

# Merced County

## Annual Report on Agriculture



# 2007

## Almonds In Merced County

Almonds are Merced County's largest tree crop in total dollar value and acreage. They rank at number three in production value for all crops grown in Merced County. California is the only state in the United States that commercially produces almonds. Almonds are the largest U.S. horticultural export. Nearly 80 countries import almonds produced in Merced County.

Almonds originated in ancient China and Central Asia. They were first introduced to California by Franciscan Padres in the mid 1700's. Unfortunately the cool weather of the coastal climate hampered the growth of the almond trees and the crop failed. A century went by before anyone else tried to produce almonds in California. Fortunately, this second attempt succeeded and almonds began to flourish in California's Central Valley. By the 1870's, research and crossbreeding introduced many of the almond varieties that we know today.

Our 1939 Crop Report lists almond acreage at 3,108 with a total value of \$360,340. Production was reported at 1,720 tons resulting in an approximate price of \$0.10 lb. Over the past 20 years almond acreage has increased over 36% from 64,532 to 87,881 acres. Prices have fluctuated over the years with a high of \$2.85 per pound in 2005. The 2007 crop brought an average price of \$1.80 per pound for a total production value of \$311,310,000.

Producing almonds is a year round endeavor. Trees are pruned and orchards are cleaned in the winter. The first blossoms appear in January or February depending on the temperatures. Because the almond tree is not self-pollinating, each almond orchard has at least two varieties of almonds planted within its rows to allow honey bees to pollinate the crop during the early spring bloom. After the petals drop and the trees have leafed out, the first signs of a hull appear around mid-March. In early July, the hulls split open slightly. Between late July and late October, the split wid-

ens, exposing the almond's shell. The whole nut and stem separate, and shortly before harvest, the hull opens completely. To prepare for harvest, orchard floors are swept and cleared. Mechanical tree "shakers" knock unshelled nuts to the ground, where they are allowed to dry before they are swept into rows and picked up by machine.

Almonds are the most nutrient dense tree nut. One ounce of almonds (about 23) contains 160 calories and only 1 gram of saturated fat. The same handful is also an excellent source of vitamin E and magnesium, a good source of protein and potassium and has no cholesterol.





## Almond Blossoms

Sir Edwin Arnold (1832-1904)

Blossom of the almond-trees,  
 April's gift to April's bees,  
 Birthday ornament of spring,  
 Flora's fairest daughterling;—  
 Coming when no flow'rets dare  
 Trust the cruel outer air;  
 When the royal king-cup bold  
 Dares not don his coat of gold;  
 And the sturdy blackthorn spray  
 Keeps his silver for the May;—  
 Coming when no flow'rets would,  
 Save thy lowly sisterhood  
 Early violets, blue and white,  
 Dying for their love of light.  
 Almond blossom, sent to teach us  
 That the spring-days soon will reach us,  
 Lest, with longing over tried,  
 We die as the violets died.  
 Blossom, clouding all the tree  
 With thy crimson broidery,  
 Long before a leaf of green  
 On the bravest bough is seen;  
 Ah! when winter winds are swinging  
 All thy red bells into ringing,  
 With a bee in every bell,  
 Almond bloom, we greet thee well.



*Our thanks go to Milford Esau and Mel Machado for the almond photographs that appear on the cover, with our summary of almond crops in Merced County and elsewhere throughout this report.*

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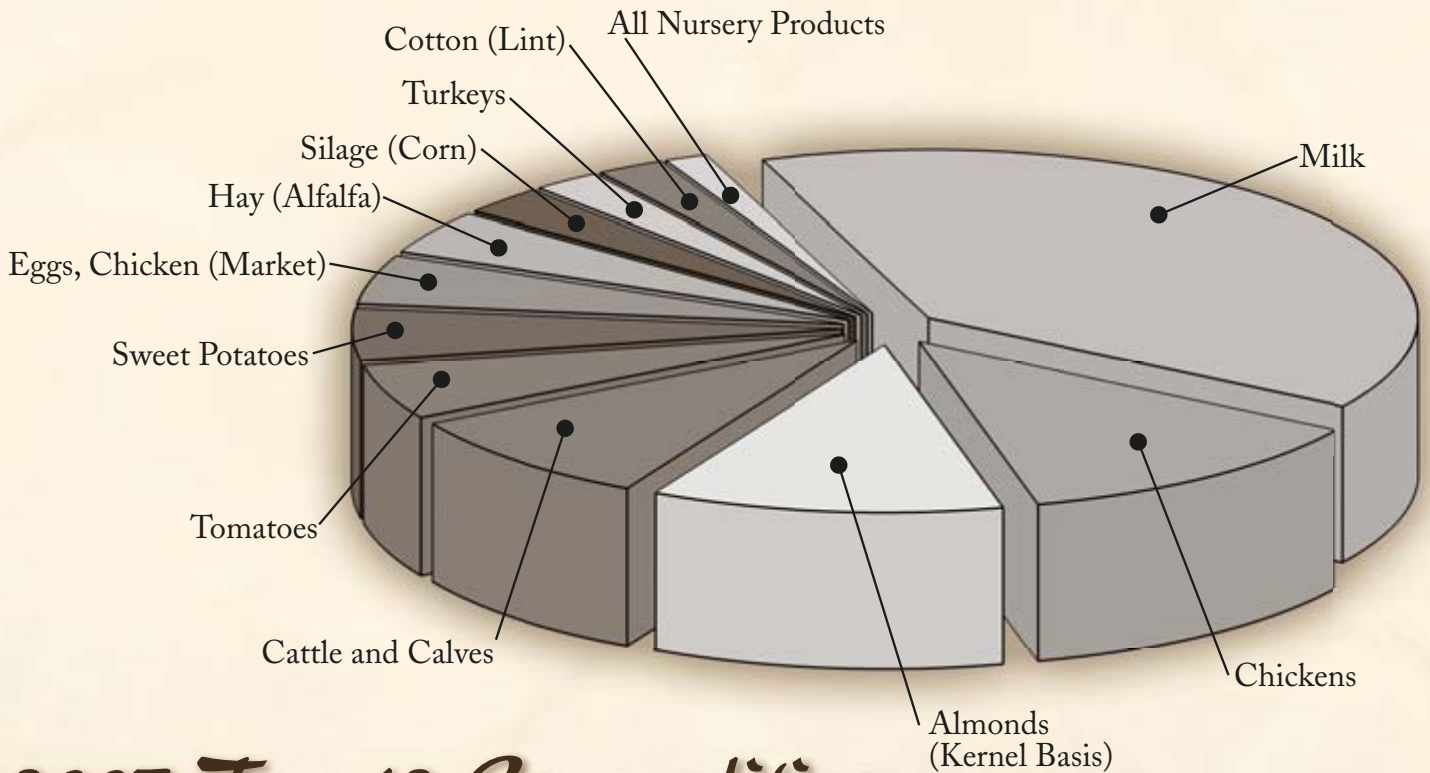
## Top Twelve Leading Farm Commodities 2007

Rank	Crop	Value	2006 Rank
1	Milk <sup>1</sup>	\$1,049,052,000	1
2	Chickens <sup>2</sup>	\$326,046,000	2
3	Almonds (Kernel Basis)	\$311,310,000	3
4	Cattle and Calves	\$236,339,000	4
5	Tomatoes <sup>3</sup>	\$144,050,000	5
6	Sweet Potatoes	\$130,110,000	6
7	Eggs, Chicken (Market)	\$124,998,000	7
8	Hay (Alfalfa)	\$110,822,000	8
9	Silage (Corn)	\$76,951,000	9
10	Turkeys	\$62,451,000	11
11	Cotton (Lint)	\$62,245,000	10
12	All Nursery Products	\$29,629,000	12

<sup>1</sup> Includes Market and Manufacturing.

<sup>2</sup> Includes Fryers and Other Chickens.

<sup>3</sup> Includes Market and Processing Tomatoes.



## 2007 Top 12 Commodities



A. G. Kawamura, *Secretary*  
*California Department of Food and Agriculture*

And

**The Honorable Board of Supervisors County of Merced**

Kathleen Crookham, *Chairman*  
John Pedrozo                      Deidre Kelsey  
Jerry O'Banion                      Mike Nelson

Demitrios O. Tatum  
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In accordance with the provisions of Sections 2272 and 2279 of the California Food and Agricultural Code, I am pleased to submit the 2007 Merced County Report of Agriculture. This report summarizes the acreage, production, and gross value of Merced County's agricultural commodities.

Last year Merced County agriculture for the first time in history surpassed the 3 billion dollar mark in gross production value of agricultural commodities. With a gross production value of \$3,001,666,000 in 2007, Merced County agricultural commodities increased \$717,206,000 (31.39%) over 2006 production values. 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 2007 crop year:

Milk accounted for more than 59.5% of the overall increase in value in 2007, increasing \$427,096,000 (68.7%) in value, and once again milk remains the county's number one commodity with an overall value of \$1,049,052,000.

Chickens remain the number two commodity, with a total value of \$326,046,000, up 13.7% due mainly to a rise in price and a slight increase in production.

Almonds again came in at number three in 2007, with a value of \$311,310,000. Although the price was down \$720/ton and acreage remained about the same, the increase in production topped last year's value of \$268,626,000 by 15.9%.

Merced County requested and received disaster declarations for two weather related events in 2007.

Between January 12th and 17th daily low temperatures fell below 20°F primarily affecting winter radicchio. Other reported losses were in seedling alfalfa and mature sugar beets.

Lack of rainfall at critical times resulted in an accumulated rainfall below 50% of normal causing considerable losses to rangeland forage and other small grain crops such as oats, wheat and barley that are dry farmed without the benefit of irrigation. Losses estimated at 71% contributed to the demand and increased prices for hay and grain products.

I wish to express my sincere thanks to our growers and ranchers, the staff of the University of California Cooperative Extension, industry representatives and the members of my staff who assisted in the gathering of data for this report

Respectfully submitted,

David A. Robinson  
Agricultural Commissioner



## Field Crops

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
Barley	2007	3,514	2.48	8,730	Ton	\$143.44	\$1,252,000
	2006	3,035	2.44	7,394		\$109.51	\$810,000
Beans (Dry Lima)	2007	2,670	1.34	3,590	Ton	\$1,082.09	\$3,884,000
	2006	876	1.08	942		\$1,203.73	\$1,134,000
Beans (Dry Other)	2007	505	1.21	612	Ton	\$766.12	\$469,000
	2006	1,570	1.41	2,216		\$945.31	\$2,095,000
Corn (Grain) <sup>1</sup>	2007	10,674	5.78	61,748	Ton	\$180.21	\$11,127,000
	2006	4,228	5.44	23,008		\$152.81	\$3,516,000
Cotton (Lint)	2007	49,190	3.35	165,004	500 Lb Bale	\$377.23	\$62,245,000
	2006	56,575	2.60	147,165		\$370.40	\$54,510,000
Cotton (Seed)	2007	---	1.72	84,409	Ton	\$234.31	\$19,778,000
	2006	---	1.01	56,892		\$160.00	\$9,103,000
Hay (Alfalfa)	2007	84,056	7.44	625,491	Ton	\$177.18	\$110,822,000
	2006	83,508	6.62	552,663		\$131.93	\$72,912,000
Hay (Grain) <sup>1</sup>	2007	33,302	4.53	150,756	Ton	\$127.24	\$19,182,000
	2006	34,991	3.57	124,868		\$81.89	\$10,226,000
Hay (Sudan)	2007	6,555	3.51	23,003	Ton	\$122.33	\$2,814,000
	2006	4,843	3.11	15,043		\$85.93	\$1,293,000
Misc. Field Crops <sup>3</sup>	2007	2,563	---	---	---	---	\$4,450,000
	2006	2,238	---	---		---	\$1,044,000
Pasture (Irrigated)	2007	38,961	---	38,961	Acre	\$179.00	\$6,974,000
	2006	59,000	---	59,000		\$145.00	\$8,555,000
Pasture (Other)	2007	569,615	---	569,615	Acre	\$22.00	\$12,532,000
	2006	560,000	---	560,000		\$22.00	\$12,320,000
Rice	2007	2,858	3.70	10,577	Ton	\$263.70	\$2,789,000
	2006	2,544	3.47	8,825		\$230.73	\$2,036,000
Silage (Alfalfa)	2007	---	0.75	63,311	Ton	\$51.50	\$3,261,000
	2006	---	1.00	83,508		\$54.50	\$4,551,000
Silage (Corn)	2007	85,160	27.76	2,363,946	Ton	\$32.55	\$76,951,000
	2006	83,868	26.41	2,214,548		\$26.73	\$59,197,000
Silage (Other) <sup>4</sup>	2007	62,257	13.06	813,297	Ton	\$23.18	\$18,855,000
	2006	64,715	14.06	909,755		\$20.79	\$18,910,000
Straw <sup>5</sup>	2007	---	---	3,953	Ton	\$37.02	\$146,000
	2006	---	---	4,800		\$43.13	\$207,000
Stubble (Pasture)	2007	---	---	16,811	Acre	\$29.13	\$490,000
	2006	---	---	16,761		\$20.00	\$335,000
Sugar Beets	2007	2,300	33.00	75,900	Ton	\$41.60	\$3,157,000
	2006	2,477	30.00	74,310		\$40.00	\$2,972,000
Wheat	2007	6,094	2.51	15,324	Ton	\$166.00	\$2,544,000
	2006	9,217	1.81	16,683		\$125.16	\$2,088,000
<b>Total</b>	<b>2007</b>	<b>960,274</b>					<b>\$363,722,000</b>
	<b>2006</b>	<b>973,685</b>					<b>\$267,813,000</b>

<sup>1</sup> For 2007, 2006: Includes Human Consumption Corn (but not Fresh Market Corn).

<sup>2</sup> For 2007, 2006: Includes Barley, Forage, Oat, and Wheat Hay.

<sup>3</sup> For 2007: Includes Corn Stalks, Cotton Mote, Milo, Oat Grain, and Safflower.  
For 2006: Includes Cotton Mote, Oat Grain, and Safflower.

<sup>4</sup> For 2007, 2006: Includes Oat, Rye, Sorghum, Sudan, Wheat, and Winter Forage.

<sup>5</sup> For 2007, 2006: Includes Straw from Barley, Bean (Dry), Oat, Rice and Wheat.

Disclaimer: Numbers will not compute exactly due to computer rounding of production and value rates.



## Vegetable Crops

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
Beans, Lima (Freezer)	2007	2,308	1.70	3,913	Ton	\$497.67	\$1,947,000
	2006	2,805	1.52	4,259		\$474.74	\$2,022,000
Melons (Cantaloupe)	2007	3,997	822.41	3,287,170	40lb Ctn	\$6.05	\$19,894,000
	2006	3,601	675.18	2,431,310		\$5.50	\$13,372,000
Melons (Other) <sup>1</sup>	2007	1,483	30.72	45,560	Ton	\$182.06	\$8,295,000
	2006	1,458	29.36	42,803		\$197.49	\$8,453,000
Misc. Vegetables <sup>2</sup>	2007	3,614	---	---	---	---	\$15,442,000
	2006	3,362	---	---		---	\$15,494,000
Sweet Potatoes	2007	12,183	16.67	203,091	Ton	\$640.65	\$130,110,000
	2006	12,028	15.23	183,186		\$610.68	\$111,868,000
Tomatoes (Market)	2007	9,761	1,260.37	12,302,476	25lb Ctn	\$7.96	\$97,957,000
	2006	9,999	1,156.21	11,560,959		\$7.01	\$81,097,000
Tomatoes (Processing)	2007	18,200	39.53	719,516	Ton	\$64.06	\$46,093,000
	2006	17,300	31.85	551,000		\$57.41	\$31,633,000
<b>Total</b>	<b>2007</b>	<b>51,546</b>					<b>\$319,737,000</b>
	<b>2006</b>	<b>50,553</b>					<b>\$263,939,000</b>

<sup>1</sup> For 2007, 2006: Includes Honeydew, Korean Melon, Mixed Melons, and Watermelon.

<sup>2</sup> For 2007: Includes Asparagus, Basil (Sweet), Cabbage (Napa), Chinese Greens, Cilantro, Cucumber, Cucumber (Pickle), Eggplant, Garbanzo Beans, Garlic, Long Chile, Mustard, Onion (Dry Bulb, Green), Parsley, Pepper (Market Bell, Processed Chile Powder, Spice), Pumpkin, Radicchio (Winter), Radish (Daikon), Spice/Herb, Sorrel, Spinach (Fresh), Squash, Squash (Winter, Zucchini), Sunflower, Tomatillo, Tomato (Pole), and Turnip.

For 2006: Includes Asparagus, Basil (Sweet), Broccoli (Processing), Cabbage, Cauliflower (Processing), Cucumber, Cucumber (Pickle), Eggplant, Garlic, Leafy Lettuce, Onion, Oriental Vegetables, Pea (Processing), Pepper (Market Bell and Chile, Processed Bell and Chile), Pumpkin, Radish, Spinach, Squash, Sunflower, and Tomatillo.

## Bee Industry

Crop	Year	Total Production	Production Unit	Value per Unit	Total Value
Beeswax	2007	41,540	Lb	\$2.11	\$88,000
	2006	35,268		\$2.00	\$71,000
Bulk Bees <sup>1</sup>	2007	64,300	Lb	\$10.86	\$698,000
	2006	84,366		\$9.93	\$838,000
Honey <sup>2</sup>	2007	2,700,126	Lb	\$0.90	\$2,430,000
	2006	2,292,400		\$0.91	\$2,086,000
Pollination <sup>3</sup>	2007	138,317	Colony	\$129.41	\$17,900,000
	2006	137,325		\$130.72	\$17,951,000
Queens <sup>4</sup>	2007	28,775	Each	\$10.27	\$296,000
	2006	29,154		\$14.17	\$413,000
<b>Total</b>	<b>2007</b>				<b>\$21,411,000</b>
	<b>2006</b>				<b>\$21,359,000</b>

<sup>1</sup> For 2007, 2006: Includes Bees Sold as Bulk Bees, Nuclei, and Packaged Bees.

<sup>2</sup> For 2007: Honey produced by 42,900 resident colonies.  
For 2006: Honey produced by 44,000 resident colonies.

<sup>3</sup> For 2007, 2006: Pollination colonies include all required to pollinate crops grown in Merced County.

<sup>4</sup> For 2007, 2006: Includes Mated Queens and Queen Cells.

## Seed Crops

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
Seed Crops <sup>1</sup>	2007	2,920	---	---	---	---	\$1,938,000
	2006	2,196	---	---	---	---	\$875,000
<b>Total</b>	<b>2007</b>	<b>2,920</b>					<b>\$1,938,000</b>
	<b>2006</b>	<b>2,196</b>					<b>\$875,000</b>

<sup>1</sup> For 2007: Includes Certified, Common, and Phytosanitary Seed from Barley, Bean (Garbanzo and Lima), Cauliflower, Cucumber, Mizuna, Oat, Pumpkin, Squash, and Wheat.

For 2006: Includes Certified, Common, and Phytosanitary Seed from Artichoke, Bean (Lima), Carrot, Cucumber, Lettuce, Oat, Onion, Pepper (Chile), Pumpkin, Rye, Squash, Tomato, and Wheat.

## Fruit and Nut Crops

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
Almonds (Hulls)	2007	---	---	179,047	Ton	\$121.17	\$21,695,000
	2006	---	---	130,598		\$95.11	\$12,421,000
Almonds (Kernel Basis)	2007	87,881	0.98	86,475	Ton	\$3,600.00	\$311,310,000
	2006	87,771	0.71	62,182		\$4,320.00	\$268,626,000
Apricots	2007	1,123	8.39	9,422	Ton	\$338.99	\$3,194,000
	2006	1,195	6.75	8,065		\$315.45	\$2,544,000
Figs (Dry)	2007	1,729	1.20	2,073	Ton	\$1,630.31	\$3,380,000
	2006	2,239	1.00	2,240		\$1,233.34	\$2,763,000
Grapes (Raisin)	2007	640	1.93	1,237	Ton	\$1,023.04	\$1,265,000
	2006	660	0.86	566		\$1,210.00	\$684,000
Grapes (Wine)	2007	9,819	6.69	65,702	Ton	\$274.08	\$18,008,000
	2006	11,397	9.93	113,138		\$237.65	\$26,887,000
Miscellaneous <sup>1</sup>	2007	2,729	---	---	---	---	\$24,209,000
	2006	2,303	---	---		---	\$12,007,000
Peaches (Clingstone)	2007	3,248	14.95	48,572	Ton	\$285.41	\$13,863,000
	2006	3,275	16.23	53,162		\$273.68	\$14,549,000
Peaches (Freestone)	2007	1,786	21.79	38,914	Ton	\$250.79	\$9,759,000
	2006	1,830	15.98	29,247		\$228.12	\$6,672,000
Pistachios	2007	3,967	0.85	3,369	Ton	\$2,984.79	\$10,055,000
	2006	4,301	1.30	5,589		\$4,327.14	\$24,184,000
Plums, Dried	2007	1,737	1.87	3,241	Ton	\$1,525.14	\$4,943,000
	2006	1,853	1.62	3,000		\$1,518.69	\$4,557,000
Strawberries	2007	97	9.38	910	Ton	\$797.81	\$726,000
	2006	104	10.22	1,063		\$756.26	\$804,000
Walnuts (English)	2007	5,773	1.32	7,644	Ton	\$2,010.78	\$15,371,000
	2006	5,877	1.24	7,311		\$1,649.09	\$12,056,000
<b>Total</b>	<b>2007</b>	<b>120,529</b>					<b>\$437,778,000</b>
	<b>2006</b>	<b>122,805</b>					<b>\$388,756,000</b>

<sup>1</sup> For 2007, 2006: Includes Apple, Blueberry, Cherry, Citrus, Fig (Cannery, Freezer and Fresh Market), Fruit Juice, Grape (Raisin to Wine), Jujube, Kiwi, Nectarine, Olive (Processed), Organic Fruit and Nut, Peach (Juice), Pear (Asian), Pecan, Persimmon, Plum, Pluot, and Pomegranate.





## Fruit and Nut Acreage Planting

<i>Crop</i>	<i>Bearing 2006</i>	<i>Non-Bearing 2006</i>	<i>Bearing 2001</i>	<i>Non Bearing 2001</i>
Almonds	88,131	3,616	83,535	4,575
Apples	121	0	348	25
Apricots	1,124	0	1,740	1
Berries	145	0	325	20
Cherries	458	3	357	18
Figs	2,177	0	3,775	49
Grapes (Raisin)	711	1	1,164	0
Grapes (Table)	124	0	149	0
Grapes (Wine)	9,818	0	11,428	0
Jujube	20	0	0	0
Kiwi	33	0	33	0
Mandarins	9	0	8	0
Nectarines	124	3	178	35
Olives	2	0	12	0
Oranges	6	0	49	0
Peaches (Clingstone)	3,248	10	3,647	350
Peaches (Freestone)	1,821	154	2,019	159
Pears	6	0	13	0
Pecans	37	0	41	10
Persimmon	17	0	0	0
Pistachios	4,527	229	4,614	462
Plums	90	0	40	42
Plums (Dried)	1,737	49	2,274	56
Pluot	71	0	0	0
Pomegranate	12	0	0	0
Walnuts (English)	5,773	329	5,726	488
<b>Total</b>	<b>120,342</b>	<b>4,394</b>	<b>121,475</b>	<b>6,290</b>

## Nursery Products

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
All Nursery Products <sup>1</sup>	2007	1,495	---	---	---	---	\$29,629,000
	2006	1,510	---	---	---	---	\$35,421,000
<b>Total</b>	<b>2007</b>	<b>1,495</b>					<b>\$29,629,000</b>
	<b>2006</b>	<b>1,510</b>					<b>\$35,421,000</b>

<sup>1</sup> For 2007, 2006: Includes Bud Wood, Cane Berries, Christmas Trees, Crowns and Cuttings, Deciduous Fruit and Nut Trees, Decorative Plants, Dried Flowers, Grapevines, Greenhouse Plants, Ornamental Plants, Ornamental and Shade Trees, Transplants (Strawberry and Vegetable), and Turf. The separate production and value are not shown to avoid disclosing individual operations.



## Livestock and Poultry Production

Crop	Year	Number of Head	Production per Head	Total Production	Production Unit	Value per Unit	Total Value
Cattle and Calves <sup>1</sup>	2007	309,643	8.44	2,613,213	Cwt	\$90.44	\$236,339,000
	2006	301,655	8.53	2,573,129		\$94.55	\$243,289,000
Chickens (Fryers and Broilers)	2007	91,606,435	5.51	504,714,814	Lb	\$0.65	\$326,046,000
	2006	90,438,363	5.29	477,974,601		\$0.60	\$286,785,000
Livestock (Miscellaneous) <sup>2</sup>	2007	37,492	---	---	---	---	\$4,124,000
	2006	35,507	---	---		---	\$4,052,000
Poultry (Miscellaneous) <sup>3</sup>	2007	231,000	---	---	---	---	\$1,652,000
	2006	140,000	---	---		---	\$1,054,000
Sheep and Lambs	2007	32,850	1.54	50,619	Cwt	\$77.53	\$3,924,000
	2006	36,918	1.54	57,025		\$77.09	\$4,396,000
Turkeys	2007	2,791,439	32.76	91,436,064	Lb	\$0.68	\$62,451,000
	2006	3,077,798	29.85	91,858,583		\$0.49	\$45,194,000
<b>Total</b>	<b>2007</b>	<b>95,008,859</b>					<b>\$634,535,000</b>
	<b>2006</b>	<b>94,030,241</b>					<b>\$584,771,000</b>

<sup>1</sup> For 2007, 2006: Includes Calves, Cull Bulls (Dairy and Beef), Cull Cows (Dairy and Beef), Replacement Heifers (Dairy and Beef) and Stocker Cattle.

<sup>2</sup> For 2007, 2006: Includes Goats, Hogs, and Pigs.

<sup>3</sup> For 2007, 2006: Includes Chukar, Pheasant, Pullets, and Squab.

## Livestock and Poultry Products

Crop	Year	Total Production	Production Unit	Value per Unit	Total Value
Eggs (Other) <sup>1</sup>	2007	2,497,960	Each	\$0.64	\$1,608,000
	2006	3,516,921		\$0.53	\$1,864,000
Eggs, Chicken (Market)	2007	161,288,340	Dozn	\$0.78	\$124,998,000
	2006	156,341,058		\$0.52	\$81,297,000
Milk (Goat)	2007	54,660	Cwt	\$34.00	\$1,858,000
	2006	71,941		\$32.17	\$2,314,000
Milk (Manufacturing)	2007	3,593,496	Cwt	\$18.97	\$68,169,000
	2006	2,620,364		\$12.58	\$32,964,000
Milk (Market)	2007	53,983,671	Cwt	\$18.17	\$980,883,000
	2006	50,775,182		\$11.60	\$588,992,000
Wool	2007	159,081	Lb	\$0.85	\$135,000
	2006	167,076		\$0.90	\$150,000
<b>Total</b>	<b>2007</b>				<b>\$1,177,652,000</b>
	<b>2006</b>				<b>\$707,582,000</b>

<sup>1</sup> For 2007, 2006: Includes Eggs other than Chicken Eggs.



## Aquaculture

Crop	Year	Total Production	Production Unit	Value per Unit	Total Value
Fish <sup>1</sup>	2007	1,600,000	Lb	\$2.07	\$3,312,000
	2006	1,318,750		\$2.30	\$3,031,000
<b>Total</b>	<b>2007</b>				<b>\$3,312,000</b>
	<b>2006</b>				<b>\$3,031,000</b>

<sup>1</sup> For 2007, 2006: Includes Black Bass, Bluegill, Catfish, Silver Carp, Striped Bass, Sturgeon, and Trout.

## Other Agriculture

Crop	Year	Total Production	Production Unit	Value per Unit	Total Value
Almond (Shells) <sup>1</sup>	2007	52,848	Ton	\$22.56	\$1,192,000
	2006	42,419		\$21.99	\$933,000
Firewood <sup>2</sup>	2007	22,194	Cord	\$158.36	\$3,515,000
	2006	20,591		\$155.81	\$3,208,000
Fuel (Cogeneration) <sup>3</sup>	2007	55,125	Ton	\$40.00	\$2,205,000
	2006	47,350		\$38.00	\$1,799,000
Manure <sup>4</sup>	2007	1,112,415	Ton	\$4.53	\$5,039,000
	2006	1,090,504		\$4.56	\$4,973,000
<b>Total</b>	<b>2007</b>				<b>\$11,951,000</b>
	<b>2006</b>				<b>\$10,913,000</b>

<sup>1</sup> For 2007, 2006: For Animal Bedding.

<sup>2</sup> For 2007, 2006: Includes Orchard Prunings and Removal for Firewood. (Recorded in Cords).

<sup>3</sup> For 2007, 2006: Includes Orchard Prunings and Orchard Removal for Fuel (Recorded in Dry Tons).

<sup>4</sup> For 2007, 2006: Includes Livestock and Poultry Manure.





## Merced County Global

### Exports go to these countries:

Algeria	Luxembourg
Argentina	Malaysia
Armenia	Malta
Australia	Mauritius
Austria	Melilla
Azerbaijan	Mexico
Bahrain	Monaco
Belarus	Morocco
Belgium	Nepal
Brazil	Netherlands
Bulgaria	New Zealand
Canada	Norway
Canary Islands	Oman
Chile	Pakistan
China	Philippines
Colombia	Poland
Costa Rica	Portugal
Cyprus	Qatar
Czech Republic	Romania
Denmark	Russian Federation
Ecuador	San Marino
Egypt	Saudi Arabia
El Salvador	Singapore
Estonia	Slovakia
Finland	Slovenia
France	South Africa
Georgia	Spain
Germany	Sweden
Greece	Switzerland
Guatemala	Syria
Honduras	Taiwan
Hong Kong	Tajikistan
India	Thailand
Indonesia	Trinidad & Tobago
Israel	Tunisia
Italy	Turkey
Japan	Ukraine
Jordan	United Arab Emirates
Kazakhstan	United Kingdom
Korea, Republic of	Uruguay
Kuwait	Uzbekistan
Latvia	Vatican City State
Lebanon	Venezuela
Liechtenstein	Vietnam
Lithuania	





# Agricultural Exports



*Exported Commodities*

Alfalfa Hay	Onion Seed	Rye Hay
Almonds	Pecans	Strawberry Nursery Stock
Cantaloupe	Pistachios	Sudan Hay
Fig	Propagative Stock	Sweet Potato
Garlic	Prunes	Tomatoes
Honeydew	Radicchio	Walnut Burls
Oat Hay	Raspberry Nursery Stock	Walnuts

## 2007 Sustainable Agriculture Report

### *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 7,535 shipments of incoming plant material were inspected in 2007. Shipments are inspected at United Parcel Service, United States Post Offices, Federal Express and trucking terminals. Thirteen shipments were rejected. The 13 rejections were for live pests, material not properly certified, or improper container markings. Of these one "Q" Rated pest (*Osmia cornifrons*) was intercepted and rejected.

Seed inspection during 2005 detected the presence of "B" Rated Jointed Goatgrass (*Aegilops cylindrica*) seed contamination in forage crop seed mixture, which had been planted in four fields totaling 312 acres in Merced County. Jointed Goatgrass is a potential major pest of small grain crops, primarily wheat. "B" Rating indicates a pest with limited distribution in the State with eradication at the discretion of the county agricultural commissioner. Since there is no known establishment of Jointed Goatgrass in Merced County, the planted fields were placed under compliance agreement to control any potential movement of seed from the planted fields. With the assistance of the California Department of Food and Agriculture, the 4 fields were visually surveyed three times in 2005 and again in 2006 with no Jointed Goatgrass plants discovered. In 2007 these fields were surveyed again to verify that the Jointed Goatgrass did not become established in Merced County. The results of these surveys were negative. Another survey is planned in 2008 to verify the continued absence of Jointed Goatgrass in Merced County.

#### *Pierce's Disease Control Program*

To prevent the introduction of the Glassy-winged Sharpshooter (GWSS) into Merced County, all shipments of nursery stock from infested counties are inspected. GWSS has the ability to spread Pierce's Disease rapidly among grape vines with devastating results. 935 shipments of nursery stock from infested counties were inspected in 2007.

In addition, all nurseries receiving nursery stock from GWSS infested areas and 1,763 residential yards were visually inspected for GWSS presence during 2007. No GWSS was detected.





### Federal Phytosanitary Certification Program:

This program prevents the spread of injurious pests from Merced County to foreign countries through inspection and certification of exported plants and plant commodities. In 2007, 4,755 export shipments were inspected and issued Phytosanitary Certificates.

### 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:**

Apple Maggot ( <i>Rhagoletis pomonella</i> )	Light Brown Apple Moth ( <i>Epiphyas postvittana</i> )
European Corn Borer ( <i>Ostrinia nubilalis</i> )	Mediterranean Fruit Fly ( <i>Ceratitis capitata</i> )
European Pine Shoot Moth ( <i>Rhyacionia buoliana</i> )	Melon Fly ( <i>Dacus cucurbitae</i> )
Glassy-winged Sharpshooter ( <i>Homalodisca coagulata</i> )	Mexican Fruit Fly ( <i>Anastrepha ludens</i> )
Gypsy Moth ( <i>Lymantria dispar</i> )	Oriental Fruit Fly ( <i>Dacus dorsalis</i> )
Japanese Beetle ( <i>Popillia japonica</i> )	Sweet Potato Weevil ( <i>Cylas formicarius elegantulus</i> )
Khapra Beetle ( <i>Trogoderma granarium</i> )	Vine Mealy Bug ( <i>Planococcus ficus</i> )

A total of 2,093 pest detection traps were placed in Merced County and inspected a total of 21,614 times during the 2007 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.

In 2006 an exotic, potentially invasive parasitic vine known as Japanese dodder was detected at six locations in Merced County. These locations were eradicated in 2007 along with two new locations that were discovered. Surveys for Japanese dodder will continue in 2008.

New invasive weed pests found in 2007 include South American Sponge Plant (“A” Rated) and Purple Loosestrife (“B” Rated). Eradication efforts are scheduled to begin in 2008.

Ongoing detection and eradication efforts continued during 2007 for Pink Bollworm, Red Imported Fire Ant, and Purple Mustard.

Ongoing detection efforts continue for Camelthorn, Carolina Horse Nettle, and Hydrilla.

Successful eradication projects include Sweet Potato Weevil and Banana Waterlily. None have been detected since the end of their respective eradication projects.

The Pink Bollworm is a significant cotton pest with eradication efforts consisting of a State operated detection trapping program in conjunction with County enforcement of the host-free period from January 1 through March 10. In 2007, 48,190 acres were trapped for Pink Bollworm. No Merced County growers were found to be in violation of the host-free period requirement during 2007.

Merced County’s Red Imported Fire Ant (RIFA) eradication program started in November 2001. During 2007 there were additional finds made in several areas of the county. By the end of 2007, 3,634 acres were still under treatment, 3,573 acres under intensive post treatment survey, and 326 acres were declared eradicated. County personnel surveyed and trapped in conjunction with CDFA personnel.



## 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.

<i>Pest</i>	<i>Organism</i>
Ash Whitefly ( <i>Siphoninus phillyreae</i> )	Parasitoid Wasp ( <i>Encarsia inaron</i> )
Grapeleaf Skeletonizer ( <i>Harrisina brillians</i> )	Parasitic Fly ( <i>Ametadoria misella</i> )
	Parasitic Wasp ( <i>Apanteles harrisinae</i> )
	Virus ( <i>WGLS Granulosis</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> )	Case-bearer Moth ( <i>Coleophora klimeschiella</i> )
	Russian Thistle Borer ( <i>Coleophora parthenica</i> )
Yellowstar Thistle ( <i>Centaurea solstitialis</i> )	False Peacock Fly ( <i>Chaetorellia succinea</i> )
	Hairy Weevil ( <i>Eustenopus villosus</i> )
	Rust Fungus ( <i>Puccinia jaceae var. solstitialis</i> )
	Seed-Head Gall Fly ( <i>Urophora sirunaseva</i> )
	Seed-Head Weevil ( <i>Bangasternus orientalis</i> )

## Organic Farming

Merced County has 13 organic handlers and 6 organic dairies. There were 44 growers of organic commodities in 2007. These growers farmed a total of 6,179 acres to produce assorted organic field crops, berries, fruits, nuts, and vegetables. Organic eggs, livestock, milk, and poultry were also produced. There were also 5 growers who farmed 17,810 acres of irrigated and non-irrigated organic pastureland.



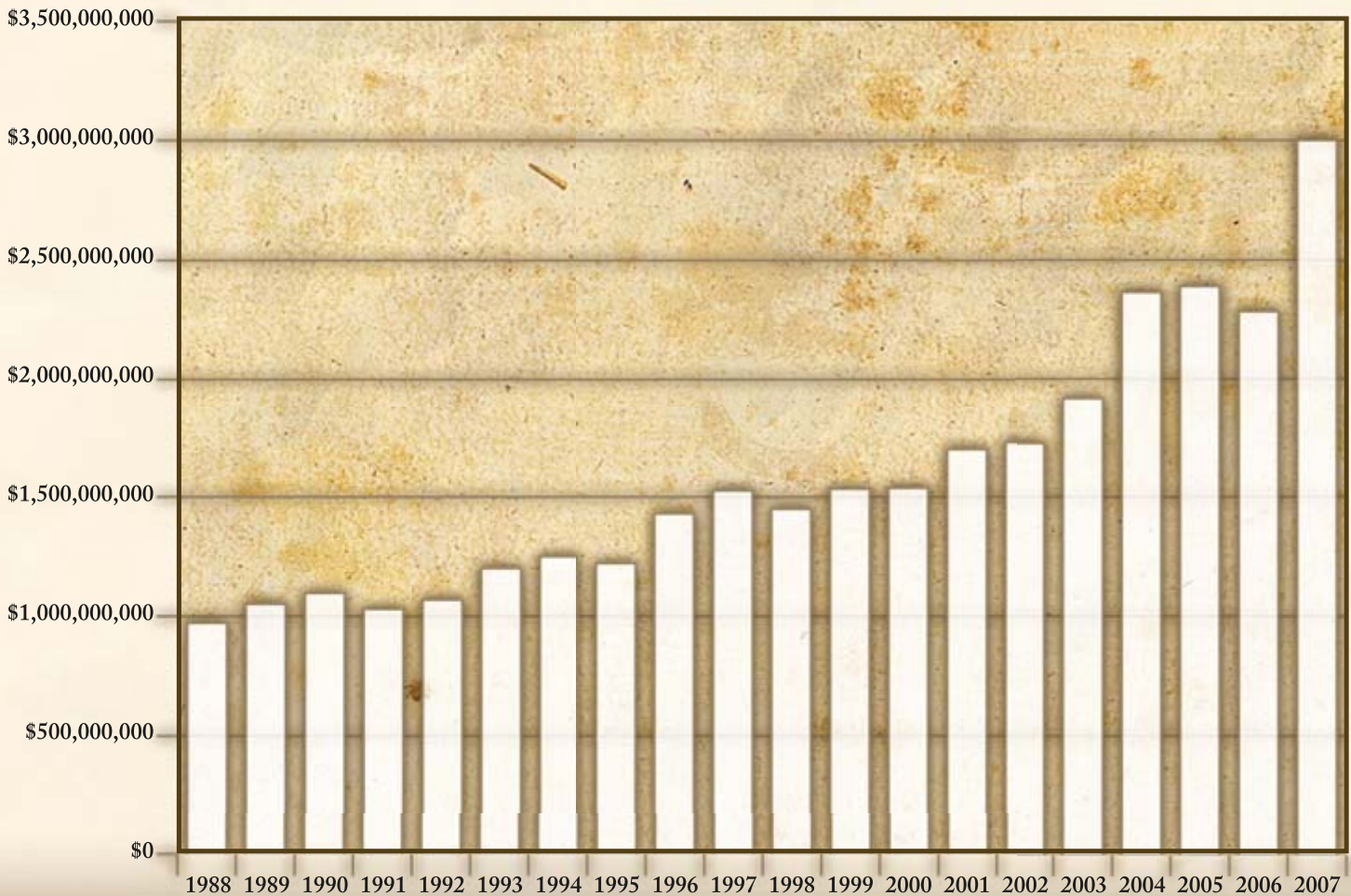




## Commodity Value Crop Comparison

Commodities	2007	1997	1987	1977
Aquaculture	\$3,312,000	\$1,280,000	---	---
Bee Industry	\$21,411,000	\$8,033,000	\$3,385,000	\$1,600,000
Field Crops	\$363,722,000	\$284,482,000	\$174,576,000	\$111,042,000
Fruit and Nut Crops	\$437,778,000	\$337,350,000	\$209,000,000	\$100,482,000
Livestock and Poultry Production	\$634,535,000	\$239,294,000	\$206,816,000	\$119,295,000
Livestock and Poultry Products	\$1,177,652,000	\$492,633,000	\$256,988,000	\$104,096,000
Nursery Products	\$29,629,000	\$15,833,000	\$8,244,000	\$6,430,000
Other Agriculture	\$11,951,000	\$11,429,000	---	---
Seed Crops	\$1,938,000	\$1,295,000	\$1,985,000	\$3,683,000
Vegetable Crops	\$319,737,000	\$135,208,000	\$81,488,000	\$60,743,000
<b>Total</b>	<b>\$3,001,666,000</b>	<b>\$1,526,837,000</b>	<b>\$942,482,000</b>	<b>\$507,369,000</b>

## Merced County Agricultural Commodity Values 1988 To 2007





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# Merced County 1992-2006 Land Use Summary

Farmland Mapping and Monitoring Program  
California Department Of Conservation

Land Use Category	Acreage By Category <sup>1</sup>								1992-2006 Net Acreage Changed	Average Annual Acreage Change
	1992	1994	1996	1998	2000	2002 <sup>2</sup>	2004	2006 <sup>3</sup>		
Prime Farmland	288,920	288,477	288,415	289,057	287,160	283,158	276,575	272,096	-16,824	-1,202
Farmland of Statewide Importance	161,792	161,189	159,788	160,066	157,936	159,022	155,856	153,249	-8,543	-610
Unique Farmland	95,096	94,370	93,580	96,593	96,355	103,008	103,133	104,419	9,323	666
Farmland of Local Importance	52,782	49,786	51,241	47,929	47,621	42,818	53,762	59,851	7,069	505
<b>Important Farmland Subtotal</b>	<b>598,590</b>	<b>593,822</b>	<b>593,024</b>	<b>593,645</b>	<b>589,072</b>	<b>588,006</b>	<b>589,326</b>	<b>589,615</b>	<b>-8,975</b>	<b>-641</b>
Grazing Land	581,798	585,110	583,709	580,934	581,729	578,026	573,629	569,828	-11,970	-855
<b>Agricultural Land Subtotal</b>	<b>1,180,388</b>	<b>1,178,932</b>	<b>1,176,733</b>	<b>1,174,579</b>	<b>1,170,801</b>	<b>1,166,032</b>	<b>1,162,955</b>	<b>1,159,443</b>	<b>-20,945</b>	<b>-1,496</b>
Urban and Built-Up Land	28,326	29,309	30,183	30,559	31,817	33,091	34,944	36,767	8,441	603
Other Land	35,759	36,264	37,526	39,304	41,832	45,321	46,548	48,348	12,589	899
Water Area	16,946	16,914	16,978	16,978	16,970	16,970	16,970	16,859	-87	-6
<b>Total Area Inventoried</b>	<b>1,261,419</b>	<b>1,261,419</b>	<b>1,261,420</b>	<b>1,261,420</b>	<b>1,261,420</b>	<b>1,261,414</b>	<b>1,261,417</b>	<b>1,261,417</b>	<b>-2</b>	<b>0</b>

<sup>1</sup> Figures are generated from the most current version of the GIS data. Files dating from 1984 through 1992 were reprocessed with a standardized county line in the Albers Equal Area projection, and other boundary improvements.

<sup>2</sup> Due to the incorporation of digital soil survey data (SSURGO) during this update, acreages for farmland, grazing and other land use categories may differ from those published in the 2000-2002 California Farmland Conversion Report.

<sup>3</sup> Water acreage decreased in 2006 due to two water bodies being dry for multiple update cycles.

**Percentage Of County Inventoried: 100%**

## Merced County Land Use Conversion Synopsis

Over the past fifteen years Merced County has undergone some major changes in both cropping patterns and land use changes. Some of the most notable changes in crops have been a substantial decline in the cotton acreage and a large increase in the almond acreage. Much of these acreage fluctuations are accounted for by shifts into or out of other crops. However, most of the changes in the overall amount of farmed acres in the county are due to land use conversions. Most notable are the amounts converted from irrigated pastureland and other pastureland (rangeland) to irrigated crops such as almonds, and from agriculture land to urban uses. Since most of the irrigated pastureland and other pastureland acres are not captured by the pesticide permit system it is difficult to track their acreage fluctuations. In an effort to more correctly reflect the actual acreage farmed in Merced County, data from the Farmland Mapping and Monitoring Program within the California Department of Conservation was used to adjust the acres reported for irrigated pastureland and other pastureland in the 2007 Crop Report. The result was an overall decrease in farmed acres of 14,214 acres over the past one and a half decades. The table above shows the Merced County summary and change by land use category from 1992 to 2006 as determined by the California Department of Conservation.

*Merced County*

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