

SUTTER COUNTY

Crop & Livestock Report



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Jupiter's Royal Acorns

As the newest commodity to wear the crown of top crop in Sutter County, the walnut's rise to the top has been a long time coming. In fact, it is the oldest tree food known to man, its history of cultivation stretching back to 7000 BC.

One of the nuts' common names, Persian walnut, points to its origin in Central Asia. There, the tree may be found growing wild although a grove of native trees may bear only the slightest resemblance to a modern high yielding orchard with grafted trees. The hard shells of those nuts allowed it to be carried far and wide for use in trade. This dispersion throughout Europe by land eventually led to it being carried across the sea, with the English merchant ships bringing the nut to the new world. This gave rise to its common name, English walnut, despite England not growing the crop commercially.

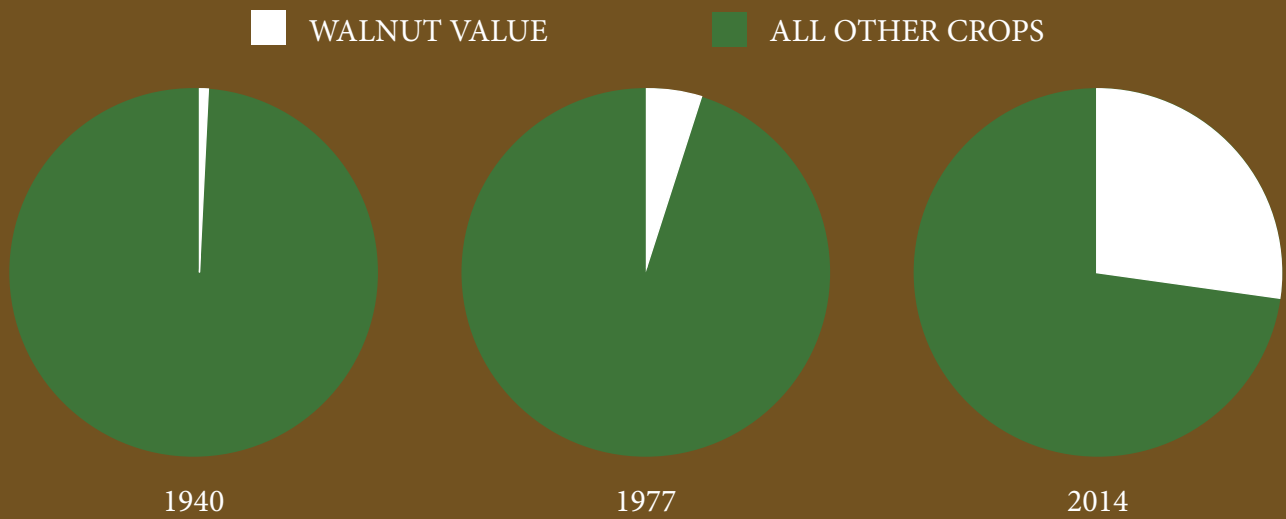
Called *Juglans regia* or Jupiter's royal acorn by the Romans, they recognized its value by reserving it for royalty. Pliny the elder, first century author of Natural History, wrote extensively of the walnuts protective and curative properties and even described a wedding custom in which the groom scattered walnuts amongst the young people while they sang songs.

The walnut was first cultivated in California in the late 1700s by Franciscan Fathers. Like the olive of the same name, these nuts were known as "mission" walnuts. The first commercial plantings occurred in the 1867 in Goleta, near Santa Barbara. Initially, plantings were made in Southern California, but over the next 70 years, production shifted to the Central Valley, where better growing conditions and improved access to irrigation led to dramatic increases in yields. The Central Valley's fertile soils became America's number one walnut producing region, accounting for 99% of the domestic production and 75% of worldwide production.



Sutter County's 1940 Crop Report indicated 1,763 acres of walnuts harvested, with an average yield of 0.35 tons per acre, with an overall value of \$111,060. Fast forward 75 years to 2014, and now Sutter County accounts for nearly 30,000 acres, with an average yield of 1.81 tons per acre, and an overall value of nearly \$200 Million.

Throughout California's history there have been rapid increases in walnut planting when markets were favorable, as well as significant softening of prices and subsequent reductions in acreage. In 1951, the value of the walnut crop in Sutter County first topped \$1 Million; twenty-seven years later, in 1978, it topped \$10 Million; and in 2011, the crop topped \$100 Million. As the demand for California walnuts continues to remain high, our local exporters are busy shipping their "royal acorns" to all corners of the earth, proving that the world loves Sutter County walnuts.



Sources:

California Walnut Board www.walnuts.org

Historical Virtues of the Walnut, Andrew F. Smith

Cover

Top: Krehe & Krehe

Bottom: whole walnuts, cracked walnuts

Back Cover

Top: Thomas Joaquin

Middle: JS Johal & Sons, shelled walnuts

Bottom: Thomas Joaquin

Inside

Opposite: whole walnuts

Right: whole, cracked, & shelled walnuts





TABLE OF CONTENTS

4	Agricultural Commissioner's Letter
5	Fruit & Nut Crops
6	Vegetable Crops
6	Organic Farming
7	Field Crops
8	Seed Crops
9	Apiary Products
9	Livestock
10	Nursery Products
10	Pierce's Disease Program
11	Ten Leading Crops
12	Gross Production Value
13	Sutter County Exports by Country
14	Sustainable Agriculture
15	Department Statistics
17	Honeybee Health
18	Staff

MISSION STATEMENT

Our mission is to serve the public's interest by ensuring equity in the marketplace, promoting and protecting agriculture, assuring environmental quality, and protecting the health, safety and welfare of Sutter County's citizens.

We fulfill our mission through the following programs: Pest Exclusion, Pesticide Use Enforcement, Pest Detection, Fruit and Vegetable Standardization, Egg Quality Control, Pest Management, Nursery Inspection, Pest Eradication, Seed Inspection, Weights and Measures Enforcement, Predatory Animal Control, and other non-regulatory and special services programs.



OFFICE OF THE
AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS & MEASURES

MARK P. QUISENBERRY
Agricultural Commissioner
Sealer of Weights and Measures

MARK BROWN
Assistant Agricultural Commissioner
Assistant Sealer of Weights and Measures

July, 2015

To: Karen Ross, Secretary
California Department of Food
and Agriculture

and

The Honorable Board of Supervisors,
County of Sutter:
Ron Sullenger, Chairman, District 1
Dan Flores, District 2
Larry Munger, District 3
Jim Whiteaker, District 4
Barbara LeVake, District 5

In accordance with Section 2272 and 2279 of the California Food and Agricultural Code, I am pleased to submit the 2014 Sutter County Agricultural Crop Report. One of the effects of the drought was the rise of Walnuts to the top ranking this crop year, replacing Rice which was the leader for the past twenty-four years. Generally, the drought reduced production for all crops by 10 percent.

For the 2014 crop year, Sutter County's gross agricultural production value totaled \$726,066,000 with Walnuts, Rice, Dried Plums (Prunes), Peaches (processing), Tomatoes (processing), Nursery Products, and Almonds as the leading agricultural commodities.

Aside from the frustrations brought about by the ongoing drought, increased bearing acreage, production and value bolstered returns for almonds, peaches (cling), dried plums (prunes), walnuts, tomatoes (processing) and nursery stock. Rice production and value were favorable, but access to irrigation water reduced cropping acreage by 34 percent. Except for a few commodities, production and returns were favorable for the remaining crops.

As summarized in this report, agriculture continues to be an integral part of Sutter County's economic base. Industries such as banking, labor, marketing, transportation, and other services directly or indirectly tied to agriculture benefited appreciably as the agricultural industry returned over \$2.96 Billion to our economy in 2014.

I would like to express my sincere appreciation to staff and to the many individuals from the agricultural industry who assisted in the compilation of this report.

Respectfully submitted,

A handwritten signature in black ink, appearing to be "M. Quisenberry", with a long horizontal flourish extending to the right.

Mark P. Quisenberry
Agricultural Commissioner

FRUIT & NUT CROPS

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Almonds, Meats	2014	7,435	0.73	5,428	Ton	\$5,722	\$31,059,000
	2013	6,360	0.54	3,434	Ton	\$5,066	\$17,397,000
Almonds, Hulls	2014			6,785	Ton	128	868,000
	2013			4,293	Ton	100	429,000
Kiwifruit	2014	84	7.29	612	Ton	1,686	1,032,000
	2013	155	6.36	986	Ton	1,600	1,578,000
Olives	2014	1,144	2.67	3,054	Ton	444	1,356,000
	2013	785	8.48	6,657	Ton	454	3,022,000
Peaches, Cling	2014	8,425	21.85	184,086	Ton	377	69,400,000
	2013	7,838	15.33	120,157	Ton	347	41,694,000
Persimmons	2014	145	8.46	1,227	Ton	408	501,000
	2013	153	8.91	1,363	Ton	373	508,000
Dried Plums (Prunes)	2014	18,442	2.38	43,892	Ton	2,451	107,579,000
	2013	17,236	1.57	27,061	Ton	1,863	50,415,000
Walnuts, English	2014	29,851	1.81	54,030	Ton	3,546	191,590,000
	2013	26,033	1.60	41,653	Ton	3,446	143,536,000
Miscellaneous ¹	2014	691		2,152	Ton		2,499,000
	2013	779		3,120	Ton		2,873,000
Orchard By-Products	2014						8,465,000
	2013						8,040,000
TOTAL	2014	66,217					\$414,349,000
	2013	59,339					\$269,492,000

¹ Includes Apples, Apricots, Bushberries (Blackberry, Boysenberry & Raspberry), Cherries, Chestnuts, Feijoa (Guava), Figs, Grapefruit, Grapes, Jujubes (Chinese Date), Lemons, Limes, Nectarines, Oranges (Mandarin, Navel & Valencia), Peaches (Freestone), Pecans, Pears, Pistachios, Plums, Pomegranates, Strawberries, Tangerines, Walnuts (Black) and other miscellaneous fruit and nut crops of a limited number of growers/processors in Sutter County.

CROP	BEARING ACRES		NON-BEARING ACRES	
	2014	2013	2014	2013
Almonds	7,435	6,360	919	1,202
Kiwifruit	84	155	0	1
Olives	1,144	785	72	138
Peaches, Cling	8,425	7,838	468	1,276
Persimmons	145	153	3	3
Dried Plums (Prune)	18,442	17,236	938	237
Walnuts, English	29,851	26,033	7,042	7,979
Miscellaneous ¹	691	779	69	251
TOTAL	66,217	59,339	9,511	11,087

¹ Includes Apples, Apricots, Bushberries (Blackberry, Boysenberry & Raspberry), Cherries, Chestnuts, Feijoa (Guava), Figs, Grapefruit, Grapes, Jujubes (Chinese Date), Lemons, Limes, Oranges (including Navel, Valencia and Mandarin), Pears, Pecans, Pistachios, Pluots, Pomegranates and Tangerines.

VEGETABLE CROPS

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Melons, Honeydew	2014	516	10.92	5,635	Ton	\$572	\$3,223,000
	2013	545	11.90	6,486	Ton	\$353	\$2,290,000
Tomato, Processing	2014	10,000	45.13	451,300	Ton	85	38,361,000
	2013	8,070	42.63	344,024	Ton	71	24,426,000
Miscellaneous ¹	2014	171		5,154	Ton		2,785,000
	2013	90		1,271	Ton		1,119,000
TOTAL	2014	10,687					\$44,369,000
	2013	8,705					\$27,835,000

¹ Includes Artichoke, Asparagus, Basil, Beets, Bitter Melon, Bok Choy, Broccoli, Brussels Sprouts, Cabbage, Cantaloupe, Carrots, Cauliflower, Celery, Chard, Cilantro, Corn (sweet), Cucumber, Eggplant, Garlic, Gourds, Green Beans, Herbs, Kale, Kohlrabi, Leek, Lettuce, Melons (Mixed), Mustard, Okra, Onions, Parsnip, Pea, Peppers, Potatoes, Pumpkin, Radish, Rhubarb, Rutabaga, Shallots, Spinach, Sprouts, Squash, Sweet Potatoes, Tomatillo, Tomato (Fresh), Turnip, Watermelon, Winter Squash, Zucchini and other miscellaneous vegetables of a limited number of growers/processors in Sutter County.

ORGANIC FARMING

California is the only state with its own organic program. Organic agriculture in California accounts for more than twenty percent of all organic production in the nation.

Thirty farms, totaling approximately 10,723 acres of crop land were registered as organic in Sutter County in 2014. Utilizing organic principles defined in the Federal Organic Foods Production Act of 1990, and the California Organic Product Act of 2003, these farms produce a wide array of commodities such as almonds, stone fruit, beans, herbs, corn, popcorn, miscellaneous vegetables, apples, grapes, pears, pomegranates, melons, squash, oats, peas, prunes, rice, seed crops, tomatoes, walnuts, and wheat. The total estimated value of organic production in Sutter County in 2014 was \$24,294,636. In comparison, 2013 had 12,302 production acres with an estimated value of \$23,223,450.

Sutter County Agricultural Biologists assist organic growers with their registration and cost-share applications. They also inspect registered organic products at point of production, certified farmers' markets, and retail locations. Our biologists also obtained nineteen random produce samples from our producers and retail locations for submission to the State Laboratory for assuring organic production standards.



Feather River Farms

FIELD CROPS

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Beans, All dry, edible ¹	2014	7,718	0.76	5,866	Ton	\$1,265	\$7,420,000
	2013	4,714	1.06	4,997	Ton	\$942	\$4,707,000
Corn, Field Grain	2014	11,266	6.14	69,173	Ton	155	10,722,000
	2013	12,282	6.40	78,605	Ton	204	16,035,000
Hay, Alfalfa	2014	5,666	7.03	39,832	Ton	238	9,480,000
	2013	6,191	6.48	40,118	Ton	214	8,585,000
Hay, Grain ²	2014	3,563	2.33	8,302	Ton	180	1,494,000
	2013	2,236	2.02	4,517	Ton	147	664,000
Pasture, Irrigated ³	2014	10,050			Acre	185	1,859,000
	2013	10,240			Acre	180	1,843,000
Pasture, Range Dry	2014	63,900			Acre	20	1,278,000
	2013	64,000			Acre	16	1,024,000
Rice ⁴	2014	75,903	4.49	340,804	Ton	419	142,797,000
	2013	115,949	4.28	496,262	Ton	361	179,151,000
Rice, Wild	2014	1,149	1.08	1,241	Ton	1,842	2,286,000
	2013	1,402	0.98	1,374	Ton	1,430	1,965,000
Safflower	2014	2,119	1.18	2,500	Ton	498	1,245,000
	2013	1,526	0.99	1,511	Ton	520	786,000
Wheat, Grain	2014	7,134	2.52	17,978	Ton	227	4,081,000
	2013	8,910	2.80	24,948	Ton	246	6,137,000
Miscellaneous, Field Crops ^{5,6}	2014	7,498		42,230	Ton		2,358,000
	2013	7,459		31,967	Ton		3,187,000
Field Crops, By-Products	2014			62,315	Ton		2,929,000
	2013			76,085	Ton		3,576,000
TOTAL	2014	195,966					\$187,949,000
	2013	234,909					\$227,660,000

1 Includes all varieties of edible Dried Beans, including Lima, Blackeye, Garbanzo, Light and Dark Red Kidney Bean, and other miscellaneous Beans of a limited number of growers/processors in Sutter County.

2 Revised 2013 Grain Hay yield, tonnage, total value and Field Crop total value

3 The valuation is not an animal production figure but a land value (rental equivalent).

4 Includes USDA Support Price.

5 Includes Barley, Corn (Silage), Cotton, Grass Hay, Oats (Silage), Popcorn, Triticale, Vetch, Sorghum and other miscellaneous field crops of a limited number of growers/processors in Sutter County.

6 Miscellaneous Field Crops 2013 acreage, tonnage and value adjusted to include Grass Hay.



SEED CROPS

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Beans, Dry ¹	2014	1,055	1,880	1,983,000	Lb	0.63	\$1,249,000
	2013	866	1,977	1,712,000	Lb	0.74	\$1,267,000
Cucumbers	2014	350	181	63,350	Lb	13.58	860,000
	2013	426	199	84,774	Lb	10.33	876,000
Pumpkins & Squash	2014	168	562	94,416	Lb	5.96	563,000
	2013	268	423	113,000	Lb	5.90	667,000
Rice	2014	3,180	8,820	28,048,000	Lb	0.22	6,170,000
	2013	3,152	8,596	27,095,000	Lb	0.24	6,503,000
Safflower	2014	455	1,800	819,000	Lb	0.27	221,000
	2013	469	1,614	757,000	Lb	0.29	220,000
Sunflowers	2014	10,156	1,455	14,777,000	Lb	1.02	15,073,000
	2013	11,558	1,140	13,176,000	Lb	1.21	15,943,000
Watermelons	2014	583	211	123,013	Lb	35.38	4,352,000
	2013	785	150	118,000	Lb	29.62	3,495,000
Wheat	2014	732	6,000	4,392,000	Lb	0.12	527,000
	2013	1,070	6,370	6,816,000	Lb	0.11	750,000
Miscellaneous ²	2014	846		2,324,000	Lb		1,800,000
	2013	628		1,280,000	Lb		3,299,000
TOTAL	2014	17,525					\$30,815,000
	2013	19,222					\$33,020,000

1 Includes Beans (Blackeye, Cowpea, Cranberry, Lima, Dark Red Kidney, Light Red Kidney) and other bean seed crops of a limited number of growers/processors in Sutter County.

2 Includes Alfalfa, Arugula, Basil, Beans (Fresh), Broccoli, Cabbage, Cantaloupe, Carrots, Cauliflower, Coriander, Gourds, Kale, Lettuce, Onion, Peppers, Mixed Melons, Okra, Radish, Sugar Peas, Swiss Chard, Tomato, Tomatillo, Wild Rice and other miscellaneous seed crops of a limited growers/processors in Sutter County.

Craig Bryant



APIARY PRODUCTS

ITEM	YEAR	PRODUCTION	UNIT	VALUE PER UNIT	TOTAL
Pollination	2014	50,866	Colony	\$63	\$3,205,000
	2013	51,275	Colony	\$56	\$2,871,000
Miscellaneous ¹	2014				\$1,465,000
	2013				\$1,523,000
TOTAL	2014				\$4,670,000
	2013				\$4,394,000

¹ Includes Package Bees, Queen Bees, Honey and Wax.



Matt Neubert



McPherrin Ranch

LIVESTOCK

ITEM	YEAR	NUMBER	LIVE WEIGHT	UNIT	VALUE PER UNIT	TOTAL
Cattle & Calves ¹	2014	4,720	34,762	Cwt.	\$180	\$6,257,000
	2013	6,080	44,780	Cwt.	\$109	\$4,881,000
Sheep & Lambs	2014	10,506	12,952	Cwt.	151	\$1,956,000
	2013	12,848	17,141	Cwt.	101	1,731,000
Miscellaneous ²	2014					3,755,000
	2013					2,834,000
Livestock By-Products	2014					3,000
	2013					3,000
TOTAL	2014					\$11,971,000
	2013					\$9,449,000

¹ Includes USDA Support Price.

² Includes Alpaca & Angora Fur, Aquaculture, Chickens, Chicken Eggs, Ducks, Fish Bait, Geese, Goats, Hogs, Milk (Market), Game Birds, Musk Oxen, Pheasants, Pigeons, Rabbits, Rabbit Hides, Turkeys, Water Buffalo, Wool and other miscellaneous livestock and poultry of a limited number of growers/processors in Sutter County.

NURSERY PRODUCTS

ITEM	YEAR	FIELD ACRES	QUANTITY SOLD	UNIT	TOTAL
Fruit & Nuts (Bareroot & Potted)	2014	272	5,248,000	Each	\$31,532,000
Trees and Vines	2013	169	5,041,000	Each	\$25,268,000
Miscellaneous ¹	2014	6	39,000	Each	411,000
	2013	6	39,087	Each	412,000
TOTAL	2014				\$31,943,000
	2013				\$25,680,000

¹ Includes Ornamental Trees, Shrubs and other Nursery Stock.

PIERCE'S DISEASE PROGRAM

Pierce's disease, a deadly disease of grapevines, has been known in California since 1892. Caused by the bacterium *Xylella fastidiosa*, it did not cause much damage because the insects which transmitted it, the native blue green sharpshooter, were weak fliers and did not travel far from their riparian habitats.

This changed in the 1990s, with the arrival and spread of the invasive glassy-winged sharpshooter (GWSS). A strong flier, GWSS quickly moved throughout Southern California. Its host list grew rapidly. Due to the spread of GWSS Pierce's Disease now posed a very real threat of decimating California's grape and wine industry. The bacterium was also found to cause Almond leaf scorch as well as Olive blight, spreading the potential risk further yet.

In the last 15 years much has been done to protect California from this threat. Activities include a statewide nursery inspection program to prevent the spread of GWSS through a variety of certification options; area-wide management programs to protect grapevines in GWSS infested areas; and grower-funded research that has led to several possible solutions to the disease, including resistant grapevines.

The Sutter County Ag Commissioner's office works hard to protect the County and North State from a GWSS infestation. In 2014, staff monitored 101 yellow panel sticky traps (YPST) in urban areas to assist in the early detection of GWSS. Staff monitored 28 YPST at retail nurseries and inspected 169 incoming nursery shipments of host plant material from GWSS-infested areas. None were found with live egg masses, although 2 egg masses were found which were determined by the California Department of Food and Agriculture's Plant Pest Diagnostic laboratory to be non-viable or not capable of producing live adults insects.

Statewide, this approach has been extremely effective, where 44,000 shipments were inspected in 2014, and only 12 live egg masses were detected.



TEN LEADING CROPS

CROP	2014	CROP	2013
WALNUTS	\$191,590,000	RICE ¹	\$185,654,000
RICE ¹	\$148,967,000	WALNUTS	\$143,536,000
DRIED PLUMS (PRUNE)	\$107,579,000	DRIED PLUMS (PRUNES)	\$50,415,000
PEACHES (PROCESSING)	\$69,400,000	PEACHES (PROCESSING)	\$41,694,000
TOMATOES (PROCESSING)	\$38,361,000	NURSERY PRODUCTS	\$25,680,000
NURSERY PRODUCTS	\$31,943,000	TOMATOES (PROCESSING)	\$24,426,000
ALMONDS	\$31,059,000	ALMONDS	\$17,397,000
SUNFLOWERS (SEED)	\$15,073,000	CORN (FIELD)	\$16,035,000
CORN (FIELD)	\$10,722,000	SUNFLOWERS (SEED)	\$15,943,000
ALFALFA	\$9,480,000	ALFALFA	\$8,585,000

¹ Includes Seed, does not include Wild Rice.



Stephens Ranch

GROSS PRODUCTION VALUE

CATEGORIES	2014	2013
FRUIT & NUT CROPS	\$414,349,000	\$269,492,000
FIELD CROPS	\$187,949,000	\$227,660,000 ¹
SEED CROPS	\$30,815,000	\$33,020,000
VEGETABLE CROPS	\$44,369,000	\$27,835,000
NURSERY PRODUCTS	\$31,943,000	\$25,680,000
LIVESTOCK PRODUCTS	\$11,971,000	\$9,449,000
APIARY PRODUCTS	\$4,670,000	\$4,394,000
TOTAL	\$726,066,000	\$597,530,000 ²

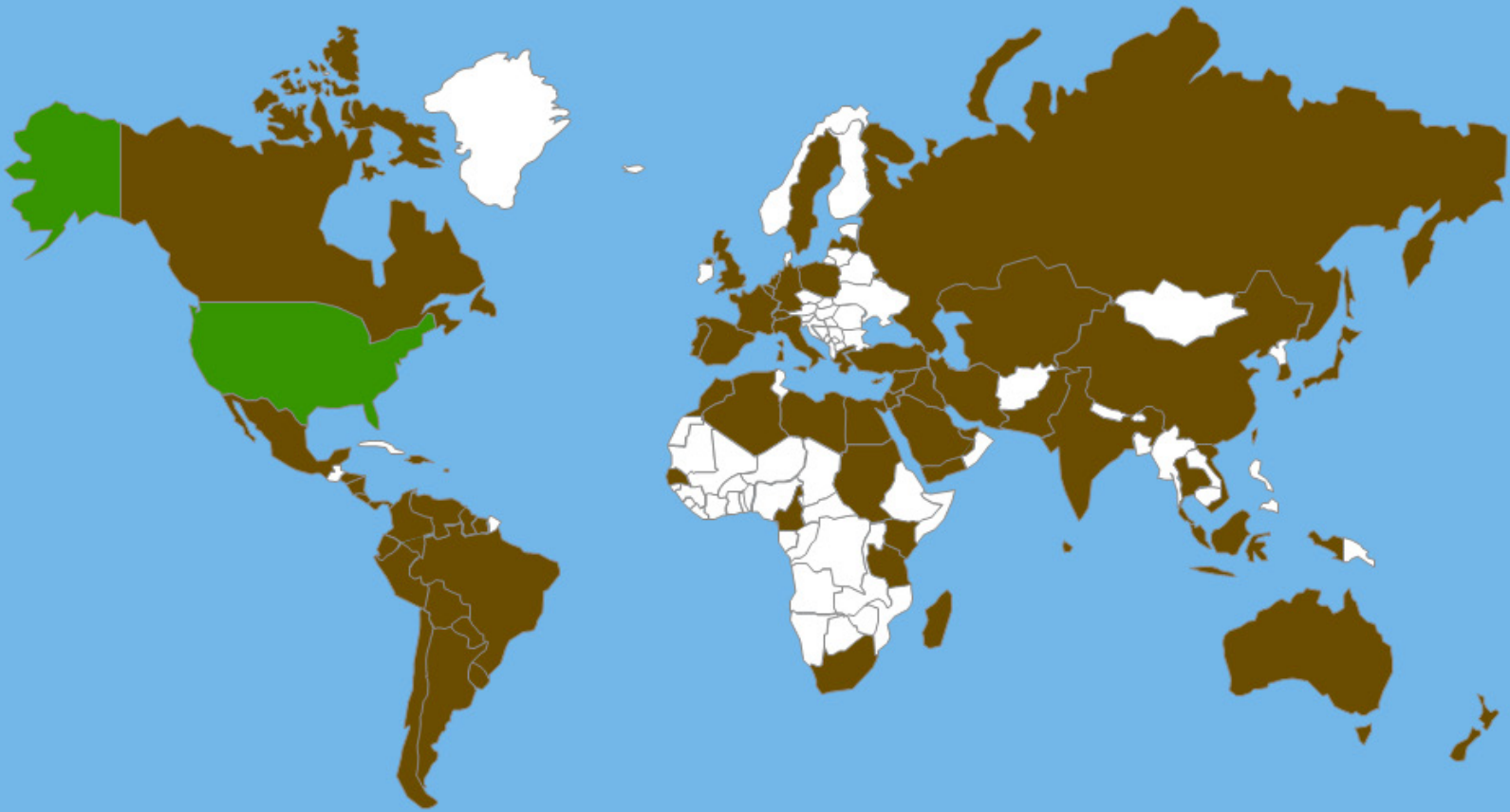
1 Revised 2013 Field Crops Total value.

2 Revised 2013 Overall Total value.

YEAR	VALUE	YEAR	VALUE	YEAR	VALUE
1956	\$49,381,000	1976	\$178,554,000	1996	\$302,706,400
1957	41,313,000	1977	200,878,000	1997	277,169,700
1958	38,786,000	1978	220,502,000	1998	268,323,100
1959	50,707,000	1979	258,666,900	1999	347,939,000
1960	50,536,000	1980	299,014,700	2000	340,176,000
1961	55,585,000	1981	316,465,900	2001	264,673,000
1962	57,322,000	1982	247,784,100	2002	291,061,100
1963	55,155,000	1983	205,335,300	2003	307,322,300
1964	66,740,000	1984	262,285,500	2004	299,219,300
1965	64,564,000	1985	255,449,600	2005	305,190,190
1966	71,627,000	1986	229,364,800	2006	358,845,200
1967	69,313,000	1987	216,183,600	2007	377,940,800
1968	80,275,000	1988	201,345,800	2008	498,195,200
1969	74,006,000	1989	243,940,200	2009	475,691,100
1970	77,238,000	1990	217,400,000	2010	521,640,570
1971	82,209,000	1991	268,941,900	2011	518,198,460
1972	95,118,000	1992	285,622,700	2012	528,253,000
1973	159,204,000	1993	292,108,300	2013	597,530,000 ¹
1974	179,719,000	1994	340,171,300	2014	726,066,000
1975	187,517,000	1995	330,170,500		

1 Revised 2013 total Agricultural Production value.

SUTTER COUNTY EXPORTS BY COUNTRY



- | | | | |
|--------------------|------------|--------------|----------------------|
| Algeria | France | Madagascar | Spain |
| Argentina | Germany | Malaysia | Sri Lanka |
| Armenia | Greece | Malta | Sudan |
| Australia | Grenada | Mauritius | Suriname |
| Bahrain | Guyana | Mexico | Sweden |
| Belgium | Haiti | Morocco | Switzerland |
| Belize | Honduras | Netherlands | Syria |
| Bolivia | India | New Zealand | Taiwan |
| Brazil | Indonesia | Nicaragua | Tanzania |
| Cameroon | Iran | Pakistan | Thailand |
| Canada | Israel | Panama | Trinidad & Tobago |
| Chile | Italy | Paraguay | Turkey |
| China | Jamaica | Peru | United Arab Emirates |
| Colombia | Japan | Poland | United Kingdom |
| Costa Rica | Jordan | Portugal | Uruguay |
| Cyprus | Kazakhstan | Russia | Venezuela |
| Dominican Republic | Kenya | Saudi Arabia | Viet Nam |
| Ecuador | Kuwait | Senegal | Yemen |
| Egypt | Latvia | Singapore | |
| El Salvador | Lebanon | South Africa | |
| Fiji | Libya | South Korea | |

In 2014, the Sutter County Agricultural Commissioner's Office issued 1,677 Federal Phytosanitary Certificates for international shipments to 82 countries and 55 State Phytosanitary Certificates for shipments within the United States.

SUSTAINABLE AGRICULTURE

REGISTERED ORGANIC FARMING

Thirty (30) Organic Producers (farming 10,723 Acres)
 Four (4) Handlers
 One (1) Processor

PEST EXCLUSION

	Units Inspected	Acres Inspected
Interstate, Intrastate	4,020	
Phytosanitary Field Inspection		12,385

BIOLOGICAL CONTROL

Pest	Control Agent	Scientific Name	Program Scope*	Distribution*
Puncturevine <i>(Tribulus terrestris)</i>	Puncturevine Seed Weevil	<i>(Microlarinus lareynii)</i>	Countywide	General
	Puncturevine Stem Weevil	<i>(M. lypriformis)</i>	Countywide	General
Yellow Starthistle <i>(Centaurea solstitialis)</i>	Yellow Starthistle Bud Weevil	<i>(Bangasternus orientalis)</i>	10 sites	Locally established
	Yellow Starthistle Hairy Weevil	<i>(Eustenopus villosus)</i>	10 sites	Locally established
	Yellow Starthistle Flower Weevil	<i>(Larinus curtus)</i>	2 sites	Locally established
Redgum Lerp Psyllid <i>(Glycaspis brimblecombei)</i>	False Peacock Fly	<i>(Chaetorellia succinea)</i>	Countywide	General
	Yellow Starthistle Peacock Fly	<i>(C. australis)</i>	Countywide	General
	Yellow Starthistle Gall Fly	<i>(Urophora sirunaseva)</i>	Countywide	General
	Lerp Psyllid Wasp	<i>(Psyllaephagus bliteus)</i>	2 sites	Locally established

PEST DETECTION

Target Pest	Traps in Operation (Seasonal Max)	Total Number of Services
Asian Citrus Psyllid	153	871
European Grapevine Moth	9	76
Khapra Beetle	12	141
General Fruit Flies (McPhail)	12	334
Vine Mealybug	9	76
Light Brown Apple Moth	131	1,592
European Pine Shoot Moth	5	27
Glassy-Winged Sharpshooter	138	1,500
Gypsy Moth	61	440
Japanese Beetle	42	309
Mediterranean Fruit Fly	110	1,467
Melon Fruit Fly	42	496
Oriental Fruit Fly	42	574



VERTEBRATE PEST CONTROL

Control Agents	Units Used/Sold
Anticoagulant Bait	1,100 Pounds
Zinc Phosphide Bait	950 Pounds

NURSERY INSPECTION

Visual Hours	Number of Properties	Number of Acres
68	52	326

*Represents number of sites or crop control agents incorporated into program.

WEED MANAGEMENT AREA PROGRAMS

	Sites	Hours	Acres
Arundo donax L.	8	13	2

DEPARTMENT STATISTICS

Pest Exclusion

This program provides the first line of defense for California agriculture and the environment against the invasion of exotic pests. Inspections provide protection from the introduction of plant and animal insect and disease pests that may be introduced into the state through the movement of legal or illegal trade. This program also involves inspections of plant material being delivered to other states and countries and the issuance of certificates documenting compliance with their entry requirements.

Total Hours Expended 2014: 6,185

Pest Detection

This program provides the second line of defense against exotic pests through the early detection of new introductions before they become widely established. Through early detection the likelihood of these pests becoming established in the state is lessened and the cost and environmental impact of eradication is minimized.

Total Hours Expended 2014: 2,027

Pest Management

The County Ag Commissioner is charged with the responsibility of managing nuisance pests of agriculture and human health. Many of these pests are introduced species that have become established despite our best pest exclusion efforts. If promising, programs are established to distribute biological agents for troublesome pests.

Total Hours Expended 2014: 743

Pesticide Use Enforcement

This is a complex legislatively mandated program that provides for the proper, safe, and effective use of pesticides essential for production of food and fiber and for protection of the public health and safety. It also protects the environment from potentially harmful pesticides by prohibiting, regulating or ensuring proper stewardship of pesticides. An important component of the program focuses on agricultural and pest control workers, ensuring safe working conditions, use of proper protective equipment and training for employees who work with or around pesticides. Other components of the program include pesticide use reporting, incident investigations, outreach activities promoting best management practices, and monitoring applications in the field.

Total Hours Expended 2014: 12,282

Seed Certification

Inspections are performed at retail and wholesale establishments that sell seed. Samples are drawn for germination and purity testing, and labeling is inspected for compliance with state requirements. Through this program certification services are also available for growers and processors in cooperation with the California Crop Improvement Association.

Total Hours Expended 2014: 450

Nursery Inspection

Through this program inspections are performed at the growing, propagation, production and sales site to assure cleanliness from pests, varietal trueness and stock vigor prior to consumer sales.

Total Hours Expended 2014: 88

Fruit, Nut, and Vegetable Standardization

This program ensures compliance with California's minimum standards regarding quality and marketing of all produce commercially grown and/or marketed in the state. Direct Marketing regulation and Organic law enforcement are part of a program that provides for local protection to growers, marketers and consumers.

Total Hours Expended 2014: 1,137

Apiary Inspection

A program that emphasizes the registration and site location of honeybee colonies in the county. At the request of beekeepers or growers, the County Ag Commissioner inspects colonies for strength and health to ensure effective pollination.

Total Hours Expended 2014: 133



Bee photos by Kathryn Garvey, UC Davis Department of Entomology and Nematology

Crop Statistics

As required by the California Food and Agricultural Code, the gross production and value of the county's commodities are compiled and recorded in the annual crop report. This valuable information helps associated businesses while promoting the production and prosperity of agriculture in California.

Total Hours Expended 2014: 607

Predatory Animal Damage Control

In cooperation with USDA's Animal and Plant Health Inspection Service-Wildlife Services, this program responds to requests by the public and agencies in need of assistance in managing wildlife damage. The program has the authority to assist in solving problems that are created when wildlife causes damage to agricultural property or natural resources. The program also assists with wildlife problems involving threats to human health and safety and threatened or endangered species.

Total Hours Expended 2014: 2,246

Measurement Standards

County Weights and Measures officials ensure the accuracy of commercial weighing and measuring devices, verify the quantity of both bulk and packaged commodities; and enforce the quality, advertising and labeling standards for most petroleum products.

Total Hours Expended 2014: 3,014



HONEYBEE HEALTH

Honeybees are essential to the health and well-being of California's diverse agricultural environment. They pollinate everything from almonds to prunes to seed crops. In Sutter County, the crops which use honeybees for pollination total over 37,000 Acres. Thus protecting honeybee health is very important to farmers and honeybee farmers alike. To this end the California Almond Industry has worked in conjunction with beekeepers, farmers and researchers at UC Davis to develop industry standards for keeping honeybees safe.

These standards can be transferred to other agribusinesses that use honeybees for pollination and can even be adopted by homeowners in their yards and gardens. Some honeybee best management practices developed are: if you must spray pesticides spray very early in the morning or late in the evening when honeybees are not foraging, don't spray insecticides when plants are in bloom, and communicate with your local beekeepers to keep honeybees safe.



For more information regarding honeybee health:
www.almonds.com/pollination#tc-honey-bee-protection
www.xerces.org
Bee photos by Kathryn Garvey, UC Davis Department of Entomology and Nematology

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SEALER OF WEIGHTS AND MEASURES**
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