

The Measure of California Agriculture

CHAPTER 2

University of California Agricultural Issues Center

Demand and Supply

- 2-3.....Commodity demand
- 2-6.....Leading commodities and cash receipts
- 2-11.....Production by principal commodity group
- 2-15.....Regional and county-level production
- 2-25.....Organic agriculture

California participates in national and international agricultural markets. Californians consume food that is produced in the state, as well as food that is imported from other states and countries. Measured by cash receipts, agriculture in California is the largest among the states, and produces a variety of animals and animal products, fruit, tree nuts, vegetables, field crops, and nursery and floriculture products. California agricultural commissioners' data indicates the Central Valley (composed of the Sacramento and San Joaquin valleys) accounts for more than half of the state's gross value of agricultural production.

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Commodity demand

Primary information on California per capita consumption of major foods is not available. However, we can access statistics for the whole U.S. per capita consumption of most foods (Table 2.1). Since 1971, the largest per capita consumption increases have been in fresh fruits (about 26 percent), fresh vegetables (32 percent), and tree nuts (55 percent). Per capita consumption of meats has been more or less stable in the last 30 years, with consistent increased substitution of chicken for red meats.

In 1970, food expenditures by U.S. families and individuals accounted for nearly 14 percent of total disposable income (Figure 2.1). That share fell to about 10 percent in 2004.

Expenditures for food consumed away from home became more important in the last three decades (Figure 2.2). In 1970, \$95.9 billion (inflation adjusted) was spent on food away from home. This represented 26 percent of total U.S. food expenditures. By 2004 expenditures away from home increased to about 43 percent (i.e. \$324.9 billion). We would expect to see a similar pattern for California.

Although California is the nation's largest agricultural producer in terms of cash receipts, many foods are imported from other states or countries. Almost all of the pork, much of the beef, and much of the grain used for bakery, pasta, and livestock feed come from Midwestern states. Tropical products such as bananas and mangoes come from Central and South America. During the local off-season, California imports products that it produces in other months, such as winter tomatoes from Florida and Mexico.

TABLE 2.1

United States per capita consumption of major foods, 1971-2003

	Red meats ^a	Chicken ^a	Eggs	Dairy ^b	Fresh fruits	Fresh vegetables ^c	Tree nuts	Coffee ^d	Wine ^e
	pounds							gallons	
1971	136.1	27.4	39.7	557.9	100.6	148.0	1.89	9.9	1.48
1976	133.4	28.6	34.6	539.7	101.7	148.1	1.91	9.4	1.73
1981	125.1	33.7	34.0	540.6	103.8	145.1	1.92	7.5	2.20
1986	122.2	36.9	32.6	591.5	117.6	158.6	2.21	7.8	2.44
1991	111.5	44.1	30.0	563.7	112.9	170.8	2.15	7.8	1.84
1996	111.0	48.8	30.1	566.2	126.5	186.5	2.03	6.6	1.86
2001	111.4	54.0	32.5	586.5	125.7	194.5	2.62	7.2	1.97
2002	114.0	56.8	32.8	585.3	126.9	193.5	2.86	7.1	2.07
2003	111.9	57.5	32.7	593.9	126.7	195.6	2.93	7.3	2.16

Source: USDA Economic Research Service. <http://www.ers.usda.gov/Data/FoodConsumption/>

^a Retail, boneless.

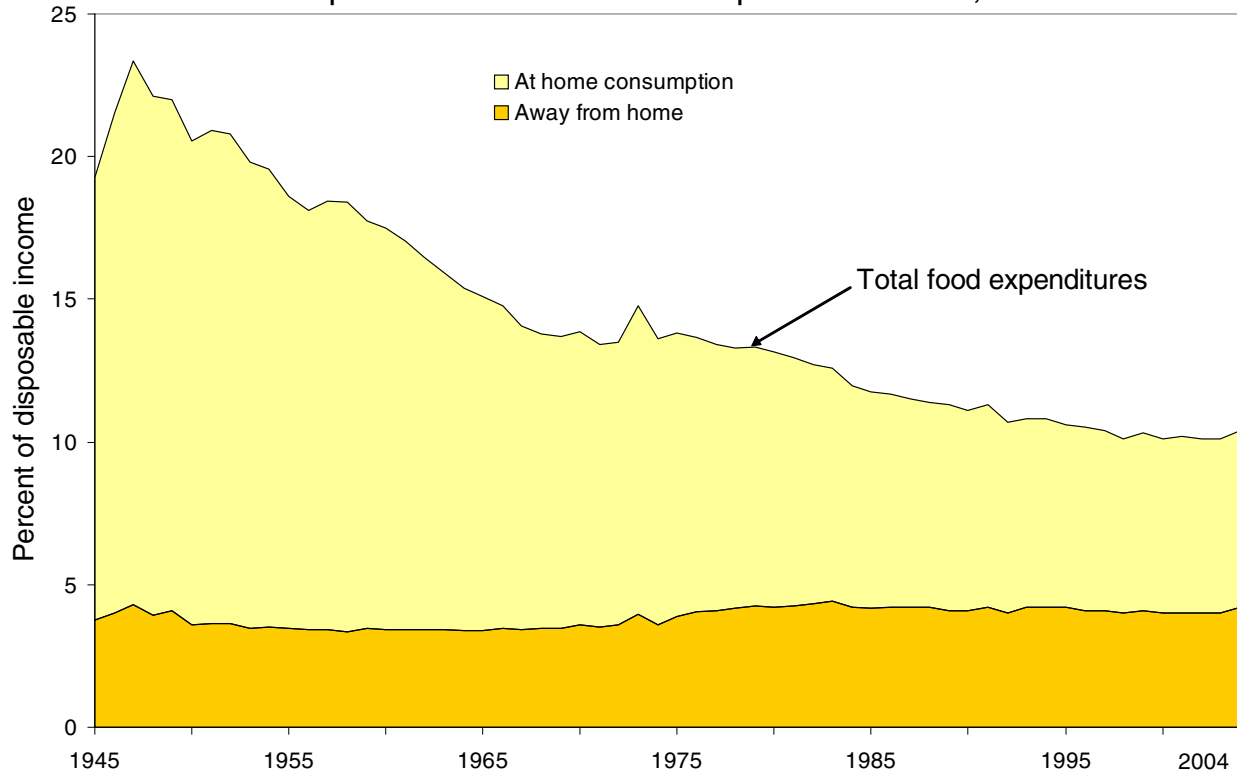
^b All dairy products, milk equivalent, milkfat basis.

^c Includes potatoes and sweet potatoes.

^d Includes instant and regular coffee.

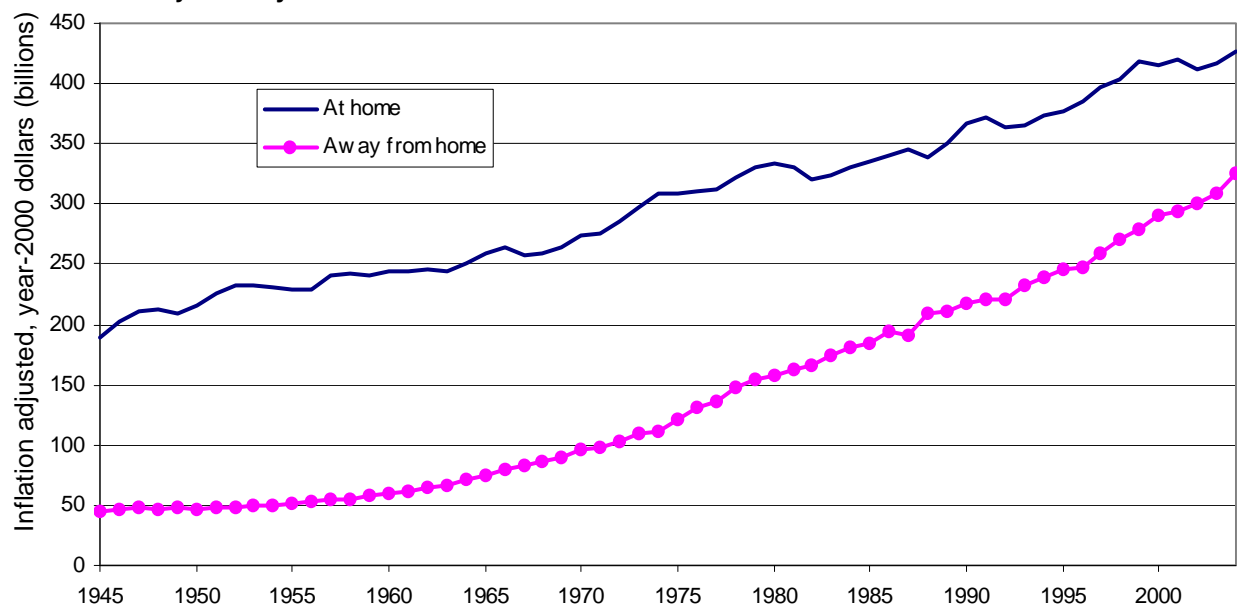
^e Beginning 1983, includes wine coolers.

FIGURE 2.1
 United States food expenditures as a share of disposable income, 1945–2004



Source: Economic Research Service, USDA.
<http://www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/Table7.htm>

FIGURE 2.2
 United States food expenditures, at home and away from home, 1945–2004, in inflation-adjusted year-2000 dollars^a



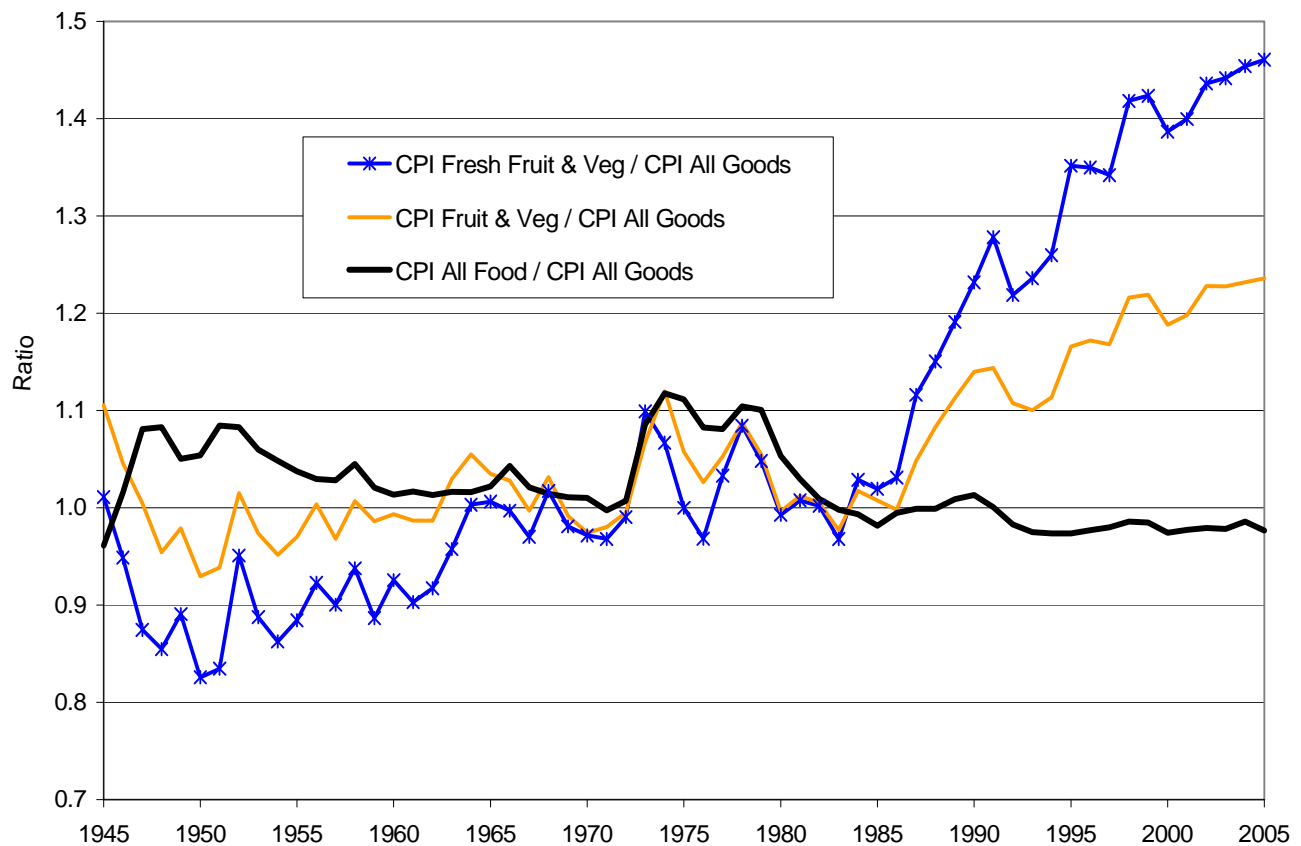
Source: Economic Research Service, USDA.
<http://www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/Table7.htm>

^a The inflation adjustment used by the U.S. Department of Commerce, Bureau of Economic Analysis, GDP deflator

The price of food relative to all goods purchased by consumers has remained relatively stable since 1984 when adjusted for inflation. In contrast, the inflation adjusted price of fruits and vegetables relative to the price of all goods has risen markedly, especially for fresh fruits and vegetables (Figure 2.3).

FIGURE 2.3

United States retail food and fruit and vegetable price indices relative to price indices of all consumer goods, 1945–2005



Sources: USDA Economic Research Service. <http://ers.usda.gov/data/foodconsumption/>; Bureau of Labor Statistics, U.S. Department of Labor, Consumer Price Index, <http://data.bls.gov/PDQ/outside.jsp?survey=cu>

Leading commodities and cash receipts

Compared to other states, California's agriculture is very diverse, with the total output of the top 25 commodities accounting for 82 percent of the state's farm cash receipts. Dairy, greenhouse/nursery products and grapes have been the state's leading products for many years, with a combined 36 percent of total cash receipts in 2004 (Table 2.2 and Figure 2.4). By commodity group, fruits and tree nuts make up the largest share of cash receipts (Figure 2.5).

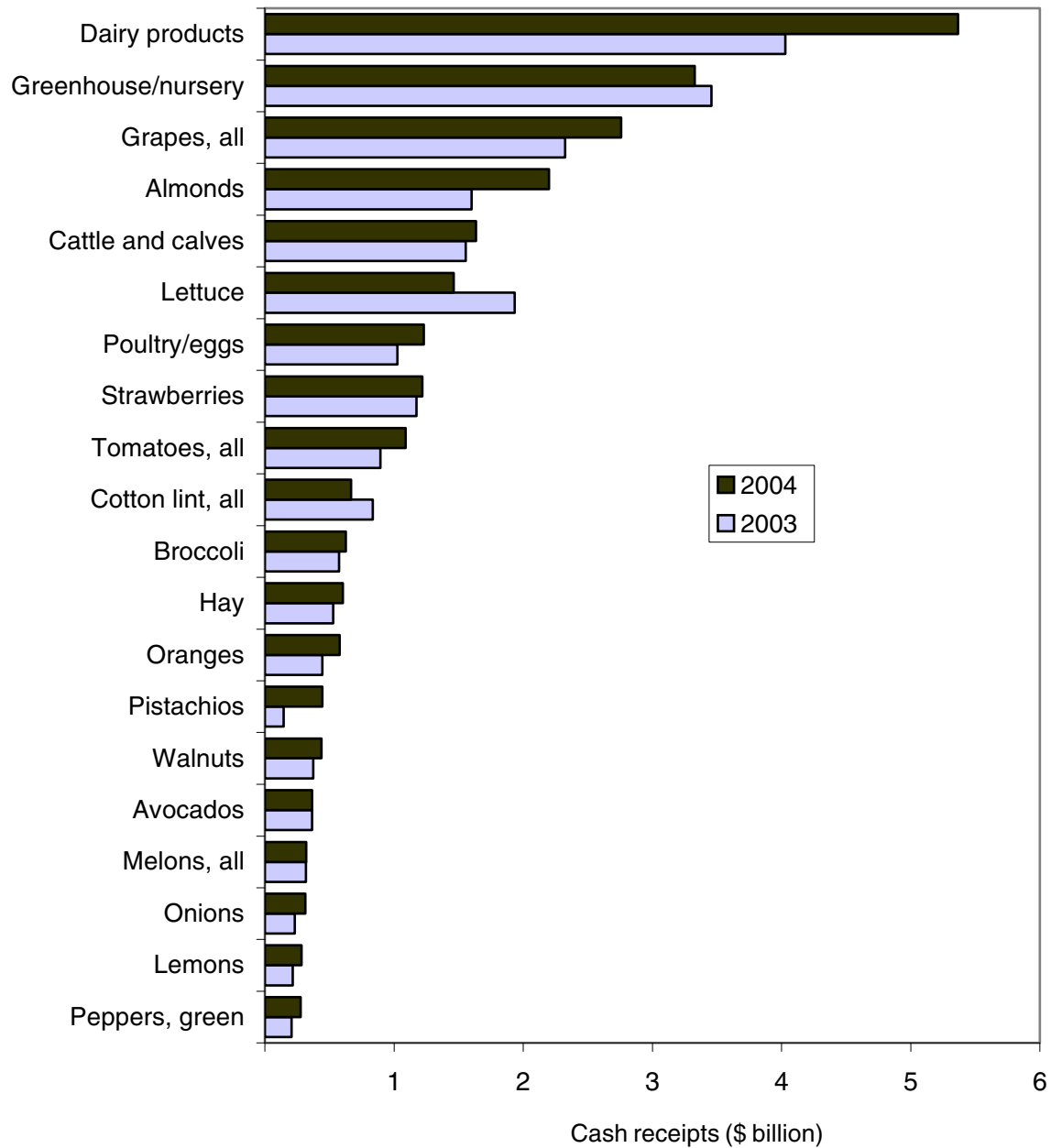
TABLE 2.2

Leading California commodities by cash receipts, 2004

Rank		Value of receipts	Share of California receipts	California share of U.S. value
		(\$1,000)	(percent)	
1	Dairy products	5,365,992	16.9	19.6
2	Greenhouse/nursery	3,328,147	10.5	21.2
3	Grapes	2,758,467	8.7	91.5
4	Almonds	2,200,055	6.9	100.0
5	Cattle and calves	1,633,740	5.1	3.5
6	Lettuce	1,462,331	4.6	70.7
7	Poultry/eggs	1,230,065	3.9	4.2
8	Strawberries	1,218,860	3.8	82.8
9	Tomatoes, processing	669,973	2.1	93.1
10	Cotton lint, all	666,510	2.1	14.3
11	Broccoli	625,721	2.0	92.5
12	Hay	603,344	1.9	13.7
13	Oranges	577,326	1.8	36.8
14	Pistachios	444,160	1.4	100.0
15	Walnuts	438,750	1.4	100.0
16	Tomatoes, fresh	420,616	1.3	31.3
17	Avocados	365,371	1.1	96.3
18	Melons, watermelons, etc.	319,027	1.0	45.3
19	Onions	313,534	1.0	30.6
20	Lemons	284,413	0.9	88.9
21	Peppers, green, fresh	277,120	0.9	48.1
22	Celery	265,081	0.8	93.4
23	Peaches	251,254	0.8	54.4
24	Potatoes	217,782	0.7	9.2
25	Spinach, fresh	199,920	0.6	76.6
	Top 25	26,137,559	82.1	
	All commodities	31,835,183	100.0	13.2

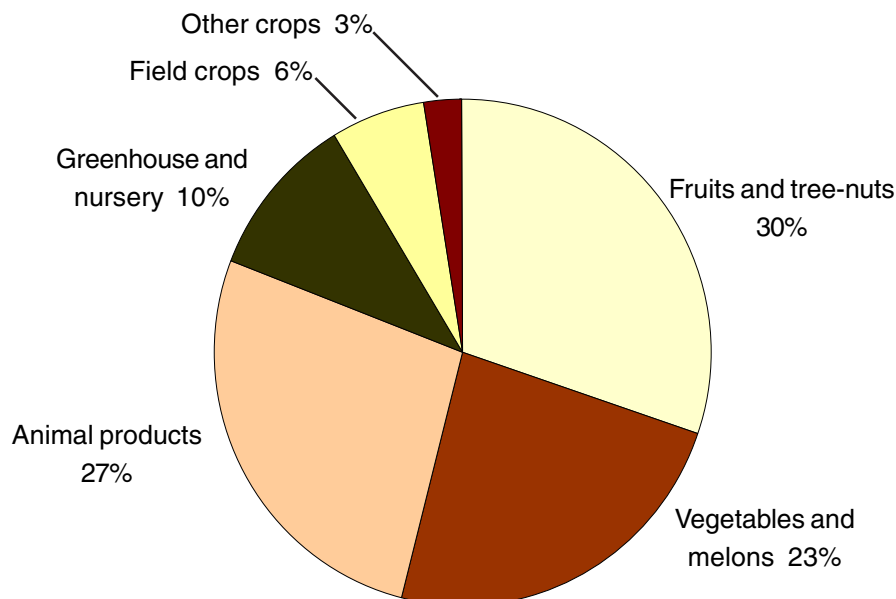
Source: USDA Economic Research Service. <http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm>

FIGURE 2.4
 Value of leading California commodities, 2003–2004



Source: USDA Economic Research Service. <http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm>

FIGURE 2.5
Cash receipts by commodity group, California, 2004



Source: USDA Economic Research Service. <http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm>

TABLE 2.3
Crops for which California is the sole or major U.S. producer:
California's share of national cash receipts, 2004

99 percent or greater	70 to 98 percent	
Almonds	Apricots	Avocados
Artichokes	Broccoli	Cauliflower
Dates	Celery	Cotton, American pima
Figs	Garlic	Grapes
Kiwifruit	Lemons	Lettuce
Nectarines	Plums	Prunes
Olives	Raspberries	Spinach
Peaches, clingstone	Strawberries	Tomatoes, processing
Pistachios		
Walnuts		

Source: USDA Economic Research Service. <http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm>

California accounts for virtually the entire U.S. production of almonds, pistachios and walnuts, and it produces a very large portion of the grapes, avocados, celery and plums. California produces more than 70 percent of the U.S. production of a number of different commodities (Table 2.3).

The California share of national cash receipts from farm marketings has increased from 9.5 percent in 1965 to 13.2 percent in 2004 (Table 2.4). The leading state in farm revenue since 1948, California cash receipts were 93 percent higher than Texas, the second ranking state (Figure 2.6). California also leads in net farm income, with a value 74 percent higher than Texas (Figure 2.7).

TABLE 2.4

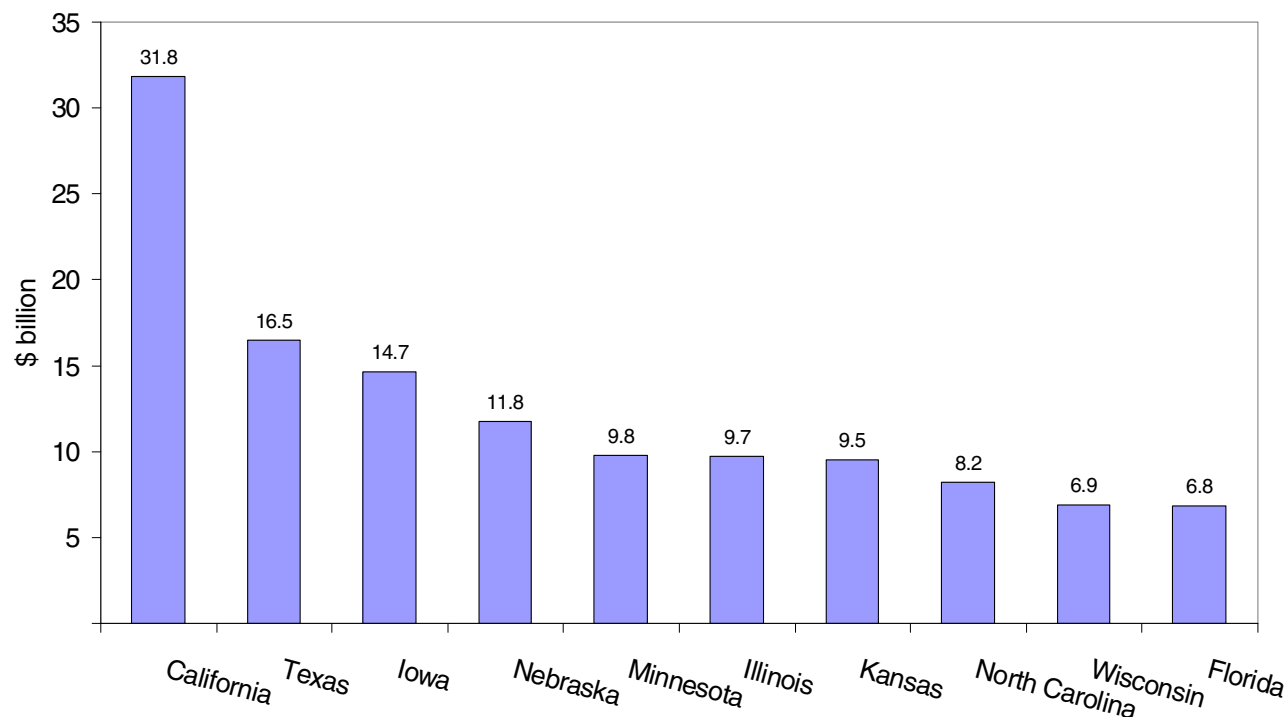
Cash receipts from farm marketings, United States and California, selected years, year-2000 inflation-adjusted dollars.

	California	U.S.	California share of U.S.
	constant year-2000 dollars (million)		percent
1965	16,516	174,682	9.5
1975	22,300	233,846	9.5
1985	20,517	206,537	9.9
1995	24,587	204,377	12.0
2004	29,180	221,123	13.2

Source: USDA Economic Research Service. <http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm>

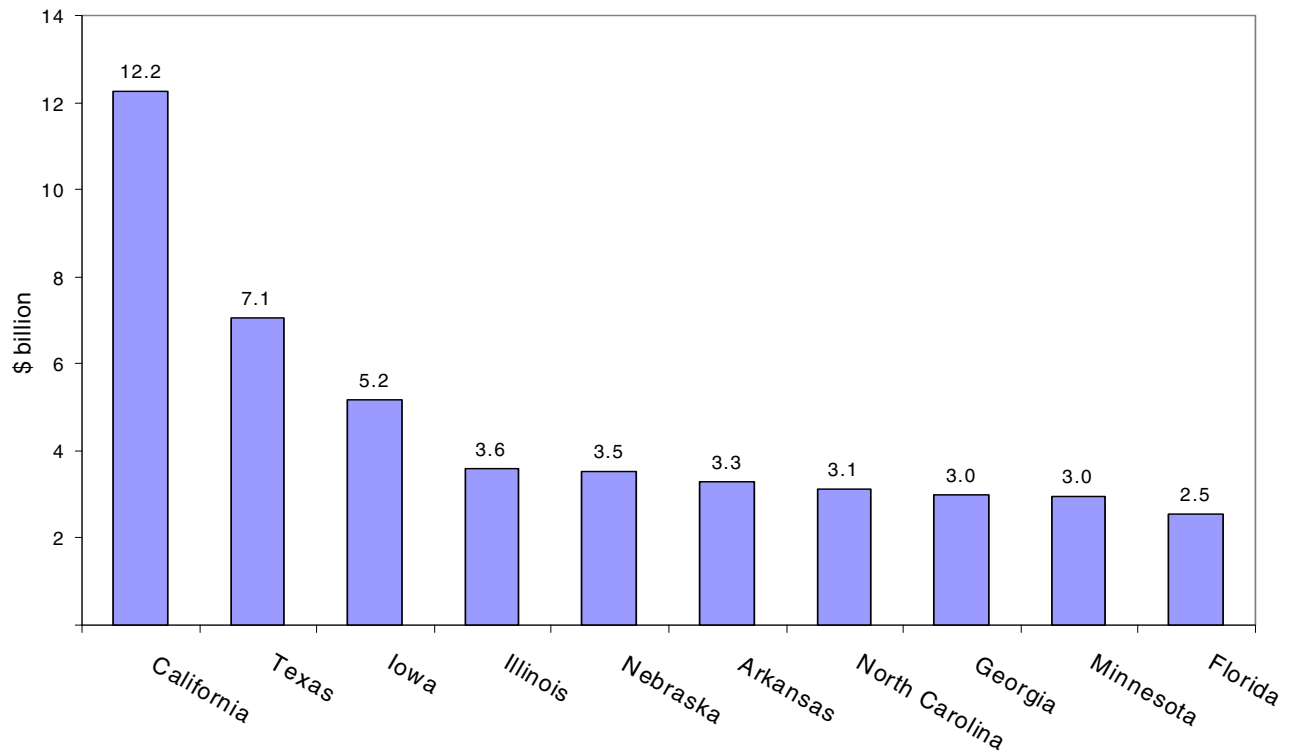
FIGURE 2.6

Top 10 states by cash receipts from farm marketings, 2004



Source: USDA Economic Research Service. <http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm>

FIGURE 2.7
Top 10 states by net farm cash income, 2004



Source: USDA Economic Research Service. <http://www.ers.usda.gov/data/FarmIncome/finfidmu.htm>

Production by principal commodity group

The 2002 *Census of Agriculture* categorizes each farm according to the North American Industry Classification System principal commodity groups. Total farm sales are classified by principal commodity and aggregated by total sales of all commodities on that farm. As reported in the census, the principal commodity of a farm is the one that accounts for the largest share of the farm's sales, not necessarily the majority. Principal commodities are aggregated at different levels.

TABLE 2.5

Number of farms, land and sales by principal commodity, California and United States, 2002^a

California	Farms	Land in farms (acres)	Acres per farm	Total sales (\$million)	Average sales per farm (\$)
Total	79,631	27,589,027	346	25,737	323,205
Field crops (oilseeds, grains, cotton)	7,538	4,585,324	608	2,291	303,896
Vegetable and melon farming	2,898	1,861,367	642	4,915	1,696,067
Fruit and tree nut farming	36,574	4,800,419	131	8,557	233,977
Greenhouse, nursery, and floriculture	4,388	219,286	50	3,319	756,378
Beef cattle, including feedlots	11,812	12,870,237	1,090	1,323	112,000
Dairy cattle and milk production	2,361	968,070	410	4,064	1,721,146
All other animals	14,060	2,284,324	162	1,268	90,196

United States	Farms	Land in farms (acres)	Acres per farm	Total sales (\$million)	Average sales per farm (\$)
Total	2,128,982	938,279,056	441	207,192	97,320
Field crops (oilseeds, grains, cotton)	791,955	360,546,218	455	56,585	71,449
Vegetable and melon farming	34,624	11,215,546	324	13,246	382,581
Fruit and tree nut farming	95,680	11,525,130	120	13,556	141,680
Greenhouse, nursery, and floriculture	64,366	4,819,149	75	15,076	234,219
Beef cattle, incl. feedlots	719,903	445,806,364	619	43,571	60,523
Dairy cattle and milk production	72,537	27,351,777	377	23,443	323,182
All other animals	349,917	77,014,872	220	41,707	119,190

Source: USDA National Agricultural Statistics Service, *Census of Agriculture*, 2002. http://www.nass.usda.gov/Census_of_Agriculture/index.asp

^a Farms classified according to North American Industry Classification System. For a farm to be classified under a certain commodity group, that commodity must account for the largest portion of the farm sales. The value of total sales includes all commodities produced on the farm.

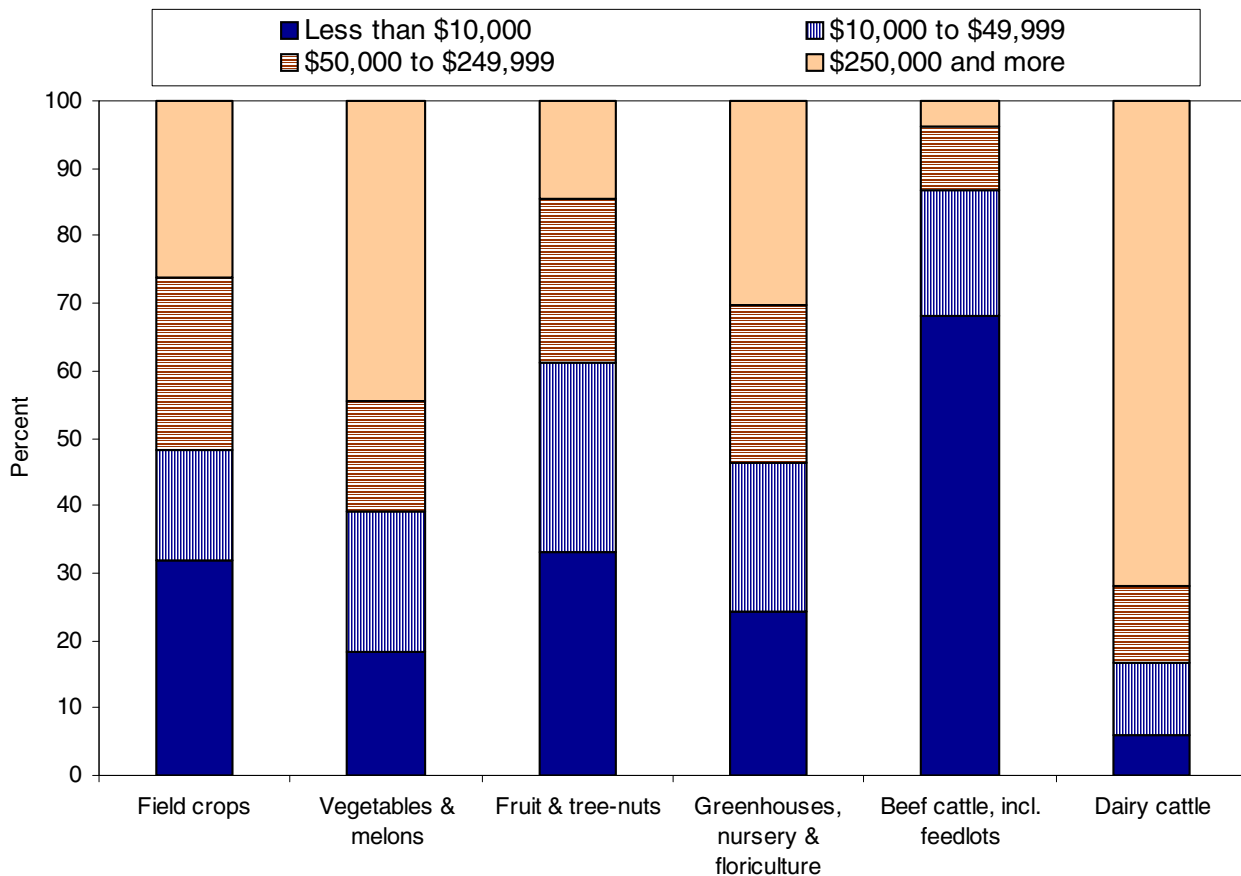
With only 3.7 percent of the nation’s farms, California has 38 percent of the U.S. farms that produce fruits and tree nuts as their principal commodity. It has 8.4 percent of the U.S. farms with vegetables as the principal commodity, and 6.8 percent of the U.S. farms that produce mainly greenhouse and nursery products (Table 2.5). Conversely, California has a negligible number of farms where the principal commodity is either oilseeds or grains, and none of the 37,000 U.S. tobacco farms.

Compared to the United States as a whole, the average California farm records higher sales, especially farms where the principal commodities are field crops, vegetables or dairy cattle and milk.

Almost two-thirds of California farms produce some plant crop as the main product, while the main product of the other third is of animal origin. More than 36,000 farms or 46 percent of all farms produce fruit or nuts as the principal commodity. These farms account for one-third of all the state’s farm cash receipts. Dairies and beef cattle producers account for 21 percent of the state’s farm cash receipts, and farms producing vegetables and melons account for 19 percent. Beef cattle producers account for 47 percent of California’s farm acreage.

FIGURE 2.8

Farms according to sales per farm by principal commodity group, California, 2002



Source: USDA National Agricultural Statistics Service, *Census of Agriculture, 2002*, Table 56.

Fewer than 10 percent of the state's farms produce field crops, according to the principal commodity classification system (Table 2.5). Total sales from these farms account for 9 percent of the farm cash receipts in the state, and the average sales per farm is very close to the state average for all crops. A third of these farms growing field crops have sales of less than \$10,000 each, whereas 26 percent sell more than \$250,000 each (Figure 2.8).

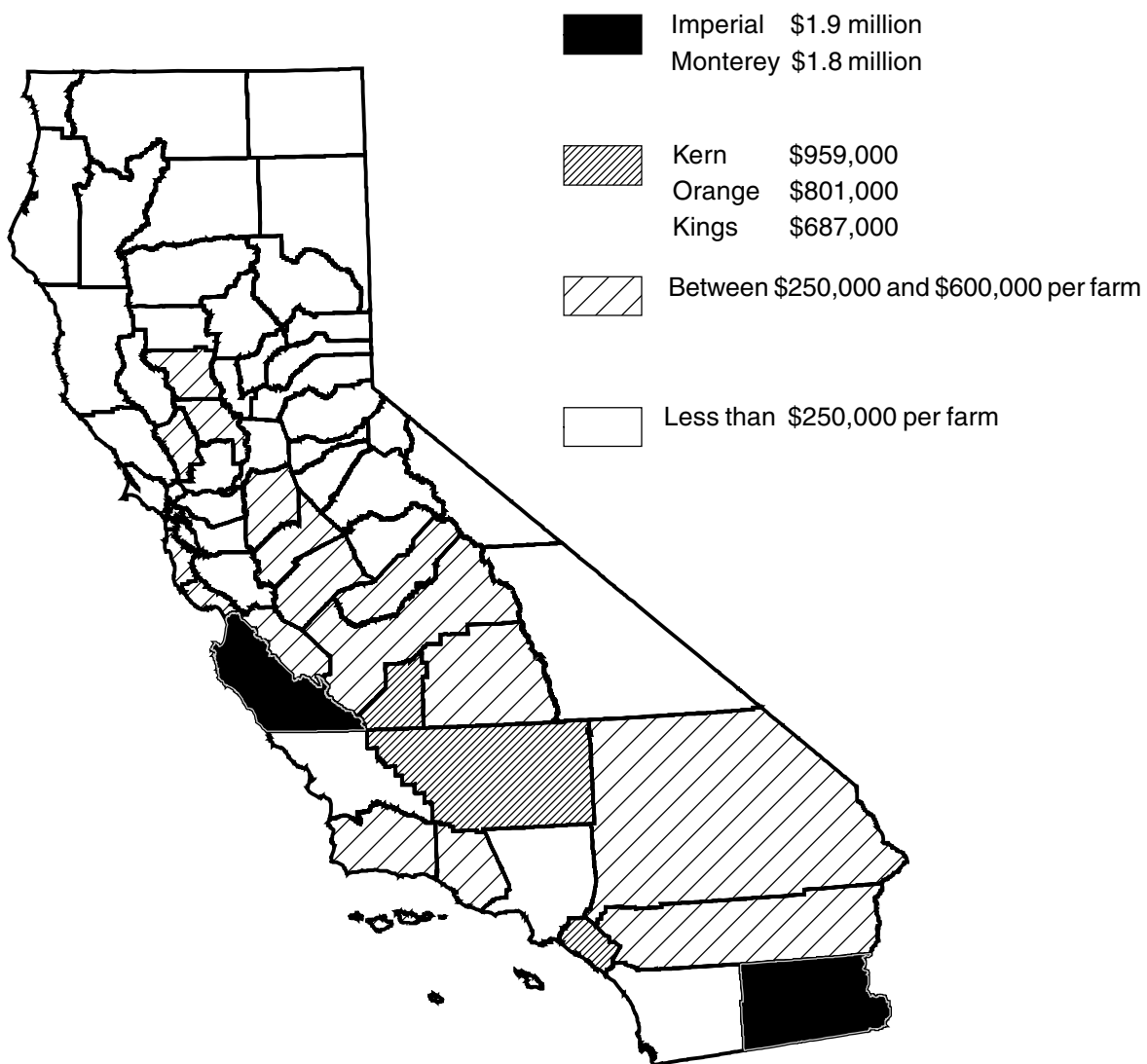
Fewer than 4 percent of the state's farms comprise the vegetable and melons farming group (Table 2.5). Total sales from these farms approach \$5 billion, one-fifth of the state's total sales. Eighteen percent of the farms with vegetables and melons as the principal commodity group sell less than \$10,000 each, while 44 percent have sales above \$250,000 (Figure 2.8).

Farms with fruits and tree nuts as the principal commodity group have 33 percent of the state's total farm sales. One-third of these farms have sales under \$10,000 each, and only 14 percent record sales higher than \$250,000.

Farms with greenhouse and nursery production as the principal activity account for 13 percent of the state's sales. The distribution of the different sales categories among this group of farms is relatively even, with 24 percent of farms selling less than \$10,000 and 30 percent selling above \$250,000.

The beef and dairy cattle and milk production groups present an interesting contrast. Not considering "other animals," beef cattle operations are the state's smallest farms in terms of average sales and dairies are the largest. Among beef cattle producers, 68 percent have sales under \$10,000, whereas only 6 percent of the dairies are in that category. Conversely, only 4 percent of the beef cattle farms record sales above \$250,000, compared to 72 percent of the dairies.

FIGURE 2.9
Average production value per farm by county



NOTE: Revenue categories are formed to maximize the difference between categories and minimize the difference within.

Source: U.C. Agricultural Issues Center based on *Census of Agriculture*, 2002. http://www.nass.usda.gov/Census_of_Agriculture/index.asp

Average production value per farm is greatest in Imperial and Monterey counties (Figure 2.9).

The *U.S. Census of Agriculture*, however, does not track commodity-specific data at the county level as do county Agricultural Commissioners' reports. For that reason the following county-level section is based on the *2004 County Agricultural Commissioners' Data*.

Regional and county-level production

California can be divided into seven production regions (previously described in Chapter 1 and depicted in Figure 1.8). The San Joaquin Valley, the leading agricultural area in the state, produces a broad array of fruits, vegetables, livestock, tree nuts, field crops and dairy products. The Sacramento Valley is known for its horticultural and field crops, particularly processed tomatoes and rice. The Central Coast is a major horticultural region containing the main vegetable production area. The South Coast also grows a number of horticultural crops, including citrus, and is a major producer of nursery and floriculture products. The Desert region produces winter vegetables, field crops, and horticultural specialties. The Mountain region holds California's vast forest and rangeland resources. The North Coast is a diverse region containing California's premier wine production areas to the south and the timber industry to the north.

California's 17-county Central Valley—the Sacramento and San Joaquin valleys—accounts for 60.3 percent of the state gross value of agricultural production according to data from county Agricultural Commissioners' reports. Gross production value refers to all farm production that has been sold through any marketing channel or consumed on the farm. Fresno has been the number one county since the 1950s and in 2004 was responsible for one-eighth of the state's agricultural production value (Table 2.6).

In 2004, 13 counties produced over \$1 billion each in gross agricultural value, and 4 counties recorded sales between \$500 million and \$1 billion. Seventeen counties, each with more than \$500 million in sales, accounted for 84 percent of the agricultural production value of the state (Figure 2.10). Of the 58 counties in California, 36 produced a gross agricultural value greater than \$100 million.

The top 6 counties—Fresno, Tulare, Monterey, Kern, Merced and Stanislaus—account for 52 percent of California's total value of agricultural production. With the exception of Monterey County, all of the top producing counties list dairy, along with either almond or grape production, among their top 5 products.

In 2004, 9 of the 10 lowest producing counties, ranked by value, list cattle stockers and feeders or cattle and calves as their top grossing agricultural commodity.

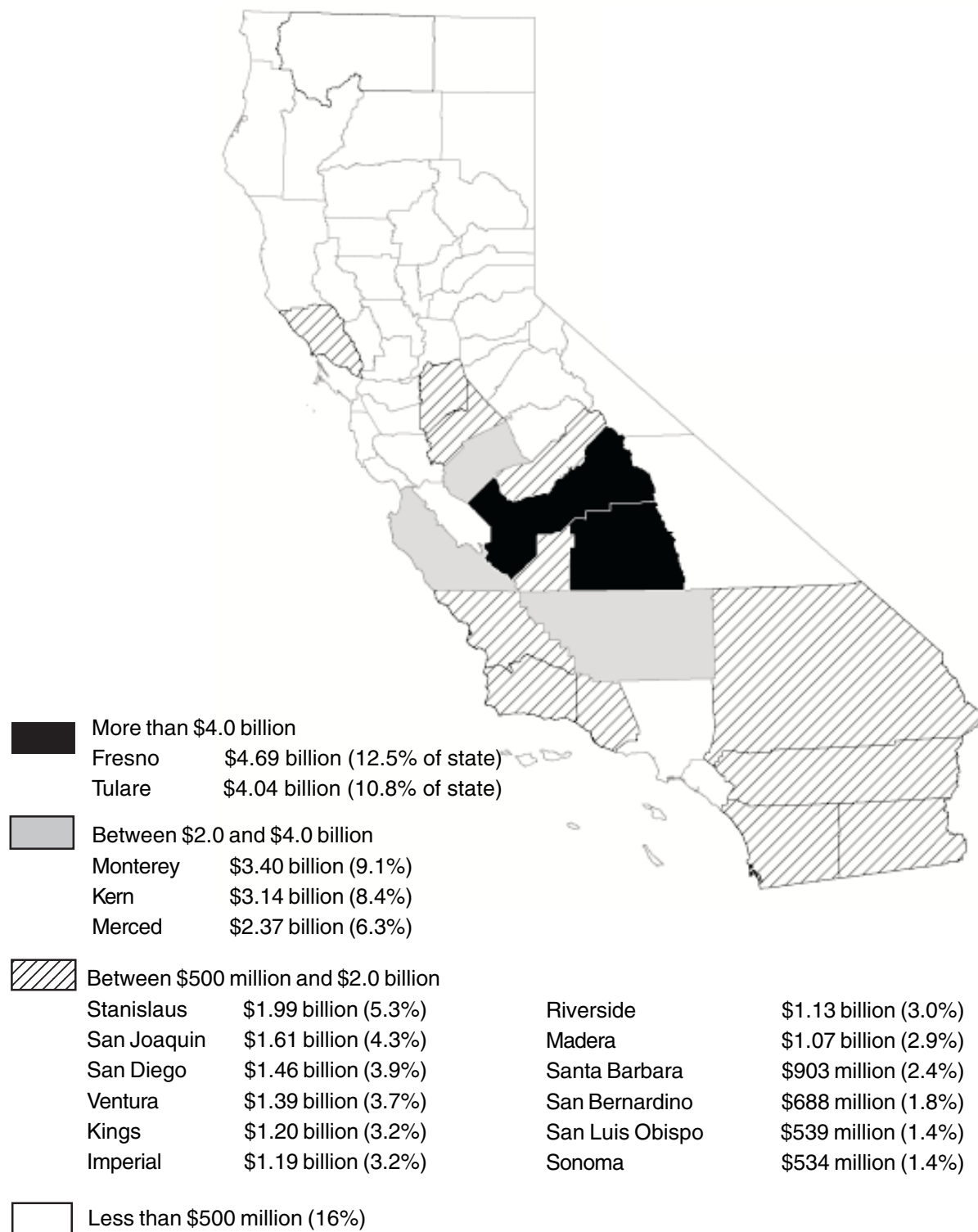
TABLE 2.6
Agricultural production value by county, 2004

Rank	County	Production value ^a (\$million)	Percent of state total
1	Fresno	4,690	12.5
2	Tulare	4,040	10.8
3	Monterey	3,398	9.1
4	Kern	3,142	8.4
5	Merced	2,366	6.3
6	Stanislaus	1,978	5.3
7	San Joaquin	1,613	4.3
8	San Diego	1,462	3.9
9	Ventura	1,387	3.7
10	Kings	1,197	3.2
11	Imperial	1,187	3.2
12	Riverside	1,131	3.0
13	Madera	1,070	2.9
14	Santa Barbara	903	2.4
15	San Bernardino	688	1.8
16	San Luis Obispo	539	1.4
17	Sonoma	534	1.4
18	Santa Cruz	448	1.2
19	Butte	358	1.0
20	Napa	357	1.0
21	Colusa	352	0.9
22	Glenn	348	0.9
23	Yolo	338	0.9
24	Sacramento	326	0.9
25	Los Angeles	300	0.8
26	Sutter	300	0.8
27	Orange	294	0.8
28	Humboldt	289	0.8
29	San Benito	266	0.7
30	Santa Clara	258	0.7
31	Solano	205	0.5
32	San Mateo	182	0.5
33	Siskiyou	182	0.5
34	Mendocino	148	0.4
35	Tehama	146	0.4
36	Yuba	135	0.4
37	Contra Costa	95	0.3
	All others	833	2.2
	Total	37,485	100.0

Source: Agricultural Statistics Service, *Summary of County Agricultural Commissioners' Reports, 2003-2004*.
http://www.nass.usda.gov/Statistics_by_State/California/Publications/AgComm/200410cavtb00.pdf

^aIncluding timber.

FIGURE 2.10
Agricultural production value by county, California 2004



Source: U.C. Agricultural Issues Center based on Table 2.6, derived from Agricultural Statistics Service, *Summary of County Agricultural Commissioners' reports, 2003-2004*.
http://www.nass.usda.gov/Statistics_by_State/California/Publications/AgComm/200410cavtb00.pdf.

The San Joaquin Valley is the number one region for most of the commodity groups (Table 2.7). The combined farm sales of the 8 counties that form the San Joaquin Valley would rank at the national level after the state of Texas and before the state of Iowa. This region produces about half of the total value of agricultural production in California. It ranks first in value of fruit and tree nut production with 52.7 percent, first in livestock products with 74.4 percent, and first in field crops with 60.9 percent. The area also ranks second for vegetables and melons with 31.1 percent, just behind the Central Coast region.

The South Coast is the principal region for greenhouse production (51.2%) and second for fruit and tree nut production. The Central Coast is first in vegetable and melon production (43.9%) and second in greenhouse production. The Desert region accounts for 12.8 percent of the livestock production value, second after the San Joaquin Valley (74.4%). The Sacramento Valley is second, after San Joaquin Valley, in field crop production value, with 21.1 percent of the state total.

TABLE 2.7
Gross production value by commodity group and production region,
California, 2004^a

	Field crops	Fruit & nut crops	Livestock products	Nursery, forestry & flowers	Vegetables & melons	All commodities
Percent of California agricultural gross production value						
Central Coast ^b	1.7	13.8	1.7	21.8	43.9	16.5
Desert ^c	9.5	5.3	12.8	7.3	9.1	9.4
Mountain ^d	4.8	0.2	2.3	1.3	0.7	1.8
North Coast ^e	0.9	0.8	3.5	2.6	0.2	1.7
Sacramento Valley ^f	21.1	3.9	3.9	2.8	3.6	6.1
San Joaquin Valley ^g	60.9	52.7	74.4	12.9	31.1	50.8
South Coast ^h	1.0	23.3	1.4	51.2	11.5	13.8

Source: U.C. Agricultural Issues Center based on California Agricultural Statistics Service, *2004 County Agricultural Commissioners' Data*, October 2005.

http://www.nass.usda.gov/Statistics_by_State/California/Publications/AgComm/200410cactb00.pdf

^a Regions are per map in Figure 1.8.

^b Central Coast is Alameda, Contra Costa, Monterey, San Benito, San Francisco, San Luis Obispo, San Mateo, Santa Clara and Santa Cruz counties.

^c Desert is Imperial, Riverside and San Bernadino counties.

^d Mountain is Alpine, Amador, Calaveras, El Dorado, Inyo, Lassen, Mariposa, Modoc, Mono, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Trinity and Tuolumne counties.

^e North Coast is Del Norte, Humboldt, Lake, Marin, Mendocino, Napa and Sonoma counties.

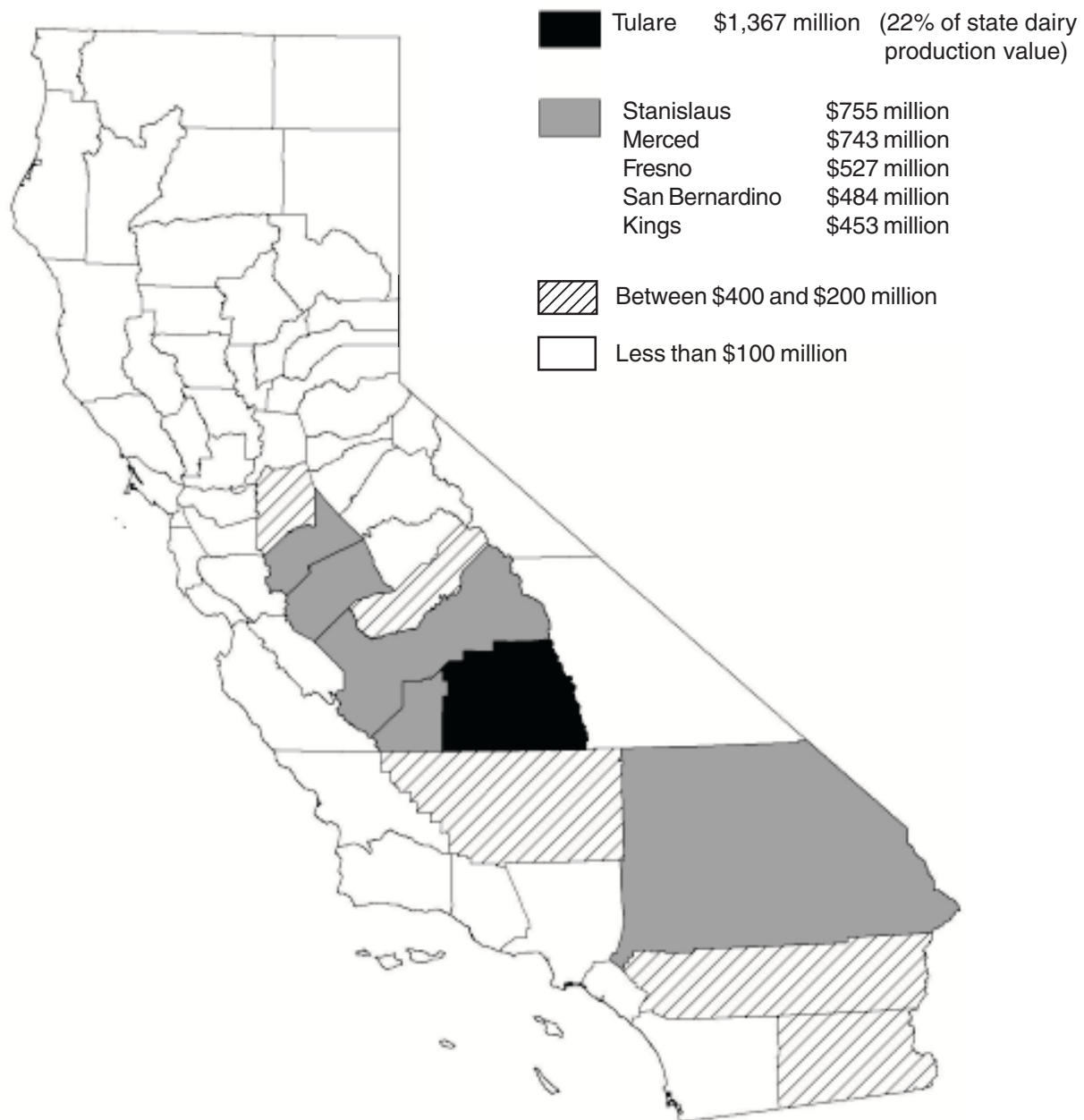
^f Sacramento Valley is Butte, Colusa, Glenn, Sacramento, Solano, Sutter, Tehama, Yolo and Yuba counties.

^g San Joaquin Valley is Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare counties.

^h South Coast is Los Angeles, Orange, San Diego, Santa Barbara and Ventura counties.

Principal commodities vary across regions and counties. Tulare County is the leader in livestock and dairy production. Monterey County leads in vegetable production, while Fresno County is first in field crops and grape production, and San Diego County leads in greenhouse production. Kern County leads in value of tree nut production. Figures 2.11 - 2.16 display value of production for leading California counties for each major commodity group.

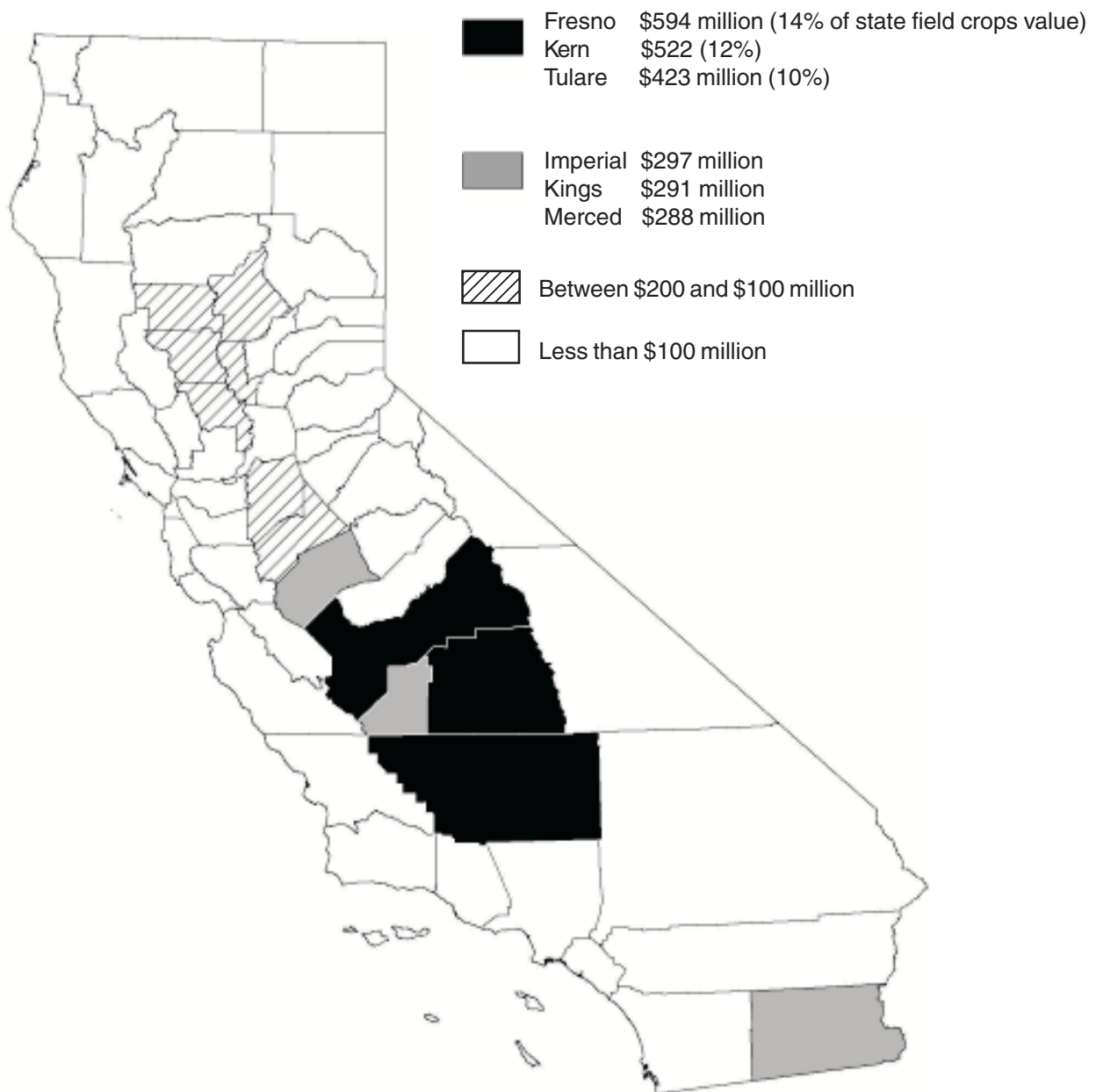
FIGURE 2.11
Dairy production value by county, 2004



Source: U.C. Agricultural Issues Center based on California Agricultural Statistics Service, *2004 County Agricultural Commissioners' Data*, October 2005.

Note: Revenue categories are formed to maximize the difference between categories and minimize the difference within.

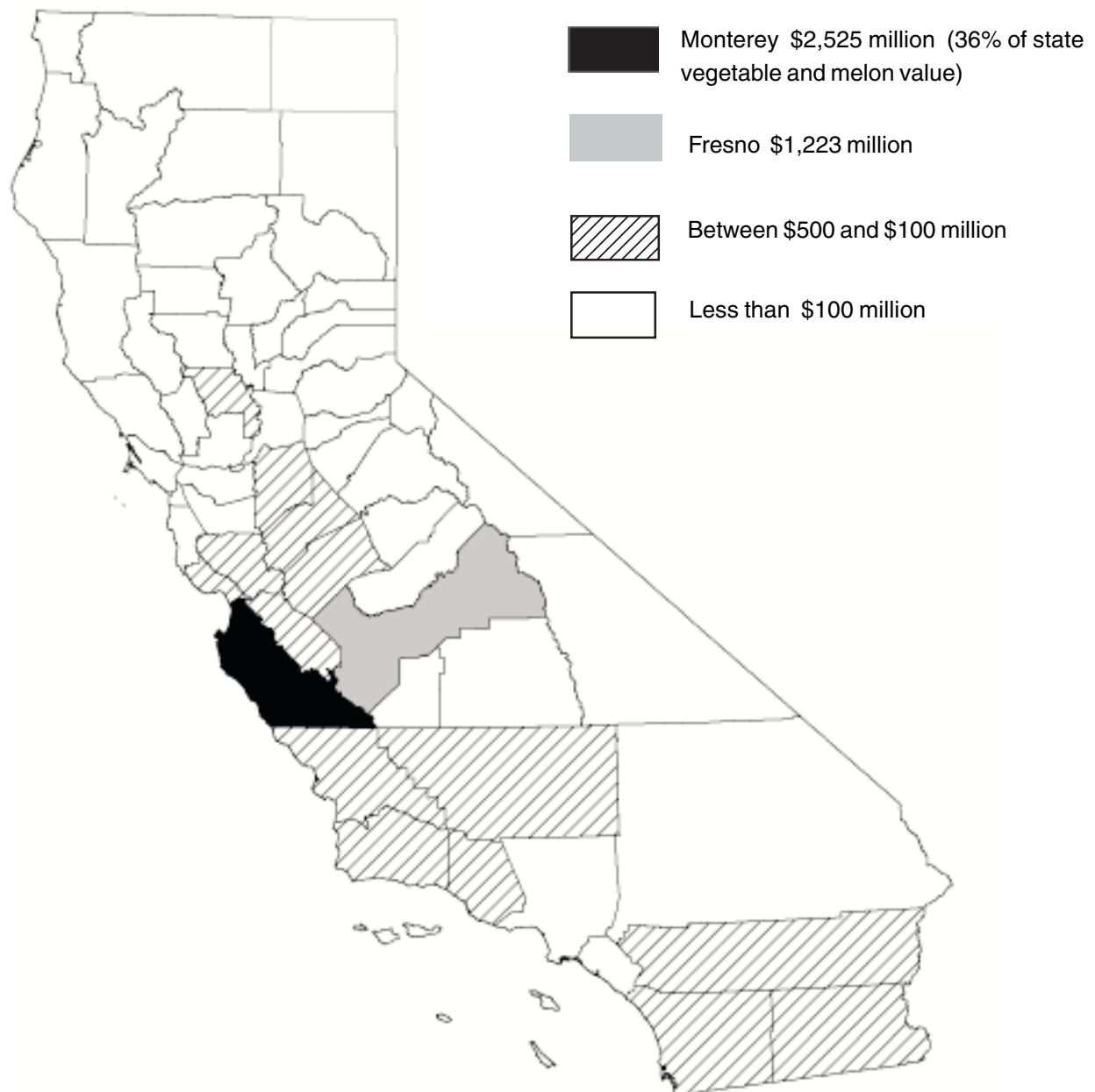
FIGURE 2.12
Field crops production value by county, 2004



Source: U.C. Agricultural Issues Center based on California Agricultural Statistics Service, *2004 County Agricultural Commissioners' Data*, October 2005.

Note: Revenue categories are formed to maximize the difference between categories and minimize the difference within.

FIGURE 2.13
Vegetable and melon production value by county, 2004

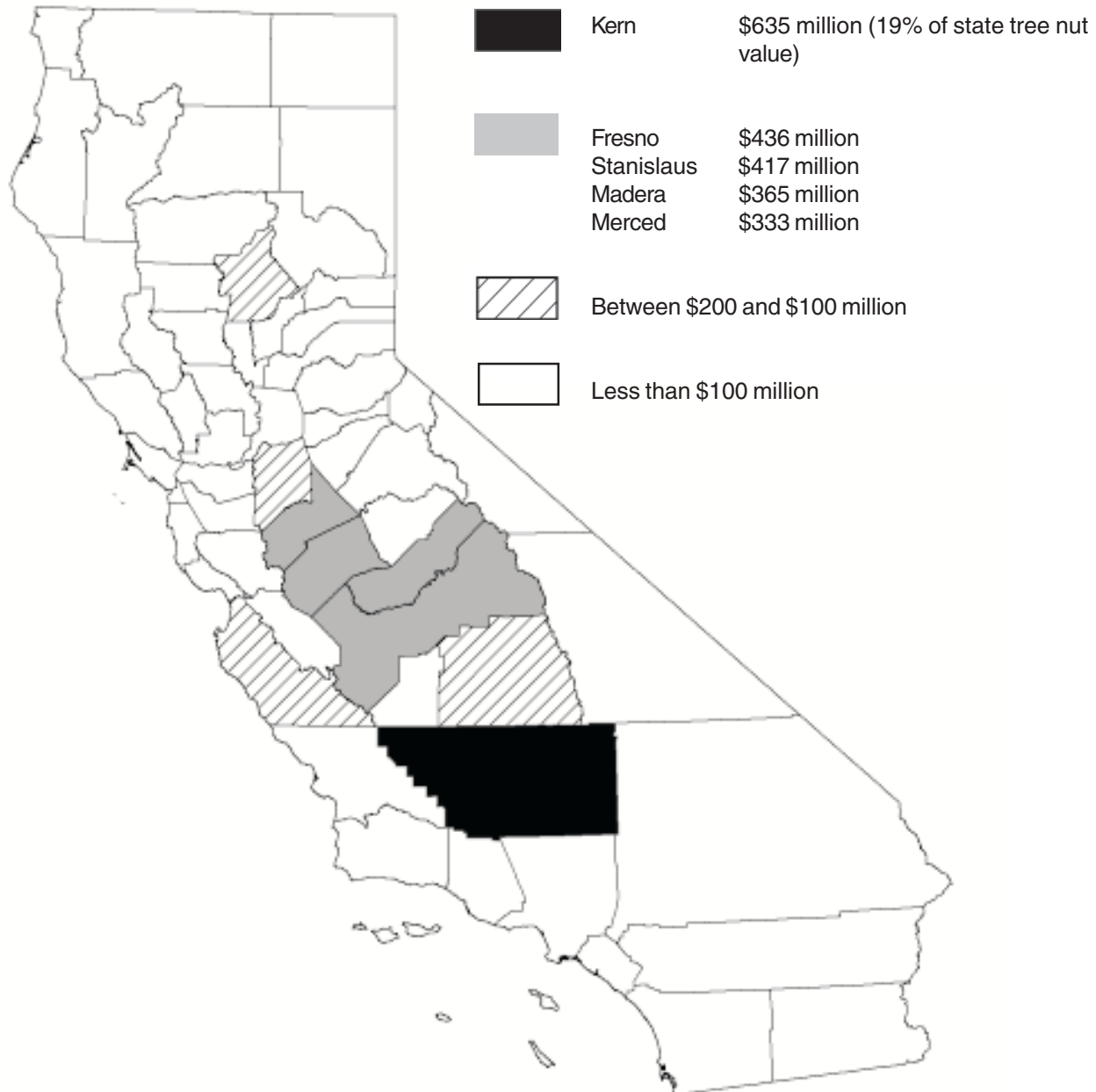


Source: U.C. Agricultural Issues Center based on California Agricultural Statistics Service, 2004 *County Agricultural Commissioners' Data*, October 2005.

Note: Revenue categories are formed to maximize the difference between categories and minimize the difference within.

FIGURE 2.14

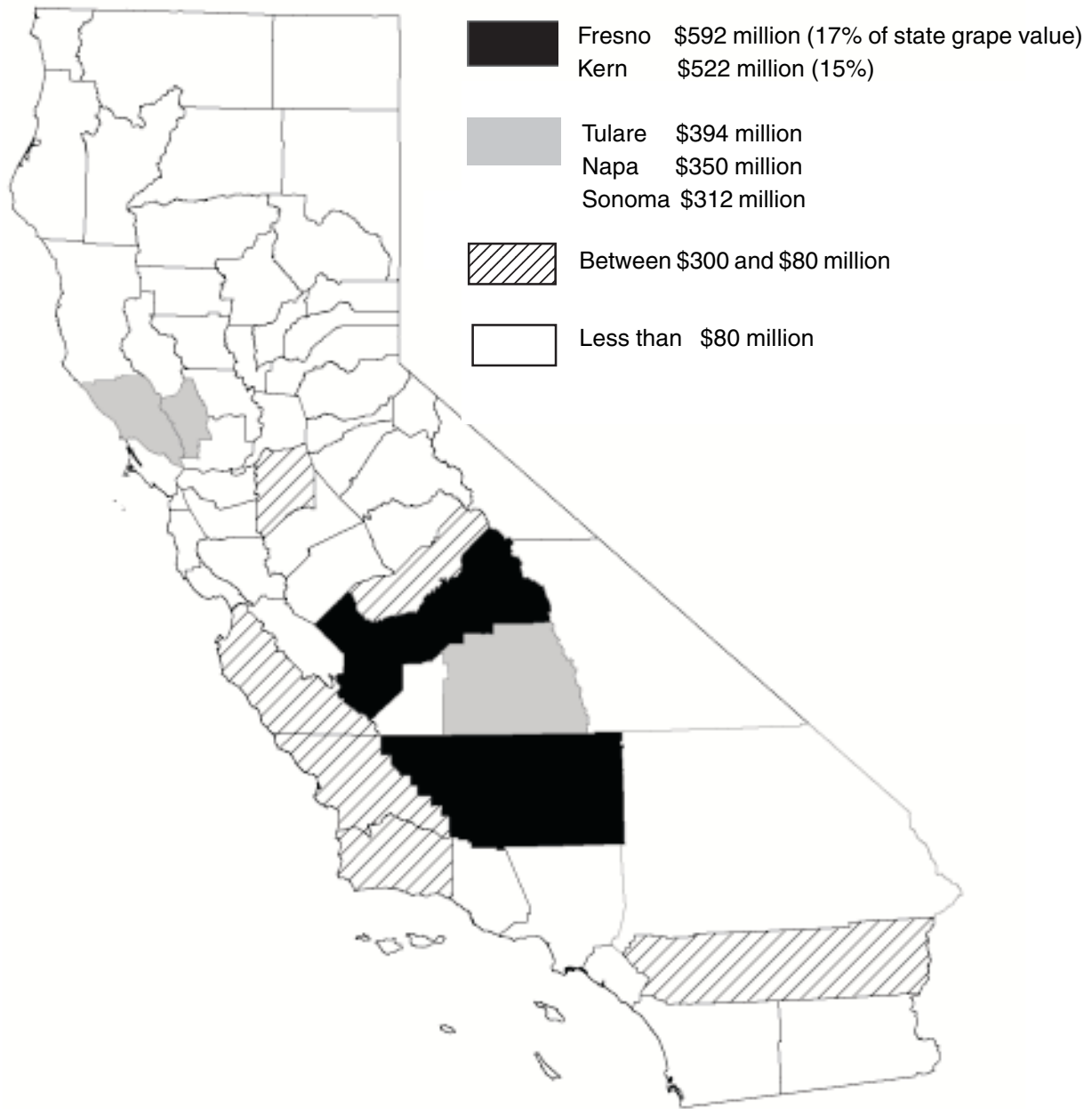
Tree nut production value by county, 2004



Source: U.C. Agricultural Issues Center based on California Agricultural Statistics Service, *2004 County Agricultural Commissioners' Data*, October 2005.

Note: Revenue categories are formed to maximize the difference between categories and minimize the difference within.

FIGURE 2.15
 Grape production value by county, 2004

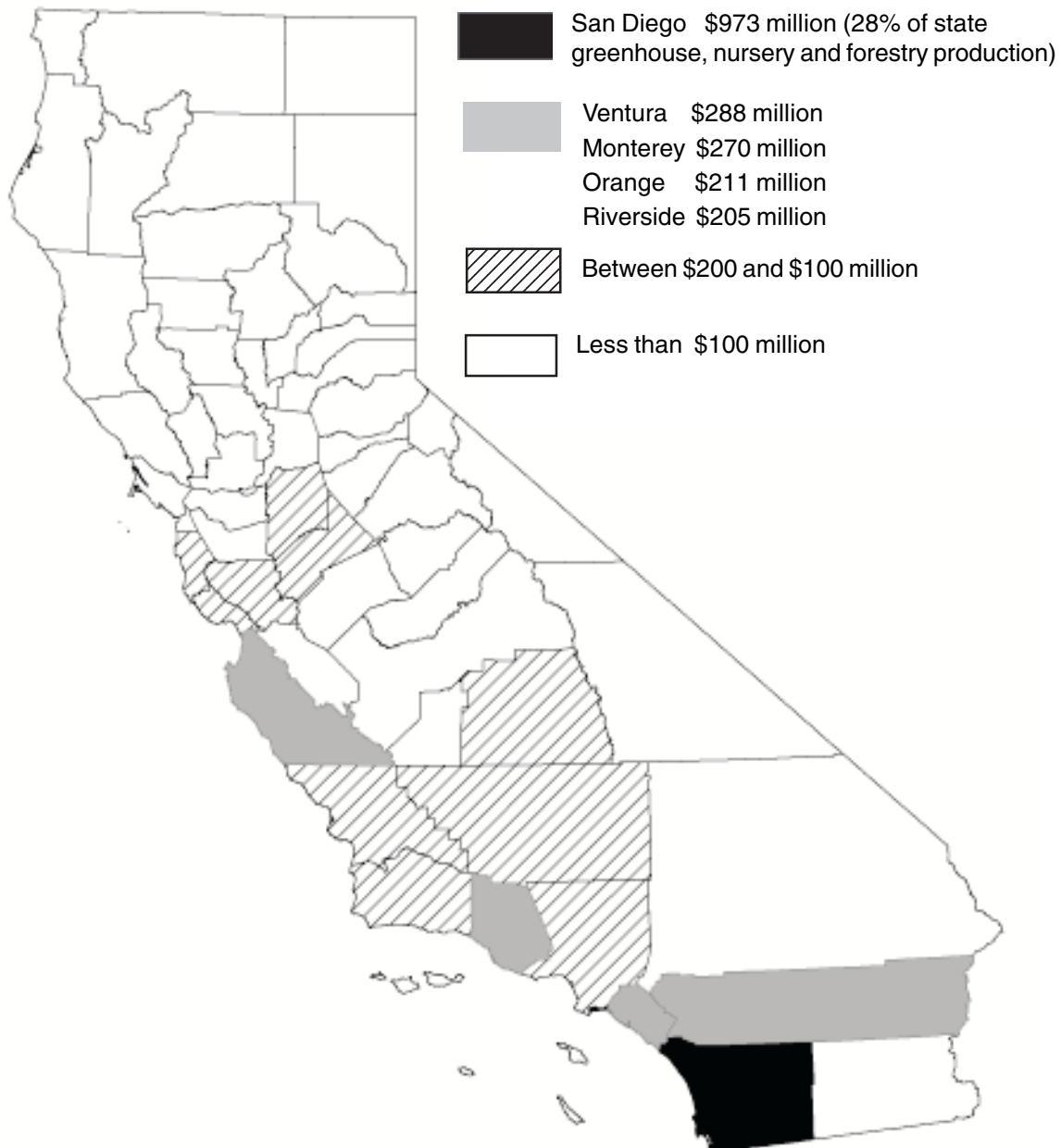


Source: Agricultural Issues Center based on California Agricultural Statistics Service, *2004 County Agricultural Commissioners' Data*, October 2005.

Note: Revenue categories are formed to maximize the difference between categories and minimize the difference within.

FIGURE 2.16

Greenhouse, nursery and forestry production value by county, 2004



Source: Agricultural Issues Center based on California Agricultural Statistics Service, *2004 County Agricultural Commissioners' Data*, October 2005.

Note: Revenue categories are formed to maximize the difference between categories and minimize the difference within.

Organic agriculture

Gross sales of organic agricultural farm products more than doubled between 1997 and 2003. Organic sales plateaued between 1999 and 2001 and resumed rapid growth from 2001 to 2003. The number of organic registrants peaked in 2001, but acres in organic production and gross sales continued to increase (Table 2.8).

TABLE 2.8
California organic agriculture, 1997 - 2003

	Number of Farms	Acres	Sales (\$1,000)
1997	1,533	67,826	158,288
1998	1,757	85,131	182,713
1999	1,741	125,720	204,324
2000	1,903	148,552	200,836
2001	1,925	167,460	207,221
2002	1,847	164,503	250,005
2003	1,757	173,821	329,824

Source: Klonsky, Karen and Kurt Richter. *Statistical Review of California's Agriculture, 1998 - 2003*. Agricultural Issues Center, University of California, 2005. <http://aic.ucdavis.edu/research/StatisticalReview98-03f8.pdf>;
Klonsky, Karen, Laura Tourte, Robin Kozloff, Benjamin Shouse. *A Statistical Picture of California's Organic Agriculture, 1995 - 1998*. Agricultural Issues Center, University of California, 2002. <http://aic.ucdavis.edu/research/misc/Organic1995-98.pdf>.

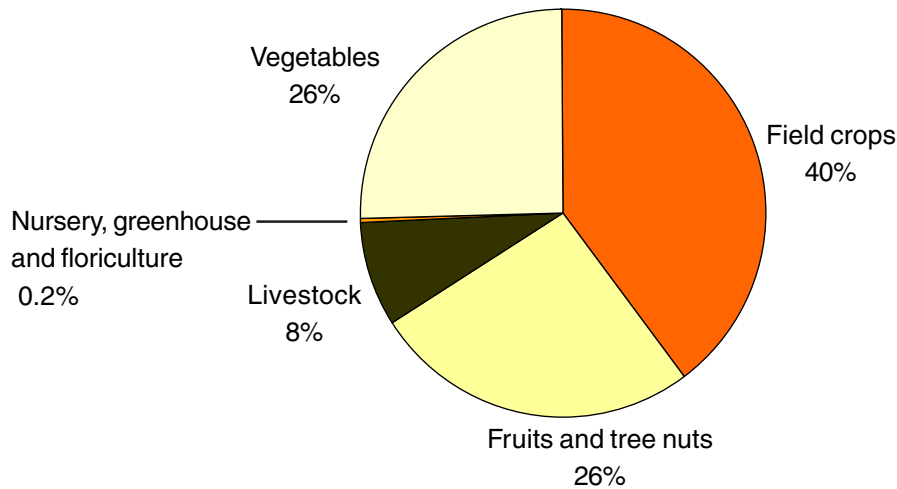
In 2003, 1,757 registered organic growers in California reported almost \$330 million in gross sales from slightly less than 174 thousand acres. Their combined gross sales represented about 1 percent of the state's total agricultural sales. Total gross sales that year had more than doubled since 1997. Farmers using organic techniques produced almost 200 different commodities in 2003. Vegetable crops, with 46.9 percent of the state organic sales, and fruit and nut crops with 35.6 percent account for the majority of California's organic production (Table 2.9).

TABLE 2.9
California organic farmers' cash receipts by commodity group, 2003

	Sales of organic production (\$1,000)	Share of California organic sales (percent)
Vegetable crops	154,827	46.9
Fruit & nut crops	117,468	35.6
Livestock, dairy, poultry, & apiary	34,450	10.4
Field crops	14,987	4.5
Nursery, greenhouse & floriculture	8,090	2.5
Total	329,824	100

Source: Klonsky, Karen and Kurt Richter. *Statistical Review of California's Agriculture, 1998 - 2003*. Agricultural Issues Center, University of California, 2005. <http://aic.ucdavis.edu/research/StatisticalReview98-03f8.pdf>

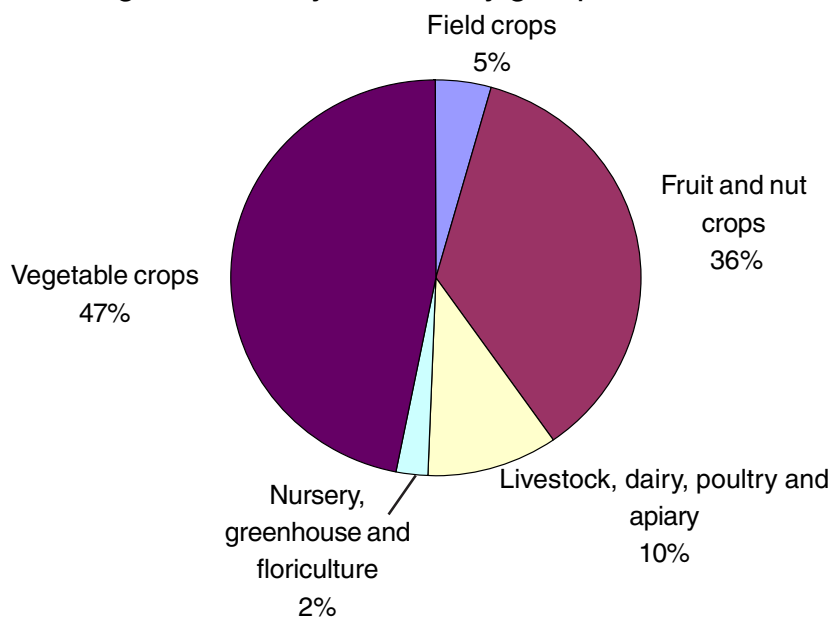
FIGURE 2.17
California organic acres by commodity group, 2003



Source: Klonsky, Karen and Kurt Richter. *Statistical Review of California's Agriculture, 1998 - 2003*. Agricultural Issues Center, University of California, 2005. <http://aic.ucdavis.edu/research/StatisticalReview98-03f8.pdf>

Among the 1,757 registered California organic producers reporting to the state in 2004, some grew more than one commodity group. Over 90 percent of the organic acreage (Figure 2.17) was allocated to field crops (40%), fruit and nut crops (26%), and vegetable crops (26%). The vast majority of organic sales in 2003 (Figure 2.18) consisted of vegetable crops (47%) and fruits and tree nuts (36%).

FIGURE 2.18
California organic sales by commodity group, 2003



Source: Klonsky, Karen and Kurt Richter. *Statistical Review of California's Agriculture, 1998 - 2003*. Agricultural Issues Center, University of California, 2005. <http://aic.ucdavis.edu/research/StatisticalReview98-03f8.pdf>

The organic industry in California is comprised of a large number of small producers and a small number of very large producers who dominate sales. Sixty-nine percent of them report sales of less than \$50,000, whereas 4 percent report sales of over \$1 million. In 2003, 72 percent of the organic sales receipts were generated by producers with gross sales in excess of \$500,000 (Table 2.10).

TABLE 2.10

Percent of registered organic growers and total sales by sales class, 1998-2003

Sales Class \$ per year	1998		1999		2000		2001		2002		2003	
	Growers (percent)	Sales (percent)	Growers (percent)	Sales (percent)	Growers (percent)	Sales (percent)	Growers (percent)	Sales (percent)	Growers (percent)	Sales (percent)	Growers (percent)	Sales (percent)
0 - 4,999	42	1	40	1	39	1	39	1	38	<1	36	<1
5,000 - 9,999	16	1	14	1	15	1	15	1	11	1	9	<1
10,000 - 49,999	20	5	22	5	20	5	21	5	22	4	24	3
50,000 - 99,999	8	6	7	5	9	7	8	6	11	6	10	4
100,000 - 249,999	6	9	7	10	7	11	7	11	8	10	10	9
250,000 - 499,999	5	16	4	13	4	15	4	15	5	13	6	11
500,000 - 999,999	2	13	2	13	3	18	3	24	3	16	3	12
1,000,000 & above	2	49	2	52	1	41	2	36	3	49	4	60
All	100	100	100	100	100	100	100	100	100	100	100	100

Source: Klonsky, Karen and Kurt Richter. *Statistical Review of California's Agriculture, 1998 - 2003*. Agricultural Issues Center, University of California, 2005. <http://aic.ucdavis.edu/research/StatisticalReview98-03f8.pdf>

Organic sales have been dominated by vegetable crops and fruit and nut crops since 1998, the first year with reliable records. More recently, there has been some growth in organic animal production. In fact, looking at single organic commodities, organic milk is the third most important in sales throughout the state, behind lettuce and grapes (Tables 2.11 and 2.12).

TABLE 2.11
California organic agriculture by commodity group, 1998-2003

	Field crops	Fruit & nut crops	Livestock, dairy, poultry & apiary	Nursery, greenhouse & floriculture	Vegetable crops	Total
Number of Growers ^a						
1998	194	1,254	28	133	592	1,757
1999	210	1,236	43	173	589	1,741
2000	245	1,365	57	186	643	1,903
2001	263	1,402	54	190	616	1,925
2002	261	1,332	65	194	585	1,847
2003	251	1,274	75	174	525	1,757

^aRow totals do not equal the sum of the columns because of growers in multiple commodity groups.

Number of Acres						
1998	25,814	28,701	1,088	533	28,995	85,131
1999	44,320	34,284	2,049	591	44,476	125,720
2000	56,121	36,626	4,754	765	50,286	148,552
2001	55,372	39,967	6,234	605	65,284	167,460
2002	61,653	47,423	5,919	551	48,957	164,503
2003	68,974	45,576	14,404	376	44,488	173,821

Sales (\$1,000)						
1998	13,653	67,646	4,868	2,743	93,803	182,713
1999	11,675	76,578	9,381	4,454	102,236	204,325
2000	18,364	71,474	12,121	4,752	94,125	200,836
2001	15,575	85,974	12,056	7,010	86,606	207,222
2002	13,544	98,399	11,725	7,147	119,190	250,006
2003	14,987	117,469	34,451	8,091	154,828	329,825

Source: Klonsky, Karen and Kurt Richter. *Statistical Review of California's Agriculture, 1998 - 2003*. Agricultural Issues Center, University of California, 2005. <http://aic.ucdavis.edu/research/StatisticalReview98-03f8.pdf>

TABLE 2.12
 Top 20 California organic products by sales revenue, 2003

Rank	Product	Sales (\$1,000)
1	Lettuce, all	42,148
2	Grapes, all	33,930
3	Dairy	23,393
4	Carrots	18,664
5	Strawberries	17,509
6	Tomatoes, all	11,433
7	Spinach	10,887
8	Chickens, meat	10,225
9	Rice	9,219
10	Sweet potatoes	7,297
11	Almonds	6,416
12	Broccoli	6,353
13	Dates	6,068
14	Celery and celeriac	6,005
15	Peaches, all	5,554
16	Raspberries	5,467
17	Oranges, all	5,082
18	Walnuts	4,281
19	Mustard	4,233
20	Avocados	4,211
Top 20 total products		238,375

Source: Klonsky, Karen and Kurt Richter. *Statistical Review of California's Agriculture, 1998 - 2003*. Agricultural Issues Center, University of California, 2005. <http://aic.ucdavis.edu/research/StatisticalReview98-03f8.pdf>

