comply with the Agricultural Code. As a result of his failure to appear and his previous record, a criminal citation was issued. He appeared in Court on October 4, 1963, plead guilty to violation of Section 275 of the Agricultural Code and was fined \$56.00.

Many bees were moved into the county for winter feeding on eucalyptus. Mustard was also good in the spring. There were 3,000 colonies on alfalfa seed pollination in the Guyana Valley.

SEED SCREENINGS

During 1963 thirty (30) lots of seed screenings were found clean on inspection and were released for unrestricted movement. Ten (10) permits were issued for lots infested with weed seeds for processing to destroy the weed seeds. In most cases, this was accomplished by cooking the infested screenings and then feeding the lot to livestock.

STANDARDIZATION

The enforcement of the standardization provisions of the Agricultural Code is one of the major functions of this Department. This phase of our activities is under the direction and supervision of the State Director of Agriculture.

This office is charged with the inspection of fruits, nuts, vegetables, eggs, poultry and honey at packing houses, packing sheds, loading areas, wholesale and retail markets to enforce the requirements governing the quality, packing and marketing of such products and to inspect and certify loads of commodities moving interstate and intrastate on request of shippers to show compliance with California Standardization requirements.

The Board of Supervisors entered into an agreement with the Summer Head Lettuce Advisory Board which provided that this office would act as enforcing officers of the Summer Head Lettuce Marketing Order. The County was reimbursed for the expenses incurred.

STANDARDIZATION ENFORCEMENT

Packing Shed and Store Inspections

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Total Man Days	377	336	317	286	298
Total Containers Passed	936,005	1,258,142	818,744	869,735	1,108,748
Number of Rejections	89	147	111	101	98
Total Containers Rejected	6,920	11,321	10,276	13,505 24#	9,637 233#

Egg and Poultry Inspections

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
<u>Egg Inspections:</u>					
Total Man Days	50	27	28	32	30
Number Premises Visited	329	291	283	299	307
Number Lots of Eggs Inspected	1,117	874	1,088	1,195	1,299
Number Dozen Eggs Represented by All Samples Inspected	65,869	94,212	113,349	123,484	128,182
Number of Dozen Eggs Rejected	1,673	2,125	1,011½	1,832	2,509
Number Violation Notices Issued	50	50	38	46	35
<u>Poultry Inspections:</u>					
Man Days	18	16	16	16	15
Number Premises Visited	227	176	219	243	278
Number Carcasses and Packages Represented by Inspection	16,259	14,809	20,156	20,377	31,148
Number Violation Notices Issued	0	3	1	5	1
Number Carcasses & Packages Rejected	0	63	15	179	40

Under agreement with the Dry Pack Lettuce Advisory Board this office is charged with the enforcement of the quality provisions of the State Marketing Act pertaining to Dry Pack Lettuce. All dry packed lettuce has to be inspected in the field prior to loading for shipment. If it complies with the law, a clearance certificate is issued. Violation notices are issued on all lots not complying, and these lots are required to be reconditioned to meet the State Standards before shipment.

Lettuce is harvested early in the morning with most of the crews beginning at daylight. The inspectors are in the field before 7:00 A.M., seven days a week in order that there be a minimum of delay in the movement of lettuce.

DRY BACK LETTUCE CERTIFICATION

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Total man days	459	410	346	277	286
Number certificates issued	5,742	4,499	4,526	3,611	3,009
Number containers certified	1,711,006	1,705,843	1,851,543	1,522,632	1,177,635
Number rejections	155	210	148	84	68
Number containers rejected	26,935	23,516	20,801	8,257	6,249
Total amount received	\$ 11,504.50	10,281.75	10,577.75	8,632.75	6,905.75

STANDARDIZATION CERTIFICATION

At the request of growers, or shippers, clearance certificates are issued on lots of fruits and vegetables found to comply with the provisions of the Agricultural Code.

Shipments of vegetables by truck are now going to all parts of western United States with an increasing amount going into the middle west and as far east as the southern states and Florida. This phase of the work creates a serious problem as many times shipments have to be inspected and certified on comparatively short notice.

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Total man days	304	270	254	246	243
Number certificates issued	4,900	4,779	4,856	4,471	3,872
Number containers certified	1,030,240	847,421	1,054,081	1,064,969	856,089
Fees collected	\$ 8,241.00	7,410.00	8,222.75	7,726.75	6,265.25

RODENT CONTROL

The rodent control program followed its usual pattern. Squirrels on cultivated land and in and near urbanized areas were intensively treated with carbon bisulfide during the early spring. Bison grain baits were used on range and agricultural land during the summer. Due to its low secondary toxicity and relative safeness, anti-coagulant baits were used around centers of population.

During the year, the following amounts of material were used on squirrel control:

<u>Acres Treated</u>	<u>1080 Baitings</u>	<u>Fival Baitings</u>	<u>Prolin</u>	<u>Carbon Bisulphide</u>
578,653	5,025 lbs.	368 lbs.	243 lbs.	462½ gals.

PLAGUE AREA OPERATIONS

The plague area is defined to include all of Vandenberg Air Force Base and a strip one-half mile each side of the Santa Ynez River from Gibraltar Dam to the ocean, including the areas around the towns of Lompoc, Buellton, Solvang and Los Olivos.

The control measures in these areas are intensified over and above those in the rest of the County. The population of squirrels is kept at a very low minimum to decrease the possibility of an outbreak of Bubonic Plague.

During 1963 the following materials were used in plague area operations:

Acres treated	24,450
1080 grain	98 lbs.
Carbon Bisulfide	40 gals.
Waste Balls	72

GOPHERS

To assist in the control of gophers, which do considerable damage in the county, this Department prepares and sells at cost strychnine poison grain. This bait, prepared at the Santa Maria office, is available for purchase at any of the district offices. More than twenty-nine (29) machines for the application of the 3% strychnine gopher bait are now in operation within the County.

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Number of individual sales	314	292	585	331	563
No. pounds regular (.3%) bait sold	2,365	2,327½	4,653	2,095	5,526
No. pounds machine (3%) bait sold	--	--	4,514½	3,443	5,328
Ounces strychnine sold	1½	½	190	3	13
Total amount collected \$	289.46	285.09	4,720.10	3,147.09	4,999.91

RABBITS

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Number of individual sales	26	26	57	23	78
Number pounds bait sold	534	646	932	339	1,300
Ounces strychnine sold	9	1	15	9½	22
Total amount collected \$	83.39	88.68	174.09	71.32	241.00

RATS

This office received many calls during the year for assistance in the control of rats doing damage on the various farms and in agricultural buildings. Recommendations were made in regard to sanitation and rat proofing as these are basic in control. Most of the control work was done with the use of anti-coagulant materials which have proven very effective and relatively safe as compared to other poisons. Close cooperation was maintained with the County Health Department in all of our rodent and rat activities where the element of human danger from transmission of rodent borne diseases is possible.

During 1963 the following materials were used in controlling rats:

<u>Properties Treated</u>	<u>Frolin</u>	<u>Zinc Phosphide Baitings</u>	<u>1080 Baitings</u>	<u>Fivalyn</u>	<u>Fival</u>
348	269 lbs.	14½ lbs.	12 lbs.	170 pkgs.	629 lbs.

BIRD CONTROL

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
Number individual sales	33	32	32	12	15
Ounces strychnine sold	71	101	63	33½	29
Amounts collected	\$ 93.61	134.46	93.44	51.88	43.50

PREDATORY ANIMAL CONTROL

During the past several years, an agreement has been entered into between the County of Santa Barbara, the State Department of Agriculture and the U. S. Fish and Wildlife Service for the control of predatory animals in Santa Barbara County. During the past year very few complaints were received concerning damage done to agriculture by coyotes or other predatory animals. Considerable work was done in the South Coast area in keeping skunk and fox population low as they are potential reservoirs of rabies. 198 coyotes and 97 bobcats were trapped during the year.

WEED CONTROL

The control of noxious weeds and the prevention of their spread and establishment in new areas is of major concern. The estimated loss caused to agriculture by weeds equals that of damage caused by insects and diseases combined.

Any person applying Injurious Herbicides must first obtain a permit from the Agricultural Commissioner. During the year 126 seasonal and 320 single Herbicide permits, making a total of 446 permits in all, were issued for pest control purposes in Santa Barbara County.

During the year, most of the railroad tracks in the county were walked for the purpose of finding any new infestations of noxious weeds, and the highways were traveled for the same reason. We find the most common avenue of introduction of new weeds to be along the railroad or highways. Airports are also checked.

For 21 consecutive years the County has entered into an agreement with the State Division of Highways for the control of certain noxious weeds on State Highway rights-of-way. The County was reimbursed for all monies spent by the County for such weed control. This amounted to \$5,929.70 for the fiscal year 1962-1963.

This Department is responsible for the control of certain specified noxious weeds on both public and private properties within the County as stated by Resolution 3913 of the Board of Supervisors. At the request of the County Road Department herbicides were applied along county roads to prevent the growth of weeds and unwanted vegetation. Also considerable work was done on the control of poison oak and other weeds in the various County Parks.

All known locations of primary and secondary noxious weeds are noted on individual maps giving the size of the infestation, the location for ready finding, each date that infestation was found, and a continuous record of treatment and results. Each District Inspector has a copy of these maps for his respective

district, and a master set is kept on file in the central office. In this way, a record is kept of all treatment on these weeds and the progress of eradication and control can be easily noted. If no weeds are found for five (5) consecutive years the infestation is considered eradicated. In spite of intensive control measures, puncture vine has continued to spread within the County.

Poison Hemlock, Bermuda Grass, Johnson Grass, Morning Glory and Poison Oak are weeds that are more or less generally distributed in the county. The policy regarding their control is that the County controls them on county roads and highways if the adjacent property owner controls them on his own property.

Weed Control Materials Applied by this Department

Materials Furnished By:

	<u>Agricultural Department</u>	<u>Other County Departments</u>
2,4-D	49 gals. 1 qt. 9 ozs.	2 pts.
Hyvar	117 pounds	838 pounds
638	4 3/4 gals.	
Multifilm L	5 gals. 2 qts. 1 pt. 13 ozs.	
LV 4	15 gals. 2 qts. 1 1/2 pts.	
Gamet	3 gals. 1 pt. 6 ozs.	
M C P	1 pt. 5 ozs.	
EPTC	2 qts.	
Farin	1 gal.	
Oil	3,885 gals. 2 qts.	
Carbon	8 gals.	
Chipman Additive	2 pts.	
Methoxone	1 7/8 pts.	
Brush Killer	3 qts.	
Dalapon	116 pounds	
Atlacida	21 pounds	
Polybor Chlorate	30 pounds	
Amino Trisacole	39 1/2 pounds	
Uroox	25 pounds	
M 542	5 pounds	
ACP 629	3 1/2 quarts	
X-77	31 3/4 pts. 89 1/2 ozs.	
Telvar	577 pounds	2,790 lbs.

In addition, 1,028 gals. and 40 pounds of concentrate herbicides furnished by private individuals were applied by this Department in the control of certain noxious weeds on private properties as authorized by Resolution 3913 of the Board of Supervisors.

SEED INSPECTION

This is another function of this office that is under the direction and supervision of the Director of Agriculture. It is important that seed be correctly labeled in order that the consumers know what they are planting. All seed is required to be labeled with the name of the seed, percentage of germination, presence and names of weed seeds, etc. Stop sale orders are issued on all lots of seed not in compliance with the law. The following is a report of seed inspection work done in the county:

	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
"Stop Sale" orders issued	29	52	29	8	30
"Stop Sale" orders removed	22	46	18	25	21
Lots seized for condemnation	0	0	0	6	21
Number of convictions	0	0	0	0	0
Number of complaints filed	0	0	0	0	0
Number of dealers cited for hearing	0	0	0	0	0
Official samples drawn	48	34	40	26	39

Samples were drawn on 101 lots of dry beans for the Bureau of Field Crops, State Department of Agriculture.

AGRICULTURAL STATISTICS

This office is called upon constantly from many different sources for information regarding agricultural statistics. At the request of the vegetable growers of the County, a monthly survey is made of the acres planted during the month to various vegetable crops, and of the acres of these crops to be harvested the following month. This report is mailed to the growers and companies requesting same.

The Agricultural Code requires that this office compile and issue an annual crop report showing the acreage, production and value of agricultural crops of the County. This is done at the end of each calendar year.

At the request of the County Water Agency, an annual report of the acreage, production and value of agricultural crops produced in the area serviced by water from Cachuma is submitted to the U. S. Bureau of Reclamation.

From time to time during the year we are called upon by the Director of Agriculture to compile reports regarding specific items. We have compiled many reports and given much information to Government Bureaus, Chambers of Commerce, organizations, and individuals relative to agricultural statistics of the County.

IN-SERVICE TRAINING MEETINGS

During the year, two all day training sessions on the following subject matter were conducted in Santa Barbara by the State Department of Agriculture for Agricultural Inspectors: Plant Pathology and Plant Disease Detection. Also a training session on Standardization Inspection was held in Santa Maria. Staff meetings were regularly held the first of each month. These meetings and training sessions have proven to be very valuable, resulting in a better informed and a more efficient staff.

FINANCIAL STATEMENT

Fiscal Year 1962-63

Salaries and Wages	
Commissioner, Deputy Commissioners, Inspectors and Clerks	\$ 136,298.11
Field Labor	7,976.60
Maintenance and Operations	17,751.05
Capital Outlay	<u>4,185.22</u>
TOTAL	166,210.98
Revenue	<u>29,998.29</u>
Net Operating Cost of the Department	\$ 136,212.69

Classification of Estimated Expenditures by Functions
Fiscal Year 1962 - 1963

Plant Quarantine	16,708.45
Standardization	42,880.09
Insect Detection and Survey	7,453.40
Plant Disease Detection and Survey	744.35
Pest Control and Eradication program	16,718.75
Nursery Inspection	4,731.59
Seed Inspection	887.17
Rodent Control (County Expense)	37,145.40
Plague Suppression (County Expense)	1,538.52
Weed Control (County Expense)	22,365.85
Apiary Inspection	2,072.74
Crop Statistics	6,949.52
Pest Control Operators Enforcement	1,774.34
Other Items	<u>4,240.81</u>
TOTAL EXPENDITURES	\$ 166,210.98

REVENUE

Fiscal Year 1962 - 1963

Standardization Certification	7,141.00
Sale of Strychnine Grain (Gophers & Rabbits)	4,167.53
Dry Pack Lettuce Inspection	8,766.25
Plague Suppression	193.81
Weed Work on State Highways	5,929.70
Commissioner's Salary Reimbursement	3,300.00
Summer Head Lettuce Inspection	<u>500.00</u>
TOTAL	\$ 29,998.29

TIME AND MILEAGE SPENT BY
INSPECTORS DURING 1963

	Hours						Miles								
	1959	1960	1961	1962	1963	1959	1960	1961	1962	1963	1959	1960	1961	1962	1963
1. Office	4,626	5,311	4,819	4,891	4,934	13,759	22,118	15,525	14,978	18,744	13,759	22,118	15,525	14,978	18,744
2. Quarantine Certification	2,741	2,581	2,478	2,559	2,601	20,743	18,113	17,005	19,071	18,470	20,743	18,113	17,005	19,071	18,470
3. Quarantine	291	324	369	338	342	2,465	2,981	3,257	3,249	3,221	2,465	2,981	3,257	3,249	3,221
4. Insect-disease-pest survey	1,124	1,987	1,355	1,507	1,580	6,949	13,311	9,515	10,930	11,095	6,949	13,311	9,515	10,930	11,095
5. Nursery Inspection	554	607	795	648	857	2,828	3,227	3,910	3,399	4,299	2,828	3,227	3,910	3,399	4,299
6. Orchard Inspection	1,129	889	1,114	1,238	995	8,696	6,808	9,238	9,967	8,631	8,696	6,808	9,238	9,967	8,631
7. Field-Truck Crop Inspection	160	181	147	216	222	1,517	1,534	1,338	1,720	1,825	1,517	1,534	1,338	1,720	1,825
8. Pest Control	871	738	906	638	544	7,725	6,594	8,182	5,121	5,012	7,725	6,594	8,182	5,121	5,012
9. Beneficial Insects	90	15	83	43	47	621	136	474	231	378	621	136	474	231	378
10. Seed Inspection	135	147	111	118	210	375	453	352	686	2,190	375	453	352	686	2,190
11. Weeds	3,651	3,666	2,995	3,334	3,683	18,818	18,663	17,406	20,027	26,583	18,818	18,663	17,406	20,027	26,583
12. Rodents	2,990	3,049	4,360	3,837	4,149	22,036	21,817	32,913	31,198	36,433	22,036	21,817	32,913	31,198	36,433
13. Rodents - Flague Area	179	78	117	35	18	1,599	650	1,338	327	15,971	1,599	650	1,338	327	15,971
14. Standardization	3,014	2,691	2,537	2,795	3,199	25,556	23,079	23,534	27,108	13,990	25,556	23,079	23,534	27,108	13,990
15. Standardization Certification	2,431	2,159	2,033	1,967	1,786	16,295	13,816	14,242	13,692	10,742	16,295	13,816	14,242	13,692	10,742
16. Dry Pack Lettuce Certification	3,672	3,278	2,769	2,218	2,117	35,761	31,963	27,155	22,872	18,920	35,761	31,963	27,155	22,872	18,920
17. Crop Census	179	247	201	355	157	1,265	1,699	1,332	2,044	1,483	1,265	1,699	1,332	2,044	1,483
18. Annual Report	1,050	1,050	1,147	875	690	7,620	7,063	7,156	6,856	5,990	7,620	7,063	7,156	6,856	5,990
19. House Calls	666	784	829	1,002	877	4,476	5,482	5,619	7,143	6,228	4,476	5,482	5,619	7,143	6,228
20. Meetings	1,147	952	945	944	918	7,675	8,382	6,263	7,818	6,755	7,675	8,382	6,263	7,818	6,755
21. Fairs, Exhibits	1,083	936	78	47	52	6,159	4,251	618	225	594	6,159	4,251	618	225	594
22. Apiary	293	224	199	415	323	2,611	2,419	2,506	5,511	4,710	2,611	2,419	2,506	5,511	4,710
23. Birds, Predatory Animals	57	35	143	92	44	534	241	1,064	928	337	57	35	1,064	928	337
24. Pest Control Operator's Inf.	--	--	--	266	373	--	--	--	2,258	3,199	--	--	--	2,258	3,199
25. Miscellaneous	3,781	3,271	4,198	3,644	3,433	11,678	13,254	15,372	11,465	7,887	3,781	3,271	4,198	11,465	7,887
TOTALS	35,914	35,200	34,728	34,022	34,151	227,761	228,054	225,314	228,824	233,687	35,914	35,200	34,728	34,022	34,151