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California Department of Food and Agriculture

Agricultural Commissioners' Crop Reports

Merced County

2015-2017

2015 REPORT ON Agriculture



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Cover photograph by S. Stoddard.
Numbers in this report reflect computer rounding of production & value rates.





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Agricultural Commissioner
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Karen Ross, *Secretary*
California Department of Food and Agriculture
and

The Honorable Board of Supervisors, County of Merced

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Deidre F. Kelsey **Daron McDaniel**

Jerry O'Banion **John Pedrozo**

James L. Brown, *County Executive Officer*

In accordance with the provisions of Sections 2272 and 2279 of the California Food and Agricultural Code, I am pleased to submit the 2015 Merced County Report of Agriculture. This report summarizes the acreage, production, and gross value of Merced County's agricultural commodities.

Merced County agriculture commodities grossed \$3,589,903,000 in 2015. This is an 18.9% decrease from the 2014 production season. Commodity price decreases and water availability for growers were all factors to cause production and value decreases. These figures represent gross returns to the producer and do not take into account the costs of production, marketing, or transportation. Net income of the producer is not reflected in this report.

SIGNIFICANT EVENTS OF THE 2015 CROP YEAR

- Milk remains the county's number one commodity with an overall value of \$895,180,000. Milk manufacturing had a substantial increase (1,426,629 cwt) in units produced, while market milk reported a decrease (3,395,169 cwt) in production. Although there was a substantial increase in units produced, in 2015 the value decreased significantly, a reported drop of 36.5% in the price of market milk and 25.5% decrease in the price of milk manufacturing products. The 2015 prices were the lowest prices reported in the last five years.
- Almonds held steady as the second leading commodity with a gross production value of \$552,042,000. Commodity value prices were down, compared to the previous season.
- Chickens surpassed Cattle & Calves this year to be the number three commodity in 2015 with a total production value of \$364,085,000. Cattle prices remained lower than average in 2015.
- Cattle & Calves fell to the number four commodity with a gross production value of \$357,426,000. This is an increase of 2.1% (\$7,334,000) from the previous year.
- Sweet Potatoes remained the number five commodity for a total production value of \$194,317,000. Production and price values were similar to the prior year values.
- Turkeys jumped three positions to the number ten spot, with a total production value of \$68,147,000. This is a 17% increase from the reported value of \$54,528,000 in 2014.

I wish to express my sincere thanks to our growers, ranchers, and industry representatives who assisted in providing the data for this report. I would also like to thank my staff, particularly Kelcie Baptista, Jennifer Dimapasoc, Derrik Hunger, Carrie Mitchell, and Dillon White for their dedication in compiling information for this report.

Respectfully submitted,

David A. Robinson, Agricultural Commissioner

Top Fifteen Commodities

RANK	CROP	VALUE	2015 RANK
1	Milk (includes market and manufacturing)	\$895,180,000	1
2	Almonds (kernel basis)	\$552,042,000	2
3	Chickens (includes fryers and other chickens)	\$364,085,000	4 ▲
4	Cattle & Calves	\$357,426,000	3 ▼
5	Sweet Potatoes	\$194,317,000	5
6	Tomatoes (includes market and processing tomatoes)	\$161,100,000	6
7	Silage (corn)	\$141,221,000	7
8	Eggs, Chicken (market)	\$123,242,000	9 ▲
9	Hay (alfalfa)	\$100,459,000	8 ▼
10	Turkeys	\$68,147,000	13 ▲▲▲
11	All Nursery Products	\$58,026,000	11
12	Cotton (includes acala and pima cotton)	\$54,292,000	10 ▼▼
13	Grapes (wine)	\$53,425,000	15 ▲▲
14	Silage (other)	\$52,143,000	12 ▼▼
15	Misc. Vegetables	\$40,695,000	16 ▲
Top Fifteen Total		\$3,215,800,000	



Field Crops

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Barley	2015	1,638	2.05	3,364	Ton	\$243.17	\$818,000
	2014	1,217	2.63	3,195		\$250.52	\$800,000
Beans (Dry Lima)	2015	1,979	1.08	2,132	Ton	\$1,554.41	\$3,314,000
	2014	720	1.19	858		\$1,182.23	\$1,015,000
Corn (Grain) ⁽¹⁾	2015	9,286	4.37	40,626	Ton	\$291.84	\$11,856,000
	2014	14,175	6.00	85,047		\$300.00	\$25,514,000
Cotton (Acala)	2015	19,560	3.43	67,001	500 Lb Bale	\$455.95	\$30,549,000
	2014	19,895	3.66	72,848		\$514.05	\$37,447,000
Cotton (Pima)	2015	12,260	3.01	36,878	500 Lb Bale	\$643.82	\$23,743,000
	2014	16,190	3.11	50,396		\$848.33	\$42,752,000
Cotton (Seed)	2015	—	0.99	31,431	Ton	\$327.86	\$10,305,000
	2014	—	1.18	42,552		\$363.84	\$15,482,000
Hay (Alfalfa)	2015	86,752	6.17	535,281	Ton	\$187.67	\$100,459,000
	2014	84,731	7.05	597,195		\$251.23	\$150,036,000
Hay (Grain) ⁽²⁾	2015	43,273	3.19	138,245	Ton	\$128.03	\$17,699,000
	2014	39,220	3.16	123,770		\$236.00	\$29,209,000
Hay (Sudan)	2015	12,046	3.73	44,957	Ton	\$120.22	\$5,405,000
	2014	11,478	3.99	45,848		\$134.72	\$6,177,000
Misc. Field Crops ⁽³⁾	2015	3,801	—	—	—	—	\$1,756,000
	2014	2,307	—	—		—	\$1,758,000
Pasture (Irrigated)	2015	25,030	—	25,030	Acre	\$162.25	\$4,061,000
	2014	25,030	—	25,030		\$180.00	\$4,505,000
Pasture (Other)	2015	556,966	—	556,966	Acre	\$27.75	\$15,456,000
	2014	556,966	—	556,966		\$23.95	\$13,339,000
Silage (Alfalfa)	2015	—	1.42	124,029	Ton	\$67.79	\$8,408,000
	2014	—	0.41	34,740		\$65.00	\$2,258,000
Silage (Corn)	2015	106,380	26.85	2,856,288	Ton	\$49.44	\$141,221,000
	2014	100,394	27.02	2,712,645		\$61.08	\$165,694,000
Silage (Other) ⁽⁴⁾	2015	96,265	14.96	1,440,143	Ton	\$36.21	\$52,143,000
	2014	85,511	15.43	1,319,795		\$42.88	\$56,595,000
Straw ⁽⁵⁾	2015	—	—	2,337	Ton	\$104.07	\$243,000
	2014	—	—	1,993		\$137.79	\$275,000
Stubble (Pasture)	2015	—	—	6,979	Acre	\$27.50	\$192,000
	2014	—	—	7,178		\$11.97	\$86,000
Wheat	2015	26,573	3.85	102,370	Ton	\$283.23	\$28,994,000
	2014	21,635	2.88	62,309		\$325.00	\$20,251,000
Total	2015	1,001,810					\$456,622,000
	2014	979,469					\$573,194,000

⁽¹⁾ For 2015 & 2014: Includes Human Consumption Corn (but not Fresh Market Corn) & Grain for feed.

⁽²⁾ For 2015: Includes Forage Mix, Oat, Ryegrass & Wheat.
For 2014: Includes Barley, Oat & Wheat.

⁽³⁾ For 2015: Includes Beans, Oat Grain, Rye Grain, Organic Grain & Silage, Safflower & Triticale.
For 2014: Includes Beans (Dry Other), Oat Grain, Rice & Safflower.

⁽⁴⁾ For 2015: Includes Barley, Forage Mix, Oat, Sorghum, Sudan, Triticale, Wheat, Winter Forage.
For 2014: Includes Forge Mix, Oat, Sudan, Wheat & Winter Forage.

⁽⁵⁾ For 2015 & 2014: Includes Straw from Barley, Bean (Dry), Oat, Rye & Wheat.

Livestock & Poultry Products

CROP	YEAR	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Eggs (Other) ⁽¹⁾	2015	—	Doz	—	—
	2014	6,355,965		\$2.26	\$14,343,000
Eggs, Chicken (Market) ⁽²⁾	2015	69,161,893	Doz	\$1.78	\$123,242,000
	2014	84,447,930		\$1.11	\$94,075,000
Milk (Goat)	2015	102,539	Cwt	\$34.16	\$3,503,000
	2014	126,880		\$34.99	\$4,440,000
Milk (Manufacturing)	2015	2,219,030	Cwt	\$17.35	\$38,500,000
	2014	792,401		\$23.29	\$18,455,000
Milk (Market)	2015	60,414,634	Cwt	\$14.18	\$856,680,000
	2014	63,809,803		\$22.32	\$1,424,235,000
Wool	2015	84,959	Lb	\$1.71	\$145,000
	2014	94,395		\$1.95	\$184,000
Total	2015				\$1,022,070,000
	2014				\$1,555,731,000



⁽¹⁾ For 2014: Includes Eggs other than Chicken Eggs & Organic Chicken Eggs.

⁽²⁾ For 2015: Includes Conventional & Organic Chicken Eggs.
For 2014: Includes Conventional Chicken Eggs.

Livestock & Poultry Production

CROP	YEAR	NUMBER OF HEAD	PRODUCTION PER HEAD	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Cattle and Calves ⁽¹⁾	2015	330,565	8.70	2,875,298	Cwt	\$124.31	\$357,426,000
	2014	312,752	8.60	2,688,924		\$130.20	\$350,092,000
Chickens (Fryers and Broilers)	2015	74,636,840	6.09	454,538,356	Lb	\$0.80	\$364,085,000
	2014	67,999,309	6.03	410,225,826		\$0.75	\$309,133,000
Livestock (Miscellaneous) ⁽²⁾	2015	52,177	—	—	—	—	\$6,894,000
	2014	54,672	—	—	—	—	\$6,635,000
Poultry & Fish (Miscellaneous) ⁽³⁾	2015	188,323	—	—	—	—	\$1,985,000
	2014	380,000	—	—	—	—	\$1,016,000
Sheep and Lambs	2015	25,595	1.37	35,141	Cwt	\$128.64	\$4,520,000
	2014	30,612	1.40	42,851		\$114.86	\$4,922,000
Turkeys	2015	2,455,307	27.08	66,484,066	Lb	\$1.03	\$68,147,000
	2014	1,590,933	31.17	49,589,382		\$1.10	\$54,528,000
Total	2015	77,688,807					\$803,058,000
	2014	70,368,278					\$726,327,000

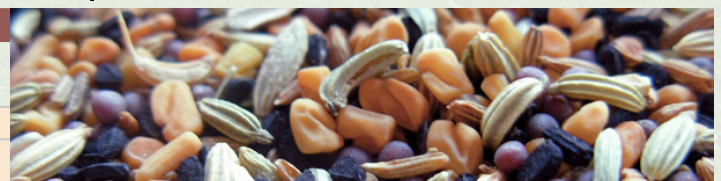
⁽¹⁾ For 2015 & 2014: Includes Calves, Cull Bulls (Dairy & Beef), Cull Cows (Dairy & Beef), Replacement Heifers (Dairy & Beef) & Stocker Cattle.

⁽²⁾ For 2015 & 2014: Includes Dairy & Meat Goats sold for meat.

⁽³⁾ For 2015 & 2014: includes Chukar, Fish, Pheasant & Squab.

Seed Crops

CROP	YEAR	ACRES HARVESTED	VALUE TOTAL
Seed Crops ⁽¹⁾	2015	5,039	\$4,110,000
	2014	3,730	\$3,825,000
Total	2015	5,039	\$4,110,000
	2014	3,730	\$3,825,000



⁽¹⁾ For 2014: Includes Certified, Common & Phytosanitary Seed from Alfalfa, Lettuce, Onion, Triticale & Wheat.

For 2015: Includes Certified, Common & Phytosanitary Seed from Alfalfa, Artichoke, Cantaloupe, Honeydew, Lettuce, Onion, Squash, Tomato, Watermelon & Wheat.

Fruit & Nut Crops

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Almonds (Hulls)	2015	—	—	186,159	Ton	\$101.06	\$18,814,000
	2014	—	—	205,013		\$150.79	\$30,915,000
Almonds (Kernel Basis)	2015	101,835	0.85	86,244	Ton	\$6,400.93	\$552,042,000
	2014	99,907	0.99	98,598		\$8,020.00	\$790,754,000
Apricots	2015	—	—	—	Ton	—	—
	2014	314	4.81	1,510		\$326.88	\$494,000
Figs (Dry)	2015	—	—	—	Ton	—	—
	2014	619	1.00	619		\$2,400.00	\$1,485,000
Grapes (Wine)	2015	13,702	9.21	126,244	Ton	\$423.19	\$53,425,000
	2014	12,902	8.63	111,339		\$300.00	\$33,402,000
Miscellaneous ⁽¹⁾	2015	4,461	—	—	—	—	\$38,283,000
	2014	2,271	—	—		—	\$14,157,000
Peaches (Clingstone)	2015	1,630	12.91	21,042	Ton	\$456.75	\$9,611,000
	2014	2,141	16.37	35,039		\$449.91	\$15,764,000
Peaches (Freestone)	2015	1,522	20.26	30,832	Ton	\$459.63	\$14,171,000
	2014	1,665	19.98	33,270		\$396.28	\$13,184,000
Pistachios	2015	6,176	0.84	5,206	Ton	\$6,251.99	\$32,547,000
	2014	5,110	1.06	5,402		\$7,873.75	\$42,536,000
Plums (Dried)	2015	1,504	1.13	1,698	Ton	\$2,397.50	\$4,071,000
	2014	1,408	2.84	3,991		\$1,084.45	\$4,328,000
Walnuts (English)	2015	6,123	1.78	10,920	Ton	\$2,181.19	\$23,819,000
	2014	5,909	1.56	9,196		\$3,289.94	\$30,253,000
Total	2015	136,617					\$746,783,000
	2014	132,245					\$977,271,000

⁽¹⁾ For 2015: Includes Apple, Apricot (Fresh), Blueberry, Cherry, Fig (Dry & Fresh), Fruit Juice, Grape (Raisin, Raisin to Wine), Kiwi, Nectarine, Olive, Olive (Oil), Orange, Organic Fruit & Nut, Pear, Pecan, Persimmon, Plum, Pluot, Pomegranate & Strawberry.
 For 2014: Includes Apple, Blackberry, Blueberry, Cherry, Fig (Fresh), Grape (Fresh, Raisin to Wine), Kiwi, Nectarine, Olives, Orange, Organic Fruit & Nut, Pear, Pecan, Persimmon, Plum, Pluot, Pomegranate & Strawberry.

Nursery Products

CROP	YEAR	ACRES HARVESTED	VALUE TOTAL
All Nursery Products ⁽¹⁾	2015	1,646	\$58,026,000
	2014	1,677	\$66,299,000
Total	2015	1,646	\$58,026,000
	2014	1,677	\$66,299,000



⁽¹⁾ For 2015 & 2014: Includes Cane Berries, Christmas Trees, Crown & Cuttings, Decorative Plants, Transplants (Vegetable) & Turf. The separate production & value are not shown to avoid disclosing individual operations.

Fruit & Nut Acreage Planting

CROPS	BEARING 2015	NON-BEARING 2015	BEARING 2010	NON-BEARING 2010
Almonds	103,002	6,735	98,895	2,799
Apples	3	0	1	0
Apricots	344	24	441	0
Berries	0	0	189	0
Cherries	411	0	365	41
Figs	901	21	1,226	194
Grapes (Raisin)	143	0	612	0
Grapes (Table)	6	0	0	0
Grapes (Wine)	13,702	265	11,186	622
Jujubes	0	0	0	0
Kiwis	16	0	26	0
Mandarins	0	0	16	0
Nectarines	29	0	99	0
Olives	78	74	7	0
Oranges	9	0	6	0
Peaches (Clingstone)	1,664	36	2,631	48
Peaches (Freestone)	1,522	140	1,875	32
Pears	8	0	7	0
Pecans	29	0	0	0
Persimmons	20	13	16	20
Pistachios	6,736	635	5,006	490
Plums	46	0	86	28
Plums (Dried)	1,504	0	1,706	250
Pluots	15	0	38	0
Pomegranates	304	0	202	108
Walnuts (English)	6,307	348	5,326	210
Total	136,799	8,291	129,962	4,842



Bee Industry

CROP	YEAR	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Beeswax	2015	37,569	Lb	\$3.53	\$133,000
	2014	45,727		\$3.86	\$177,000
Bulk Bees ⁽¹⁾	2015	69,725	Lb	\$18.31	\$1,276,000
	2014	67,725		\$18.33	\$1,241,000
Honey ⁽²⁾	2015	1,878,463	Lb	\$1.86	\$3,500,000
	2014	2,166,019		\$1.96	\$4,245,000
Pollination ⁽³⁾	2015	163,193	Colony	\$164.51	\$26,847,000
	2014	158,631		\$162.34	\$25,752,000
Queens ⁽⁴⁾	2015	36,525	Each	\$16.37	\$598,000
	2014	20,625		\$20.00	\$413,000
Total	2015				\$32,355,000
	2014				\$31,828,000



⁽¹⁾ For 2015 & 2014: Includes Bees sold as Bulk Bees, Nuclei & Packaged Bees.

⁽²⁾ For 2015: Honey produced by 39,601 resident colonies.

For 2014: Honey produced by 46,500 resident colonies.

⁽³⁾ For 2015 & 2014: Pollination colonies include all required to pollinate crops grown in Merced County.

⁽⁴⁾ For 2015 & 2014: Includes Mated Queens & Queen Cells.

Vegetable Crops

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Melons (Cantaloupe) ⁽¹⁾	2015	5,125	864.50	4,430,572	40lb Ctn	\$7.20	\$31,909,000
	2014	5,346	895.28	4,786,183		\$6.23	\$29,799,000
Melons (Other) ⁽²⁾	2015	2,231	33.71	75,209	Ton	\$307.61	\$23,135,000
	2014	2,488	19.95	49,633		\$269.29	\$13,366,000
Misc. Vegetables ⁽³⁾	2015	4,901	—	—	—	—	\$40,695,000
	2014	5,446	—	—		—	\$32,166,000
Sweet Potatoes ⁽⁴⁾	2015	17,848	14.33	255,703	Ton	\$759.93	\$194,317,000
	2014	17,567	15.05	264,383		\$820.79	\$217,003,000
Tomatoes (Market) ⁽⁵⁾	2015	5,501	1,458.69	8,024,563	25lb Ctn	\$6.10	\$48,959,000
	2014	8,575	1,406.11	12,057,402		\$6.64	\$80,035,000
Tomatoes (Processing)	2015	28,100	49.13	1,380,595	Ton	\$81.23	\$112,141,000
	2014	23,000	53.99	1,241,695		\$83.69	\$103,915,000
Total	2015	63,706					\$451,156,000
	2014	62,422					\$476,284,000

⁽¹⁾ For 2015 & 2014: Price reflects wholesale after packing & shipping.

⁽²⁾ For 2015 & 2014: Includes Honeydew, Mixed Melons & Watermelon.

⁽³⁾ For 2015: Includes Asparagus, Beans, Cabbage, Carrot, Cilantro, Onion, Organic Melons, Pepper (Bell), Pumpkin, Radish, Radicchio, Squash & Tomatillo.

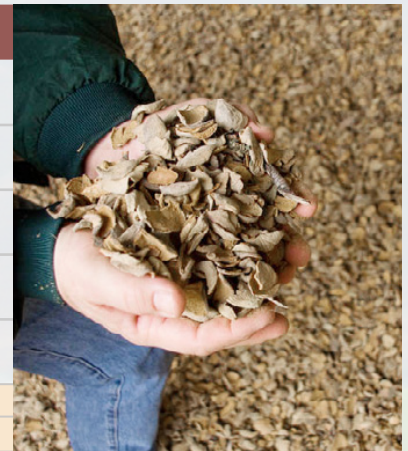
For 2014: Includes Asparagus, Basil, Beans (Freezer Lima), Broccoli, Cabbage, Carrot, Cauliflower, Cilantro, Cucumber, Eggplant, Fennel, Garlic, Kale, Leek, Onion, Oregano, Pepper (Bell), Pumpkin, Radicchio, Sage, Spice/Herb, Squash, Tarragon, Thyme & Tomatillo.

⁽⁴⁾ For 2015 & 2014: Price reflects wholesale after packing & shipping.

⁽⁵⁾ For 2015 & 2014: Price reflects wholesale after packing & shipping.

Other Agriculture

CROP	YEAR	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Almond (Hash) ⁽¹⁾	2015	605	Ton	\$6,036.00	\$3,651,000
	2014	795		\$5,562.31	\$4,424,000
Almond (Shells) ⁽²⁾	2015	51,015	Ton	\$20.63	\$1,052,000
	2014	67,939		\$21.97	\$1,493,000
Firewood ⁽³⁾	2015	16,671	Cord	\$179.24	\$2,988,000
	2014	16,895		\$197.32	\$3,334,000
Fuel (Cogeneration) ⁽⁴⁾	2015	72,466	Ton	\$22.50	\$1,630,000
	2014	89,244		\$40.00	\$3,570,000
Manure ⁽⁵⁾	2015	1,544,908	Ton	\$4.14	\$6,401,000
	2014	1,477,279		\$4.34	\$6,407,000
Total	2015				\$15,724,000
	2014				\$19,228,000



⁽¹⁾ For 2015 & 2014: Almond by-product.

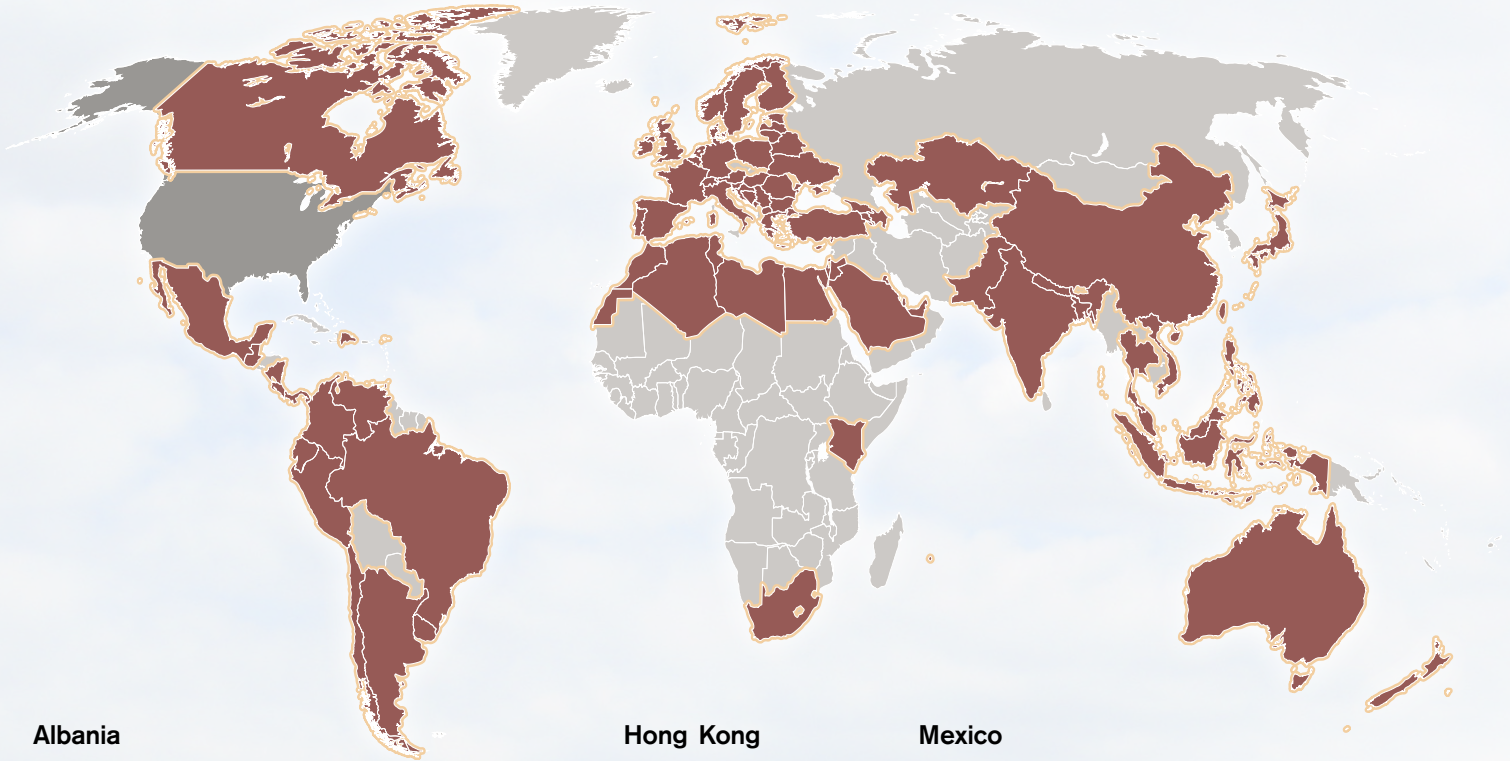
⁽²⁾ For 2015 & 2014: For Animal Bedding & Cogeneration.

⁽³⁾ For 2015 & 2014: Includes Orchard Prunings & Removals for Firewood (Recorded in Cords).

⁽⁴⁾ For 2015 & 2014: Includes Orchard Prunings & Orchard Removals for fuel (Recorded in Dry Tons).

⁽⁵⁾ For 2015 & 2014: Includes Livestock & Poultry Manure.

Countries Of Export



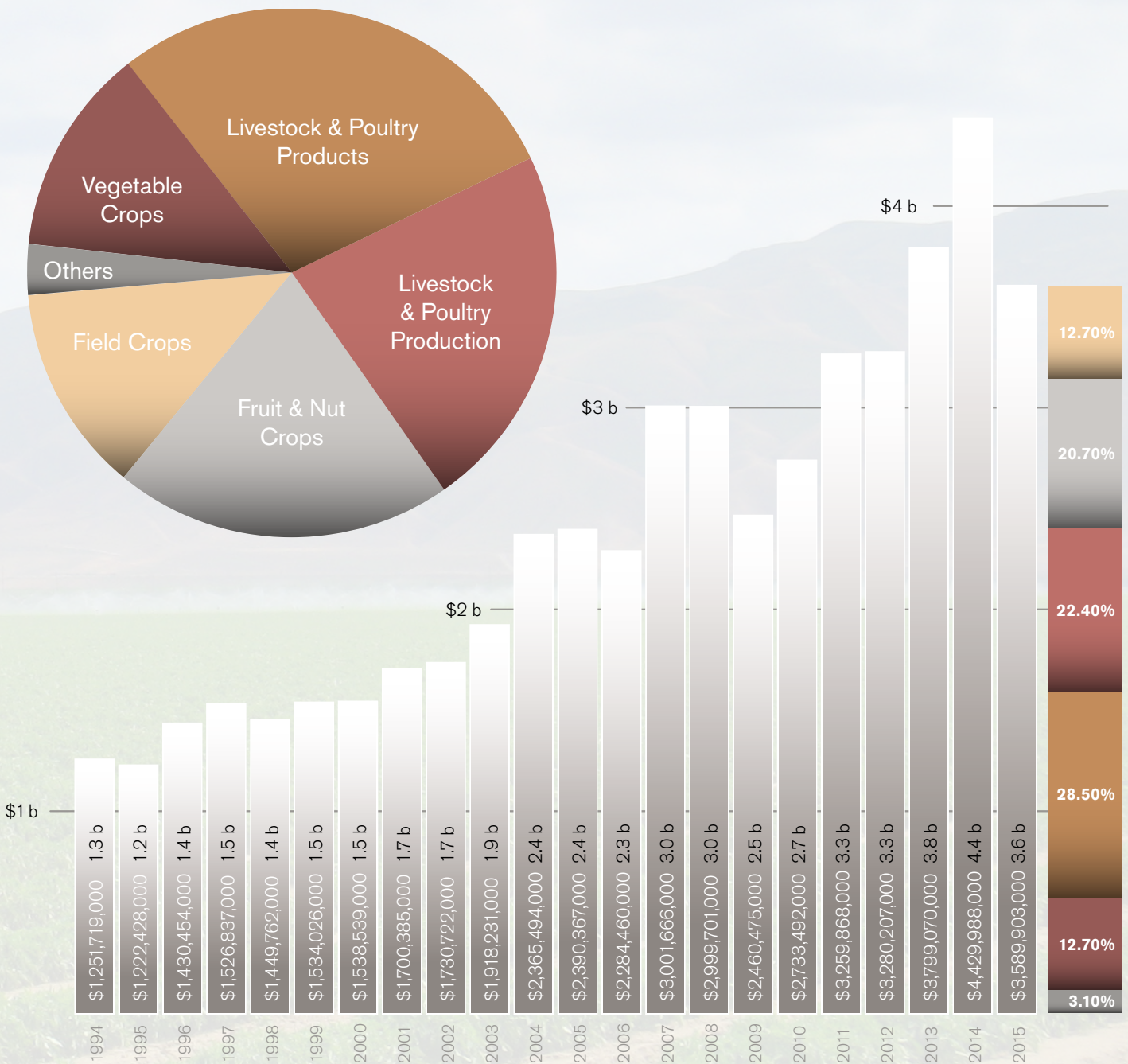
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|------------------------|--------------------|------------|--------------|----------------------|
| Albania | | Hong Kong | Mexico | Slovenia |
| Algeria | | Hungary | Montenegro | South Africa |
| Argentina | | India | Morocco | Spain |
| Armenia | Colombia | Indonesia | Nepal | Sweden |
| Australia | Costa Rica | Ireland | Netherlands | Switzerland |
| Austria | Croatia | Israel | New Zealand | Taiwan |
| Azerbaijan | Cyprus | Italy | Nicaragua | Thailand |
| Bahrain | Czech Republic | Japan | Norway | Trinidad & Tobago |
| Bangladesh | Denmark | Jordan | Pakistan | Tunisia |
| Belarus | Dominican Republic | Kazakhstan | Panama | Turkey |
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| British Virgin Islands | Finland | Lebanon | Portugal | Uruguay |
| Bulgaria | France | Libya | Qatar | Venezuela |
| Canada | Georgia | Lithuania | Romania | Vietnam |
| Chile | Germany | Macedonia | Saudi Arabia | |
| China | Greece | Malaysia | Serbia | |
| | Guatemala | Mauritius | Singapore | |

Products Of Export

- | | | | | | | |
|-------------|------------|---------------|-----------|-----------|-----------------|-------------|
| Alfalfa Hay | Cantaloupe | Fennel | Oat Hay | Pistachio | Rice | Tomato |
| Almond | Celery | Japanese Plum | Onion | Prune | Rye Grass Hay | Treviso |
| Blackberry | Chicory | Kale | Peach | Radicchio | Strawberry | Walnut |
| Blueberry | Edible Fig | Melon | Pecan | Raisin | Sudan Grass Hay | Walnut Wood |
| Broccoli | Endive | Nectarine | Pine Nuts | Raspberry | Sweet Potato | Willow |

Commodity Value Crop Comparison

COMMODITIES	1985	1995	2005	2015
Aquaculture	—	\$1,148,000	\$2,327,000	—
Bee Industry	\$3,682,000	\$6,063,000	\$14,704,000	\$32,355,000
Field Crops	\$161,412,000	\$226,667,000	\$287,912,000	\$456,621,000
Fruit and Nut Crops	\$121,208,000	\$239,867,000	\$409,696,000	\$741,609,000
Livestock and Poultry Production	\$193,934,000	\$202,435,000	\$620,723,000	\$803,058,000
Livestock and Poultry Products	\$247,574,000	\$391,424,000	\$790,438,000	\$1,022,070,000
Nursery Products	\$7,239,000	\$14,093,000	\$33,329,000	\$58,026,000
Other Agriculture	—	\$8,811,000	\$7,962,000	\$15,724,000
Seed Crops	\$2,876,000	\$837,000	\$3,319,000	\$4,110,000
Vegetable Crops	\$74,493,000	\$131,084,000	\$219,957,000	\$451,156,000
Total	\$812,418,000	\$1,222,428,000	\$2,390,367,000	\$3,589,903,000



Sustainable Agriculture

Pest Prevention

The California Food and Agricultural Code mandates pest prevention programs to prevent the introduction and spread of pests in California. Pest prevention involves Pest Exclusion, Pest Detection, Pierce's Disease Control, and the Federal Phytosanitary Certification Program.

PEST EXCLUSION PROGRAM

Pest Exclusion is the first line of defense to prevent the introduction of pests, injurious to agriculture, that are not of common occurrence in Merced County.

A total of 4156 shipments of incoming plant material were inspected in 2015. Shipments are inspected at United Parcel Service, United States Post Offices, Federal Express and trucking terminals. Thirty five shipments were rejected. The 35 rejections were for live pests, material not properly certified, or improper container markings.

PIERCE'S DISEASE CONTROL PROGRAM

To prevent the introduction of the Glassy-winged Sharpshooter (GWSS) into Merced County, which is the main insect vector of Pierce's Disease, all shipments of nursery stock from infested counties, shipped by nurseries under a Master Compliance Agreement, are inspected. GWSS has the ability to spread Pierce's Disease rapidly among grape vines with devastating results. Three hundred and six shipments of nursery stock from infested counties were inspected in 2015.

In addition, all nurseries receiving nursery stock from GWSS infested areas and residential yards were inspected for GWSS presence for a total of 3,525 inspections during 2015. No GWSS were detected.

In addition, all nurseries receiving nursery stock from GWSS infested areas and residential yards were inspected for GWSS presence for a total of 3,525 inspections during 2015. No GWSS were detected.

FEDERAL PHYTOSANITARY CERTIFICATION PROGRAM

This program ensures that plants and plant commodities exported to foreign countries from Merced County are free from injurious pests. In 2015, the Merced County staff inspected and issued Phytosanitary Certificates for 5,219 export shipments.

PEST DETECTION PROGRAM

Pest Detection uses visual inspection and insect traps that target specific exotic insects of high agricultural and economic importance.

The trapping program in Merced County targeted the following pests:

Asian Citrus Psyllid (*Diaphorina citri* Kuwayama)

Apple Maggot (*Rhagoletis pomonella*)

European Pine Shoot Moth (*Rhyacionia buoliana*)

Glassy-winged Sharpshooter (*Homalodisca vitripennis*)

Light Brown Apple Moth (*Epiphyas postvittana*)

Khapra Beetle (*Trogoderma granarium*)

Melon Fly (*Dacus cucurbitae*)

Oriental Fruit Fly (*Dacus dorsalis*)

Vine Mealy Bug (*Planococcus ficus*)

European Corn Borer (*Ostrinia nubilalis*)

European Grapevine Moth (*Lobesia botrana*)

Gypsy Moth (*Lymantria dispar*)

Japanese Beetle (*Popillia japonica*)

Mediterranean Fruit Fly (*Ceratitis capitata*)

Mexican Fruit Fly (*Anastrepha ludens*)

Sweet Potato Weevil (*Cylas formicarius elegantulus*)



Japanese dodder, *Cuscuta japonica*

A total of 2,415 pest detection traps were placed in Merced County and inspected a total of 31,9771 times during the 2015 trapping season.

Pest Eradication

The Pest Eradication Program endeavors to eliminate infestations of significant agricultural pests with limited distribution before they are able to cause ongoing economic cost to California Agriculture.

Successful eradication projects include Sweet Potato Weevil, Banana Waterlily, Japanese Dodder, and European Grapevine Moth (EGVM)

Only limited detection and eradication efforts for the invasive weeds South American Sponge Plant ("A" Rated), Purple Loosestrife ("B Rated), and Perennial Peppergrass ("B" Rated) were conducted during 2015, due to budget constraints.

Detection and eradication efforts for the insect pest Pink Bollworm continues.

There were no Pink Bollworm moths trapped in Merced County during 2015.

The Pink Bollworm is a major cotton pest. Eradication efforts included a State operated trapping program of 31,820 acres in conjunction with County enforcement of the host free period from January 1 through March 10, also known as Cotton Plow down. Treatment is accomplished by mating disruption utilizing pheromones and sterile moths.

Biological Control

The Biological Control (Biocontrol) Program uses natural enemies to suppress pest populations to economically and environmentally acceptable levels. Once the biocontrol agent becomes established it is self-perpetuating, reducing the need to use pesticides. The following are pests found in Merced County and their Biocontrol Agents.

PEST	ORGANISM
Ash Whitefly (<i>Siphoninus phillyreae</i>)	Parasitoid Wasp (<i>Encarsia inaron</i>)
Grapeleaf Skeletonizer (<i>Harrisina brillians</i>)	Parasitic Fly (<i>Ametadoria misella</i>)
	Virus (<i>WGLS Granulosis</i>)
	Parasitic Wasp (<i>Apanteles harrisinae</i>)
Italian Thistle (<i>Carduus sp.</i>)	Seed Head Weevil (<i>Rhinocyllus conicus</i>)
Klamath Weed (<i>Hypericum perforatum</i>)	Leaf Beetle (<i>Chrysolina quadrigemina</i>)
Milk Thistle (<i>Silybum marianum</i>)	Seed Head Weevil (<i>Rhinocyllus conicus</i>)
Puncture Vine (<i>Tribulus terrestris</i>)	Seed Weevil (<i>Microlarinus laerynii</i>)
	Stem Weevil (<i>Microlarinus lypriformis</i>)
Red Gum Lerp Psyllid (<i>Glycaspis brimblecombei</i>)	Parasitoid Wasp (<i>Psyllaephagus bliteus</i>)
Russian Thistle (<i>Salsola sp.</i>)	Casebearer Moth (<i>Coleophora klimeschiella</i>)
	Russian Thistle Borer (<i>Coleophora parthenica</i>)
Yellowstar Thistle (<i>Centaurea solstitialis</i>)	Seed Head Weevil (<i>Bangasternus orientalis</i>)
	Seed Head Gall Fly (<i>Urophora sirunaseva</i>)
	Hairy Weevil (<i>Eustenopus villosus</i>)
	False Peacock Fly (<i>Chaetorellia succinea</i>)
	Rust Fungus (<i>Puccinia jaceae var. solstitialis</i>)



Organic Farming

Merced County had 70 organic producers, 12 organic handlers and 4 organic processors in 2015. There were 132 assorted organic crops produced in Merced County including: berries, eggs, field crops, fallow farmland, fruits, flowers, livestock, milk, poultry, nuts, seed, and vegetables. These crop values are included in their respective commodity groups.

There were 9 growers who farmed a total of 29,208 acres of organic pastureland and rangeland. In addition, all of Merced County's organic producers, handlers, and processors were certified in the California Organic Program through CDFA.

Rainfall

YEAR	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
1965-66	—	0.49	—	0.12	4.12	2.12	1.24	0.38	0.20	0.34	0.19	—	9.20
1966-67	—	—	0.07	—	1.88	2.85	2.78	0.38	2.53	4.60	0.73	0.16	15.98
1967-68	—	—	0.06	0.03	1.34	0.86	1.39	1.93	1.43	0.49	0.01	—	7.54
1968-69	—	—	—	0.92	3.08	3.12	7.07	4.74	0.89	2.08	—	—	21.90
1969-70	0.07	—	—	1.25	2.24	0.96	3.94	1.41	2.52	0.13	—	0.07	12.59
1970-71	—	—	—	0.66	3.19	2.13	0.56	0.31	0.92	1.16	1.22	—	10.15
1971-72	—	—	0.06	0.28	1.00	2.33	0.60	0.56	—	0.71	—	—	5.54
1972-73	—	—	0.11	0.69	4.91	1.58	3.12	4.72	3.16	0.11	—	—	18.40
1973-74	—	—	—	2.10	1.65	3.15	1.95	0.50	2.37	1.44	—	0.06	13.22
1974-75	0.42	—	—	1.06	0.66	2.14	0.50	3.99	3.11	0.95	—	—	12.83
1975-76	0.10	0.11	0.02	0.92	0.17	0.13	0.14	2.01	0.41	1.14	—	0.07	5.22
1976-77	0.02	0.22	0.97	0.16	1.06	0.57	0.66	0.29	1.05	0.02	0.90	0.44	6.36
1977-78	—	—	—	—	0.44	2.75	4.93	3.78	4.22	3.48	—	—	19.60
1978-79	—	—	0.74	—	2.13	1.06	4.35	3.02	1.73	0.49	0.19	—	13.71
1979-80	0.21	—	—	0.84	1.09	1.79	3.83	3.45	1.19	0.77	0.46	—	13.63
1980-81	—	—	—	0.13	—	0.72	2.83	1.42	3.27	0.75	0.10	—	9.22
1981-82	—	—	—	1.13	3.63	0.59	1.6	2.08	5.39	1.85	—	0.05	16.32
1982-83	—	—	1.14	0.98	2.84	2.7	4.89	3.43	5.47	2.01	0.44	—	23.90
1983-84	—	0.10	2.77	0.43	2.12	2.63	0.12	0.88	0.33	0.08	—	0.02	9.48
1984-85	0.03	0.03	0.17	0.54	1.10	1.65	0.56	0.98	1.91	0.06	—	0.12	7.15
1985-86	—	—	—	0.6	3.28	1.26	0.92	3.72	3.9	0.64	0.25	—	14.57
1986-87	—	—	0.30	—	0.06	1.65	1.70	2.96	2.97	0.08	0.11	—	9.83
1987-88	—	—	—	0.47	0.89	2.46	1.60	0.87	0.29	2.03	0.38	0.01	9.00
1988-89	—	—	—	—	1.33	2.43	0.62	1.57	2.24	0.10	—	—	8.29
1989-90	—	0.05	1.34	1.55	0.48	0.10	2.08	1.64	0.68	0.59	1.62	—	10.13
1990-91	—	—	—	0.18	0.36	0.64	0.16	1.68	5.15	0.34	0.09	0.01	8.61
1991-92	—	0.11	—	1.59	0.53	1.46	1.56	3.77	2.02	0.02	—	0.06	11.12
1992-93	0.18	—	—	0.9	0.08	2.44	5.70	3.44	2.53	0.33	1.06	0.61	17.27
1993-94	—	—	—	0.18	0.68	1.30	2.29	3.30	0.18	1.10	1.38	—	10.41
1994-95	—	—	0.22	0.58	1.60	0.92	6.71	0.37	4.31	1.35	1.10	0.59	17.75
1995-96	0.02	—	—	—	—	3.25	3.15	3.43	1.84	0.84	1.03	—	13.56
1996-97	—	—	—	1.27	2.37	4.49	4.58	0.26	—	0.14	0.01	0.05	13.17
1997-98	—	—	0.07	0.07	2.44	1.63	4.89	6.10	4.81	0.99	2.13	0.48	23.61
1998-99	—	—	0.02	0.76	1.11	0.85	2.00	2.59	1.13	1.34	0.19	—	9.99
1999-00	—	—	—	—	0.90	0.27	3.28	4.80	0.95	2.06	0.79	0.18	13.23
2000-01	—	—	0.10	3.52	0.12	0.15	3.14	2.19	1.40	1.70	—	—	12.32
2001-02	—	—	0.14	0.33	2.27	2.59	1.01	0.88	1.47	0.15	0.47	—	9.31
2002-03	—	—	—	—	1.81	3.69	0.75	1.04	0.91	1.28	0.94	—	10.42
2003-04	—	0.10	0.02	—	0.80	3.05	0.89	3.77	0.77	—	0.19	—	9.59
2004-05	—	—	0.11	2.91	1.20	3.37	4.18	2.50	2.87	1.17	1.11	0.02	19.44
2005-06	—	—	0.22	0.11	0.15	2.81	2.75	1.01	3.36	2.47	1.07	—	13.95
2006-07	—	—	—	0.23	0.68	1.75	0.48	1.93	0.31	0.75	0.01	—	6.14
2007-08	0.01	—	0.25	0.85	0.22	1.23	4.26	1.86	0.06	0.01	0.07	—	8.82
2008-09	—	—	—	0.12	0.83	1.25	1.82	2.15	1.02	0.45	0.05	0.01	7.70
2009-10	—	—	0.17	1.68	0.16	2.72	2.73	2.82	1.07	3.36	0.46	—	15.17
2010-11	—	—	—	0.82	2.02	3.33	1.60	1.93	4.11	0.20	0.76	1.16	15.93
2011-12	—	—	—	0.95	0.88	0.06	0.73	0.69	2.02	1.69	0.01	0.37	7.40
2012-13	0.02	—	0.02	0.23	1.60	2.96	1.04	0.38	0.74	0.43	0.10	0.09	7.61
2013-14	—	—	—	0.10	0.62	0.29	0.31	1.65	1.41	0.53	0.06	—	4.97
2014-15	—	—	—	0.66	0.70	3.39	0.02	1.05	0.19	0.44	0.74	—	7.19
AVERAGE	0.02	0.02	0.18	0.66	1.38	1.87	2.28	2.13	1.94	0.98	0.41	0.09	11.97



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DEPARTMENT OF AGRICULTURE

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Merced, California 95341-6445



MERCED 
COUNTY
Department Of Agriculture

2016 REPORT ON Agriculture

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Photos: Cari Gansberger (cover), Kelsie Baptista, Derrik, Hunger, Dillon White.
Numbers in this report reflect computer rounding of production & value rates.



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California Department of Food and Agriculture
and

The Honorable Board of Supervisors, County of Merced

Daron McDaniel, Chairman
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Jerry O'Banion Lloyd Pareira
James L. Brown, County Executive Officer

In accordance with the provisions of Sections 2272 and 2279 of the California Food and Agricultural Code, I am pleased to submit the 2016 Merced County Report of Agriculture. This report summarizes the acreage, production, and gross value of Merced County's agricultural commodities.

Merced County agriculture commodities grossed \$3,447,830,000 in 2016. This is a 3.9% decrease from the 2015 production season. Continued decreased water availability for Merced County growers and commodity prices were both factors to cause production and value decreases. These figures represent gross returns to the producer and do not take into account the costs of production, marketing, or transportation. Net income of the producer is not reflected in this report.

SIGNIFICANT EVENTS OF THE 2016 CROP YEAR


- Milk remains the county's number one commodity with an overall value of \$939,042,000. Milk manufacturing had a substantial increase in units produced. A growth of 2,517,571 CWT was reported for the 2016 year. This is a 53% increase in production units. Market milk had a 5.8 % decrease in units produced (3,504,797 CWT).
- Almonds held steady as the second leading commodity with a gross production value of \$578,581,000. Commodity value prices were steady throughout the 2016 season, compared to the previous season.
- Wine Grapes jumped to the eighth highest ranked commodity from 13th in 2015. This increase is from a larger production value and a large increase in market value.
- Cattle & Calves remained the fourth ranked commodity with a gross production value of \$296,508,000. There was a \$60 million decrease in value for the 2016 season.
- Sweet Potatoes remained the number five commodity for a total production value of \$232,399,000. Acres produced remained relatively the same as the previous years, but the value of the commodity had a \$2.78 price increase in 2016.
- Market Chicken fell four positions to the twelfth highest value commodity. The price per unit value decreased from \$1.78 in 2015 to \$0.91 in 2016.

I wish to express my sincere thanks to our growers and ranchers, and to industry representatives who assisted in providing the data for this report. I would also like to thank my staff, particularly Kelcie Baptista, Derrik Hunger, Carrie Mitchell, Yvette Pellman, and Dillon White, for all the dedication into compiling this report.

Respectfully submitted,

David A. Robinson
Agricultural Commissioner

Top Fifteen Commodities

RANK	CROP	VALUE	PREVIOUS RANK
1	 Milk (includes Market and Manufacturing)	\$939,042,000	1
2	 Almonds (Kernel Basis)	\$578,581,000	2
3	 Chickens (includes Fryers and Other Chickens)	\$381,036,000	3
4	 Cattle and Calves	\$296,508,000	4
5	 Sweet Potatoes	\$232,399,000	5
6	 Tomatoes (includes Market and Processing Tomatoes)	\$151,963,000	6
7	 Silage (Corn)	\$98,842,000	7
8	 Grapes (Wine)	\$79,891,000	13 
9	 Hay (Alfalfa)	\$77,003,000	9
10	 All Nursery Products	\$74,189,000	11 
11	 Cotton (includes Acala and Pima Cotton)	\$64,570,000	12 
12	 Eggs, Chicken (Market)	\$62,920,000	8 
13	 Turkeys	\$58,248,000	10 
14	 Pollination	\$35,051,000	20 
15	 Misc. Vegetables	\$31,694,000	15
TOP FIFTEEN TOTAL		\$3,161,937,000	



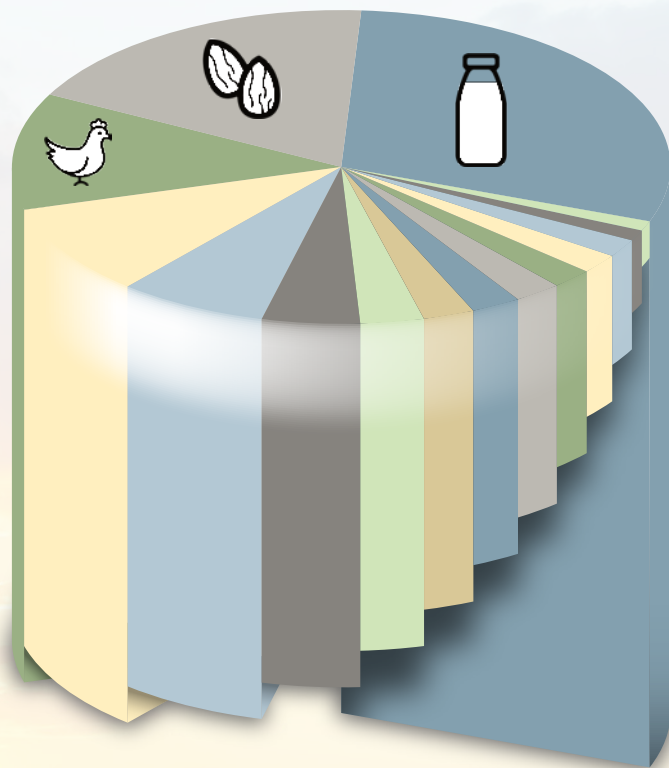
Milk accounts for **almost a third,** or 29.698%, of the total commodity value.



Milk and Almonds comprise **nearly half** the county production value at 47.9966%.



Of the county's total commodity value, 60.05%, or **more than half,** arises from the top three commodities: Milk, Almonds, and Chickens.



Fruit & Nut Crops

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Almonds (Hulls)	2016	—	—	230,996	Ton	\$56.85	\$13,132,000
	2015	—	—	186,159		\$101.06	\$18,814,000
Almonds (Kernel Basis)	2016	103,577	1.14	118,078	Ton	\$4,900.00	\$578,581,000
	2015	101,835	0.85	86,244		\$6,400.93	\$552,042,000
Grapes (Wine)	2016	13,550	11.23	152,177	Ton	\$524.99	\$79,891,000
	2015	13,702	9.21	126,244		\$423.19	\$53,425,000
Miscellaneous ⁽¹⁾	2016	4,080	—	—	—	—	\$19,972,000
	2015	4,461	—	—		—	\$38,283,000
Peaches (Clingstone)	2016	1,346	16.74	22,532	Ton	\$490.18	\$11,045,000
	2015	1,630	12.91	21,042		\$456.75	\$9,611,000
Peaches (Freestone)	2016	1,457	24.57	35,808	Ton	\$463.01	\$16,579,000
	2015	1,522	20.26	30,832		\$459.63	\$14,171,000
Pistachios	2016	6,205	1.39	8,643	Ton	\$3,367.31	\$29,105,000
	2015	6,176	0.84	5,206		\$6,251.99	\$32,547,000
Plums, Dried	2016	1,477	3.91	5,780	Ton	\$1,051.25	\$6,077,000
	2015	1,504	1.13	1,698		\$2,397.50	\$4,071,000
Walnuts (English)	2016	6,303	1.61	10,141	Ton	\$2,903.30	\$29,442,000
	2015	6,123	1.78	10,920		\$2,181.19	\$23,819,000
Total	2016	137,996					\$783,823,000
	2015	136,954					\$746,783,000

⁽¹⁾ For 2016: Includes Apple, Apricot (Process), Blueberry, Cherry, Fig (Dry & Fresh), Grape (Raisin, Raisin to Wine, Table), Grapefruit, Kiwi, Olive, Olive (Oil), Orange, Organic Fruit & Nut, Pear, Pecan, Persimmon, Plum, Pluot, Pomegranate & Strawberry.

For 2015: Includes Apple, Apricot (Fresh), Blueberry, Cherry, Fig (Dry & Fresh), Fruit Juice, Grape (Raisin & Raisin to Wine), Kiwi, Nectarine, Olive, Olive (Oil), Orange, Organic Fruit & Nut, Pear, Pecan, Persimmon, Plum, Pluot, Pomegranate & Strawberry.

Nursery Products

CROP	YEAR	ACRES HARVESTED	VALUE TOTAL
All Nursery Products ⁽¹⁾	2016	1,478	\$74,189,000
	2015	1,646	\$58,026,000
Total	2016	1,478	\$74,189,000
	2015	1,646	\$58,026,000

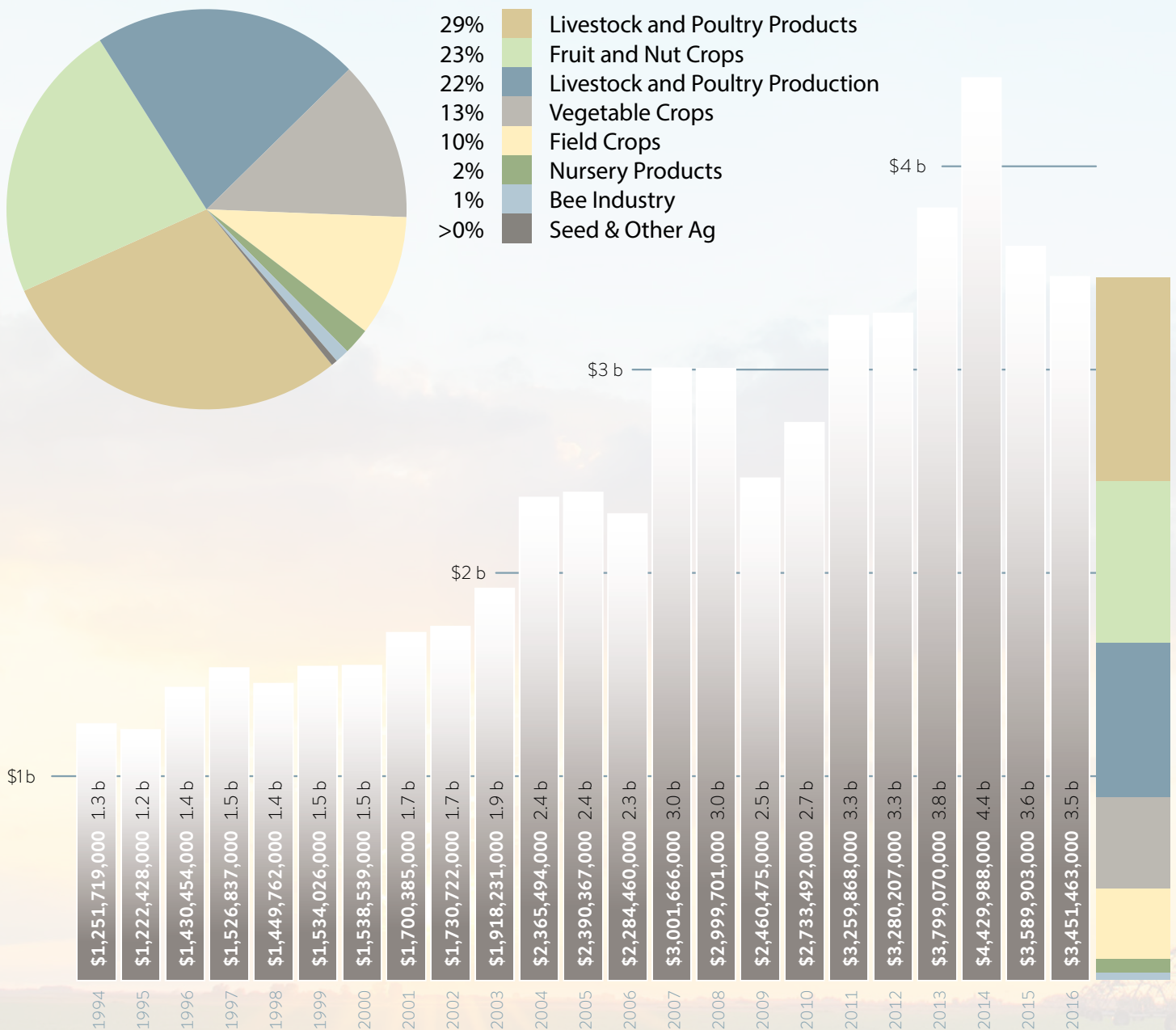


⁽¹⁾ For 2016 & 2015: Includes Cane Berries, Christmas Trees, Crown & Cuttings, Decorative Plants, Transplants (Vegetable) & Turf. The separate production & value are not shown to avoid disclosing individual operations.



Commodity Value Crop Comparison

COMMODITIES	2016	2006	1996	1986
Aquaculture	—	\$3,031,000	\$1,382,000	—
Bee Industry	\$39,211,000	\$21,359,000	\$7,480,000	\$3,464,000
Field Crops	\$337,545,000	\$267,813,000	\$260,256,000	\$152,423,000
Fruit and Nut Crops	\$783,823,000	\$388,756,000	\$293,142,000	\$151,252,000
Livestock and Poultry Production	\$746,274,000	\$584,771,000	\$214,703,000	\$209,788,000
Livestock and Poultry Products	\$1,004,377,000	\$707,582,000	\$488,956,000	\$239,804,000
Nursery Products	\$74,189,000	\$35,421,000	\$14,265,000	\$8,132,000
Other Agriculture	\$14,658,000	\$10,913,000	\$10,038,000	—
Seed Crops	\$3,937,000	\$875,000	\$582,000	\$2,612,000
Vegetable Crops	\$447,450,000	\$263,939,000	\$139,649,000	\$82,106,000
Total	\$3,451,463,000	\$2,284,460,000	\$1,430,454,000	\$849,581,000



Livestock & Poultry Products

CROP	YEAR	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Eggs, Chicken (Market) ⁽¹⁾	2016	69,464,745	Dozn	\$0.91	\$62,920,000
	2015	69,161,893		\$1.78	\$123,242,000
Milk (Goat)	2016	62,185	Cwt	\$36.83	\$2,290,000
	2015	102,539		\$34.16	\$3,503,000
Milk (Manufacturing)	2016	4,736,601	Cwt	\$17.02	\$80,601,000
	2015	2,219,030		\$17.35	\$38,500,000
Milk (Market)	2016	56,909,837	Cwt	\$15.08	\$858,441,000
	2015	60,414,634		\$14.18	\$856,680,000
Wool	2016	82,945	Lb	\$1.50	\$124,000
	2015	84,959		\$1.71	\$145,000
Total	2016				\$1,004,377,000
	2015				\$1,022,070,000



⁽¹⁾ For 2016 & 2015: Includes Conventional and Organic Chicken Eggs.

Livestock & Poultry Production

CROP	YEAR	NUMBER OF HEAD	PRODUCTION PER HEAD	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Cattle and Calves ⁽¹⁾	2016	342,241	8.61	2,946,614	Cwt	\$100.63	\$296,508,000
	2015	330,565	8.70	2,875,298		\$124.31	\$357,426,000
Chickens (Fryers and Broilers)	2016	82,727,830	5.79	479,191,084	Lb	\$0.80	\$381,036,000
	2015	74,636,840	6.09	454,538,356		\$0.80	\$364,085,000
Livestock (Miscellaneous) ⁽²⁾	2016	33,622	–	–	–	–	\$5,017,000
	2015	52,177	–	–	–	–	\$6,894,000
Poultry & Fish (Miscellaneous) ⁽³⁾	2016	259,018	–	–	–	–	\$1,627,000
	2015	188,323	–	–	–	–	\$1,985,000
Sheep and Lambs	2016	25,530	1.24	31,597	Cwt	\$121.46	\$3,838,000
	2015	25,595	1.37	35,141		\$128.64	\$4,520,000
Turkeys	2016	2,362,871	25.30	59,776,913	Lb	\$0.97	\$58,248,000
	2015	2,455,307	27.08	66,484,066		\$1.03	\$68,147,000
Total	2016	85,751,112					\$746,274,000
	2015	77,688,807					\$803,058,000

⁽¹⁾ For 2016 & 2015: Includes Calves, Cull Bulls (Dairy & Beef), Cull Cows (Dairy & Beef), Replacement Heifers (Dairy & Beef), and Stocker Cattle.

⁽²⁾ For 2016 & 2015: Includes Dairy & Meat Goats sold for meat.

⁽³⁾ For 2016 & 2015: Includes Chukar, Fish, Pheasant & Squab.

Seed Crops

CROP	YEAR	ACRES HARVESTED	VALUE TOTAL
Seed Crops ⁽¹⁾	2016	5,684	\$3,937,000
	2015	5,039	\$4,110,000
Total	2016	5,684	\$3,937,000
	2015	5,039	\$4,110,000



⁽¹⁾ For 2016: Includes Certified, Common & Phytosanitary Seed from Lettuce, Rye, Triticale & Wheat.

For 2015: Includes Certified, Common, and Phytosanitary Seed from Alfalfa, Artichoke, Cantaloupe, Honeydew, Lettuce, Onion, Squash, Tomato, Watermelon, and Wheat.



Field Crops

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Barley	2016	1,167	2.55	2,976	Ton	\$195.00	\$580,000
	2015	1,638	2.05	3,364		\$243.17	\$818,000
Beans (Dry Lima)	2016	2,300	1.15	2,644	Ton	\$1,370.82	\$3,625,000
	2015	1,979	1.08	2,132		\$1,554.41	\$3,314,000
Corn (Grain) ⁽¹⁾	2016	5,303	5.71	30,282	Ton	\$279.21	\$8,455,000
	2015	9,286	4.37	40,626		\$291.84	\$11,856,000
Cotton (Acala)	2016	25,245	3.30	83,186	500 Lb Bale	\$428.45	\$35,641,000
	2015	19,560	3.43	67,001		\$455.95	\$30,549,000
Cotton (Pima)	2016	14,795	2.95	43,670	500 Lb Bale	\$662.44	\$28,929,000
	2015	12,260	3.01	36,878		\$643.82	\$23,743,000
Cotton (Seed)	2016	—	0.36	12,375	Ton	\$279.88	\$3,464,000
	2015	—	0.99	31,431		\$327.86	\$10,305,000
Hay (Alfalfa)	2016	62,251	7.25	451,355	Ton	\$170.60	\$77,003,000
	2015	86,752	6.17	535,281		\$187.67	\$100,459,000
Hay (Grain) ⁽²⁾	2016	35,238	3.91	137,844	Ton	\$144.36	\$19,900,000
	2015	43,273	3.19	138,245		\$128.03	\$17,699,000
Hay (Sudan)	2016	9,620	4.55	43,810	Ton	\$77.01	\$3,374,000
	2015	12,046	3.73	44,957		\$120.22	\$5,405,000
Misc. Field Crops ⁽³⁾	2016	2,831	—	—	—	—	\$2,213,000
	2015	3,801	—	—		—	\$1,756,000
Pasture (Irrigated)	2016	25,030	—	25,030	Acre	\$174.00	\$4,355,000
	2015	25,030	—	25,030		\$162.25	\$4,061,000
Pasture (Other)	2016	556,966	—	556,966	Acre	\$23.41	\$13,039,000
	2015	556,966	—	556,966		\$27.75	\$15,456,000
Silage (Alfalfa)	2016	—	1.31	81,599	Ton	\$43.00	\$3,509,000
	2015	—	1.42	124,029		\$67.79	\$8,408,000
Silage (Corn)	2016	91,128	28.20	2,569,643	Ton	\$38.47	\$98,842,000
	2015	106,380	26.85	2,856,288		\$49.44	\$141,221,000
Silage (Other) ⁽⁴⁾	2016	79,638	15.37	1,223,936	Ton	\$24.72	\$30,256,000
	2015	96,265	14.96	1,440,143		\$36.21	\$52,143,000
Straw ⁽⁵⁾	2016	—	—	1,241	Ton	\$86.53	\$107,000
	2015	—	—	2,337		\$104.07	\$243,000
Stubble (Pasture)	2016	—	—	4,980	Acre	\$10.00	\$50,000
	2015	—	—	6,979		\$27.50	\$192,000
Wheat	2016	10,920	2.29	25,000	Ton	\$168.10	\$4,202,000
	2015	26,573	3.85	102,370		\$283.23	\$28,994,000
Total	2016	922,432					\$337,545,000
	2015	1,001,810					\$456,621,000

⁽¹⁾ For 2016 & 2015: Includes Human Consumption Corn (but not Fresh Market Corn) & Grain for feed.

⁽²⁾ For 2016: Includes Barley, Forage Mix, Oat, Ryegrass, Triticale & Wheat.
For 2015: Includes Forage Mix, Oat, Ryegrass & Wheat.

⁽³⁾ For 2016: Includes Organic Barley, Beans, Organic Human Consumption Corn, Organic Grain Hay, Rice & Safflower.
For 2015: Includes Beans, Oat Grain, Rye Grain, Organic Grain & Silage, Safflower & Triticale.

⁽⁴⁾ For 2016: Includes Oat, Ryegrass, Sorghum, Sudan, Triticale, Wheat & Winter Forage.
For 2015: Includes Barley, Forage Mix, Oat, Sorghum, Sudan, Triticale, Wheat, Winter Forage

⁽⁵⁾ For 2016: Includes Straw from Barley, Oat, Rice, Rye & Wheat.
For 2015: Includes Straw from Barley, Bean (Dry), Oat, Rye & Wheat.

Fruit & Nut Acreage Planting

CROPS	BEARING 2016	NON-BEARING 2016	BEARING 2011	NON-BEARING 2011
Almonds	104,593	5,586	98,504	2,178
Apples	1	0	1	0
Apricots	304	24	349	0
Berries	0	0	114	0
Cherries	322	0	316	91
Figs	901	21	965	381
Grapes (Raisin)	117	0	544	0
Grapes (Table)	6	0	0	0
Grapes (Wine)	13,550	318	11,617	1,266
Jujube	0	0	0	0
Kiwi	16	0	26	0
Mandarins	0	0	16	0
Nectarines	29	0	41	0
Olives	98	45	55	22
Oranges	4	0	16	0
Peaches (Clingstone)	1,366	79	2,412	48
Peaches (Freestone)	1,477	140	1,756	40
Pears	7	0	7	0
Pecans	29	10	26	0
Persimmon	20	13	16	19
Pistachios	6,766	702	5,162	475
Plums	16	0	74	0
Plums (Dried)	1,477	0	1,646	249
Pluot	15	0	15	0
Pomegranate	304	0	313	54
Walnuts (English)	6,420	378	5,147	524
Total	137,838	7,316	129,138	5,347



Bee Industry

CROP	YEAR	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Beeswax	2016	24,681	Lb	\$3.81	\$94,000
	2015	37,569		\$3.53	\$133,000
Bulk Bees ⁽¹⁾	2016	55,549	Lb	\$23.89	\$1,327,000
	2015	69,725		\$18.31	\$1,276,000
Honey ⁽²⁾	2016	1,234,044	Lb	\$1.81	\$2,234,000
	2015	1,878,463		\$1.86	\$3,500,000
Pollination ⁽³⁾	2016	201,896	Colony	\$173.61	\$35,051,000
	2015	163,193		\$164.51	\$26,847,000
Queens ⁽⁴⁾	2016	37,670	Each	\$13.41	\$505,000
	2015	36,525		\$16.37	\$598,000
Total	2016				\$39,211,000
	2015				\$32,355,000



⁽¹⁾ For 2016 & 2015: Includes Bees sold as Bulk Bees, Nuclei & Packaged Bees.

⁽²⁾ For 2016: Honey produced by 34,279 resident colonies.

For 2015: Honey produced by 39,601 resident colonies.

⁽³⁾ For 2016 & 2015: Pollination colonies include all required to pollinate crops grown in Merced County.

⁽⁴⁾ For 2016 & 2015: Includes Mated Queens & Queen Cells.

Vegetable Crops

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Melons (Cantaloupe) ⁽¹⁾	2016	4,517	671.65	3,033,845	40lb Ctn	\$4.87	\$14,784,000
	2015	5,125	864.50	4,430,572		\$7.20	\$31,909,000
Melons (Other) ⁽²⁾	2016	1,511	33.26	50,257	Ton	\$258.20	\$12,976,000
	2015	2,231	33.71	75,209		\$307.61	\$23,135,000
Misc. Vegetables ⁽³⁾	2016	5,169	—	—	—	—	\$31,694,000
	2015	4,901	—	—		—	\$40,695,000
Sweet Potatoes ⁽⁴⁾	2016	17,156	753.36	12,924,576	40lb Ctn	\$17.98	\$232,399,000
	2015	17,848	716.34	12,785,129		\$15.20	\$194,316,000
Tomatoes (Market) ⁽⁵⁾	2016	5,707	1,738.80	9,923,617	25lb Ctn	\$6.79	\$67,352,000
	2015	5,501	1,458.69	8,024,563		\$6.10	\$48,959,000
Tomatoes (Processing)	2016	22,956	51.32	1,178,133	Ton	\$71.82	\$84,611,000
	2015	28,100	49.13	1,380,595		\$81.23	\$112,141,000
Total	2016	57,016					\$443,817,000
	2015	63,706					\$451,155,000

⁽¹⁾ For 2016 & 2015: Price reflects wholesale after packing & shipping.

⁽²⁾ For 2016 & 2015: Includes Honeydew, Mixed Melons & Watermelon.

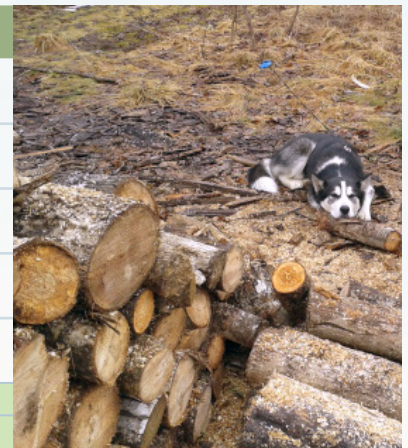
⁽³⁾ For 2016 & 2015: Includes Asparagus, Beans, Cabbage, Carrot, Cilantro, Onion, Organic Melons, Pepper (Bell), Pumpkin, Radish, Radicchio, Squash & Tomatillo.

⁽⁴⁾ For 2016 & 2015: Unit = \$ per Box. Price reflects wholesale after packing & shipping.

⁽⁵⁾ For 2016 & 2015: Price reflects wholesale after packing & shipping.

Other Agriculture

CROP	YEAR	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Almond (Hash) ⁽¹⁾	2016	569	Ton	\$2,300.00	\$1,310,000
	2015	605		\$6,036.00	\$3,651,000
Almond (Shells) ⁽²⁾	2016	53,156	Ton	\$6.13	\$326,000
	2015	51,015		\$20.63	\$1,052,000
Firewood ⁽³⁾	2016	16,915	Cord	\$165.42	\$2,798,000
	2015	16,671		\$179.24	\$2,988,000
Fuel (Cogeneration) ⁽⁴⁾	2016	74,334	Ton	\$22.50	\$1,673,000
	2015	72,466		\$22.50	\$1,630,000
Manure ⁽⁵⁾	2016	1,653,006	Ton	\$5.17	\$8,552,000
	2015	1,544,908		\$4.14	\$6,401,000
Total	2016				\$14,658,000
	2015				\$15,724,000



⁽¹⁾ For 2016 & 2015: Almond by-product.

⁽²⁾ For 2016 & 2015: For Animal Bedding & Cogeneration.

⁽³⁾ For 2016 & 2015: Includes Orchard Prunings & Removals for Firewood (Recorded in Cords).

⁽⁴⁾ For 2016 & 2015: Includes Orchard Prunings & Orchard Removals for fuel (Recorded in Dry Tons).

⁽⁵⁾ For 2016 & 2015: Includes livestock & poultry manure.

Sustainable Agriculture



Pest Prevention

The California Food and Agricultural Code mandates pest prevention programs to prevent the introduction and spread of pests in California. Pest prevention involves Pest Exclusion, Pest Detection, Pierce's Disease Control, and the Federal Phytosanitary Certification Program.

PEST EXCLUSION PROGRAM

Pest Exclusion is the first line of defense to prevent the introduction of pests, injurious to agriculture, that are not of common occurrence in Merced County.

A total of 4,079 shipments of incoming plant material were inspected in 2016. Shipments are inspected at United Parcel Service, United States Post Offices, Federal Express and trucking terminals. Fifty-one shipments were rejected for live pests, material not properly certified, or improper container markings. Two shipments were A/Q-rated pests.

PIERCE'S DISEASE CONTROL PROGRAM

To prevent the introduction of the Glassy-winged Sharpshooter (GWSS) into Merced County, which is the main insect vector of Pierce's Disease, all shipments of nursery stock from infested counties, shipped by nurseries under a Master Compliance Agreement, are inspected. GWSS has the ability to spread Pierce's Disease rapidly among grape vines with devastating results. Two hundred and fifty-three shipments of nursery stock from infested counties were inspected in 2016.

In addition, all nurseries receiving nursery stock from GWSS infested areas and residential yards were inspected for GWSS presence for a total of 3,348 inspections during 2016. No GWSS were detected.

FEDERAL PHYTOSANITARY CERTIFICATION PROGRAM

This program ensures that plants and plant commodities exported to foreign countries from Merced County are free from injurious pests. In 2016, the Merced County staff inspected and issued Phytosanitary Certificates for 5,588 export shipments.

Pest Eradication

The Pest Eradication Program endeavors to eliminate infestations of significant agricultural pests with limited distribution before they are able to cause ongoing economic cost to California Agriculture.

Successful eradication projects include Sweet Potato Weevil, Banana Waterlily, Japanese Dodder, and European Grapevine Moth (EGVM)

Only limited detection and eradication efforts for the invasive weeds South American Sponge Plant ("A" Rated), Purple Loosestrife ("B" Rated), and Perennial Peppergrass ("B" Rated) were conducted during 2016, due to budget constraints.

PEST DETECTION PROGRAM

Pest Detection uses visual inspection and insect traps that target specific exotic insects of high agricultural and economic importance.

The trapping program in Merced County targeted the following pests:

- Asian Citrus Psyllid (*Diaphorina citri* Kuwayama)
- Apple Maggot (*Rhagoletis pomonella*)
- European Pine Shoot Moth (*Rhyacionia buoliana*)
- Glassy-winged Sharpshooter (*Homalodisca vitripennis*)
- Light Brown Apple Moth (*Epiphyas postvittana*)
- Khapra Beetle (*Trogoderma granarium*)
- Melon Fly (*Dacus cucurbitae*)
- Oriental Fruit Fly (*Dacus dorsalis*)
- Vine Mealy Bug (*Planococcus ficus*)
- European Corn Borer (*Ostrinia nubilalis*)
- European Grapevine Moth (*Lobesia botrana*)
- Gypsy Moth (*Lymantria dispar*)
- Japanese Beetle (*Popillia japonica*)
- Mediterranean Fruit Fly (*Ceratitis capitata*)
- Mexican Fruit Fly (*Anastrepha ludens*)
- Sweet Potato Weevil (*Cylas formicarius elegantulus*)

A total of 2,620 pest detection traps were placed in Merced County and inspected a total of 31,720 times during the 2016 trapping season.

Detection and eradication efforts for the insect pest Pink Bollworm continues.

There were no Pink Bollworm moths detected in Merced County during 2016.

The Pink Bollworm is a major cotton pest. Eradication efforts included a State operated trapping program of 31,820 acres in conjunction with County enforcement of the host free period from January 1 through March 10, also known as Cotton Plowdown. Treatment is accomplished by mating disruption utilizing pheromones and sterile moths.

Biological Control

The Biological Control (Biocontrol) Program uses natural enemies to suppress pest populations to economically and environmentally acceptable levels. Once the biocontrol agent becomes established it is self-perpetuating, reducing the need to use pesticides. The following are pests found in Merced County and their Biocontrol Agents.

PEST	ORGANISM
Ash Whitefly (<i>Siphoninus phillyreae</i>)	Parasitoid Wasp (<i>Encarsia inaron</i>)
Grapeleaf Skeletonizer (<i>Harrisina brillians</i>)	Parasitic Fly (<i>Ametadoria misella</i>)
	Virus (<i>WGLS Granulosis</i>)
	Parasitic Wasp (<i>Apanteles harrisinae</i>)
Italian Thistle (<i>Carduus sp.</i>)	Seed Head Weevil (<i>Rhinocyllus conicus</i>)
Klamath Weed (<i>Hypericum perforatum</i>)	Leaf Beetle (<i>Chrysolina quadrigemina</i>)
Milk Thistle (<i>Silybum marianum</i>)	Seed Head Weevil (<i>Rhinocyllus conicus</i>)
Puncture Vine (<i>Tribulus terrestris</i>)	Seed Weevil (<i>Microlarinus lareynii</i>)
	Stem Weevil (<i>Microlarinus lypriformis</i>)
Red Gum Lerp Psyllid (<i>Glycaspis brimblecombei</i>)	Parasitoid Wasp (<i>Psyllaephagus bliteus</i>)
Russian Thistle (<i>Salsola sp.</i>)	Casebearer Moth (<i>Coleophora klimeschiella</i>)
	Russian Thistle Borer (<i>Coleophora parthenica</i>)
Yellowstar Thistle (<i>Centaurea solstitialis</i>)	Seed Head Weevil (<i>Bangasternus orientalis</i>)
	Seed Head Gall Fly (<i>Urophora sirunaseva</i>)
	Hairy Weevil (<i>Eustenopus villosus</i>)
	False Peacock Fly (<i>Chaetorellia succinea</i>)
	Rust Fungus (<i>Puccinia jaceae var. solstitialis</i>)

Asian Citrus Psyllid

The Asian Citrus Psyllid (ACP) was found in the United States in June 1998 in Palm Beach County, Florida. It prefers tropical and subtropical areas of the world—Asia, Afganistan, Saudi Arabia, South and Central America, and Mexico.

ACP was first detected in Southern California and is now being found throughout the state. In April 2016, Merced County had its first detection along Highway 59 and Bellevue Avenue.

The citrus industry is at risk if this pest establishes in California. ACP spreads the Huanglongbing, a bacterial disease commonly known as “citrus greening.” Symptoms of citrus greening include yellow shoots as well as mottling and chlorosis of the leaves. The plants develop lopsided, hard fruit with small, dark, aborted seed. Juice from the affected fruit has a bitter taste. Currently there is no known cure for this devastating disease.

All citrus trees are hosts, along with the curry leaf trees. These are both host to the insects and the disease.

Affected fruit is misshapen, and the host plant’s overall health will decline until it eventually dies. Quarantines are in place statewide. ACP has been detected in the following counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Tulare, Ventura, portions of Alameda, Fresno, Kern, Kings, Madera, Merced, Monterey, San Benito, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, and Stanislaus.

Merced County employees placed 520 ACP traps in 2016. Quarantines are still in effect in Merced County. Citrus plants in the quarantine areas are under regulations. If you believe you have seen this pest, please contact the Merced County Agricultural Commissioner Office at (209) 385-7431.



Organic Farming

Merced County had 69 organic producers, 11 organic handlers, and 4 organic processors in 2016. The 69 organic producers grew over 120 assorted organic commodities within Merced County, including asparagus, leeks, cabbage, beets, pumpkins, corn, lavender, pears, apples, oranges, guava, beans, eggs, and milk. Reported estimated gross sales of organic commodities in 2016 were over \$400,000,000. These crop values are reflected in each respective category.

There were 3 growers who produced organic chicken eggs, 4 growers who produced organic dairy milk, and 7 growers who farmed 28,813 acres of organic pastureland and rangeland. All of Merced County's organic producers, handlers, and processors were certified in the California Organic Program through the California Department of Food and Agriculture. The California Organic Products Act was enacted in 2003 and provides statutes that protect consumers, producers, handlers, processors, and retailers by the establishment of standards under which agricultural products may be labelled and sold as "organic."



Certified Producers

The Certified Producers Program, a.k.a. Direct Marketing, provides an opportunity for communities to enjoy high-quality produce provided by local growers through farmers' markets certified through the California Department of Agriculture, each with a unique set of market rules to provide consumers with a wide selection of agricultural commodities. Certified producers participating in certified farmers' markets must apply with the Agricultural Commissioner's Office and show the staff of the Commissioner's Office that they have produced what they are marketing.

In 2016, Merced County had 73 certified producers who grew within the county and four certified farmers' markets:

- **GUSTINE FARMERS' MARKET**
Henry Miller Park, Gustine, June through September on Thursdays @ 5pm-8pm.
- **LOS BANOS FARMERS' MARKET**
Henry Miller Plaza, Los Banos, June through September on Tuesdays @ 4:30pm-9pm.
- **LIVINGSTON FARMERS' MARKET**
Main Street & C Street, Livingston, May through October on Thursdays @ 5pm-9pm.
- **THE ORIGINAL MERCED COUNTY FARMERS' MARKET**
16th & Canal Street, Merced, year-round on Saturdays @ 8am-12pm.



The Little Guys

Merced County is known for being top producers of milk, almonds, chickens, cattle & calves and sweet potatoes. Not many people know how many different types of vegetables are grown in Merced County. They may never appear in our Top 15 Commodities list, but they still hold a presence in our county.

Radicchio, squash, carrots, herbs, asparagus, and onions are a few to name that are grown throughout Merced County. Our soils vary throughout the county, which will determine where these vegetables can thrive.

These are just a few different types of vegetables grown in Merced County. One of the great beauties of living in the Central Valley is the variety of vegetables that can be grown in our county.



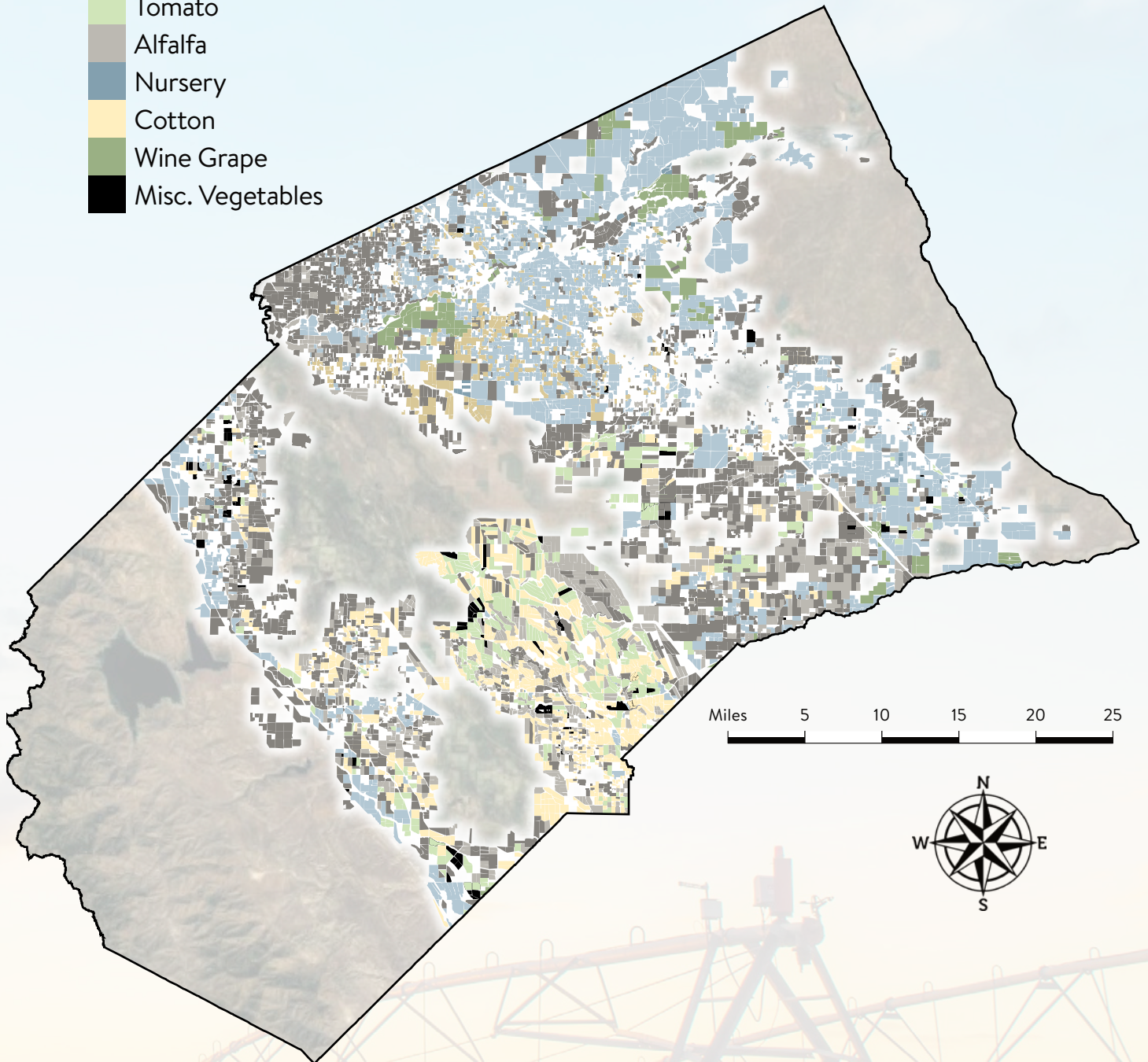
- In 2016, there were over 2,000 acres of **RADICCHIO** harvested during the winter and spring season. Radicchio is an Italian leafy chicory that has red leaves with white ribs and resembles a cabbage. This type of vegetable is mainly grown on the east side of Merced County between Merced and Le Grand. Radicchio is commonly found in salad mixes and has a distinct taste. Radicchio is hand-packed and exported all over the world.
- There are just under 500 acres of **CARROTS** grown in Merced County on both the east and west sides. Carrots prefer a sandy soil, which provides an ease for harvesting. Carrots are a root vegetable requiring 90 days to mature and are harvested through the summer season into fall.
- **ASPARAGUS** comes in at just 400 acres harvested in Merced County. Most of the asparagus is grown on the west side of the county. It's one of the only vegetables that our county grows that can be harvested twice a year in the spring and fall seasons. Asparagus thrives in soils that are high in saline, where many other plants cannot grow. Our county also produces asparagus crowns, the part that is transplanted into your home garden.
- Merced County grows over 700 acres of a mixture of green **ONIONS**, red, white & yellow onions, and onion seed. Onions are grown throughout the county and harvested in the fall. California is one of 20 states that can grow onions. The growing season is 5–6 months. When onions are mature, the tops lie down and dry. This amazing vegetable provides layers of flavor for any dish.

Rainfall MERCED COUNTY, 1966-2016

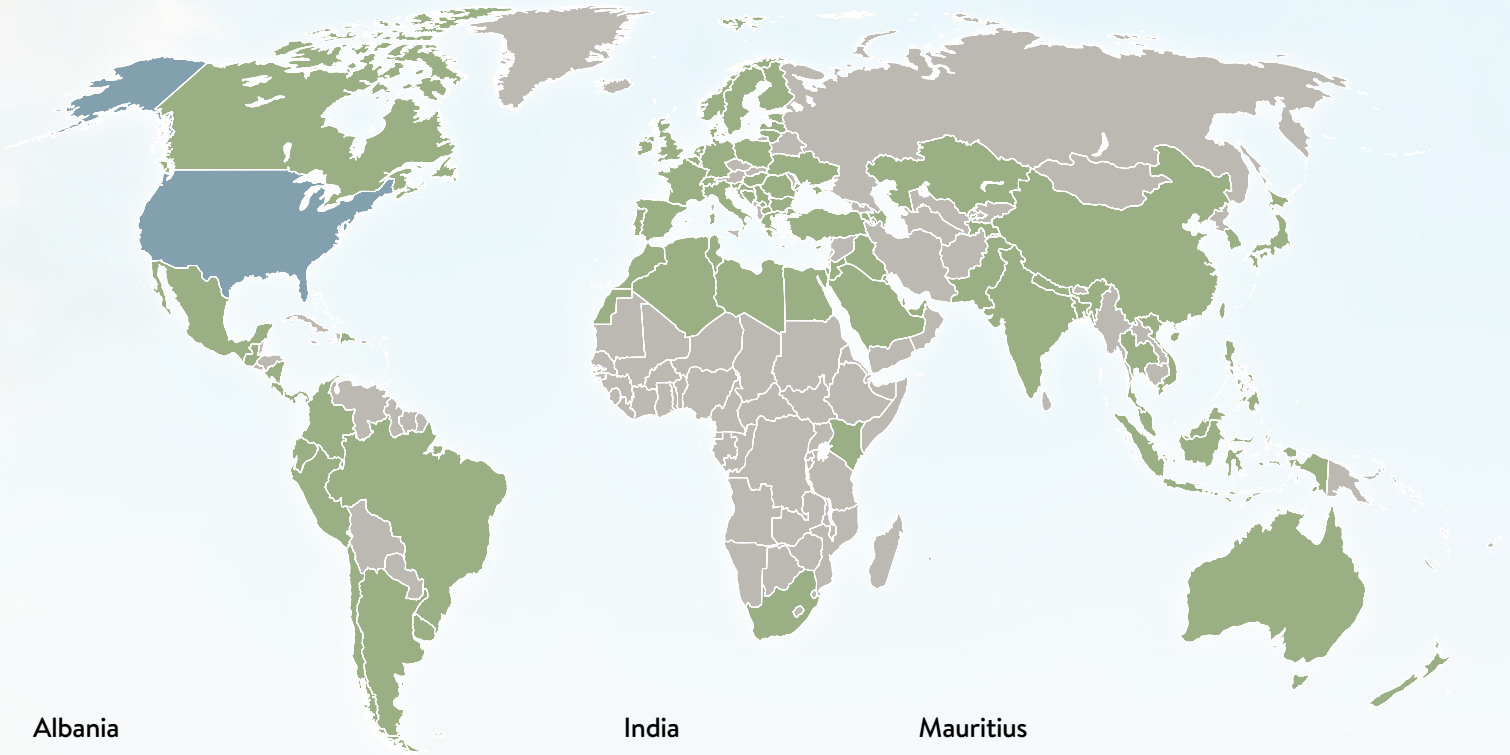
YEAR	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
1966-67	0	0	0.07	0	1.88	2.85	2.78	0.38	2.53	4.6	0.73	0.16	15.98
1967-68	0	0	0.06	0.03	1.34	0.86	1.39	1.93	1.43	0.49	0.01	0	7.54
1968-69	0	0	0	0.92	3.08	3.12	7.07	4.74	0.89	2.08	0	0	21.9
1969-70	0.07	0	0	1.25	2.24	0.96	3.94	1.41	2.52	0.13	0	0.07	12.59
1970-71	0	0	0	0.66	3.19	2.13	0.56	0.31	0.92	1.16	1.22	0	10.15
1971-72	0	0	0.06	0.28	1	2.33	0.6	0.56	0	0.71	0	0	5.54
1972-73	0	0	0.11	0.69	4.91	1.58	3.12	4.72	3.16	0.11	0	0	18.4
1973-74	0	0	0	2.1	1.65	3.15	1.95	0.5	2.37	1.44	0	0.06	13.22
1974-75	0.42	0	0	1.06	0.66	2.14	0.5	3.99	3.11	0.95	0	0	12.83
1975-76	0.1	0.11	0.02	0.92	0.17	0.13	0.14	2.01	0.41	1.14	0	0.07	5.22
1976-77	0.02	0.22	0.97	0.16	1.06	0.57	0.66	0.29	1.05	0.02	0.9	0.44	6.36
1977-78	0	0	0	0	0.44	2.75	4.93	3.78	4.22	3.48	0	0	19.6
1978-79	0	0	0.74	0	2.13	1.06	4.35	3.02	1.73	0.49	0.19	0	13.71
1979-80	0.21	0	0	0.84	1.09	1.79	3.83	3.45	1.19	0.77	0.46	0	13.63
1980-81	0	0	0	0.13	0	0.72	2.83	1.42	3.27	0.75	0.1	0	9.22
1981-82	0	0	0	1.13	3.63	0.59	1.6	2.08	5.39	1.85	0	0.05	16.32
1982-83	0	0	1.14	0.98	2.84	2.7	4.89	3.43	5.47	2.01	0.44	0	23.9
1983-84	0	0.1	2.77	0.43	2.12	2.63	0.12	0.88	0.33	0.08	0	0.02	9.48
1984-85	0.03	0.03	0.17	0.54	1.1	1.65	0.56	0.98	1.91	0.06	0	0.12	7.15
1985-86	0	0	0	0.6	3.28	1.26	0.92	3.72	3.9	0.64	0.25	0	14.57
1986-87	0	0	0.3	0	0.06	1.65	1.7	2.96	2.97	0.08	0.11	0	9.83
1987-88	0	0	0	0.47	0.89	2.46	1.6	0.87	0.29	2.03	0.38	0.01	9
1988-89	0	0	0	0	1.33	2.43	0.62	1.57	2.24	0.1	0	0	8.29
1989-90	0	0.05	1.34	1.55	0.48	0.1	2.08	1.64	0.68	0.59	1.62	0	10.13
1990-91	0	0	0	0.18	0.36	0.64	0.16	1.68	5.15	0.34	0.09	0.01	8.61
1991-92	0	0.11	0	1.59	0.53	1.46	1.56	3.77	2.02	0.02	0	0.06	11.12
1992-93	0.18	0	0	0.9	0.08	2.44	5.7	3.44	2.53	0.33	1.06	0.61	17.27
1993-94	0	0	0	0.18	0.68	1.3	2.29	3.3	0.18	1.1	1.38	0	10.41
1994-95	0	0	0.22	0.58	1.6	0.92	6.71	0.37	4.31	1.35	1.1	0.59	17.75
1995-96	0.02	0	0	0	0	3.25	3.15	3.43	1.84	0.84	1.03	0	13.56
1996-97	0	0	0	1.27	2.37	4.49	4.58	0.26	0	0.14	0.01	0.05	13.17
1997-98	0	0	0.07	0.07	2.44	1.63	4.89	6.1	4.81	0.99	2.13	0.48	23.61
1998-99	0	0	0.02	0.76	1.11	0.85	2	2.59	1.13	1.34	0.19	0	9.99
1999-00	0	0	0	0	0.9	0.27	3.28	4.8	0.95	2.06	0.79	0.18	13.23
2000-01	0	0	0.1	3.52	0.12	0.15	3.14	2.19	1.4	1.7	0	0	12.32
2001-02	0	0	0.14	0.33	2.27	2.59	1.01	0.88	1.47	0.15	0.47	0	9.31
2002-03	0	0	0	0	1.81	3.69	0.75	1.04	0.91	1.28	0.94	0	10.42
2003-04	0	0.1	0.02	0	0.8	3.05	0.89	3.77	0.77	0	0.19	0	9.59
2004-05	0	0	0.11	2.91	1.2	3.37	4.18	2.5	2.87	1.17	1.11	0.02	19.44
2005-06	0	0	0.22	0.11	0.15	2.81	2.75	1.01	3.36	2.47	1.07	0	13.95
2006-07	0	0	0	0.23	0.68	1.75	0.48	1.93	0.31	0.75	0.01	0	6.14
2007-08	0.01	0	0.25	0.85	0.22	1.23	4.26	1.86	0.06	0.01	0.07	0	8.82
2008-09	0	0	0	0.12	0.83	1.25	1.82	2.15	1.02	0.45	0.046	0.013	7.699
2009-10	0	0	0.17	1.68	0.16	2.72	2.73	2.82	1.07	3.36	0.46	0	15.17
2010-11	0	0	0	0.82	2.02	3.33	1.6	1.93	4.11	0.2	0.76	1.16	15.93
2011-12	0	0	0	0.95	0.88	0.06	0.73	0.69	2.02	1.69	0.01	0.37	7.4
2012-13	0.02	0	0.02	0.23	1.6	2.96	1.04	0.38	0.74	0.43	0.1	0.09	7.61
2013-14	0	0	0	0.1	0.62	0.29	0.31	1.65	1.41	0.53	0.06	0	4.97
2014-15	0	0	0	0.66	0.7	3.39	0.02	1.05	0.19	0.44	0.74	0	7.19
2015-16	0	0.06	0	0.41	2	1.23	4.27	0.7	2.31	2.47	0.55	0	14
AVERAGE	0.02	0.016	0.18	0.66	1.33	1.85	2.34	2.14	1.98	1.03	0.42	0.09	12.06

Merced County 2016 Crop Distribution

- Silage (Corn, Forage, Oat, Rye, Sorghum, Sudangrass, Triticale, Wheat)
- Almond
- Sweet Potato
- Tomato
- Alfalfa
- Nursery
- Cotton
- Wine Grape
- Misc. Vegetables



Countries Of Export



- | | | | | | |
|------------------------|--------------------|--------------------|--|--------------|----------------------|
| Albania | | India | | Mauritius | |
| Algeria | | Indonesia | | Mexico | Serbia |
| Argentina | | Iraq | | Montenegro | Singapore |
| Armenia | Croatia | Ireland | | Morocco | Slovenia |
| Australia | Cyprus | Israel | | Nepal | South Africa |
| Azerbaijan | Czech Republic | Italy | | Netherlands | Spain |
| Bahrain | Denmark | Japan | | New Zealand | Sweden |
| Bangladesh | Dominican Republic | Jordan | | Nicaragua | Switzerland |
| Belgium | Ecuador | Kazakhstan | | Norway | Taiwan |
| Bosnia and Herzegovina | Egypt | Kenya | | Pakistan | Tajikistan |
| Brazil | Estonia | Korea, Republic of | | Panama | Thailand |
| Bulgaria | Finland | Kuwait | | Peru | Tunisia |
| Canada | France | Latvia | | Philippines | Turkey |
| Chile | Germany | Lebanon | | Poland | Ukraine |
| China | Greece | Libya | | Portugal | United Arab Emirates |
| Colombia | Guatemala | Lithuania | | Qatar | United Kingdom |
| Costa Rica | Hong Kong | Macedonia | | Romania | Uruguay |
| | Hungary | Malaysia | | Saudi Arabia | Vietnam |

Products Of Export

- | | | | | | |
|-------------------|-----------------|-----------|---------------|-----------------|-------------|
| Alfalfa Hay | Cantaloupe | Fennel | Prune | Strawberry | Walnut |
| Almond | Celery | Melon | Radicchio | Sudan Grass Hay | Walnut Wood |
| Black Walnut Logs | Chicory | Oat Hay | Raspberry | Sweet Potato | |
| Blackberry | Edible Fig | Onion | Rice | Tomato | |
| Blueberry | Eucalyptus Logs | Pistachio | Rye Grass Hay | Treviso | |

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Deputy Agricultural Commissioners

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DEPARTMENT OF AGRICULTURE

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MERCED 
COUNTY
DEPARTMENT OF AGRICULTURE

2017 REPORT ON Agriculture



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Karen Ross, Secretary
California Department of Food and Agriculture

And

The Honorable Board of Supervisors, County of Merced

Jerry O'Banion, Chairman

Rodrigo Espinoza Lee Lor

Jerry O'Banion Lloyd Pareira

James L. Brown, County Executive Officer

In accordance with the provisions of Sections 2272 and 2279 of the California Food and Agricultural Code, I am pleased to submit the 2017 Merced County Report of Agriculture. This report summarizes the acreage, production, and gross value of Merced County's agricultural commodities.

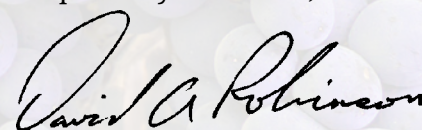
Merced County agricultural commodities grossed \$3,408,866,000 in 2017. Price value decreased, which contributed to the overall decrease in commodity values for Merced County during the 2017 production season. These figures represent gross returns to the producer and do not take into account the costs of production, marketing, or transportation. Net income of the producer is not reflected in this report.

SIGNIFICANT EVENTS OF THE 2017 CROP YEAR:

- Market milk and processed milk remained Merced County's leading commodities, with an overall gross value of \$1,026,270,000. 2017 saw an increase in production milk manufacturing along with an increase in value for both categories.
- Chicken Egg Market moved three positions with a gross production value of \$69,798,000. This is an 11% increase from the 2016 production year.
- Almond acreage continued to increase county-wide, growing 5% in 2017. On the west side, historically dominated by row crops, improvements to root stock variety and crop management are now changing the commodity landscape to include tree crops.
- The miscellaneous vegetable category moved to the 11th position. This category experienced a substantial increase in acreage among asparagus, carrots, cilantro and endive. Prices increased across the table for the commodities in this section.
- Sweet potatoes remained the number five commodity in Merced County, but production in 2017 decreased by 55 cartons per acre. Growers saw prices fall 6% to \$1.08 per 40 pound carton.
- Pima cotton acreage had a substantial increase in production acres. In 2017, acres of pima cotton increased 10,230 acres from the previous year. A price increase led to an increase of total gross production of \$48,812,000. This is a 69% increase.

I wish to express my sincere thanks to our growers, ranchers, and industry representatives who assisted in providing the data for this report. I would also like to thank my staff, particularly Kelcie Baptista, Derrick Hunger, Carrie Mitchell, Yvette Pellman, and Dillon White, for all the dedication into compiling this report.

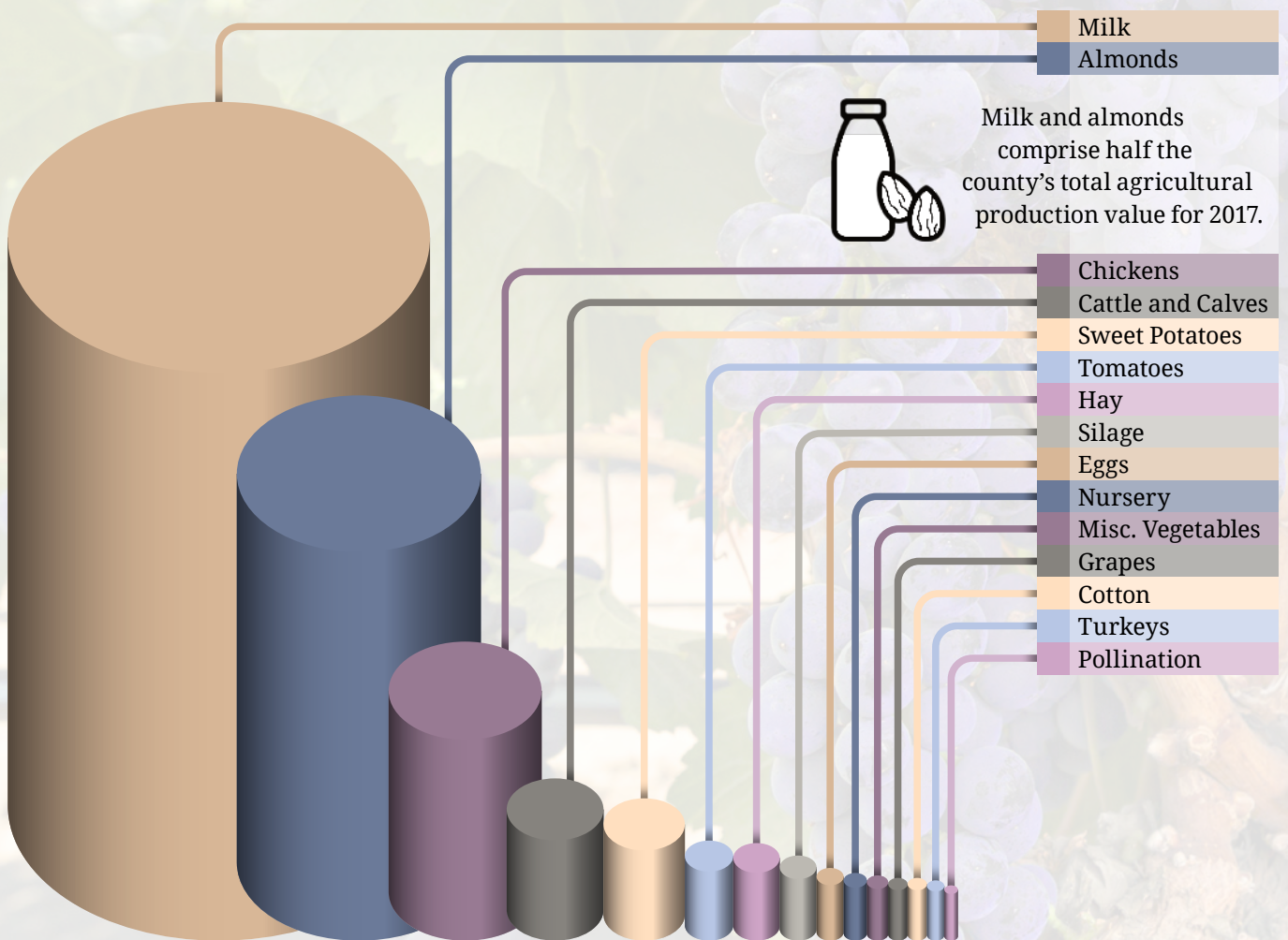
Respectfully submitted,



David A. Robinson
Agricultural Commissioner

Top Fifteen Commodities

RANK	CROP		VALUE	PREVIOUS RANK
1	Milk	<i>incl. Market and Manufacturing</i>	\$1,026,270,000	<i>no change</i>
2	Almonds	<i>Kernel Basis</i>	\$596,075,000	<i>no change</i>
3	Chickens	<i>incl. Fryers and Other Chickens</i>	\$374,934,000	<i>no change</i>
4	Cattle and Calves		\$235,487,000	<i>no change</i>
5	Sweet Potatoes		\$200,016,000	<i>no change</i>
6	Tomatoes	<i>incl. Market and Processing Tomatoes</i>	\$118,435,000	<i>no change</i>
7	Hay	<i>Alfalfa</i>	\$115,056,000	9 ▲▲
8	Silage	<i>Corn</i>	\$92,877,000	7 ▼▼
9	Eggs, Chicken	<i>Market</i>	\$69,798,000	11 ▲▲
10	All Nursery Products		\$57,648,000	<i>no change</i>
11	Misc. Vegetables		\$55,748,000	15 ▲▲▲▲
12	Grapes	<i>Wine</i>	\$49,254,000	8 ▼▼▼▼
13	Cotton	<i>Pima</i>	\$48,812,000	11 ▼▼
14	Turkeys		\$44,411,000	13 ▼
15	Pollination		\$33,832,000	14 ▼
TOP FIFTEEN TOTAL			\$3,118,653,000	



Fruit & Nut Crops

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Almonds (Hulls)	2017	—	—	198,288	Ton	\$65.40	\$12,968,000
	2016	—	—	183,979		\$56.85	\$10,459,000
Almonds (Kernel Basis)	2017	108,800	1.13	122,400	Ton	\$4,869.89	\$596,075,000
	2016	103,577	1.14	118,078		\$4,900.00	\$578,581,000
Grapes (Wine)	2017	13,606	10.37	141,108	Ton	\$349.05	\$49,254,000
	2016	13,550	11.23	152,177		\$524.99	\$79,891,000
Miscellaneous ⁽¹⁾	2017	3,991	—	—	—	—	\$23,470,000
	2016	4,080	—	—		—	\$19,972,000
Peaches (Clingstone)	2017	1,406	17.69	24,863	Ton	\$467.69	\$11,628,000
	2016	1,346	16.74	22,532		\$490.18	\$11,045,000
Peaches (Freestone)	2017	1,534	9.37	14,374	Ton	\$434.05	\$6,239,000
	2016	1,457	24.57	35,808		\$463.01	\$16,579,000
Pistachios	2017		0.64	4,038	Ton	\$4,598.88	\$18,568,000
	2016	6,205	1.39	8,643		\$3,367.31	\$29,105,000
Plums, Dried	2017	1,436	3.42	4,913	Ton	\$2,049.87	\$10,070,000
	2016	1,477	3.91	5,780		\$1,051.25	\$6,077,000
Walnuts (English)	2017	6,365	1.86	11,834	Ton	\$2,333.36	\$27,612,000
	2016	6,303	1.61	10,141		\$2,903.30	\$29,442,000
Total	2017	143,401					\$755,884,000
	2016	137,996					\$781,150,000

⁽¹⁾ For 2017: Includes Apple, Apricot (Process), Blueberry, Cherry, Fig (Dry & Fresh), Fruit Juice, Grape (Raisin, Raisin to Wine, Table), Grapefruit, Kiwi, Olive (Oil), Orange, Organic Fruit & Nut, Pear, Pecan, Persimmon, Plum, Pluot, Pomegranate & Strawberry.
For 2016: Includes Apple, Apricot (Process), Blueberry, Cherry, Fig (Dry & Fresh), Grape (Raisin, Raisin to Wine, Table), Grapefruit, Kiwi, Olive, Olive (Oil), Orange, Organic Fruit & Nut, Pear, Pecan, Persimmon, Plum, Pluot, Pomegranate & Strawberry.

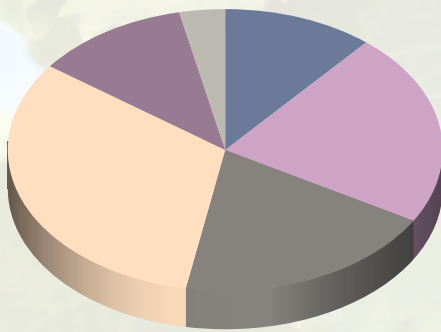
Fruit & Nut Acreage Planting

CROPS	BEARING 2017	NON-BEARING 2017	BEARING 2012	NON-BEARING 2012
Almonds	103,720	6,001	98,522	2,002
Apples	1	0	2	0
Apricots	328	0	389	0
Cherries	321	0	366	42
Figs	899	21	946	381
Grapes (Raisin)	117	0	420	0
Grapes (Table)	6	0	5	0
Grapes (Wine)	13,606	334	12,243	920
Jujube	0	0	0	0
Kiwi	16	0	26	0
Mandarins	0	0	16	0
Nectarines	29	0	41	0
Olives	118	25	55	22
Oranges	4	0	9	0
Peaches (Clingstone)	1,426	74	2,222	36
Peaches (Freestone)	1,554	27	1,728	9
Pears	7	0	7	0
Pecans	29	10	26	0
Persimmon	20	13	35	0
Pistachios	6,824	681	5,577	76
Plums	16	0	74	0
Plums (Dried)	1,436	0	1,681	204
Pluot	15	0	15	0
Pomegranate	304	1	355	12
Walnuts (English)	6,492	341	5,257	509
Total	137,288	7,528	130,017	4,213

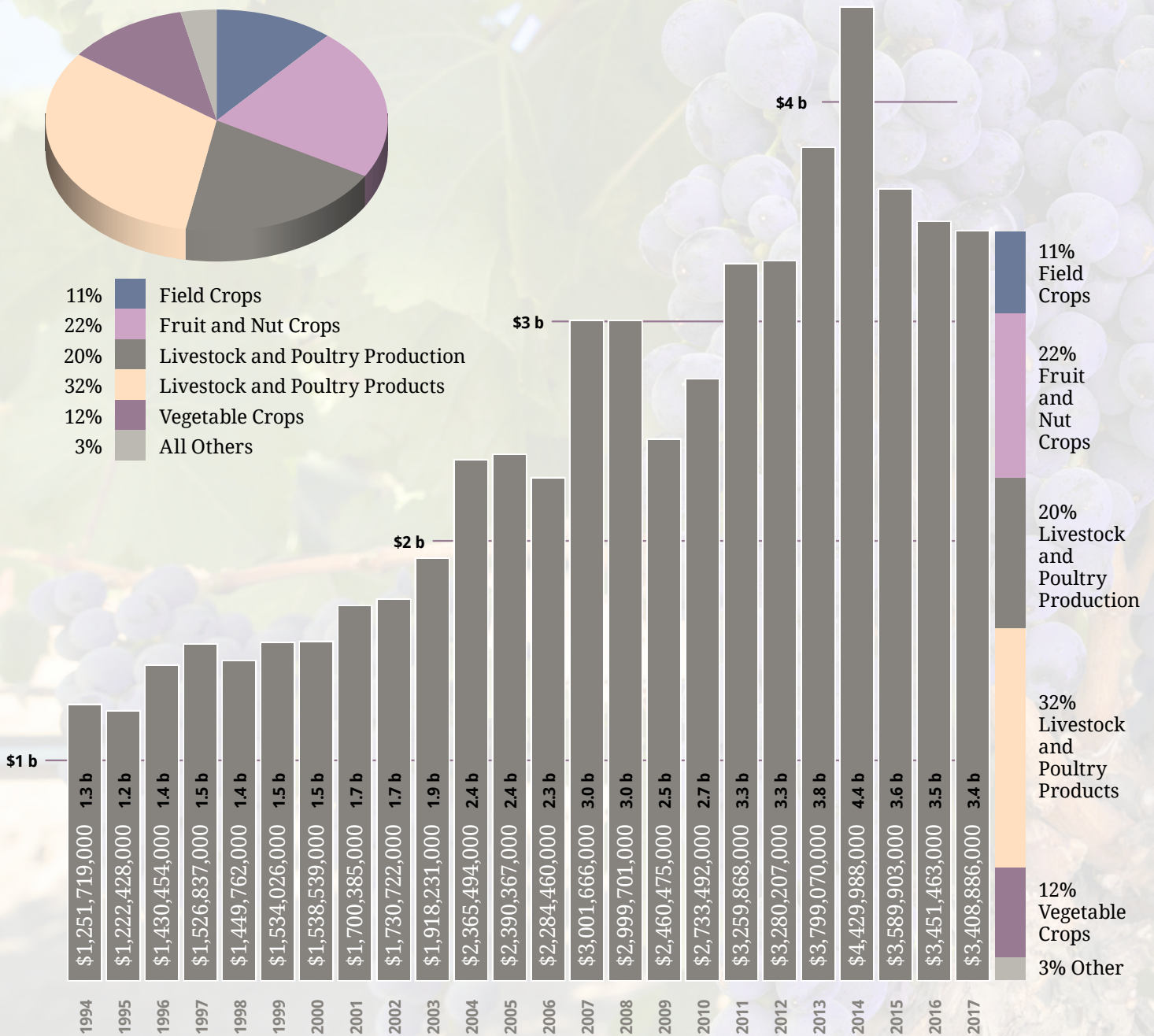


Commodity Value Crop Comparison

COMMODITIES	2017	2007	1997	1987
Aquaculture	—	\$3,312,000	\$1,280,000	—
Bee Industry	\$38,169,000	\$21,411,000	\$8,033,000	\$3,385,000
Field Crops	\$383,335,000	\$363,722,000	\$284,482,000	\$174,576,000
Fruit and Nut Crops	\$755,884,000	\$437,778,000	\$337,350,000	\$209,000,000
Livestock and Poultry Production	\$665,101,000	\$634,535,000	\$239,294,000	\$206,816,000
Livestock and Poultry Products	\$1,098,422,000	\$1,177,652,000	\$492,633,000	\$256,988,000
Nursery Products	\$57,648,000	\$29,629,000	\$15,833,000	\$8,244,000
Other Agriculture	\$15,320,000	\$11,951,000	\$11,429,000	—
Seed Crops	\$4,504,000	\$1,938,000	\$1,295,000	\$1,985,000
Vegetable Crops	\$390,502,000	\$319,737,000	\$135,208,000	\$81,488,000
Total	\$3,408,886,000	\$3,001,666,000	\$1,526,837,000	\$942,482,000



- 11% Field Crops
- 22% Fruit and Nut Crops
- 20% Livestock and Poultry Production
- 32% Livestock and Poultry Products
- 12% Vegetable Crops
- 3% All Others



Livestock & Poultry Products

CROP	YEAR	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Eggs, Chicken (Market) ⁽¹⁾	2017	68,373,976	Dozn	\$1.02	\$69,798,000
	2016	69,464,745		\$0.91	\$62,920,000
Milk (Goat)	2017	62,372	Cwt	\$35.91	\$2,240,000
	2016	62,185		\$36.83	\$2,290,000
Milk (Manufacturing)	2017	6,802,961	Cwt	\$18.39	\$125,138,000
	2016	4,736,601		\$17.02	\$80,601,000
Milk (Market)	2017	54,383,359	Cwt	\$16.57	\$901,132,000
	2016	56,909,837		\$15.08	\$858,441,000
Wool	2017	73,874	Lb	\$1.55	\$115,000
	2016	82,945		\$1.50	\$124,000
Total	2017				\$1,098,422,000
	2016				\$1,004,377,000



⁽¹⁾ For 2017 & 2016: Includes Conventional and Organic Chicken Eggs.

Livestock & Poultry Production

CROP	YEAR	NUMBER OF HEAD	PRODUCTION PER HEAD	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Cattle and Calves ⁽¹⁾	2017	341,164	8.63	2,945,912	Cwt	\$79.94	\$235,487,000
	2016	342,241	8.61	2,946,614		\$100.63	\$296,508,000
Chickens (Fryers and Broilers)	2017	84,222,499	5.16	434,661,203	Lb	\$0.86	\$374,934,000
	2016	82,727,830	5.79	479,191,084		\$0.80	\$381,036,000
Livestock (Miscellaneous) ⁽²⁾	2017	32,283	—	—	—	—	\$4,586,000
	2016	33,622	—	—	—	—	\$5,017,000
Poultry & Fish (Miscellaneous) ⁽³⁾	2017	287,979	—	—	—	—	\$1,794,000
	2016	259,018	—	—	—	—	\$1,627,000
Sheep and Lambs	2017	24,154	1.20	29,034	Cwt	\$133.97	\$3,890,000
	2016	25,530	1.24	31,597		\$121.46	\$3,838,000
Turkeys	2017	1,600,904	28.51	45,648,736	Lb	\$0.97	\$44,411,000
	2016	2,362,871	25.30	59,776,913		\$0.97	\$58,248,000
Total	2017	86,508,983					\$665,101,000
	2016	85,751,112					\$746,274,000

⁽¹⁾ For 2017 & 2016: Includes Calves, Cull Bulls (Dairy & Beef), Cull Cows (Dairy & Beef), Replacement Heifers (Dairy & Beef), and Stocker Cattle.

⁽²⁾ For 2017 & 2016: Includes Dairy & Meat Goats sold for meat.

⁽³⁾ For 2017 & 2016: Includes Chukar, Fish, Pheasant, & Squab.

Seed Crops

CROP	YEAR	ACRES HARVESTED	VALUE TOTAL
Seed Crops ⁽¹⁾	2017	6,970	\$4,504,000
	2016	5,684	\$3,937,000
Total	2017	6,970	\$4,504,000
	2016	5,684	\$3,937,000



⁽¹⁾ For 2017: Includes Certified, Common & Phytosanitary Seed from Barley, Lettuce, Oat, Triticale & Wheat.

For 2016: Includes Certified, Common & Phytosanitary Seed from Lettuce, Rye, Triticale & Wheat.



Field Crops

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Barley	2017	1,651	2.11	3,488	Ton	\$180.83	\$631,000
	2016	1,167	2.55	2,976		\$195.00	\$580,000
Beans (Dry Lima)	2017	2,599	1.04	2,694	Ton	\$1,040.24	\$2,802,000
	2016	2,300	1.15	2,644		\$1,370.82	\$3,625,000
Corn (Grain) ⁽¹⁾	2017	6,775	4.92	33,364	Ton	\$240.93	\$8,038,000
	2016	5,303	5.71	30,282		\$279.21	\$8,455,000
Cotton (Acala)	2017	20,920	2.98	62,394	500 Lb Bale	\$462.05	\$28,829,000
	2016	25,245	3.30	83,186		\$428.45	\$35,641,000
Cotton (Pima)	2017	25,025	2.92	73,002	500 Lb Bale	\$668.63	\$48,812,000
	2016	14,795	2.95	43,670		\$662.44	\$28,929,000
Cotton (Seed)	2017	—	0.38	13,510	Ton	\$261.27	\$3,530,000
	2016	—	0.36	12,375		\$279.88	\$3,464,000
Hay (Alfalfa)	2017	58,122	9.48	550,739	Ton	\$208.91	\$115,056,000
	2016	62,251	7.25	451,355		\$170.60	\$77,003,000
Hay (Grain) ⁽²⁾	2017	33,498	4.24	141,939	Ton	\$116.49	\$16,534,000
	2016	35,238	3.91	137,844		\$144.36	\$19,900,000
Hay (Sudan)	2017	8,260	3.75	30,997	Ton	\$98.14	\$3,042,000
	2016	9,620	4.55	43,810		\$77.01	\$3,374,000
Misc. Field Crops ⁽³⁾	2017	2,295	—	—	—	—	\$1,656,000
	2016	2,831	—	—		—	\$2,213,000
Pasture (Irrigated)	2017	23,135	—	23,135	Acre	\$199.00	\$4,604,000
	2016	25,030	—	25,030		\$174.00	\$4,355,000
Pasture (Other)	2017	552,632	—	552,632	Acre	\$28.13	\$15,546,000
	2016	556,966	—	556,966		\$23.41	\$13,039,000
Silage (Alfalfa)	2017	—	1.96	113,919	Ton	\$54.50	\$6,209,000
	2016	—	1.31	81,599		\$43.00	\$3,509,000
Silage (Corn)	2017	89,377	25.09	2,242,025	Ton	\$41.43	\$92,877,000
	2016	91,128	28.20	2,569,643		\$38.47	\$98,842,000
Silage (Other) ⁽⁴⁾	2017	75,620	14.59	1,103,192	Ton	\$25.64	\$28,290,000
	2016	79,638	15.37	1,223,936		\$24.72	\$30,256,000
Straw ⁽⁵⁾	2017	—	—	1,460	Ton	\$99.87	\$146,000
	2016	—	—	1,241		\$86.53	\$107,000
Stubble (Pasture)	2017	—	—	4,650	Acre	\$10.00	\$47,000
	2016	—	—	4,980		\$10.00	\$50,000
Wheat	2017	12,892	3.19	41,066	Ton	\$162.86	\$6,688,000
	2016	10,920	2.29	25,000		\$168.10	\$4,202,000
Total	2017	912,801					\$383,335,000
	2016	922,432					\$337,545,000

⁽¹⁾ For 2017, 2016: Includes Human Consumption Corn (but not Fresh Market Corn) & Grain for feed.

⁽²⁾ For 2017: Includes Forage Mix, Oat, Ryegrass, Triticale & Wheat.

For 2016: Includes Barley, Forage Mix, Oat, Ryegrass, Triticale & Wheat.

⁽³⁾ For 2017: Includes Beans, Organic Grain & Silage, Rice & Safflower.

For 2016: Includes Organic Barley, Beans, Organic Human Consumption Corn, Organic Grain Hay, Rice & Safflower.

⁽⁴⁾ For 2017: Includes Barley, Forage Mix, Oat, Ryegrass, Sorghum, Sudan, Triticale, Wheat & Winter Forage.

For 2016: Includes Oat, Ryegrass, Sorghum, Sudan, Triticale, Wheat & Winter Forage.

⁽⁵⁾ For 2017, 2016: Includes Straw from Barley, Oat, Rice, Rye & Wheat.

Nursery Products

CROP	YEAR	ACRES HARVESTED	VALUE TOTAL
All Nursery Products ⁽¹⁾	2017	1,305	\$57,648,000
	2016	1,478	\$74,189,000
Total	2017	1,305	\$57,648,000
	2016	1,478	\$74,189,000



⁽¹⁾ For 2017 & 2016: Includes Cane Berries, Christmas Trees, Crown & Cuttings, Decorative Plants, Transplants (Vegetable), & Turf. The separate production & value are not shown to avoid disclosing individual operations.



Vegetable Crops

CROP	YEAR	ACRES HARVESTED	PRODUCTION PER ACRE	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Melons (Cantaloupe)	2017	3,050	828.89	2,528,112	40lb Ctn	\$4.75	\$12,014,000
	2016	4,517	671.65	3,033,845		\$4.87	\$14,784,000
Melons (Other)	2017	472	26.38	12,453	Ton	\$344.43	\$4,289,000
	2016	1,511	33.26	50,257		\$258.20	\$12,976,000
Misc. Vegetables	2017	8,887	—	—	—	—	\$55,748,000
	2016	5,169	—	—	—	—	\$31,694,000
Sweet Potatoes ⁽¹⁾	2017	16,956	698.00	11,835,288	40lb Ctn	\$16.90	\$200,016,000
	2016	17,156	753.36	12,924,576		\$17.98	\$232,399,000
Tomatoes (Market)	2017	5,900	1,430.84	8,441,942	25lb Ctn	\$5.98	\$50,493,000
	2016	5,707	1,738.80	9,923,617		\$6.79	\$67,352,000
Tomatoes (Processing)	2017	21,237	46.16	980,338	Ton	\$69.30	\$67,942,000
	2016	22,956	51.32	1,178,133		\$71.82	\$84,611,000
Total	2017	56,502					\$390,502,000
	2016	57,017					\$443,817,000

⁽¹⁾ For 2016: Unit = \$ per Bin

Bee Industry

CROP	YEAR	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Beeswax ⁽¹⁾	2017	24,160	Lb	\$2.36	\$57,000
	2016	24,681		\$3.81	\$94,000
Bulk Bees ⁽²⁾	2017	52,244	Lb	\$24.63	\$1,287,000
	2016	55,549		\$23.89	\$1,327,000
Honey ⁽³⁾	2017	1,207,987	Lb	\$1.93	\$2,331,000
	2016	1,234,044		\$1.81	\$2,234,000
Pollination ⁽⁴⁾	2017	206,688	Colony	\$163.69	\$33,832,000
	2016	201,896		\$173.61	\$35,051,000
Queens ⁽⁵⁾	2017	38,426	Each	\$17.23	\$662,000
	2016	37,670		\$13.41	\$505,000
Total	2017				\$38,169,000
	2016				\$39,211,000



⁽¹⁾ For 2017: Beeswax produced by 31295 resident colonies. For 2016: Beeswax produced by 34,279 resident colonies.

⁽²⁾ For 2017 & 2016: Includes Bees sold as Bulk Bees, Nuclei, & Packaged Bees produced by resident colonies.

⁽³⁾ For 2017 & 2016: Honey produced by resident colonies.

⁽⁴⁾ For 2017 & 2016: Pollination colonies include all required to pollinate crops grown in Merced County.

⁽⁵⁾ For 2017 & 2016: Includes Mated Queens & Queen Cells.

Other Agriculture

CROP	YEAR	PRODUCTION TOTAL	PRODUCTION UNIT	VALUE PER UNIT	VALUE TOTAL
Almond (Hash)	2017	1,050	Ton	\$2,180.00	\$2,289,000
	2016	569		\$2,300.00	\$1,310,000
Almond (Shells)	2017	53,490	Ton	\$5.57	\$298,000
	2016	53,156		\$6.13	\$326,000
Firewood	2017	14,550	Cord	\$165.00	\$2,401,000
	2016	16,915		\$165.42	\$2,798,000
Fuel (Cogeneration)	2017	54,918	Ton	\$22.50	\$1,236,000
	2016	74,334		\$22.50	\$1,673,000
Manure	2017	1,766,251	Ton	\$5.15	\$9,096,000
	2016	1,653,006		\$5.17	\$8,552,000
Total	2017				\$15,320,000
	2016				\$14,658,000



Flooding

During the rainy season of 2017 Merced County experienced historical amounts of rainfall which lead to extensive flooding in several communities within the county. From December 2016 to March 2017 the total rainfall reached 11.03 inches of precipitation. The average amount of rainfall throughout the last 50 years during that time span has been 6.42 inches. Flooding occurred in the communities of Le Grand along the Mariposa Creek, Merced along Bear Creek, Snelling and Stevinson along the Merced River. After the previous six years of drought residents were relieved with much needed water. With continuous rainfall for several months, multiple reservoirs hit maximum capacity. Mandatory releases led to extremely high flows of water in the tributaries of Merced County.

The community of Le Grand experienced severe flooding when the Mariposa Creek flood control dam exceeded capacity and water went over the overflow. The levees could not handle the excess water and Mariposa Creek overflowed in multiple sections. After midnight on February 10, 2017, flood waters moved into Le Grand damaging houses and agricultural farmland. This community has not experienced similar flooding since the 1950's. Consistent flows caused multiple breaches along several waterways. Homes and farmland remained flooded for days.

Due to mandatory releases, increased flows throughout the rivers and creeks in Merced County put the community of Stevinson as an area of concern. The Merced River and the San Joaquin River both converge here. Agricultural land located near the river bottom was submerged for days, some even months. As a result, numerous orchards and vineyards had to be replanted.



STEVINSON



MERCED

LE GRAND

Rainfall MERCED COUNTY 1967-2017



YEAR	JUL	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOT
1967-68	0	0	0.06	0.03	1.34	0.86	1.39	1.93	1.43	0.49	0.01	0	7.54
1968-69	0	0	0	0.92	3.08	3.12	7.07	4.74	0.89	2.08	0	0	21.9
1969-70	0.07	0	0	1.25	2.24	0.96	3.94	1.41	2.52	0.13	0	0.07	12.59
1970-71	0	0	0	0.66	3.19	2.13	0.56	0.31	0.92	1.16	1.22	0	10.15
1971-72	0	0	0.06	0.28	1	2.33	0.6	0.56	0	0.71	0	0	5.54
1972-73	0	0	0.11	0.69	4.91	1.58	3.12	4.72	3.16	0.11	0	0	18.4
1973-74	0	0	0	2.1	1.65	3.15	1.95	0.5	2.37	1.44	0	0.06	13.22
1974-75	0.42	0	0	1.06	0.66	2.14	0.5	3.99	3.11	0.95	0	0	12.83
1975-76	0.1	0.11	0.02	0.92	0.17	0.13	0.14	2.01	0.41	1.14	0	0.07	5.22
1976-77	0.02	0.22	0.97	0.16	1.06	0.57	0.66	0.29	1.05	0.02	0.9	0.44	6.36
1977-78	0	0	0	0	0.44	2.75	4.93	3.78	4.22	3.48	0	0	19.6
1978-79	0	0	0.74	0	2.13	1.06	4.35	3.02	1.73	0.49	0.19	0	13.71
1979-80	0.21	0	0	0.84	1.09	1.79	3.83	3.45	1.19	0.77	0.46	0	13.63
1980-81	0	0	0	0.13	0	0.72	2.83	1.42	3.27	0.75	0.1	0	9.22
1981-82	0	0	0	1.13	3.63	0.59	1.6	2.08	5.39	1.85	0	0.05	16.32
1982-83	0	0	1.14	0.98	2.84	2.7	4.89	3.43	5.47	2.01	0.44	0	23.9
1983-84	0	0.1	2.77	0.43	2.12	2.63	0.12	0.88	0.33	0.08	0	0.02	9.48
1984-85	0.03	0.03	0.17	0.54	1.1	1.65	0.56	0.98	1.91	0.06	0	0.12	7.15
1985-86	0	0	0	0.6	3.28	1.26	0.92	3.72	3.9	0.64	0.25	0	14.57
1986-87	0	0	0.3	0	0.06	1.65	1.7	2.96	2.97	0.08	0.11	0	9.83
1987-88	0	0	0	0.47	0.89	2.46	1.6	0.87	0.29	2.03	0.38	0.01	9
1988-89	0	0	0	0	1.33	2.43	0.62	1.57	2.24	0.1	0	0	8.29
1989-90	0	0.05	1.34	1.55	0.48	0.1	2.08	1.64	0.68	0.59	1.62	0	10.13
1990-91	0	0	0	0.18	0.36	0.64	0.16	1.68	5.15	0.34	0.09	0.01	8.61
1991-92	0	0.11	0	1.59	0.53	1.46	1.56	3.77	2.02	0.02	0	0.06	11.12
1992-93	0.18	0	0	0.9	0.08	2.44	5.7	3.44	2.53	0.33	1.06	0.61	17.27
1993-94	0	0	0	0.18	0.68	1.3	2.29	3.3	0.18	1.1	1.38	0	10.41
1994-95	0	0	0.22	0.58	1.6	0.92	6.71	0.37	4.31	1.35	1.1	0.59	17.75
1995-96	0.02	0	0	0	0	3.25	3.15	3.43	1.84	0.84	1.03	0	13.56
1996-97	0	0	0	1.27	2.37	4.49	4.58	0.26	0	0.14	0.01	0.05	13.17
1997-98	0	0	0.07	0.07	2.44	1.63	4.89	6.1	4.81	0.99	2.13	0.48	23.61
1998-99	0	0	0.02	0.76	1.11	0.85	2	2.59	1.13	1.34	0.19	0	9.99
1999-00	0	0	0	0	0.9	0.27	3.28	4.8	0.95	2.06	0.79	0.18	13.23
2000-01	0	0	0.1	3.52	0.12	0.15	3.14	2.19	1.4	1.7	0	0	12.32
2001-02	0	0	0.14	0.33	2.27	2.59	1.01	0.88	1.47	0.15	0.47	0	9.31
2002-03	0	0	0	0	1.81	3.69	0.75	1.04	0.91	1.28	0.94	0	10.42
2003-04	0	0.1	0.02	0	0.8	3.05	0.89	3.77	0.77	0	0.19	0	9.59
2004-05	0	0	0.11	2.91	1.2	3.37	4.18	2.5	2.87	1.17	1.11	0.02	19.44
2005-06	0	0	0.22	0.11	0.15	2.81	2.75	1.01	3.36	2.47	1.07	0	13.95
2006-07	0	0	0	0.23	0.68	1.75	0.48	1.93	0.31	0.75	0.01	0	6.14
2007-08	0.01	0	0.25	0.85	0.22	1.23	4.26	1.86	0.06	0.01	0.07	0	8.82
2008-09	0	0	0	0.12	0.83	1.25	1.82	2.15	1.02	0.45	0.046	0.013	7.699
2009-10	0	0	0.17	1.68	0.16	2.72	2.73	2.82	1.07	3.36	0.46	0	15.17
2010-11	0	0	0	0.82	2.02	3.33	1.6	1.93	4.11	0.2	0.76	1.16	15.93
2011-12	0	0	0	0.95	0.88	0.06	0.73	0.69	2.02	1.69	0.01	0.37	7.4
2012-13	0.02	0	0.02	0.23	1.6	2.96	1.04	0.38	0.74	0.43	0.1	0.09	7.61
2013-14	0	0	0	0.1	0.62	0.29	0.31	1.65	1.41	0.53	0.06	0	4.97
2014-15	0	0	0	0.66	0.7	3.39	0.02	1.05	0.19	0.44	0.74	0	7.19
2015-16	0	0.06	0	0.41	2	1.23	4.27	0.7	2.31	2.47	0.55	0	14
2016-17	0	0	0	1.43	0.89	1.91	5.61	3.51	1.29	1.15	0.19	0.05	16.03
AVERAGE →	0.022	0.016	0.18	0.69	1.31	1.84	2.40	2.20	1.95	0.96	0.40	0.09	12.07

Sustainable Agriculture

Pest Prevention

The California Food and Agricultural Code mandates pest prevention programs to prevent the introduction and spread of pests in California. Pest prevention involves Pest Exclusion, Pest Detection, Pierce's Disease Control, and the Federal Phytosanitary Certification Program.

PEST EXCLUSION PROGRAM

Pest Exclusion is the first line of defense to prevent the introduction of pests, injurious to agriculture, that are not of common occurrence in Merced County.

A total of 5,341 shipments of incoming plant material were inspected in 2017. Shipments are inspected at United Parcel Service, United States Post Offices, Federal Express and trucking terminals. One shipment was rejected for live pests, material not properly certified, or improper container markings.

PIERCE'S DISEASE CONTROL PROGRAM

To prevent the introduction of the Glassy-winged Sharpshooter (GWSS) into Merced County, which is the main insect vector of Pierce's Disease, all shipments of nursery stock from infested counties, shipped by nurseries under a Master Compliance Agreement, are inspected. GWSS has the ability to spread Pierce's Disease rapidly among grape vines with devastating results. Three hundred twenty-two shipments of nursery stock from infested counties were inspected in 2017.

In addition, all nurseries receiving nursery stock from GWSS infested areas and residential yards were inspected

for GWSS presence for a total of 2,853 inspections during 2017. No GWSS were detected.

FEDERAL PHYTOSANITARY CERTIFICATION PROGRAM

This program ensures that plants and plant commodities exported to foreign countries from Merced County are free from injurious pests. In 2017, the Merced County staff inspected and issued Phytosanitary Certificates for 4,171 export shipments.

PEST DETECTION PROGRAM

Pest Detection uses visual inspection and insect traps that target specific exotic insects of high agricultural and economic importance.

The trapping program in Merced County targeted the following pests:

- Asian Citrus Psyllid (*Diaphorina citri* Kuwayama)
- Apple Maggot (*Rhagoletis pomonella*)
- European Pine Shoot Moth (*Rhyacionia buoliana*)
- Glassy-winged Sharpshooter (*Homalodisca vitripennis*)
- Light Brown Apple Moth (*Epiphyas postvittana*)
- Khapra Beetle (*Trogoderma granarium*)
- Melon Fly (*Dacus cucurbitae*)
- Oriental Fruit Fly (*Dacus dorsalis*)
- Vine Mealy Bug (*Planococcus ficus*)
- European Corn Borer (*Ostrinia nubilalis*)
- European Grapevine Moth (*Lobesia botrana*)
- Gypsy Moth (*Lymantria dispar*)
- Japanese Beetle (*Popillia japonica*)
- Mediterranean Fruit Fly (*Ceratitis capitata*)
- Mexican Fruit Fly (*Anastrepha ludens*)
- Sweet Potato Weevil (*Cylas formicarius elegantulus*)

A total of 2,922 pest detection traps were placed in Merced County and inspected a total of 34,038 times during the 2016 trapping season.



GLASSY-WINGED SHARPSHOOTER



Pest Eradication

The Pest Eradication Program endeavors to eliminate infestations of significant agricultural pests with limited distribution before they are able to cause ongoing economic cost to California agriculture.

Successful eradication projects include Sweet Potato Weevil, Banana Waterlily, Japanese Dodder, and European Grapevine Moth (EGVM).

Only limited detection and eradication efforts for the invasive weeds South American Sponge Plant (“A” Rated), Purple Loosestrife (“B” Rated), and Perennial Peppergrass (“B” Rated) were conducted during 2017, due to funding constraints.

Detection and eradication efforts for the insect pest Pink Bollworm continues.

There were no Pink Bollworm moths detected in Merced County during 2017.

The Pink Bollworm is a major cotton pest. Eradication efforts included a State operated trapping program of 45,945 acres in conjunction with County enforcement of the host free period from January 1 through March 10, also known as Cotton Plowdown. Treatment is accomplished by mating disruption utilizing pheromones and sterile moths.



Biological Control

The Biological Control (Biocontrol) Program uses natural enemies to suppress pest populations to economically and environmentally acceptable levels. Once the biocontrol agent becomes established it is self-perpetuating, reducing the need to use pesticides. The following are pests found in Merced County and their Biocontrol Agents.

PEST	ORGANISM
Ash Whitefly (<i>Siphoninus phillyreae</i>)	Parasitoid Wasp (<i>Encarsia inaron</i>)
Grapeleaf Skeletonizer (<i>Harrisina brillians</i>)	Parasitic Fly (<i>Ametadoria misella</i>) Virus (<i>WGLS Granulosis</i>) Parasitic Wasp (<i>Apanteles harrisinae</i>)
Italian Thistle (<i>Carduus sp.</i>)	Seed Head Weevil (<i>Rhinocyllus conicus</i>)
Klamath Weed (<i>Hypericum perforatum</i>)	Leaf Beetle (<i>Chrysolina quadrigemina</i>)
Milk Thistle (<i>Silybum marianum</i>)	Seed Head Weevil (<i>Rhinocyllus conicus</i>)
Puncture Vine (<i>Tribulus terrestris</i>)	Seed Weevil (<i>Microlarinus lareynii</i>) Stem Weevil (<i>Microlarinus lypriformis</i>)
Red Gum Lerp Psyllid (<i>Glycaspis brimblecombei</i>)	Parasitoid Wasp (<i>Psyllaephagus bliteus</i>)
Russian Thistle (<i>Salsola sp.</i>)	Casebearer Moth (<i>Coleophora klimeschiella</i>) Russian Thistle Borer (<i>Coleophora parthenica</i>)
Yellowstar Thistle (<i>Centaurea solstitialis</i>)	Seed Head Weevil (<i>Bangasternus orientalis</i>) Seed Head Gall Fly (<i>Urophora sirunaseva</i>) Hairy Weevil (<i>Eustenopus villosus</i>) False Peacock Fly (<i>Chaetorellia succinea</i>) Rust Fungus (<i>Puccinia jaceae</i> var. <i>solstitialis</i>)

Organic Farming

Merced County had 59 organic producers, 11 organic handlers, and 4 organic processors in 2017. The 59 organic producers grew over 120 assorted organic commodities within Merced County including: asparagus, leeks, cabbage, beets, pumpkin, corn, lavender, pears, apples, oranges, guava, beans, eggs, and milk. The 59 organic producers had 328 different production sites making up over 55,000 acres of organic production. Reported estimated gross sales of organic commodities in 2017 were over \$275,000,000. These crop values are reflected in each respective category.

All of Merced County's organic producers, handlers, and processors were certified in the California Organic Program through California Department of Food and Agriculture. The California Organic Products Act was enacted in 2003 and provides statutes that protect consumers, producers, handlers, processors and retailers by the establishment of standards under which agricultural products may be label and sold as "organic."



Certified Producers

The Certified Producers Program, also known as Direct Marketing, provides an opportunity for communities to have high quality produce provided by local growers through farmers' markets certified through the California Department of Agriculture, each with a unique set of market rules to provide consumers with a wide selection of agricultural commodities. Certified producers participating in certified farmers' markets must apply with the Agricultural Commissioner's Office and show the staff of the Commissioner's Office that they grow what they sell.

In 2017, Merced County had 68 certified producers who grew within the county and four certified farmers' markets:

- **LOS BANOS CERTIFIED FARMERS' MARKET**
Henry Miller Plaza, Los Banos, June through September on Tuesdays @ 4:30pm-9pm
- **LIVINGSTON FARMERS' MARKET**
Main Street & C Street, Livingston, May through October on Thursdays @ 5pm-9pm
- **THE ORIGINAL MERCED CO. CERTIFIED FARMERS' MARKET**
16th & Canal Street, Merced, year-round on Saturdays @ 8am-12pm
- **DP CHAMBER FARMERS MARKET**
1600 Block of Center Avenue, Dos Palos, July through August on Thursdays 5:30pm-8:30pm



Nutria

HISTORY

March 2017, a trapper conducting a beaver management survey captured a pregnant female Nutria. Nutria are a restricted species in California, thus they cannot be imported, transported, or possessed without a permit. Originally Nutria were introduced into California for the fur trade business. Nutria farms were operating from the 1930s through the 1940s. Also, this species was promoted as a means to control aquatic vegetation. It was quickly determined that Nutria were not beneficial and were destructive to the environment and eradication plans were implemented. It was originally believed this pest had been completely eradicated until the recent capture of a live female in Merced County. The capture took place in the western portion of Merced County in the grasslands outside of Gustine.

DAMAGES

Damages occur while they burrow into levees, causing water retention and flooding. Nutria consume 25% of their body weight each day. In the process they also destroy or waste 10 times that amount of beneficial habitat. Damage occurs to the soil structure, native plants, agricultural commodities, and severe soil erosion from the burrowing. Destructive feeding habits threaten populations of rare, threatened or endangered species occupying the same habitat. Nutria are also hosts for Tuberculosis and Septicemia which all can be transmitted to humans, livestock and pets. They can also carry tapeworms, along with blood and liver flukes.



of vegetation to create feeding and grooming platforms. The tracks show 4 visible toes, hind feet with webbing between 4 of the 5 toes, and typically drag marks in the tracks from the narrow tail.

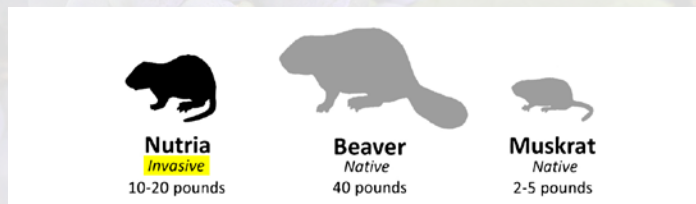
AGENCIES INVOLVED

Several agencies are currently working together to eradicate this destructive species. These agencies include: California Department of Fish and Wildlife, California Department of Food and Agriculture, California Department of Parks and Recreation, California Department of Water Resources, United States Department of Agriculture, United States Fish and Wildlife, and several county agricultural commissioner's offices. There is a small window of opportunity to eradicate Nutria from California. As the population increases and the geographic area widens, the possibility of eradication decreases. This makes it even more crucial to focus efforts to eradicate this invasive species.

If you suspect a Nutria, document any potential observations or signs of damage to CDFW's Invasive Species Program by email at invasive@wildlife.ca.gov or by phone at (866) 440-9530. If observations are on state or federal land it should be reported immediately to the local agency located on the property. For more information regarding nutria, you can visit the CDFW website at www.wildlife.ca.gov/Conservation/Invasives/Species/Nutria/Infestation.

References

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- U.S Geological Survey-National Wetlands Research Center. Worldwide Distribution, Spread of, and Efforts to Eradicate the Nutria (Myocastor coypus). Available at <http://www.nwrc.usgs.gov/special/nutria/index.htm>
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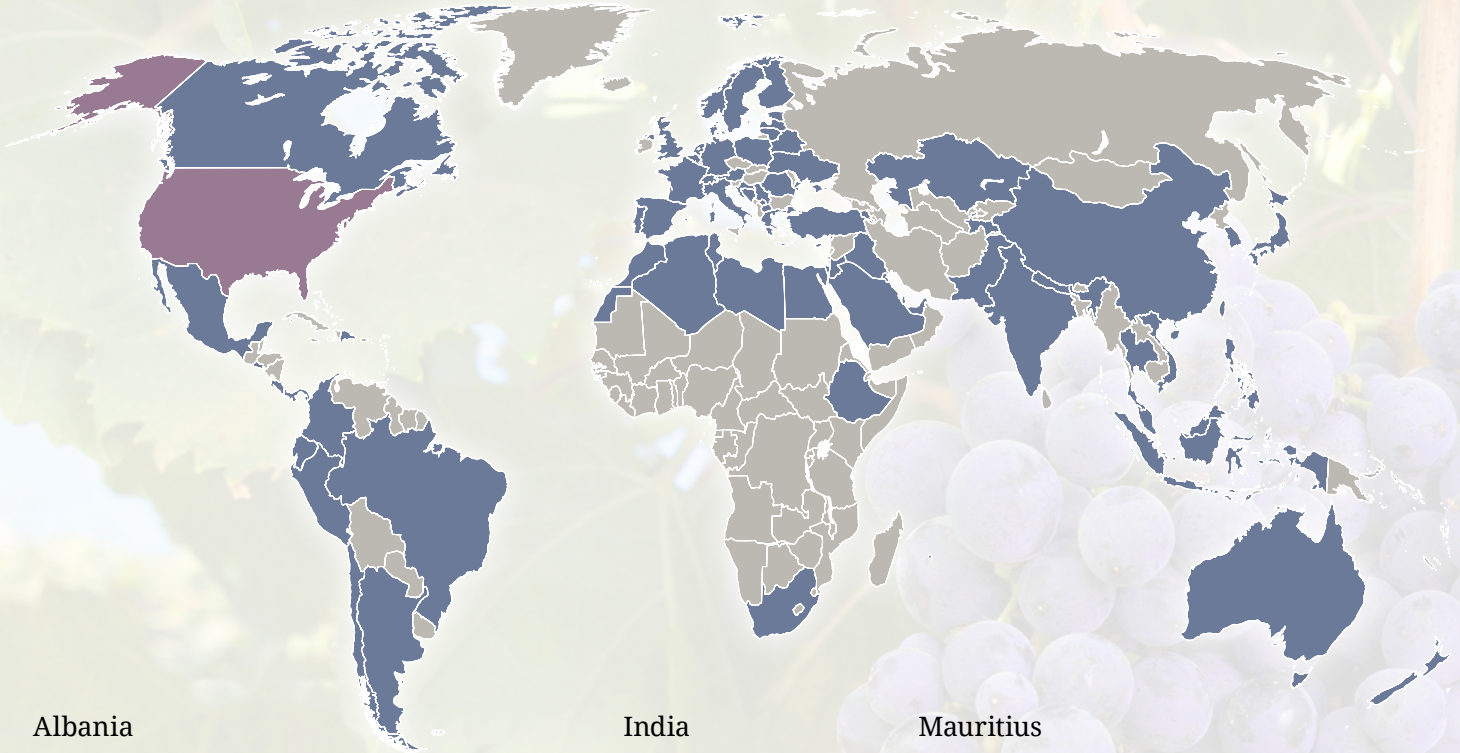


IDENTIFICATION & SIGNS OF NUTRIA

Nutria strongly resembles a native muskrat or beaver, but can be identified by a white muzzle with white whiskers and light brown coloring around the ears. They are larger than a muskrat but smaller than a beaver. The body length ranges from 2' to 2.5', with a tail length of 12" to 18". The tail is rounded and sparsely covered in hair. Preferred habitat consists of permanent water areas such as: rivers, streams, lakes, ponds and wetlands. They have been found living in cattails and tule marshes, ponds, sloughs and rivers throughout the San Joaquin Valley.

Signs that Nutria are in the area include burrows below the water lines. They also tend to pile cuttings

Countries Of Export



- | | | | | | |
|------------------------|--------------------|--------------------|--|--------------|----------------------|
| Albania | | India | | Mauritius | |
| Algeria | | Indonesia | | Mexico | Serbia |
| Argentina | | Iraq | | Montenegro | Singapore |
| Armenia | Cyprus | Israel | | Morocco | South Africa |
| Australia | Czech Republic | Italy | | Nepal | Spain |
| Austria | Denmark | Japan | | Netherlands | Sweden |
| Bahrain | Dominican Republic | Jordan | | New Zealand | Switzerland |
| Belarus | Ecuador | Kazakhstan | | Norway | Taiwan |
| Belgium | Egypt | Korea, Republic of | | Pakistan | Tajikistan |
| Bosnia and Herzegovina | El Salvador | Kuwait | | Panama | Thailand |
| Brazil | Estonia | Latvia | | Peru | Tunisia |
| Canada | Ethiopia | Lebanon | | Philippines | Turkey |
| Chile | Finland | Libya | | Poland | Ukraine |
| China | France | Lithuania | | Portugal | United Arab Emirates |
| Colombia | Germany | Macedonia | | Qatar | United Kingdom |
| Costa Rica | Greece | Malaysia | | Romania | Vietnam |
| Croatia | Honduras | Malta | | Saudi Arabia | |
| | Hong Kong | | | | |

Products Of Export

- | | | | | | |
|-------------------|------------|-----------------|-----------|-----------------|-------------|
| Alfalfa Hay | Blueberry | Eucalyptus Logs | Pistachio | Rye Grass Hay | Treviso |
| Almond | Cantaloupe | Fennel | Prune | Strawberry | Walnut |
| Black Walnut Logs | Celery | Melon | Radicchio | Sudan Grass Hay | Walnut Wood |
| Blackberry | Chicory | Oat Hay | Raspberry | Sweet Potato | |
| | Edible Fig | Onion | Rice | Tomato | |

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