

ANNUAL REPORT



Agricultural Commissioner

COUNTY OF GLENN

1949

P. V. HARRIGAN

GLENN COUNTY DEPARTMENT OF AGRICULTURE

WILLOWS, CALIFORNIA

P. V. Harrigan
Agricultural Commissioner

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A N N U A L R E P O R T

For the
Year ending December 31, 1949

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BOARD OF SUPERVISORS

Marshall Lane, Chairman

C. C. Adams

Richard H. Nichols

John F. Fiack

W. L. Linville

OFFICE OF THE AGRICULTURAL COMMISSIONER
Memorial Building
Willows, California
December 31, 1949

TO: THE HONORABLE BOARD OF SUPERVISORS OF GLENN COUNTY

TO: DIRECTOR A. M. BROCK, CALIFORNIA STATE DEPARTMENT OF
AGRICULTURE

This annual agricultural report on Glenn County is submitted in compliance with the following requirements of the Agricultural Code:

Section 65. RECORDS. The commissioner shall keep a record of his official acts and make an annual report to the Director of Agriculture on the condition of the agricultural interests in his county as to what is being done to eradicate or to control or to destroy pests and also as to quarantine against pests, and shall furnish from time to time to the director such other information as he may require.

Section 65.5. STATISTICS. The commissioner shall compile reports of the condition, acreage, production and value of the agricultural products in his county. The commissioner may publish such reports and shall transmit a copy thereof to the director.

I wish to express my sincere appreciation to all who have assisted in furnishing this office with the necessary information which has made the compilation of this report possible.

Respectfully submitted,

F. V. Harrigan
F. V. HARRIGAN
Agricultural Commissioner

PLANT AND SEED INSPECTION

Field and Pasture Seed	900 Sacks
Vegetable and flower Seed	2,233 Packages
Vegetable and Berry Plants	22,150
Ornamental Plants and Bulbs	39,306
Deciduous Fruit Trees	19,862
Deciduous Nut Trees	6,047
Citrus and Subtropical Fruit Trees	795
Grapevines	557
Shade Trees	648
Hay	210 Tons

Rejections

Deciduous Fruit and Nut Trees	683
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APIARY REPORT

11,629 colonies of bees in 249 apiaries were registered during 1949.

5,437 colonies of bees in 51 apiaries were certified to move from other counties in California into Glenn County.

4,900 colonies in 49 apiaries were certified to move from Glenn County to other counties in California.

1,915 colonies in 26 apiaries were certified to move within Glenn County.

2,186 colonies in 136 apiaries were inspected during the calendar year 1949.

12 colonies in 8 apiaries were found to be infected with American Foulbrood. 26 colonies in 19 apiaries were found to be infected with European Foulbrood.

30,750 pounds of package bees and 22,500 queen bees were certified for export. 487,960 pounds of honey and 10,250 pounds of beeswax were marketed during 1949.

FARM PRODUCTION

FIELD CROPS

Rice	1,219,000	Sacks
Barley	800,000	Sacks
Wheat	35,000	Sacks
Milo	20,000	Sacks
Beans	160,000	Pounds
Oats	10,070	Sacks

SEED

Ladino Clover Seed	800,000	Pounds
Alfalfa Seed	42,000	"
Lotus Seed	7,000	"
Bur Clover Seed	12,400	"
Field Pea Seed	210,000	"
Vetch Seed	315,000	"
Sudan Seed	1,580,000	"
Melilotus Indica Seed	113,000	"
Mustard Seed	21,600	"

TREE CROPS

Oranges	86,000	Boxes
Pears	109,000	"
Apricots, Dried	40,000	Pounds
Apricots, Fresh	6,500	Boxes
Peaches, Fresh	114,000	Pounds
Prunes, Dried	5,500,000	"
Figs, Dried	20,000	"
Figs, Fresh	10,000	"
Figs, Dried, Sub-standard	151	Tons
Almonds	3,000,000	Pounds
English Walnuts	787,000	"
Black Walnuts	450,000	"
Olives	1,400,000	"
Olive Oil	8,060	Gallons
Grapes, Wine	42	Tons

BEETS

Sugar Beets	8,700	Tons
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HAY

Alfalfa Hay	36,000	Tons
Mixed Hay	10,000	Tons
Ladino Hay	5,000	Tons

FARM PRODUCTION (CONTINUED)

LIVESTOCK

Butterfat	3,621,000 Pounds
Fat Cattle	9,000 Head
Cattle	13,500 "
Cattle, Feeders	5,000 "
Calves	16,000 "
Hides, Cattle	1,750 Each
Tallow	5,500 Pounds
Lambs	82,000 Head
Sheep	20,000 "
Wool	900,000 Pounds
Pelts	3,000 Each
Hogs	25,000 Head

POULTRY

Eggs	460,000 Dozen
Live Poultry	150,000 Pounds
Turkey Eggs	320,000 Each
Dressed Turkeys	550,000 Pounds

BEEES AND HONEY

Package Bees	32,000 Pounds
Queen Bees	22,500 Each
Honey	488,000 Pounds
Beeswax	10,250 Pounds

PASTURE

Clover Pasture	55,000 Acres
Grain Stubble	120,000 Acres
Range Pasture	250,000 Acres

FOREST PRODUCTS

Lumber Milled	1,800,000 Board Feet
Christmas Trees	5,000 Each

EVALUATION OF COMMODITIES

FIELD CROPS

Rice	\$4,023,000	
Barley	2,112,000	
Wheat	172,500	
Oats	23,500	
Milo	65,000	
Beans	12,000	
		\$6,408,000

SEED

Ladino Clover Seed	1,144,000	
Alfalfa Seed	11,500	
Lotus Seed	10,500	
Bur Clover Seed	8,900	
Field Pea Seed	9,500	
Vetch Seed	28,100	
Melilotus Indica Seed	14,200	
Sudan Seed	142,800	
Mustard Seed	2,000	
		1,371,800

SUGAR BEETS

109,000

HAY

Alfalfa Hay	900,000	
Mixed Hay	200,000	
Ladino Clover Hay	60,000	
		1,160,000

TREE CROPS

Almonds	650,000	
English Walnuts	150,000	
Black Walnuts	9,000	
Oranges	301,000	
Prunes	385,000	
Pears	245,000	
Olives	175,000	
Olive Oil	15,000	
Apricots, Dried	8,000	
Apricots, Fresh	6,500	
Peaches, Fresh	2,500	
Figs, Dried	1,400	
Figs, Sub-standard	4,650	
Figs, Fresh	400	
Grapes	1,250	
		1,954,700

EVALUATION OF COMMODITIES (CONTINUED)

LIVESTOCK

Butterfat	\$3,032,500	
Fat Cattle	2,043,000	
Cattle	1,350,000	
Feeders	625,000	
Calves	100,000	
Hides and Tallow	16,500	\$7,167,000
Lambs	1,800,000	
Sheep	120,000	
Wool	460,000	
Pelts	8,500	2,388,500
Hogs		1,125,000

POULTRY

Turkeys	220,000	
Turkey Eggs	112,000	
Live Poultry	43,500	
Chicken Eggs	193,500	569,000

PASTURE

Ladino	1,654,000	
Grain Stubble	240,000	
Range	375,000	2,269,000

BEEES AND HONEY

Package Bees	35,200	
Queen Bees	22,500	
Honey	39,200	
Beeswax	4,100	101,000

FOREST PRODUCTS

Milled Lumber	117,000	
Christmas Trees	5,000	122,000

PRODUCTION AND MARKETING ADMINISTRATION

1949 Conservation Payments		<u>75,000</u>
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TOTAL		\$24,820,000
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AGRICULTURAL ECONOMIC RESOURCES

FIELD CROP ACREAGE

Barley	70,000	
Rice	35,000	
Ladino Clover Pasture	46,500	
Ladino Clover Seed	8,500	
Alfalfa	9,000	
Wheat	5,000	
Milo	1,000	
Oats	1,000	
Sudan	1,000	
Lotus	750	
Sugar Beets	550	
Field Peas	200	
Mixed Hay	10,000	
		138,500

FRUIT AND NUT ACREAGE

Almonds	4,842	
Prunes	1,450	
Oranges	721	
Apricots	311	
Walnuts	697	
Olives	803	
Peaches	155	
Pears	203	
Figs	208	
Grapes	118	
Cherries	2	
Grapefruit	7	
		9,517

LIVESTOCK HEAD

Sheep	100,000	
Dairy Cattle	22,000	
Beef Cattle	12,500	
Hogs	10,000	
Horses and Mules	792	
Poultry	50,000	
Breeding Turkeys	7,000	

APIARY

Bees registered	11,629 Colonies	
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TEN YEARS' PRODUCTION OF TEN CROPS

Year	Rice Sacks	Barley Sacks	Ladino Seed Pounds	Almonds Pounds	Olives Pounds
1940	408,000	315,000	49,600	2,016,000	2,423,000
1941	546,000	388,000	142,000	471,500	5,951,000
1942	362,000	256,000	141,000	1,999,000	2,088,000
1943	394,000	415,000	118,000	1,415,500	7,874,000
1944	850,000	701,000	325,000	2,700,000	7,858,000
1945	690,000	675,000	350,000	1,900,000	3,690,000
1946	1,050,000	700,000	440,000	2,000,000	1,573,000
1947	1,168,000	680,000	375,000	2,000,000	4,479,000
1948	840,000	1,112,000	670,000	1,250,000	4,181,000
1949	1,219,000	792,000	800,000	3,000,000	1,763,000
10-year gross income	\$28,966,000	\$15,608,000	\$5,000,000	\$5,452,000	\$4,159,000

Year	Prunes Pounds	Cattle Head	Butterfat Pounds	Sheep Head	Wool Pounds
1940	2,584,000	8,100	1,879,000	107,000	1,245,000
1941	2,709,000	13,500	2,777,000	110,000	1,477,000
1942	2,068,000	12,000	2,678,000	116,000	1,549,000
1943	4,056,000	16,500	2,685,000	109,000	1,439,000
1944	4,864,000	23,500	3,034,000	139,000	1,500,000
1945	6,000,000	24,500	3,343,500	141,000	1,160,000
1946	4,500,000	23,500	2,973,000	121,000	1,372,000
1947	7,000,000	29,000	3,400,000	127,500	1,000,000
1948	6,000,000	31,500	3,690,000	112,000	1,006,000
1949	5,500,000	43,500	3,621,000	102,000	840,000
10-year gross income	\$3,594,000	\$16,920,000	\$24,369,000	\$14,121,000	\$5,855,000

Income from all farm production
for past ten years \$184,200,000

NATURAL ECONOMIC RESOURCES

POPULATION OF GLENN COUNTY 20,000

Water Resources: Sacramento River, Feather River, Stony Creek,
Grindstone Creek, and Butte Creek

Water Storage: Shasta Dam on Sacramento River; Stony Gorge Dam
on Stony Creek; East Park Dam on Stony Creek

Irrigation Districts in Operation: Acres

Orland, U. S. Reclamation District - Stony Creek.	20,000
Glenn-Colusa Irrigation District - Sacramento River	54,435
Jacinto Irrigation District - Sacramento River.	12,000
Provident Irrigation District - Sacramento River.	12,520
Princeton-Codora-Glenn - Sacramento River	6,000
Willow Creek Mutual Water Co. - Sacramento River.	1,000
Western Canal Company-- Feather River	11,000
Loam Ridge Irrigation District - Pumps.	1,200
Stony Creek Valley, Riparian Water Rights	1,000
Pump Irrigation from Farm Wells	<u>22,000</u>

TOTAL ACREAGE OF IRRIGATION DISTRICTS. 141,155

Other land suitable for irrigation:

West of present irrigation systems.	75,000
Butte City District, East of Sacramento River	25,000
Stony Creek Valley	1,200
West of Orland on Stony Creek below proposed Black Butte Dam	<u>15,000</u>

TOTAL ACREAGE LAND SUITABLE FOR IRRIGATION . . . 116,200

TOTAL ACREAGE IN COUNTY. 880,000

Acres in Farm Land 319,000

Acres in Range Land 287,000

Acres in National Forest 221,408

Acres of Standing Timber 86,000

Species of merchantable trees: Sugar Pine; Ponderosa (yellow)
Pine; Douglas Fir; White Fir; Red Fir; and Incense Cedar.

Sawmills in Operation. 3

Natural Gas Wells (producing). 5

Number of Farms in Glenn County. 2,300

Average acreage of each farm 260

NATURAL RECREATIONAL RESOURCES

Lakes	Stony Gorge Dam and Packer Lake	
Summer Camping Grounds - Improved		16
- Partially Improved		38
Estimated Number of Recreationists to National Forest Areas		15,000
Forest Acreage		221,408
Elevation in Forest		3,000 to 7,450
Trout Holding Ponds - Plaskett Meadows - Elevation -		6,500
Kinds of Fish:		
Mountain Streams - Rainbow Trout		
River - Stripped Bass, Black Bass, Salmon, Shad and Catfish; also Steelhead and Rainbow Trout		
Lakes - Black Bass, Catfish, Sunfish, Crappie, Bluegill		
Rivers and Creeks: (Length in miles through Glenn County)		
Sacramento River		26
Black Butte River, a tributary of Eel River		20
Stony Creek, main stream		68
Stony Creek, north fork		12
Briscoe Creek		12
Grindstone Creek		28
Cold Creek		6
Willow Creek		37
Butte Creek		10
Estimated number of wild game:		
Columbia Black Tail Deer		7,000
California Brown Bear		150
Wild Ducks	2,225,000	
Wild Geese	300,000	
Ring-neck Pheasants	20,000	
California Valley Quail	7,000	
Estimated number of predators:		
Mountain Lions		20
Coyotes		1,500
Bobcats		800
Badgers		50
Raccoons		4,000
Skunks		2,000
Mink		300
Other game: Mountain Quail, Wild Pigeon and Doves		
Wild Game reported killed:		
Deer		743
Mountain Lions		6
Coyotes		232
Muskrats trapped		25,000

CHEMICALS USED

Zinc Phosphide Treated Barley	1,989 Pounds
Zinc Phosphide Treated Oats	692 Pounds
Strychnine Treated Barley	10,590 "
Strychnine Treated Milo	82 "
Strychnine Treated Wheat	117 "
Strychnine Treated Rice	247 "
Sodium Fluoride Treated Bran	450,000 "
Ant Poison (Sodium Arsenite)	660 Ounces
Red Squill, Grain and Meat Bait	1,260 Pounds
Antu Rodent Bait	307 "
"1080" (Sodium Fluoroacetate) Treated Barley	59 "
Liquid "1080" Bait	35 Quarts
2,4-D	152 "
2,4,5-T	12 "
Black Leaf 40	16 Fints
Bluestone and Lime	40 Founds
Borax	1,200 "
Carbon Bisulphide	10 Gallons
Chlordane	100 "
Cyanogas	81 Ounces
DDT	193 Pounds
Diesel Oil	4,800 Gallons
Dow General	30 "
General Petroleum Weed Killer	250 "
Kill Tox	30 "
Lead Arsenate	96 Founds
Napthalene Crystals	25 "
Pentachlorophenol Sprays	95 "
Sinox	30 Gallons
Sodium Arsenite	100 "
Sodium Chlorate	700 Founds
Sodium Cyanide	48 Ounces
Summer Spray Oil	50 Gallons
TCA	115 Pounds

12,530 pounds of strychnine and zinc phosphide treated barley was used in squirrel control on 100,000 acres.

Baits were placed on 970 properties in rat control work.

50 pounds of treated rice were used for the control of blackbirds in rice fields.

95 pounds of treated small grain were distributed for the control of mice.

450,000 pounds of treated bran were placed on 30,000 acres in grasshopper control.

FARM SUMMARY

Farm production for the year 1949 was higher than for the past two years. However, declining prices for many farm products brought the total farm income in the county to a little lower level than was expected, i. e. to \$24,820,000. This was 2½ million dollars below the high years in 1947 and 1948. Higher prices for farm crops during these years made the chief difference in total income.

LADINO CLOVER. The ladino clover acreage has increased to 55,000 acres. 8,500 acres was cut for seed for a total of 800,000 pounds, of which 60% was certified. With restricted plantings recommended by the Production and Marketing Administration, much land formerly planted to rice and grain will eventually be planted to ladino clover. At the present rate of planting, it will not be too long before 100,000 acres of good land will be in ladino.

APIARY. The apiary industry is a much more important adjunct to the farm economy than is generally recognized. The busy honey bee carries plant pollen from flower to flower. This insures fertilization. This past year there were more than 14,000 colonies of bees registered in the county. As increased acreage is planted to clover, a greater dependence will be placed upon the beekeepers. One hive of bees to each acre of seed clover is considered the very minimum for proper pollinization. The recommended number of 2 hives or more to each acre greatly increases the seed yield. The beekeeper has his problem too, as chemical control of insect pests in seed fields often takes a heavy toll in bees. A closer cooperation between the seed growers and apiculturists is an important factor to the success of both of these industries.

WEED CONTROL. An old adage says "25% of the farmer's crop is weeds." Control of these weeds should be a highly profitable business to the farmer.

Barley and rice yields were largely influenced by a new impetus in weed control. New and highly potent herbicides were used to reduce weed growths in growing grain and rice fields this last season, as 27,000 acres of rice, grain, ladino clover, and milo maize were sprayed by airplane to control weeds.

The need for closer cooperation in weed control has taken a more serious turn with the gradual increased spread of certain very serious weed pests. Klamath weed, long a menace to range land in districts with ample rainfall, is gradually becoming a nuisance on irrigation canal banks and in irrigated fields. Hoary Cress, another serious weed, is making inroads on irrigated lands, as 45 properties infested with this pest have been reported. The gradual spread of weeds in rice fields, especially Rough Seed Bulrush, necessitates an increasing interest in weed control in rice. Approximately \$70,000 was spent in weed control this year.

GRASSHOPPER CONTROL. This past summer one of the heaviest grasshopper infestations ever reported in the county was present in nearly all parts of the county. Several different crops and range land pastures were severely damaged. Ladino clover, barley and alfalfa fields received the brunt of the grasshopper outbreak. The loss from hopper damage was estimated at \$158,000. Through the cooperation of local farmers and airplane pest control operators, 42,000 acres of land were treated with either dry bait or liquid sprays at an estimated cost of \$30,000. The newer type of chemicals, chlordane and DDT, gave excellent results, either as a liquid bait or mixed with dry bran. In addition to this, 450,000 pounds of government supplied bran and sawdust, treated with sodium fluosilicate, were used in control work.

ROBENT CONTROL. This year well over 100,000 acres of farm and range land were treated for ground squirrels. 49,000 acres were treated by the County Agricultural Department, using poison help. The balance of the treated area was baited by farmers on their own land. This was the largest area of land treated in recent years. Excellent results were obtained by the use of strychnine, zinc phosphide and sodium fluoroacetate treated grain.

INSECT PESTS. The year 1949 completes the third year of county-wide insect survey. No new serious insect pests were found. Since the final fumigation on red scale was accomplished, no new scale has been found. However, cottony cushion scale, black scale and citricola scale were reported. Elm leaf beetle, aphid, lygus bug, and red mite were present in several locations and did considerable damage this past season.

CERTIFICATION. Seed certification on 7,000 acres of the following seeds, ladino clover, sudan grass, alfalfa, milo maize, rice and barley, required a great deal of attention. One inspector was assigned full time to this phase of the agricultural program, which included inspecting the fields at harvest time in weed control, seed sampling for purity and germination tests, and the tagging of certified seed.

WEIGHTS AND MEASURES REPORT

For the Year 1949

Tested and sealed without correction:

23 Counter Scales
11 Spring Scales
26 Computing Scales
51 Platform Scales
28 Heavy Capacity Scales
203 Weights
95 Retail Measuring Pumps and Meters
3 Wholesale Meters

Tested and sealed after correction:

12 Counter Scales
8 Spring Scales
14 Computing Scales
54 Platform Scales
39 Heavy Capacity Scales
Weights
18 Retail Measuring Pumps and Meters
1 Wholesale Meter

Tested and found to be out of order:

4 Counter Scales
4 Computing Scales
10 Platform Scales
2 Heavy Capacity Scales
2 Retail Measuring Pumps and Meters

During the calendar year, 289 establishments were visited, and 208 certificates issued.