

1933

Mr. Chas. Detterding, Manager
County of Sacramento.

I submit herewith my annual report covering the activities of the office of the County Agricultural Commissioner of Sacramento County for the year 1933.

The protection to agriculture from the introduction and spread of injurious insects and plant diseases is of primary importance and was given careful attention during the past year. 3648 Shipments containing 863,461 parcels originating outside California were inspected and permitted delivery. An additional 60 shipments containing 14305 parcels were rejected for either being infected with plant pests or for having been shipped in violation of a plant quarantine. The total number of shipments inspected was slightly less than in 1932 with a difference of fifty one.

Intrastate shipments of fruit trees for planting in Sacramento County showed a decided decline with a total of 29,347 as compared with 72,793 for 1932. Ornamental stock showed a similar decline with 252,653 plants inspected in 1933 as compared with 550,014 for 1932.

Berries on the other hand showed an increase from 14151 in 1932 to 59803 in 1933.

PLANT DISEASES

Pear Blight was not as severe as in past years although damage to many orchards occurred during late summer after the removal of the crop. Pear trees removed during the year will approximate 25000 trees.

Inspections of sugar beet plantings showed a general infestation of Southern rot in fields close to the city of Sacramento, spotted infestations in the upper delta and with no disease being located in the lower delta. Shipments of beets required the careful attention of none inspector during the loading period due to presence of this disease.

FROST INJURY

The full effect of the freeze of December 1932 was not appreciated until the spring of 1933. The orange trees were the most severely damaged with tree losses of from 20 to 80% of individual orchards. Over one half of the citrus trees were rendered unfit for future commercial use. Very few trees produced fruit this season and no ornages for commercial use were in evidence. Normally 130 cars are required to move the orange crop. A limited production is expected for 1934 and it is doubtful if it will exceed 10% of the oranges formerly harvested.

Olives, were also badly damaged particularly the manzanillo variety which suffered a heavy loss of wood from freezing and also from the olive knot which followed the bark injuries causing additional losses. The total olive production was cut to less than 20% of normal.

Winter vegetables also suffered with the heaviest loss occurring to the celery fields. Vegetable stecklings, particularly beets, were injured while the carrots showed the best recovery. Market carrots, however, were rendered unmarketable due to their unfitness for table use.

RODENTS

Lack of adequate funds prevented the carrying out of general rodent control work although an increase in requests for assistance was noted as a result of the increase in rodent population. A substantial increase was also shown in the amount of rodent control material distributed which exceeded that of 1932 by 1268 lbs of poison grains and 170 Gals. of bi sulphide

BIRDS

Disbudding of trees, particularly prunes, almonds and apricots by birds has been giving concern to orchardists. This damage has been due mainly to linnets and control measures against this particular bird was supervised in the orchards where damage occurred and where assistance was requested. Gamble sparrows destroying newly planted alfalfa checks were also brought to our attention. Control measures applied resulted in the known destruction of 771 linnets, 137 gamble sparrows and 70 english sparrows. The dead birds picked up were all destructive species and are without doubt only a small percentage of those actually killed. This work was handled only on

nine ranches. Personal supervision was given to the placing of the poison so that loss of beneficial birds could be avoided.

STANDARDIZATION

Sacramento County produces and ships fresh fruit or vegetables every month in the year. The total shipments for 1933 amounted to 8,966 cars which is 1116 cars less than in 1932. The more important decreases were: Lettuce, 550 cars, following the disastrous prices received in 1932 plantings were curtailed together with some loss resulting from the hot fall of 1933: Pears, 174 cars, due to an exceptionally heavy cannery delivery which more than offset the difference; asparagus, 417 cars due to growing and market conditions.

Strawberry shipments on the other hand were increased by 31 cars or a total of 279 cars which is the heaviest car movement on record for this county, making Sacramento the leading Strawberry shipping county in the State. Grape shipments were increased by 270 cars and tomatoes by 147 cars.

Carload shipments arriving at Sacramento totaled 2347 as compared with 2626 for 1932. This difference was partially made up through increased truck movement.

Inspections made for substandard fruits and vegetables resulted in 202 lots, consisting of 12,633 packages, being rejected.

The Sacramento market is the distributing point for a considerable territory including areas of Oregon, Idaho, and Nevada. During the year 2804 inspections were made and clearances issued on trucks moving into the adjoining states. Two wholesale market centers are now in operation here to take care of this distribution.

INSECTS

The codling moth injury to pears was greater than last season and considerable loss was suffered by growers from this insect. Spray residue regulations issued by the United States Department of Agriculture requiring that residues of arsenate and lead be eliminated has complicated the situation. Acid washing equipment has now been made an integral part of packing shed equipment. Thirty eight power washers were in operation during 1933 in this county. An inexpensive home made washer suitable for handling small lots of pears was developed from suggestions furnished by this office and was extensively used in the

smaller pear producing areas.

All pear shipped from Sacramento County were thoroughly and satisfactory cleaned and no fruit was lost from seizures in markets of destination.

Incomming shipments of pears and apples were closely checked and lots showing residue were held up until properly cleaned.

The equipment in operation during 1933 demonstrated that the pears can be readily cleaned and should relieve the grower of his fear of fruit loss due to inability to remove residue and should stimulate more careful and thoroughly spraying in 1934. Unless sufficient sprays are applied to bting the moth under control. The growers may find it difficult to make cannery deliveries due to heavy losses from worms taken by the canner on the 1933 delivery.

APIARY INSPECTION

Apiary inspection work has been held down to a minimum due to insufficient funds to adequately cover this work. Apiaries registered during the year totaled 93 which was an increase of 29 over 1932. The total hives registered for 1933 however was only 2837 being 1097 less than 1932. A large number of shipments of queens and package bees was made by a local apiary whose customers were located throughout the United States. A total of 5940 queens were distributed, during the year.

Respectfully submitted ,

A. E. Morrison

Agricultural Commissioner
Sacramento County

*Anti Fair
Trucks*

ANNUAL REPORT _____ County. From Jan. 1, 1933, to Dec. 31, 1933

PLANT QUARANTINE [Interstate Shipments Only]

	BY MAIL	BY BOAT OR RAIL	BY TRUCK	BY AIR
(1) Number of Shipments Passed	1516	1561	454	117
(2) Number of Parcels Passed	1516	793514	68314	117
(3) Number of Shipments Rejected or Destroyed	16	25	24	
(4) Number of Parcels Rejected or Destroyed	16	11031	3268	
	FOUND CLEAN	COTTONSEED CONTAMINATED	OTHERWISE CONTAMINATED	
Number of Railroad freight cars inspected				21 Steam C cleaned
	FOUND CLEAN	CARRYING CONTRABAND		
Number of Private railroad cars inspected				

REASONS FOR REJECTIONS

(7) REJECTIONS BECAUSE OF QUARANTINE VIOLATIONS (BOTH INTERSTATE AND INTRASTATE)				REJECTIONS BECAUSE OF PEST INTERCEPTED ON INTERSTATE SHIPMENTS ONLY	
Number of the State Quarantine Order, Circular, Regulation, or Section of State Quarantine Law Violated	(5) Number of Violations	Number of the Federal Quarantine Violated	Number of Violations	NAME OF PESTS INTERCEPTED	(6) NUMBER TIMES INTERCEPTED
Quarantine	3	2	48	1	Nematode (Potato cars) 21
Bulb-Other	5	2			" Trucks 21 *
Boxing	6	1			(Nevada Cars 20)
	7	1			(" Trucks 21)
	13	3			(Oregon cars 1)
	15	4			Nematode Ornamentals 8
					Pear root aphid 1
					Gladiolus thrips 1
				* One truck also covered by quarantine rejection for violating quarantine No. 7	

(OVER)

ANNUAL REPORT ~~San Bernardino~~ County. From Jan. 1, 193~~3~~, to Dec. 31, 193~~3~~*Inspection of Intrastate Shipments of Nursery Stock*

KIND	NO. INSPECTED		NO. REJECTED		CAUSE OF REJECTION
	SHIPMENTS	PLANTS	SHIPMENTS	PLANTS	
Deciduous Fruit Trees.....	212	27567	12	6166	aphis, gall, nematode
Subtropical Fruit Trees.....					
Citrus.....	6	1437			
Others.....	4	343			
Berries.....	61	59803			
Grapes.....	12	6634			
Seedlings (Deciduous).....	1	2300			
Seed-bed Stock (Citrus).....					
Vegetable Plants, Flats.....	13	14522			
Ornamentals.....	1045	67322	30	259	mealybug
Bulbs—Narcissus.....	40	11373			
Bulbs—Others.....	439	126726	1	12	nematode
Bedding plants	8	767			
Hop Roots	1	11000			

NURSERY INSPECTION

PEST	NO. CLEAN NURSERIES OR PLANTINGS	NO. INFESTED NURSERIES OR PLANTINGS	AMOUNT AND KIND OF STOCK INVOLVED	WHAT CONTROL MEASURES USED
SCALE INSECTS				
Black				
<i>Saissetia oleae</i>	4	8	ornamental	oil sprays
Hemispherical				
<i>Saissetia hemisphaerica</i>	10	3	"	
Red				
<i>Chrysomphalus aurantii</i>		0		
Yellow				
<i>Chrysomphalus citrinus</i>		0		
Dictyospermum				
<i>Chrysomphalus dictyospermi</i>	11	3	Kentia	oil wash
Florida Red				
<i>Chrysomphalus aonidum</i>	12	2	Palms	"
Citricola				
<i>Coccus pseudomagnoliarum</i>		0		
Soft Brown				
<i>Coccus hesperidum</i>	11	3	ornamentals	
Purple				
<i>Lepidosaphes becki</i>		0		

NURSERY INSPECTION—Continued

PEST	NO. CLEAN NURSERIES OR PLANTINGS	NO. INFESTED NURSERIES OR PLANTINGS	AMOUNT AND KIND OF STOCK INVOLVED	WHAT CONTROL MEASURES USED
SCALE INSECTS—Continued				
Oyster Shell				
<i>Lepidosaphes ulmi</i>		0		
San Jose				
<i>Aspidiotus perniciosus</i>	13	1		
Oleander (or Ivy)				
<i>Aspidiotus hederae</i>	10	4		
Greedy				
<i>Aspidiotus camelliae</i>	12	2	oleander	
Italian Pear				
<i>Diaspis piricola</i>		0		
Brown Apricot				
<i>Lecanium corni</i>	12	2	ornamental	
Cottony Cushion				
<i>Icerya purchasi</i>	12	2	boxwood	
Rose Scale				
<i>Aulacaspis rosae</i>	11	3	roses	
Elm Scale				
<i>Gossyparia spuria</i>		0		
Greenhouse Orthozia	10	4		
ADDITIONAL SCALE INSECTS				
<i>Aspidiotus</i>	12	2	aspidiotus	
<i>Parlatoria perniciosi</i>	12	2		
<i>A. Degeneratus</i>		0	camellia	oil wash
WHITE FLIES				
Citrus		9		
Greenhouse	2	12		
Iris	2	12		
OTHER WHITE FLIES				
MEALY BUGS				
Citrophilus				
<i>Pseudococcus gahani</i>	11	3	J-p box	oil
Maritimus or Baker's				
<i>Pseudococcus maritimus</i>	8	6	Ferns	
Citrus				
<i>Pseudococcus citri</i>		0		
Long Tail				
<i>Pseudococcus longispinus</i>	10	4		

NURSERY INSPECTION—Continued

PEST	NO. CLEAN NURSERIES OR PLANTINGS	NO. INFESTED NURSERIES OR PLANTINGS	AMOUNT AND KIND OF STOCK INVOLVED	WHAT CONTROL MEASURES USED
MEALY BUGS—Continued				
Gossypii or Mexican				
<i>Phenacoccus gossypii</i>	12	2		
Colemen's				
<i>Phenacoccus colemeni</i>				
Soil Mealy Bugs				
ADDITIONAL MEALY BUGS				
DIPTERA				
Leaf Miners				
Chrysanthemum and Cineraria				
<i>Phytomyza chrysanthemi</i>				
HYMENOPTERA				
Raspberry Horntail				
<i>Hartigia cressoni</i>				
Orchid or Cattleya Fly				
<i>Eurytoma orchidearum</i>				
ANTS				
Argentine	2	12		
Natives		14		
THRIPS	0	12		
APHIS—Common forms				
Woolly Apple				
Pear Root				
Phylloxera				
LEPIDOPTERA				
Cutworms	2	12		
Army worms				
Caterpillars (Common)				
Peach Twig Borer				
<i>Anarsia lineatella</i>	9	5		
Raspberry Crown Borer				
<i>Bembecia marginata</i>		0		
Pacific Peach Tree Borer				
<i>Aegeria opalescens</i>		0		
Leaf Rollers				

NURSERY INSPECTION—Continued

PEST	NO. CLEAN NURSERIES OR PLANTINGS	NO. INFESTED NURSERIES OR PLANTINGS	AMOUNT AND KIND OF STOCK INVOLVED	WHAT CONTROL MEASURES USED
COLEOPTERA				
Wireworms		14		
June Beetle Larvae				
Flathead Apple Tree Borers		0		
<i>Chrysobothris</i> sp.				
Branch and Twig Borer		2		
<i>Polycaon confertus</i>				
Roundheaded Apple Tree Borers		0		
<i>Saperda candida</i>				
Twelve Spotted Cucumber Beetle	2	12		
<i>Diabrotica</i> sp.				
Flea Beetles				
Weevils				
Fuller's Rose Weevil				
<i>Pantomorus godmani</i>	2	12		
Strawberry Root Weevil				
<i>Brachyrhinus ovatus</i>				
Black Vine Weevil				
<i>Brachyrhinus sulcatus</i>	2	12		
Rough Strawberry Weevil				
<i>B. rugosostriatus</i>	13	1		
Cribricollis				
<i>B. cribricollis</i>	13	1		
HEMIPTERA		14		
Plant Bugs				
False Chinch Bugs				
<i>Nysius</i> sp.				
Other Plant Bugs				
BULB PESTS (Narcissus)				
Greater Fly				
Lesser Flies				
Mites		14		
Earwigs (European)		0		
Mites and Red Spiders		14		
Cyclamen Mite		10		
Brown Mite				
<i>Bryobia praetiosa</i>				
<i>Tetranychus</i> sp.		9		

NURSERY INSPECTION—Continued

PEST	NO. CLEAN NURSERIES OR PLANTINGS	NO. INFESTED NURSERIES OR PLANTINGS	AMOUNT AND KIND OF STOCK INVOLVED	WHAT CONTROL MEASURES USED
Other Red Spiders				
Leaf Hoppers				
Tree Hoppers				
Other Nursery Pests				
NURSERY DISEASES				
Oak Root Fungus	14	0		
Hairy Root		14		
Crown Gall		14		
Coryneum Blight		0		
Pear Blight		0		
Peach Blight	7	7		
Gummosis				
Deciduous				
Citrus				
Brown Rot (Deciduous)	7	7		
Root Knot (Nematode)	10	4		
Mosaic (other stock)				
Wilts				
Mildews				
Rusts				
BULB DISEASES				
Mosaic				
Nematode				
Narcissus Basal Rot				
Gladiolus Scab				

ANNUAL REPORT

County. From Jan. 1, 193 to Dec. 31, 193

INSECT PESTS

	DAMAGE** INDICATE BY CROSS MARK X			PRESENT, YES OR NO	ACRES INFESTED	EXTENT, GENERAL OR LOCAL	HOST
	SEVERE	MEDIUM	SLIGHT				
ORTHOPTERA							
Crickets* (sp.)			x	yes		general	
Grasshoppers* (sp.)		x		"		local	
THYSANOPTERA*							
Bean thrips							
<i>Hercotbrips fasciatus</i>		x			general		beans-pears
Citrus thrips							
<i>Scirtothrips citri</i>			x	yes			oranges
Western flower thrips			x	yes			
<i>Frankliniella californica</i>			x	yes			
Greenhouse thrips							
<i>Heliothrips haemorrhoidalis</i>			x	yes			
Onion thrips							
<i>Thrips tabaci</i>	x						seed onions
Pear thrips							
<i>Taeniothrips inconsequens</i>		x				general	pears
Vine thrips							
<i>Drepanothrips reuteri</i>			x	yes		local	grapes
HOMOPTERA							
Aphis*							
Bean aphis							
<i>Aphis rumicis</i>			x	yes		general	beans
Black citrus aphis			x	"		local	citrus
<i>Toxoptera aurantiae</i>			x	"			
Black cherry aphis							
<i>Myzus cerasi</i>		x				general	cherries
Grape phylloxera							
<i>Phylloxera vitifoliae</i>		x				general	grapes
Green apple aphis							
<i>Aphis pomi</i>			x	yes		local	apples
Green peach aphis			x	"		"	peaches
<i>Myzus persicae</i>			x	"		"	
Mealy plum louse							
<i>Hyalopterus arundinis</i>	x					general	prunes-plums
Melon aphis							
<i>Aphis gossypii</i>			x	"		local	
Pea aphis							
<i>Illinoia pisi</i>			x	"		general	
Rosy apple aphis			x	"		"	
<i>Anuraphis roseus</i>			x	"		"	
Walnut aphis							
<i>Chromaphis juglandicola</i>			x	"		"	
Woolly apple aphis			x	"		"	
<i>Eriosoma lanigera</i>			x	"		"	
Woolly pear aphis							
<i>E. lanuginosa</i>		x				"	pears
Mealybugs*							
Grape mealybug			x	yes		"	spotted on grapes, general but of no importance on pears
<i>Pseudococcus maritimus</i>			x	yes		"	

*Enter names of insects, if destructive, other than those mentioned.

**See reverse.

loss to county by reduction in value of crop and money spent in control.

INSECT PESTS—Continued

INSECT PESTS—Continued

	DAMAGE** INDICATE BY CROSS MARK X			PRESENT, YES OR NO	ACRES INFESTED	EXTENT, GENERAL OR LOCAL	HOST
	SEVERE	MEDIUM	SLIGHT				
Citrus mealybug <i>Pseudococcus citri</i>			x	yes		local	greenhouse ornamentals
Citrophilus mealybug <i>Pseudococcus gabani</i>			x	"		"	ornamentals in yards
Mexican mealybug <i>Phenacoccus gossypii</i>			x	"		"	in green nurseries
Scales*							
Black scale <i>Saissetia oleae</i>			x	"		general	ornamentals and olives only
Brown apricot scale <i>Lecanium corni</i>	5	x				"	Stone fruits ornamentals
Cottony cushion scale <i>Icerya purchasi</i>			x	"			
Dictyospermum scale <i>Chrysomphalus dictyospermi</i>			x	"		local	Kentia
Greedy scale <i>Aspidiotus camelliae</i>			x	"		"	ornamentals
Grey citrus scale <i>Coccus pseudomagnoliarum</i>			x	"		general	oranges-ornamentals
Italian pear scale <i>Diaspis piricola</i>			x	"		local	valnate
Ivy scale <i>Aspidiotus hederae</i>			x	"		"	ornamentals
Purple scale <i>Lepidosaphes becki</i>				NO			
Red Scale <i>Chrysomphalus aurantii</i>				NO			
San Jose scale <i>Aspidiotus perniciosus</i>	10	x		yes		general	pears - stone fruits
Soft brown scale <i>Coccus hesperidum</i>			x	"			
Yellow scale <i>Chrysomphalus citrinus</i>			x	"		local	Infestation in citrus belt destroyed by frost
Leafhoppers*							
Grape leafhopper <i>Erythroneura comes</i>			x	"		"	grapes
Sugar beet leafhopper <i>Eutettix tenellus</i>			x	"		"	sugar beets tomatoes
COLEOPTERA*							
Bean weevil <i>Mylabris spp.</i>			x	"		"	beans
Black vine weevil <i>Brachyrhinus sulcatus</i>			x	"		"	lath houses
Darkling ground beetle <i>Tenebrionidae</i>			x	"		general	tomatoes-beans
Diabrotica <i>Diabrotica spp.</i>		x		"		"	garden crops
Dried fruit beetle <i>Carpophilus hemipterus</i>		x				local	
Elm leaf beetle <i>Galerucella xanthomelaena</i>		x				"	

INSECT PESTS—Continued

INSECT PESTS—Continued

	DAMAGE** INDICATE BY CROSS MARK X			PRESENT, YES OR NO	ACRES INFESTED	EXTENT, GENERAL OR LOCAL	HOST
	SEVERE	MEDIUM	SLIGHT				
Flat headed apple tree borer <i>Chrysobothris</i> spp.		x				general	
Fullers rose weevil <i>Pantomorus godmani</i>			x	yes		"	citrus ornamentals
Grape leaf hoplia <i>Hoplia callipyge</i>		x				"	grapes
Pepper weevil <i>Anthonomus eugenii</i>							
Roman weevil <i>Brachyrhinus cribricollis</i>			x	yes		local	privet hedges
Rough strawberry weevil <i>B. rugosostriatus</i>							
Shot-hole borer <i>Scolytus rugulosus</i>			x	yes		general	injured stone fruit
Strawberry root weevil <i>B. ovatus</i>							
Vegetable weevil <i>Listroderes obliquus</i>				no			
LEPIDOPTERA*							
Artichoke plume moth <i>Platyptilia carduidactyla</i>				no			
California oak moth <i>Phryganidia californica</i>			x	slight			
Codling moth of fruits <i>Carpocapsa pomonella</i>	1	x				general	stone fruits
Codling moth of walnuts <i>Carpocapsa pomonella</i>			x	yes			
Corn ear worm <i>Heliothis obsoleta</i>	8	x				general	field crops
Crambid moths <i>Crambus</i> spp.			x	yes		local	
Cutworms <i>Noctuidae</i>		x				general	field crops
Fruit tree leaf roller <i>Cacoecia argyrospila</i>			x	yes			
Indian meal moth <i>Plodia interpunctella</i>		x				local	store rooms
Lima bean pod borer <i>Etiella schisticolor</i>							
Orange tortrix <i>Tortrix citrana</i>							
Western peach borer <i>Aegeria opalescens</i>				no			
Peach twig borer <i>Anarsia lineatella</i>	2	x				general	stone fruits
Potato tuber moth <i>Gnorimoschema operculella</i>			x	yes		local	potatoes
Red humped caterpillar <i>Schizura concinna</i>			x	"		general	walnuts
Tent caterpillars <i>Malacosoma</i> spp.			x	"			
DIPTERA*							
Cabbage maggot <i>Hylemyia brassicae</i>			x	"			

INSECT PESTS—Continued

	DAMAGE** INDICATE BY CROSS MARK X			PRESENT, YES OR NO	ACRES INFESTED	EXTENT, GENERAL OR LOCAL	HOST
	SEVERE	MEDIUM	SLIGHT				
Walnut husk fly <i>Rhagoletis suavis subsp. completa</i>				No			
DERMAPTERA*							
European earwigs <i>Forficula auricularia</i>				No			
HYMENOPTERA*							
Argentine ants <i>Iridomyrmex humilis</i>		x				general	houses-nurseries
Pear slug <i>Eriocampoides limacena</i>			x	yes		local	cherries pears
ARACHNIDA*							
Brown mite <i>Bryobia praetiosa</i>		x				general	almond-stone fruits
Pear leaf blister mite <i>Eriophyes pyri</i>	x					general	pears
Red spider <i>Tetranychus spp.</i>	x	x				pears	field crops, prunes peaches
*Other destructive species not listed.							
Wireworms		x				general	tomatoes, beans field crops
Garden centipede		x				local	asparagus
Asparagus beetle		x				"	"

BENEFICIAL INSECTS

	ABUNDANCE INDICATE BY CROSS MARK X			INSECTS ATTACKED AND THEIR HOST CROP OR TREE
	VERY	MEDIUM	SLIGHT	
<i>Aphycus</i>		x		
<i>Coccophagus guernei</i>		x		
<i>Cryptolaemus montrouzieri</i>			x	
<i>Hippodamia convergens</i>		x		
Lacewings		x		
<i>Olla abdominalis</i>			x	
<i>Rodolia cardinalis</i>		x		
<i>Rhizobius ventralis</i>		x		
<i>Scutellista</i>		x		
Syrphids		x		
<i>Tetraneura pretiosus</i>				
Other parasitic species				

INSECTARY REPORT

NAME OF INSECT	NUMBER REARED	NUMBER LIBERATED	NUMBER COLLECTED	OTHER REMARKS

REMARKS: (use reverse side for remarks)

PRINCIPAL PLANT DISEASES

	STONE	CITRUS	POME	NUT	VEGETABLE	SUBTROPICAL FRUITS	BUSH AND VINE FRUITS	FIELD CROPS	ORNAMENTAL
1. New Diseases not observed previously.							crinkle mosaic yellows		
2. Indigenous Disease present but without seasonal fluctuation.	peach blight brown rot mildew gummosis crown gall		pear blight pear scab	peach blight alnut blight crown rot die back	southern rot fusarium yellows mosaic		grey mold mildew black mildew	stripe disease smut fusarium	pear blight gummosis
3. Epidemic, wide-spread outbreak.		frost injury				olive knot			
4. Pandemic, general outbreak.									

REMARKS:

Frost injury of December 1932 froze back orange trees to the extent that no crop was produced in 1933, new growth was put out in many trees which latter dried out. heart rot appears to be starting in many injured trees. Olive trees, particularly ^{the new ones} were badly damaged and the olive knot has gained a tremendous foothold on the injured trees.

ANNUAL REPORT SACRAMENTO County. From Jan. 1, 1933, to Dec. 31, 1933

WEED CONTROL

WEEDS	SEVERITY OF INFESTATION	AREA INFESTED, ACRES	AREA TREATED, ACRES	COST OF LABOR AND MATERIAL	TREATMENT
Johnson grass	localized	300			
Sandbur	localized				
Russian thistle	leaves, waste places				
Hoary cress	local	200			
Puncture vine	medium				oil spray, burn
Camel's thorn					
Morning glory	general				
Yellow star thistle	fairly general				
Purple star thistle	very slight				hand digging
Russian knapweed	local	100			
Canada thistle	local	25			
Bull thistle	local	spotted roadsides and waste places			
Milk thistle	fairly general	on levees, roadsides, and waste places			
Creeping sow thistle					
White horse nettle	two very slight infestations				hand digging
Other weeds:					

MATERIALS USED	AMOUNT	COST	RESULTS (GOOD, FAIR, POOR)
Petroleum oils	200 gals	.03	good on puncture vine
Calcium chlorate			
Sodium chlorate			
Carbon bisulphide			
Arsenicals			
Others			
Equipment			

OTHER METHODS	EXTENT USED	COST

REMARKS:

ANNUAL REPORT ~~SAC RABBITO~~ County. For year ending Jan. 1, 193 ~~3~~ to Dec. 31, 193 ~~3~~

RODENT CONTROL

SQUIRRELS—

Strychnined Grain Used by all agencies, 1392 lbs. Av. cost per lb. 8 1/2 Number of acres treated:

(a) Grazing land		Acres.	Efficiency	%
(b) Arable land	<u>1000</u>	Acres.	Efficiency	%
	<u>1200</u>			

Thallium grain used		Pounds.		Average cost per lb.
(a) Grazing land	<u>1800</u>	Acres.	Efficiency <u>12 1/2</u>	%
(b) Arable land	<u>2000</u>	Acres.	Efficiency	%
	<u>500</u>			

Other Types of Poisoned Grain:

What kinds of poisoned grain?

What acreage covered?

Average cost per acre with poisoned grains (all kinds)

Carbon Bisulphide Used:

Pounds		Cost per pound \$	} Cost per hole \$
Wasteballs used <u>660</u>		Cost per 1,000 \$ <u>10 1/2</u>	
Pumps used <u>990</u>		Cost per hole \$ <u>4</u>	
Number of acres treated <u>4</u>		Efficiency	% Av. cost per acre \$

Other gas methods used: Efficiency % Av. cost per acre \$

Estimated total rodent control expenditure in county by all agencies \$

Estimated total expenditure, county only, \$ 2400.00Estimated annual loss occasioned by rodents, \$ 825.00 (Salaries & Expenses)What percentage of squirrels killed in county during the year? 105

Acres in county cleared of ground squirrels

What areas of government lands (National Forest and Public Domain) cause reinfestation on agricultural lands?

All taken care of

Quantity government land needing attention for rodents?

Acreage government land treated this year 786Acreage State or State controlled lands 786

OTHER RODENTS

Gophers	<u>3 3/4 oz. strychnine distributed by office</u>
Rats	<u>7 5/8 lbs. red squill</u>

REMARKS:

NOTE.—Please furnish on separate sheet any information re bird control or predatory animal control, through your office.

SUMMARY BIRD WORK SACRAMENTO COUNTY 1933

Birds

inch : Troughs :	Prebait :	Poison :	Linnetts :	E. Sparrows :	G. Sparrow :	Total 1933 :	Total 1932
1 : 10 :	5 1/2 lbs. :	9 Lbs. :	36 :	:	:	36 :	185
2 : 8 :	4 :	5-1/3 :	28 :	:	:	28 :	106
3 : 6 :	4 1/2 :	1 1/2 :	2 :	:	:	2 :	
4 :	:	:	:	24 :	:	24 :	
5 :	:	7 :	31 :	:	24 :	35 :	
6 :	4 :	5 1/2 :	31 :	:	:	31 :	1602
7 :	4 1/2 :	6 Lbs. :	:	:	113 :	113 :	
8 :	:	:	:	46 :	:	46 :	121 (A)
9 :	:	18 :	400 501 :	:	:	:	
10 :	:	2 :	144 :	:	:	:	
		54 773 :	772 773 :	70 :	127 :	768 780 :	2016

(A Includes birds from premises worked in 1932 but because of lack of bud damage in 1933 no poison had been placed.)

Bird control work was directed against three species of birds during 1933.

1-Linnets-damaging fruit buds and fresh fruit.

2-Gambel Sparrow-destruction of vegetables and alfalfa.

3-English Sparrow-Carrier of poultry disease and a general nuisance.

Linnet damage prior to 1932 was extremely severe in prune orchards lying north east and also west of Mather field; in almonds east of Fair Oaks and in Arcade. During 1932 -102 lbs. of poison seed was placed with the destruction of 2016 birds. The damage to the orchards where the work was carried on was considerable less than before control was started. It was observed that in one orchard the birds were present early in the year with control being undertaken in late December and January. These undoubtedly were birds overwintering in this area. Large flocks of linnets were noted in fields close by but were not present in the orchard. This was also found true for the 1933 season. A second orchard located several miles away was not infested until much latter with control being carried on during February and March. Indications here lead me to believe that the damage in this orchard was caused by migratory birds entirely.

Previous to the campaign of 1933 a survey showed damage to be limited to specific orchards and in no way could it be considered as wide spread or general. An interesting point noted at this time is a comparison of our 1933 work with the work of 1932. Four pounds of poison seed was used with a pick up of ~~962~~ birds. In 1932 - 102 lbs. was used with a pick up of 2016 birds. In the orchards where our greatest pick up occurred in 1932, no damage and very few linnets were noted. This was also true to a lesser degree of other orchards, indicating that damage to specific orchards may be caused by the same

flock of birds year after year. Eliminating the flock causing the damage should therefore give control although other linnets may exist in the neighborhood. Bud damage has been curtailed where control programs were carried on. Damage to fresh fruit particularly cherries has not been avoided and still presents a problem. This cherry damage may be caused by local bands which feed during the early spring on grasslands or by migratory birds. Linnet control of this nature may be necessary on areas outside the premises where the damage occurs.

II Gambel Sparrow. These birds have been destroying early vegetables, young alfalfa, and Strawberries. Unsaturated poisons were used with no success as these birds appear capable of shelling the seed without being poisoned. The change to a saturated bait was the means of destroying a Flock of 113 birds which has completely destroyed several acres of young alfalfa necessitating the replanting of the portion destroyed. A Sparrow trap was placed on one premise but the results to date are not conclusive.

III English Sparrows. Complaints regarding these birds are increasing. Particularly in residential areas although one complaint was registered from a poultryman who feared the spread of poultry disease by this bird. Poisons are dangerous for use in the areas where these birds flock although some success was obtained on one ranch. The use of a trap was tried in Sacramento with 46 birds having been caught. This seems to have eliminated the sparrows in that immediate vicinity. Other traps will be given a trial.

One area in which damage to fruit was reported, the work was delayed in order to check on late spring control. Attempts made after blossom time were unsuccessful both as to acceptance and kill. A large flock of linnets was noted and the cherry crop on a number of trees was almost a total loss due to bird picks. In July midsummer peaches were being destroyed and troughs were again put in place. A very good kill was obtained particularly on young birds. The heaviest kill being made in early September.

Two lbs. of poisoned almonds ground up and scattered around an almond huller where linnets were congregating succeeded in killing 144 birds

ANNUAL REPORT ~~SACR MEMO~~ County. From Jan. 1, 1933, to Dec. 31, 1933

FRUIT, NUT AND VEGETABLE STANDARDIZATION

REASONS FOR REJECTIONS	REJECTIONS AND DISPOSITION								ARRESTS MADE	NUMBER CONVICTIONS	TOTAL PENALTIES (AMOUNT OF FINE AND OTHER SENTENCES)	NUMBER OF MAN DAYS ON STANDARDIZATION (TOTAL DAYS SPENT UNDER EACH HEADING)	VOLUME INSPECTED			
	REJECTED			DESTROYED OR DUMPED BY COURT ORDER OR OWNER		RECONDITIONED OR REMARKED FOR SALE OR TO BY-PRODUCTS		PACK-AGES					CAR LOADS			
	No. Lots	No.* Pkgs.	Weight	No.* Pkgs.	Weight	No.* Pkgs.	Weight									
Excessive defects IMMATURITY Irregular sizes or deceptive pack, display or arrangement No marks or mismarked	38	1199		338		880					s suspended					
	71	3660		515		3145										
	14	433				433										
	8	8				8										
Excessive defects IMMATURITY Irregular sizes or deceptive pack, display or arrangement No marks or mismarked																
Excessive defects IMMATURITY Irregular sizes or deceptive pack, display or arrangement No marks or mismarked	45	5556		251		5305		1								
	11	146		87		59										
	9	470				470		1	1	10 day						
	5	742				742										
Excessive defects IMMATURITY Irregular sizes or deceptive pack, display or arrangement No marks or mismarked																
Excessive defects IMMATURITY Irregular sizes or deceptive pack, display or arrangement No marks or mismarked	1	210				210										
	83	6754		569		6135		1								
	82	3806		602		3204										
	22	903				903		1	1							
Excessive defects IMMATURITY Irregular sizes or deceptive pack, display or arrangement No marks or mismarked																
TOTAL													2	1		

*Report either number packages or weight, under their respective headings.

†Report either number packages or carloads, under their respective headings.

NOTE.—Indicate in this space principal commodities covered by this report

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FRUIT AND VEGETABLES SHIPPED FROM SACRAMENTO 1933.

Sacramento	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Celery	51	7	18	1						23	287	296	6
	237	6	3							5	275	129	6
Prunes											17		
Mix. Veg.	3	3	59	93	54	18	15	27	8	1	23	27	
	10	11	23	111	84	7	7	8	7	1	15	12	
Onions		1				98	43	3	4	5	5	1	
	4	2	6			3	32	19	16	21	9	2	
Lettuce				29	176	3				3	73	50	
				88	316								
Oranges	2	6									24	53	
	2	6	6										
Potatoes							2	5	16		3		
	1	1	1				2	2	6	16	27		
Pears							916	600	20	41	2		15
							1428	202	8	11	3		17
Asparagus			241	916	68	26							12
		2	491	931	189	42	2		4	7			16
Spinach			7	2	1								
			22	5	4								
Cherries				18									
				1	23								
Peas				1	98	16							
				2	97				1				
Strawberries				13	246	20							2
				41	207								
Cabbage		1				5							
					33	7							
Carrots					2	2	1						
					2	4							
Mix. Dec.						9	73	86	18	24			2
						2	16	91	54	35	53	16	14
Plums						26	73	30	1				13
						87	42	22					14
Melons										8	1		
										6	1		
Grapes								159	482	449	104		10
									319	227	60		7
Peaches						3		7	5	0			
Apples						1	1						
Tomatoes								2	50	92	38		18
										29	2		3
Sugar Beets						104	357	589	613	797	134	25	28
Totals	56	18	325	1055	663	211	1228	1108	1188	1256	1350	508	89
	754	30	552	1109	958	182	1610	578	457	390	806	271	100

- 1932

(Total for months does not include sugar beets.)

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CARLOAD FRUITS & VEGETABLES RECEIVED AT SACRAMENTO 1933.

Commodity	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Apples	20 23	17 15	8 8	19 20	5 6	2		1	1	6 6	3 3	12 12	85
Bananas	17	20	25	19	17	23	18	7	23	19	18	25	229
Cabbage		5	1	3									9
Celery	10	5	14	5	2	6							42
Lettuce	22	23	48	4	1	14	19		13	4		1	149
Carrots				1									1
Onions	2		2	6	4	3		1	2	1	1	3	25
Potatoes	164	162	204	256	122	90	23	12	51	153	109	161	1507
Cactelope					1	10	14						25
Citrus						3		5					8
Oranges	10	15	18		10	3			1		0		55
Misc.					1			1	1	0			3
Melons						22	110	5	1				138
Tomatoes						7	4						11
Peas													
Sweet Potatoes													
Strawberries											1	1	2
Califlower			1										1
Grapefruit	4	2		2	6	4				2	4	3	27
Lemons		1			6	6		7					20
Cucumbers							1						1
Peaches								9					9
Total	252	248	319	316	176	190	192	43	96	187	134	194	2347

ANNUAL REPORT Sacramento County. From Jan. 1, 1933 to Dec. 31, 1933

APIARY INSPECTION

			NUMBER OF APIARIES	NUMBER OF COLONIES
RECORD OF MIGRATIONS	INTER-STATE	Registered	94	2865
		Entering California		
		Leaving California		
	INTER-COUNTY	Entering County	1	19
		Leaving County	28	8
	IN-TRA-CO.	Moving within County		
APIARY INSPECTION		Inspected	20	2152
		Infected with American Foulbrood	4	93
		Infected with European Foulbrood	3	9
		Infected with Sacbrood		
		Adult Bee Diseases (paralysis, etc.)		
AMERICAN FOULBROOD ERADICATION		Burned American Foulbrood		93
		Otherwise Treated for American Foulbrood		
LEGAL PROCEDURES		No. Certificates Issued	2	
		No. Permits Granted		
		No. Abatement Notices Issued		
		Arrests Made		
		Cases Tried		
		No. Convictions		
		Total Penalties		
		Funds Expended		\$ 100.00

Footnotes or Remarks (Use extra sheets if necessary):

Queens shipped interstate	2207	
" " intrastate	3733	Total 5940 Queens
Package bees, interstate	539	
" " , intrastate	31	Total 570 Packages

ANNUAL REPORT SACRAMENTO County. For fiscal year ending June 30, 1938

FINANCIAL STATEMENT

Salaries and Wages	TOTAL	SUBTOTAL	GRAND TOTAL
Commissioner.....	\$ 2400.00		
Deputy Commissioner (s).....			
Inspectors.....	7700.61		
Office help.....	900.00	\$ 11,000.61	
Office and General Expense		\$ 3,597.81	
Materials and Supplies			
On hand July 1, 193.....	\$		
Add purchases during year.....			
Deduct on hand June 30, 193.....		\$	
Equipment purchases.....		\$	
Deduct refunds due.....			\$ 14,597.42
Classification to agree in total with above:			
Plant Quarantine.....	\$	3,595.00	
Standardization.....		4,824.09	
Orchard Inspection.....		2,010.00	
Nursery Inspection.....		300.00	
Rodent Control (County expense).....		825.00	
Weed Control (County expense).....		1,000.00	
Apiary Inspections.....		100.00	
Other Items.....		1,943.73	\$ 14,597.42
Budget for current year:			
Plant Quarantine.....	\$	3,500	
Standardization.....		4,000	
Orchard Inspection.....		2,000	
Nursery Inspection.....		300	
Rodent Control.....		1,000	
Weed Control.....		750	
Apiary Inspection.....		100	
Miscellaneous.....		1,135	\$ 13,835

SPECIAL INTERSTATE CERTIFICATES ISSUED
1933.

	Oregon Quar. # 14:	Oregon Quar. # 20:	Nevada Colorado Beetle	Potato Fumigation	Potato Field	Misc. Cardization	Stand- Total
JAN	: 33	: 41	:	:	:	:	: 74
Feb.	: 25	: 28	:	: 1	:	:	: 54
Mar.	: 120	: 85	:	: 6	:	: 1	: 212
April	: 123	: 81	: 23	: 11	:	:	: 248
May	: 206	: 179	: 134	: 18	:	: 3	: 510
June	: 110	: 97	: 126	: 19	:	:	: 352
July	: 19	: 19	: 184	: 3	:	:	: 225
Aug.	: 19	: 19	: 81	: 0	: 0	: 1	: 120
Sept.	: 25	: 25	: 18	: 0	: 0	: 0	: 68
Oct.	: 49	: 57	: 3	: 0	: 0	: 101	: 210
Nov.	: 84	: 90	: 4	: 0	: 0	: 180	: 358
Dec.	: 70	: 89	: 3	: 0	: 0	: 231	: 393
Total	: 883	: 810	: 576	: 58	: 3	: 514	: 2804

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TRUCKLOADS FRUITS & VEGETABLES UNLOADED AT SACRAMENTO 1933.

Commodity:

	Sept.	October	November	December	Total
Apples	5	78	54	46	183
Cabbage					
Cauliflower					
Celery					
Carrots					
Cantaloupes					
Citrus					
Grapefruit		6	6	2	14
Lettuce		15			15
Lemons		1	7	3	11
Melons		2			2
Onions		1			1
Oranges		10	11	19	40
Potatoes	14	38	46	34	132
Peas					
Sweet Potatoes	2		10	11	23
Tomatoes					
Misc.		9			9
Mix. Veg.		10			10
Total	21	170	134	115	440