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California Department of Food and Agriculture

Agricultural Commissioners' Crop Reports

# Fresno County

2000-2004

California County Agricultural Commissioners' Reports from the California Department of Food and Agriculture. This collection consists of annual crop and livestock data from each of the 58 California Counties. The collection covers 1915-1981; digitization of the rest of the collection is forthcoming.

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County Administrative Officer

I am pleased to submit the 2000 Fresno County Agricultural Crop and Livestock Report. This annual compilation presents statistical data pertaining to the acreage, yield, and gross value of Fresno County agricultural products.

The total gross production value of Fresno County agricultural commodities in 2000 was \$3,427,400,400. This represents a 4 percent decrease from the 1999 gross production value. It must be emphasized that the values presented in this report reflect gross values only, and do not in any manner reflect net income or loss to producers.

Agriculture continues as the major industry in Fresno County and is a driving force in the county's economy. Every dollar received by Fresno County producers results in the economic extension benefit of three and one-half dollars to the total economy of the county.

For the first time in Fresno County's history, the raisin industry has entered mandatory arbitration because growers and packers were unable to agree upon a price. Therefore, the total reported gross value of this report should be considered as an estimate, pending resolution of the arbitration. The final agreed-upon price for raisins, as well as a revised total gross production value, will be reported in the 2001 Crop Report.

I sincerely appreciate the professional and dedicated work performed by Deputy Agricultural Commissioner/Sealer Dennis C. Plann; Supervising Agricultural/Standards Specialist Bruce Clayton; Agricultural/Standards Specialists Scotti Walker and Jennifer Fulbright; Seasonal Agricultural/Standards Specialist Cézanne Baker, as well as the rest of my staff at the Department of Agriculture for the preparation of this report.

My thanks to the many individuals, related agencies, and members of the agricultural industry for their contributions to the compilation of this report.

Sincerely,

Jerry Prieto, Jr.  
Agricultural Commissioner/Sealer

*"From his war with the vine and tractor,  
both with and against them, the farmer at  
last wins his war with himself,  
and like his perfect machine and vines realizes  
that he too has at last become consummate  
and unchanging and for the ages."*

***Victor Davis Hanson***

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This report is also available at our internet site:  
<http://www.fresno.ca.gov/4010/agwelcm.htm>

## FRESNO COUNTY'S 10 LEADING CROPS

Crop	2000 Rank	2000 Dollar Value	1999 Rank	1990 Rank	1980 Rank
GRAPES	1	\$ 642,385,000	1	1	1
POULTRY	2	400,065,000	2	+	+
COTTON	3	354,440,000	3	2	2
TOMATOES	4	279,754,000	4	3	6
MILK	5	198,821,000	5	5	4
CATTLE AND CALVES	6	186,734,000	7	6	3
ALMONDS	7	117,983,000	8	14	12
HEAD LETTUCE	8	109,032,000	11*	11	16
PLUMS	9	96,760,000	10*	7	7
PEACHES	10	<u>95,120,000</u>	9*	9	13
TOP TEN TOTAL		\$2,481,094,000			

+ Not previously combined for ranking purposes

\* Revised

## 2000 Highlights in Retrospect

### January:

Peach, plum, nectarine, and almond growers were pruning and shredding brush. Grapevines were being pruned, canes tied, brush shredded, and herbicides applied. Birds caused significant damage to young seedlings in sugar beet fields. Strawberry fields were being mowed back and plastic tarps laid down. Processing tomato fields were being bedded up and fumigated. Lettuce, garlic, and onion fields were growing slowly due to cold weather and lack of rain. Rain in the latter part of the month caused some rust damage to garlic fields. Broccoli, napa cabbage, cauliflower, greens, turnips, and a variety of oriental vegetables were harvested.

### February:

Cotton growers were preparing fields for planting. Grape growers continued to prune, tie canes, and apply herbicides for weed control. Early varieties of stone fruit began to bloom. Growers were applying bloom spray to stone fruit and apple orchards to prevent fungal diseases. Navel oranges and tangelos were harvested between rainstorms. Sugar beet growers used hazing techniques to protect seedlings from birds. Growth in garlic and onion fields slowed due to cooler weather. Lettuce was hand weeded, thinned, and treated for mildew. Asparagus, artichoke, broccoli, bok choy, and greens were harvested. On February 27, 2000, a storm front that moved across Fresno County brought thunder, lightning, heavy rain, hail, and tornado sightings. Overall, this storm caused only minimal crop damage.

### March:

Most field work came to a halt due to wet conditions. Alfalfa hay fields were treated for weevils and aphids. Cotton planting started and beds were treated for weeds by air. Bud break began in grapes. The head lettuce harvest began. Apricots, cherries, peaches, plums, and nectarines were in bloom. Almonds were nearly done blooming and had started to leaf out. The navel orange and tangelo harvests continued. Citrus and olive growers began to prune trees. Due to rain, some dairies were spreading out straw in wet, muddy corrals. Summer vegetables were planted. Oriental vegetables were harvested.

### April:

Small grain fields were maturing and showing good growth. Cotton was planted and growers were applying insecticides to their fields. Grape vineyards were leafing out and growers applied sulfur to control mildew. Cherries were being harvested. Some early varieties stone fruit were harvested. Stone fruit growers were also thinning and treating orchards for scale and worms. Fig and pistachio trees were leafing out. The lettuce harvest peaked this month and slowed down with minimal problems. Sweet corn and melons were planted. Strawberries were in full bloom; early rainstorms resulted in damage to fruit. Beehives were placed in citrus orchards that were in full bloom. The valencia orange harvest started. The oriental vegetable harvest continued while summer vegetables were being planted.

### May:

Oat hay, wheat forage, and alfalfa hay were cut and baled. Cotton planting was completed and earlier planted fields were showing good growth. Rice was planted. Sugar beets showed good growth. Grape growers continued to treat vineyards for mildew, leafhoppers, lepidopterous pests, and weeds. Apricots, apriums, cherries, peaches, nectarines, plums, and pluots were harvested. Pomegranates showed early stages of bloom. Strawberries, blackberries, boysenberries, and blueberries were being harvested. Tomato fields were weeded and fertilized. Basil, broccoli, beets, cabbage, carrots, mustard and collard greens, onions, squash, sugar and snap peas, radishes, spinach, and turnips were also harvested. Navel and valencia oranges were harvested.

#### June:

A surprise rainstorm resulted in some damage to oat and alfalfa hay. The storm forced growers to re-bag onions that were drying in the fields. Growth in small grains slowed due to poor weather. Cotton plants started to bloom. Grape growers treated vineyards for mildew and insects. Stone fruit was harvested and some orchards were experiencing brown rot and worm problems. Melon fields were blooming and tomatoes were growing well. Sweet corn growers applied insecticides. Garlic fields and almond orchards were prepared for harvest. Cantaloupe and processing tomato harvests started. Harvesting of strawberries, blackberries, boysenberries, and blueberries continued, while strawberry growers began to replant. Other vegetables being harvested were beans, bittermelon, cilantro, cucumbers, dill, greens, lemongrass, okra, snap and sugar peas, squash, and yam leaves. Beekeepers were moving hives into seed alfalfa and melon fields.

#### July:

Small grains, sugar beets, silage corn, and wheat seed were harvested. Cotton and alfalfa hay were treated for aphids, mites, lygus, and worms. Table grapes, peaches, plums, nectarines, and asian pears were harvested. Almond hulls started to split and growers prepared for harvest. Harvesting of cantaloupe and processing tomatoes continued. Strawberry growers prepared fields for fall, as the spring season came to a finish. Valencia oranges and lemons were packed. Summer and oriental vegetable harvests were in full swing. Rangeland was dry and cattle feedlots were at 88 percent capacity.

#### August:

The small grain harvest was completed. Cotton growers irrigated and sprayed their plants for insects. Cotton bolls started to open. Rice growers prepared for harvest. Table grapes were packed, while raisin growers finished their last irrigation and started to lay fruit on trays. The stone fruit harvest continued. Almond growers had started to shake trees. Granny Smith apples were released for packing. Cantaloupes, honeydews, and watermelons were harvested. Fresh and processed tomato harvests continued. Fall lettuce was planted. The sweet potato and yam harvests started. Beets, basil, carrots, cucumbers, eggplant, garlic, mint, onions, peppers, radishes, squash, Swiss chard, and cherry tomatoes were harvested. The valencia orange harvest finished in the Sanger district but continued in Clovis and Reedley districts. Some growers prepared ground for new citrus plantings.

#### September:

A rainstorm in early September caused some damage to the raisin crop; a few raisins already on trays required reconditioning. Cotton bolls started to mature. Black-eyed beans, silage corn, and sugar beets were harvested. Zinnia fields planted for seed production were in full bloom. McIntosh apples were released for harvest. Fuji and Granny Smith apples were harvested. The table grape, juice grape, and wine grape harvests continued. Pomegranates, pistachios and figs were packed. The almond harvest continued. Olive producers sprayed and trapped for olive fruit flies in preparation for harvest. The cantaloupe harvest slowed. Cauliflower, broccoli, cabbage, and lettuce were planted. Fall lettuce fields were irrigated, weeded, and sprayed for worms. Strawberries were in bloom and growers irrigated and fertilized. The processing tomato harvest continued.

#### October:

On October 10, 2000, heavy rainstorms and isolated hail storms hit Fresno County, causing substantial damage to head lettuce, chinese broccoli, pomegranates, persimmons, alfalfa hay, cherry tomatoes, and green beans. Rice was harvested. Ground was prepared for planting winter forage. Cotton growers were defoliating fields and began to harvest. The table grape and raisin harvests were nearly completed. The cantaloupe harvest



finished, while the stone fruit harvest continued. Walnut, pomegranate, persimmon, quince, and apple harvests continued. The fall lettuce harvest started slowly. The valencia orange and olive harvests continued. The summer vegetable and oriental vegetable harvests continued. Strawberries were in production and being sold at roadside stands.

#### November:

Rain stopped work in fields and orchards. The rice harvest finished. Wet conditions slowed both ground preparation for winter forage and the cotton harvest. The raisin harvest ended this month. The lettuce harvest was slow, but showed good quality. Pomegranates, persimmons, quince, walnuts, almonds, and kiwifruit were harvested. The broccoli and cabbage harvests continued. Garlic fields were planted for the 2001 crop. The yam and sweet potato harvests came to an end. Navel orange, mandarin, and lemon harvests continued with good quality. Summer and oriental vegetable harvesting slowed. Rangeland grasses had started to turn green.

#### December:

Wheat and barley fields were planted and fertilized. The cotton harvest was completed. Stone fruit growers began to prune and pull dead and older, nonproductive trees from orchards. Apple, kiwifruit, and persimmon harvests continued. Grape growers were planting cover crops, adding soil amendments and fertilizing. Fall lettuce finished this month. Lettuce growers were preparing ground for spring planting. Broccoli, cabbage, and strawberry harvests continued. The following vegetables were harvested this month: basil, bok choy, chives, cilantro, napa cabbage, mustard and collard greens, green onions, parsley, peppers, spinach and Swiss chard. Navel oranges were harvested.

**FIELD CROPS:** The total gross returns for field crops increased by \$22,312,000 from \$485,640,000 to \$507,952,000. Cotton, the county's third most valuable crop, increased in value by 6.61 percent from \$332,472,000 to \$354,440,000. Cotton lint increased by \$16,793,000 and seed was up \$4,494,000. The Acala upland cotton harvest increased 75,000 acres while Pima cotton plantings were down 64.32 percent or 60,200 acres. The value of the barley crop was up 16.46 percent, or \$146,000, as a result of an increase in planted acreage and an \$11 per ton increase in value. Returns for corn grain were down \$1,977,000; silage corn increased in value \$2,512,000. Alfalfa hay decreased in value by \$2,790,000 because of a 10,100 acre reduction in plantings. The total value of the rice crop was down \$447,000 reflecting a 24.08 percent reduction in the price paid per ton. Safflower acreage was down 49.42 percent; the crop value decreased \$1,097,000. Wheat plantings were up 14,200 acres and the crop value increased from \$18,923,000 to \$24,395,000.

**SEED CROPS:** The total gross returns for seed crops decreased 19.07 percent or \$8,264,000. Certified alfalfa seed was down \$12,149,000 as a result of 8,600 fewer planted acres and reductions in yield and price. Certified cotton seed, up 1,300 acres, increased in value \$681,000.

**VEGETABLE CROPS:** The total gross returns for all vegetable crops decreased by \$91,041,000, or 10.32 percent to \$791,607,000. Asparagus, bell pepper, broccoli, and eggplant values were down. Fresh garlic decreased in value \$50,016,000 and processing garlic was down \$40,997,000, resulting in a 51.90 percent decrease in gross returns. Spring head lettuce was down \$17,531,000; fall head lettuce was up \$28,549,000. Tomatoes, number four on the county's top ten list, were down \$33,081,000; processing tomatoes, down \$36,288,000, were responsible for this loss. The value of the cantaloupe crop increased \$4,323,000 (5.82 percent) as a result of increased plantings and a 5.08 percent increase in yield. The honeydew crop more than doubled in value because of increases in both yield and price. Oriental vegetable production was down 3.39 tons per acre and plantings decreased 270 acres.

**FRUIT AND NUT CROPS:** The total gross returns for all fruit and nut crops increased \$53,641,800 from \$1,191,094,000 to \$1,244,735,800. The final price for raisin grapes has not been determined and will go to arbitration in late May and early June. The price used in this report is not intended to reflect the Department's opinion as to what the price for raisins should be, and is used only to accommodate the deadline for publishing this report. Cherries, not previously reported separately, had a value of \$17,282,000. The value of the orange crop increased 63.93 percent or \$35,376,000 after a \$69,563,000 loss in 1999 resulting from damage caused by freezing temperatures. The lemon crop increased in value from \$1,339,000 to \$2,137,000. The price for almonds increased \$520 a ton, but the total value of the crop was down \$910,000 as a result of a 500 pound per acre decrease in yield. Fresh apple production was down 16,900 tons while processed apples increased from 3,660 tons in 1999 to 18,500 tons in 2000. Decreases in apricot acreage, yield, and price resulted in a \$2,077,000 reduction in crop value. The crop values for peaches, plums, and nectarines were down: peaches 9.29 percent, plums 4.53 percent, and nectarines 9.89 percent. Even though the price of strawberries was down \$113 a ton, production increased 6.94 tons per acre, resulting in a crop value increase of 47.87 percent.

**NURSERY:** The total gross returns for nursery products decreased \$3,626,000 from the 1999 figure of \$32,530,600 to \$28,904,600. The number of herbaceous ornamentals (potted plants, bedding plants, flats and perennials) increased by 9,791,000 plants and was up \$1,728,000. The sale of christmas trees was down 34.12 percent. The other category, which includes bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf, decreased in value \$5,934,000.

**LIVESTOCK AND POULTRY:** Total gross returns for livestock and poultry decreased \$92,123,000 from \$686,071,000 to 593,948,000. Cattle and calves moved from seventh to sixth on the county's top ten list when value increased to \$186,734,000. Lambs were up \$339,000 in value. The price per hundred weight for sheep increased \$2.84. Turkey production decreased by 1,880,000 birds.

**LIVESTOCK AND POULTRY PRODUCTS:** Total gross returns for livestock and poultry products decreased by \$24,615,000 to a total of \$207,036,000. Manure produced in the county was down 47.48 percent. The value of milk fell \$23,946,000 even though production increased by 767,000 hundred weight. Chicken, duck and turkey egg production increased 212,000 dozens and the value increased 20.17 percent.

**APIARY PRODUCTS AND POLLINATION SERVICES:** Gross returns for apiary products and pollination decreased \$1,665,000. The value of honey and beeswax increased by \$5,000. The total value of pollination services, which includes alfalfa seed, fruit and nut trees, and cantaloupes, fell \$1,670,000, as a result of a 43,600 acre reduction in alfalfa seed and a 9,200 acre reduction in cantaloupe seed.

**INDUSTRIAL CROPS:** Gross returns for industrial crops were up \$2,753,000. Timber sales increased 10,673,000 board feet while firewood sales were down 2,300 cords.

## SUSTAINABLE AGRICULTURE

### 2000 BIOLOGICAL CONTROL ACTIVITIES

PEST	B.C. AGENT/MECHANISM	ACTIVITY
Yellow Starthistle (YST)	Hairy weevil (Eustenopus villosus sp.)	Most sites showed well-established populations that were spreading.
	Peacock fly (Chaetorellia sp.)	Specimens were not moved anywhere as the flies continued to spread rapidly on their own.
	Seedhead fly (Urophora sirunaseva sp.)	Surveys showed that it is present in most of the YST areas and is still expanding its range.
	Bud weevil (Bangasternus orientalis sp.)	Surveys showed that it is still present and expanding its range.

### 2000 DETECTION ACTIVITIES

INSECT	TRAPS DEPLOYED	RESULTS
Medfly	844	Seven sterile flies trapped
Mexican fruit fly	249	None captured
Oriental fruit fly	163	None captured
Melon fly	121	None captured
Gypsy moth	370	None captured
Japanese beetle	261	None captured
Olive fruit fly	1407	Eight hundred plus trapped
Glassy-winged sharpshooter	800	Four nurseries and numerous residences positive

# SUSTAINABLE AGRICULTURE

## PEST ERADICATION

**RED IMPORTED FIRE ANT:** Another infestation was found in Fresno County. This time in a rural area east of Clovis near Leonard and Shaw Avenue. True to form, this infestation had also started in an almond orchard, but unlike the other RIFA infestations in Fresno County, this one had spread to some nearby homes. Residents were the first to complain about stinging incidents in their yards. The infestation appeared to be at least 5-6 years old or older, as some of the mounds were quite large and it had spread some distance. It was treated once last fall and treatment will resume this spring.

**GLASSY-WINGED SHARPSHOOTER:** Glassy-winged sharpshooter (GWSS) was found well established in several areas of Fresno County. Sharp-eyed residents initially alerted us to the infestations and subsequent surveys turned up a few others. Over a thousand properties were found positive and treated for GWSS. Efforts will continue this year to further delimit the GWSS population with extensive surveys throughout the city.

**OLIVE FRUIT FLY:** This serious pest of olives turned up in Fresno County last year. The initial find was in Reedley, but county-wide trapping soon detected it in many areas of the city and county. Over 800 flies were trapped which was quite amazing since we trapped none the year before. The fly seemed to just explode throughout the county. The population is very well established and eradication efforts would be futile. Olive fruit fly is here to stay, so commercial olive growers will have to learn how to deal with them.

## NEW AND UNUSUAL PEST OUTBREAKS IN 2000

**RED GUM LERP PSYLLID** (*Glycaspis brimblecombei*) continued to expand its presence in Fresno County. Many varieties of eucalyptus are showing severe stress due to this insect. Bio-control agents are on the way but have not yet been established here.

The second species of eucalyptus long horned borer has found its way to Fresno County. *Phoracantha recurva* was turned into the office last year but because of its close resemblance to *Phoracantha semipunctata* it was not realized at the time. A close inspection of the accumulated specimens eventually ferreted it out. This species also is a killer of eucalyptus trees but is now here without its parasitoids. Chances are it will do a lot of damage until some parasitoids are released.

## 2000 ORGANIC FARMING

Gross returns for organic farming in 2000 totaled \$18,530,000. A large variety of crops were produced in compliance with the California Organic Food Act of 1990. Seventy-eight farms totaling 8,442 acres and eighteen handlers (shippers/packers) were registered organic in Fresno County in 2000. Crops grown, packed, and shipped include alfalfa, almonds, apples, apricots, basil, beans, bell peppers, blueberries, boysenberries, broccoli, carrots, cattle, chard, cilantro, corn, eggplant, endive, fennel, figs, garlic, grapes, kiwifruit, leeks, lemon, lettuce, nectarines, nursery plants, olives, onions, oranges, parsley, peaches, peppers, persimmons, plums, pluots, pomegranates, radishes, raisins, shallots, spinach, squash, tangerines, tomatoes, turkeys, walnuts, watermelon, and wheat.

# FRESNO COUNTY

## FIELD CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Barley</b>	2000	4,100	2.27	9,310	ton	\$ 111.00	\$ 1,033,000
	1999	3,310	2.68	8,870	ton	\$ 100.00	\$ 887,000
<b>Beans, dry <sup>a</sup></b>	2000	13,400	1.20	16,100	ton	523.00	8,420,000
	1999	17,700	1.38	24,400	ton	513.00	12,517,000
<b>Corn</b>							
Grain	2000	4,000	4.30	17,200	ton	86.00	1,479,000
	1999	5,600	5.14	28,800	ton	120.00	3,456,000
Silage	2000	18,700	24.39	456,000	ton	27.00 <sup>b</sup>	12,312,000
	1999	19,900	24.62	490,000	ton	20.00 <sup>b</sup>	9,800,000
<b>Cotton</b>							
Upland (Acala) Lint	2000	220,000	1,486 <sup>c</sup>	654,000 <sup>d</sup>	bale	.69 <sup>e</sup>	227,435,000
	1999	145,000	1,421 <sup>c</sup>	412,000 <sup>d</sup>	bale	.74 <sup>e</sup>	153,660,000
Seed	2000			231,000	ton	151.00	34,881,000
	1999			141,000	ton	158.00	22,278,000
Upland (Non-Acala) Lint	2000	38,100	1,293 <sup>c</sup>	98,500 <sup>d</sup>	bale	.66 <sup>e</sup>	32,765,000
	1999	41,200	1,226 <sup>c</sup>	101,000 <sup>d</sup>	bale	.71 <sup>e</sup>	36,142,000
Seed	2000			34,800	ton	151.00	5,255,000
	1999			34,600	ton	158.00	5,467,000
Pima Lint	2000	33,400	1,413 <sup>c</sup>	94,400 <sup>d</sup>	bale	1.00 <sup>e</sup>	47,578,000
	1999	93,600	1,277 <sup>c</sup>	239,000 <sup>d</sup>	bale	.84 <sup>e</sup>	101,183,000
Seed	2000			37,300	ton	132.00	4,924,000
	1999			37,300	ton	133.00	12,821,000
<b>Cotton Total <sup>f</sup></b>	<b>2000</b>	<b>291,500</b>					<b>352,838,000</b>
	<b>1999</b>	<b>279,800</b>					<b>331,551,000</b>
<b>Hay</b>							
Alfalfa	2000	71,400	7.56	540,000	ton	98.00	52,920,000
	1999	81,500	7.60	619,000	ton	90.00	55,710,000
Other <sup>g</sup>	2000	10,700	4.27	45,700	ton	56.00	2,559,000
	1999	14,000	3.11	43,500	ton	79.00	3,437,000

## FRESNO COUNTY

## FIELD CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Pasture and Range							
Field	2000	19,500			acre	\$ 29.28	\$ 571,000
Stubble <sup>h</sup>	1999	29,700			acre	\$ 25.96	\$ 771,000
Irrigated	2000	40,000			acre	125.00	5,000,000
Pasture	1999	40,000			acre	110.00	4,400,000
Grazing	2000	850,000			acre	8.00	6,800,000
Range	1999	850,000			acre	7.00	5,950,000
Rice	2000	6,160	3.99	24,600	ton	186.00	4,576,000
	1999	5,800	3.53	20,500	ton	245.00	5,023,000
Safflower	2000	3,070	2.48	7,600	ton	146.00	1,110,000
	1999	6,070	2.04	12,400	ton	178.00	2,207,000
Sugar Beets	2000	19,100	35.76	683,000	ton	35.00	23,905,000
	1999	20,400	33.19	677,000	ton	34.00	23,018,000
Wheat	2000	69,500	2.95	205,000	ton	119.00	24,395,000
	1999	55,300	2.69	149,000	ton	127.00	18,923,000
Other <sup>i</sup>	2000	8,820					10,034,000
	1999	<u>9,560</u>					<u>7,990,000</u>
Total	2000	1,410,450					\$507,952,000
	1999	1,408,940					\$485,640,000

**a** Includes black-eyed, garbanzo, Jackson Wonderful, baby lima, pinto, and red kidney beans

**b** Field price

**c** Pounds of lint per acre

**d** 500 pounds lint per bale

**e** Price per pound, 504 pounds gross weight per bale

**f** Not used for top 10 ranking; does not include cotton seed for planting

**g** Includes hay from alfalfa seed, oats, pasture grass, sudan, winter forage and wheat

**h** Not included in total field crop acreage; includes acreage from alfalfa hay, barley, beans, and melons

**i** Includes barley silage, oats (grain), sorghum, straw, sugar beet pulp, wheat silage, and winter forage; **organic:** alfalfa and oat hay

# FRESNO COUNTY

## SEED CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Alfalfa</b>	2000	23,800	560	13,328,000	lb.	\$1.50	\$19,992,000
<b>Certified</b>	1999	32,400	620	20,088,000	lb.	\$1.60	\$32,141,000
<b>Cotton<sup>a</sup></b>	2000	11,200		14,560,000	lb.	.11	1,602,000
<b>Certified</b>	1999	9,900		7,673,000	lb.	.12	921,000
<b>Vegetable<sup>b</sup></b>	2000	3,670					7,540,000
	1999	1,540					4,230,000
<b>Other<sup>c</sup></b>	2000	6,090					5,934,000
	1999	<u>7,030*</u>					<u>6,040,000*</u>
<b>Total</b>	<b>2000</b>	<b>33,560</b>					<b>\$35,068,000</b>
	<b>1999</b>	<b>40,970</b>					<b>\$43,332,000</b>

**a** Included in field crop acreage

**b** Kohlrabi, lettuce, mustard (Japanese and red), onion, radish, red kale, and tomato

**c** Alfalfa (non-certified), barley, black-eyed beans, corn, garbanzo beans, grain sorghum, rice, sunflower, triticale, wheat (certified and non-certified), and zinnia

\* Revised

## FRESNO COUNTY

## VEGETABLE CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Asparagus<sup>a</sup></b>	2000	2,590	2.62	6,790	ton	\$1,772.00	\$ 12,032,000
	1999	2,750	2.31	6,350	ton	\$1,958.00	\$ 12,433,000
<b>Bell Peppers<sup>a</sup></b>	2000	2,380	20.88	49,700	ton	357.00	17,743,000
	1999	2,490	21.24	52,900	ton	354.00	18,727,000
<b>Broccoli<sup>a</sup></b>	2000	7,640	8.31	63,500	ton	478.00	30,353,000
	1999	13,500	4.90	66,200	ton	478.00	31,644,000
<b>Eggplant<sup>b</sup></b>	2000	910	9.71	8,840	ton	528.00	4,668,000
	1999	850	14.00	11,900	ton	521.00	6,200,000
<b>Garlic</b>							
Fresh	2000	4,500	8.31	37,400	ton	1,337.00	50,004,000
	1999	7,800	8.94	69,700	ton	1,435.00	100,020,000
Processed	2000	13,500	8.74	118,000	ton	291.00	34,338,000
	1999	23,500	10.51	247,000	ton	305.00	75,335,000
<b>Head Lettuce</b>							
Naked				28,900	ton		
Wrapped				75,200	ton		
Bulk				42,600	ton		
Spring	2000	9,920	14.79	146,700	ton	293.00	42,983,000
Season Total	1999	11,000	16.37	180,100	ton	336.00	60,514,000
Naked				45,600	ton		
Wrapped				100,500	ton		
Bulk				61,600	ton		
Fall	2000	10,100	20.56	207,700	ton	318.00	66,049,000
Season Total	1999	9,980	15.92	158,900	ton	236.00	37,500,000
<b>Head Lettuce</b>	<b>2000</b>	<b>20,020</b>		<b>354,400</b>			<b>109,032,000</b>
<b>Totals</b>	<b>1999</b>	<b>20,980</b>		<b>339,000</b>			<b>98,014,000</b>



# FRESNO COUNTY

## VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Leaf Lettuce</b> <sup>c</sup>	2000	4,800	10.38	49,800	ton	\$ 842.00	\$ 41,932,000
	1999	4,300	10.81	46,500	ton	\$ 531.00	\$ 24,692,000
<b>Melons</b>							
Cantaloupe <sup>a</sup>	2000	28,700	13.24	380,000	ton	207.00	78,660,000
	1999	27,700	12.60	349,000	ton	213.00	74,337,000
Honeydew	2000	3,770	17.16	64,700	ton	310.00	20,057,000
	1999	3,150	12.79	40,300	ton	239.00	9,632,000
Mixed Melons <sup>d</sup>	2000	1,670	8.80	14,700	ton	281.00	4,131,000
	1999	2,030	10.64	21,600	ton	283.00	6,113,000
Watermelon	2000	1,720	31.57	54,300	ton	171.00	9,285,000
	1999	1,940	34.18	66,300	ton	169.00	11,205,000
<b>Onions</b>							
Fresh	2000	5,330	25.00	133,000	ton	175.00	23,275,000
	1999	4,290	21.86	93,800	ton	235.00	22,043,000
Processed	2000	9,100	18.90	172,000	ton	78.00	13,416,000
	1999	12,300	19.84	244,000	ton	82.00	20,008,000
<b>Oriental Vegetables</b> <sup>e</sup>	2000	1,350	7.41	10,000	ton	567.00	5,670,000
	1999	1,620	10.80	17,500	ton	619.00	10,833,000
<b>Squash</b> <sup>f</sup>	2000	820	7.00	5,740	ton	514.00	2,950,000
	1999	650	6.37	4,140	ton	378.00	1,565,000
<b>Sweet Corn</b>	2000	7,470	11.70	87,400	ton	259.00	22,637,000
	1999	6,800	12.00	81,600	ton	210.00	17,136,000
<b>Tomatoes</b>							
Cherry	2000	170	24.53	4,170	ton	862.00	3,595,000
	1999	180	26.50	4,770	ton	733.00	3,496,000

# FRESNO COUNTY

## VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Tomatoes, continued							
Standard	2000	6,350	16.69	106,000	ton	\$381.00	\$ 40,386,000
	1999	6,500	17.54	114,000	ton	\$327.00	\$ 37,278,000
Processed	2000	115,000	40.20	4,623,000	ton	51.00	235,773,000
	1999	115,000	41.50	4,773,000	ton	57.00	272,061,000
Tomatoes Total	2000	121,520					279,754,000
	1999	121,680					312,835,000
Other <sup>g</sup>	2000	7,540					31,670,000
	1999	<u>12,100</u>					<u>29,876,000</u>
Total	2000	245,330					\$ 791,607,000
	1999	270,430					\$ 882,648,000

**a** Includes fresh and processed

**b** Includes Chinese, Globe, Green Hordet, Italian, Japanese, Orchid Surprise, Rosa Bianca, and White varieties

**c** Includes Red, Green, Butter, and Romaine varieties

**d** Includes Casaba, Crenshaw, Galia, Juan Canary, Orange Flesh, Persian, Santa Claus, and Sharlyn varieties

**e** Includes bittermelon, bok choy (baby, regular, and Shanghai), daikon, donqua, gai choy, gailon, gourds, lemon grass, lo bok, long beans, moqua, muop, napa, opo, sinqua, sugar peas, taro, and you choy

**f** Includes soft and hard types

**g** Includes artichokes, arugula, fava beans, green and snap beans, beets, cabbage (fresh and processed), carrots (processed), cauliflower, Swiss chard, chicory/radicchio, collards, cornuts, cucumbers (fresh and processed), dandelion greens, endive/escarole, kale, kohlrabi, leeks, mushrooms, mustard greens, okra, green onions, parsley (dry), chili peppers, pimientos, pumpkins, radishes, rutabagas, spinach, sunchokes, sweet potatoes/yams, tomatillos, and turnips; **herbs**: basil, cilantro, dill, mint, rosemary, and sage; **organic**: bittermelon, bok choy, cantaloupe, celery, Swiss chard, daikon, garlic (fresh and processed), eggplant (Chinese and Globe), head lettuce, leaf lettuce (baby, red, green, and romaine), long beans, mustard greens, onions (fresh and processed), parsley, chili peppers, spinach and tomatoes (fresh and processed); **organic herbs**: basil and cilantro

## FRESNO COUNTY

## FRUIT AND NUT CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Almonds</b>	2000	57,350	.83	47,600	ton	\$2,340.00	\$ 111,384,000
	1999	57,125	1.08	61,700	ton	\$1,820.00	\$ 112,294,000
<b>Almond Hulls</b>	2000			85,700	ton	77.00	6,599,000
	1999			117,000	ton	57.00	6,669,000
<b>Apples</b>	2000	3,205	11.95				
	1999	3,959	10.19				
Fresh	2000			19,800	ton	600.00	11,880,000
	1999			36,700	ton	591.00	21,690,000
Processed	2000			18,500	ton	65.00	1,203,000
	1999			3,660	ton	74.00	271,000
<b>Apricots</b>	2000	1,301	6.16	8,010	ton	878.00	7,033,000
	1999	1,502	6.66	10,000	ton	911.00	9,110,000
<b>Cherries<sup>a</sup></b>	2000	1,496	1.76	2,630	ton	6,571.00	17,282,000
	1999						
<b>Citrus</b>							
<b>Lemons</b>	2000	830	12.00				
	1999	933	13.83				
Fresh	2000			4,570	ton	411.00	1,878,000
	1999			1,600	ton	604.00	966,000
Processed	2000			5,400	ton	48.00	259,000
	1999			11,300	ton	33.00	373,000
<b>Citrus, other<sup>b</sup></b>	2000	1,205	10.94				
	1999	1,255	6.93				
Fresh	2000			9,200	ton	493.00	4,536,000
	1999			6,970	ton	588.00	4,098,000
Processed	2000			3,980	ton	10.00	39,800
	1999			1,730	ton	25.00	43,000

## FRESNO COUNTY

## FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Oranges							
Navel	2000	20,717	12.31				
	1999	20,971	8.72				
Fresh	2000			193,000	ton	\$376.00	\$ 72,568,000
	1999			97,100	ton	\$457.00	\$ 44,375,000
Processed	2000			62,000	ton	25.00	1,550,000
	1999			85,800	ton	34.00	2,917,000
Valencia	2000	5,534	15.63				
	1999	5,578	4.20				
Fresh	2000			46,400	ton	323.00	14,990,000
	1999			16,300	ton	472.00	7,694,000
Processed	2000			40,100	ton	40.00	1,604,000
	1999			7,150	ton	49.00	350,000
Oranges Total	2000	26,251					90,712,000
	1999	26,549					55,336,000
Grapes							
Raisin Varieties	2000	170,817	11.22				
	1999	172,226	8.18				
Canned	2000			9,700	ton	181.00	1,756,000
	1999			8,480	ton	221.00	1,874,000
Crushed	2000			322,000	ton	124.00	39,928,000
	1999			264,000	ton	201.00	53,064,000
Dried	2000			356,000	ton	1,025.00 <sup>c</sup>	364,900,000
	1999			258,000	ton	1,214.00	313,212,000
Fresh	2000			55,000	ton	885.00	48,675,000
	1999			53,700	ton	975.00	52,358,000
Juice	2000			2,100	ton	539.00	1,132,000
	1999			7,120	ton	259.00	1,844,000

## FRESNO COUNTY

## FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Grapes (continued)							
Table Varieties	2000	10,677	9.37				
	1999	11,158	8.42				
Crushed	2000			15,000	ton	\$ 93.00	\$ 1,395,000
	1999			18,000	ton	\$ 174.00	\$ 3,132,000
Fresh	2000			85,000		956.00	81,260,000
	1999			76,000	ton	985.00	74,860,000
Wine Varieties	2000	43,782	11.11				
	1999	45,046	8.80				
Crushed	2000			483,000	ton	210.00	101,430,000
	1999			393,000	ton	261.00	102,573,000
Juice	2000			3,510	ton	544.00	1,909,000
	1999			3,310	ton	694.00	2,297,000
Grapes Total	2000	225,276					642,385,000
	1999	228,430					605,214,000
Kiwifruit <sup>d</sup>	2000	415	6.43	2,670	ton	843.00	2,251,000
	1999	416	3.35	1,400	ton	876.00	1,226,000
Nectarines	2000	13,784	8.13	112,000	ton	697.00	78,064,000
	1999	14,985	7.94	119,000	ton	728.00	86,632,000
Olives, canned <sup>d</sup>	2000	1,230	1.87	2,300	ton	775.00	1,783,000
	1999	1,395	4.55	6,350	ton	477.00	3,029,000
Peaches							
Cling	2000	1,263	17.81	22,500	ton	232.00	5,220,000
	1999	1,693	22.80	38,600	ton	214.00	8,260,000
Freestone <sup>d</sup>	2000	12,690	9.77	124,000	ton	725.00	89,900,000
	1999	13,474	9.20	124,000	ton	779.00	96,596,000
Peaches Total	2000	13,953					95,120,000
	1999	15,167					104,856,000
Pears, Asian and European	2000	972	12.24	11,900	ton	1,013.00	12,055,000
	1999	726	6.85	4,970	ton	1,064.00	5,288,000

FRESNO COUNTY

FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Persimmons	2000	411	9.49	3,900	ton	\$697.00	\$ 2,718,000
	1999	420	8.36	3,510	ton	\$982.00	\$ 3,447,000
Pistachios	2000	4,541	1.45	6,580	ton	2,300.00	15,134,000
	1999	4,576	.78	3,570	ton	3,260.00	11,638,000
Plums	2000	14,841	7.95	118,000	ton	820.00	96,760,000
	1999	15,434	7.39	114,000	ton	889.00	101,346,000
Pomegranates	2000	1,089	4.80	5,230	ton	1,147.00	5,999,000
	1999	1,092	6.03	6,580	ton	1,815.00	11,943,000
Prunes, dried <sup>d</sup>	2000	3,533	1.85	6,540	ton	844.00	5,520,000
	1999	3,619	2.87	10,400	ton	855.00	8,892,000
Strawberries <sup>e</sup>	2000	494	19.25	9,510	ton	761.00	7,237,000
	1999	455	12.31	5,600	ton	874.00	4,894,000
Walnuts	2000	3,122	1.70	5,300	ton	1,280.00	6,784,000
	1999	3,321	1.96	6,510	ton	871.00	5,670,000
Other <sup>f</sup>	2000	3,480					20,120,000
	1999	3,845 <sup>*</sup>					26,169,000 <sup>*</sup>
Total	2000	378,779					\$1,244,735,800
	1999	385,204					\$1,191,094,000

a Not previously reported separately

b Includes blood oranges, grapefruit, mandarins/tangerines, minneolas/tangelos, and pummelos

c At the time of this report the bargaining price has not been determined and the Raisin Bargaining Association (RBA) is locked in a first time mandatory arbitration. The RBA's last offered price was \$1025 per ton on October 17, 2000, and is being used for reporting purposes only. *This price reflects the free tonnage price only.* It is in no way intended to influence the arbitrated price which is yet to be determined. The final arbitrated price will be published in the 2001 crop report.

d Acres packed fresh or processed are included in other fruit and nut crops: 50 acres olive oil, and 63 acres prunes, 18 acres freestone peaches (processed); **organic**: 4 acres apricots, 120 acres figs, and 11 acres kiwifruit, 56 acres freestone peaches, 27 acres plums

e Includes fresh and processed

f Includes apricots (processed), blackberries, blueberries, boysenberries (fresh and processed), chestnuts, dried fruit, figs (fresh, dried, and substandard), grape leaves, grapes (raisin byproducts), jujubes, kiwifruit (processed), nectarines (processed), olive (oil), peaches (processed), pecans, plumcots, plums (processed), prunes (processed), and quince; **organic**: apricots (fresh and processed), figs (fresh and dried), grapes (table, raisin, and wine), kiwifruit (fresh and processed), nectarines, peaches, persimmons, plumcots, and plums

\* Revised

## FRESNO COUNTY

## NURSERY PRODUCTS

ITEM	YEAR	ACRES	QUANTITY	UNIT	VALUE
<b>Christmas Trees</b>	2000	28	1,390	trees	\$ 36,600
	1999	26	2,110	trees	\$ 54,600
<b>Herbaceous Ornamentals<sup>a</sup></b>	2000	18	11,036,000	b	4,598,000
	1999	14	1,245,000	b	2,870,000
<b>Ornamental Trees and Shrubs</b>	2000	90	1,074,000	plants	7,968,000
	1999	84	1,071,000	plants	7,370,000
<b>Other<sup>c</sup></b>	2000	590	261,995,000	plants	16,302,000
	1999	<u>887</u>	246,368,000	plants	<u>22,236,000</u>
<b>Total</b>	<b>2000</b>	<b>726</b>			<b>\$28,904,600</b>
	<b>1999</b>	<b>1,011</b>			<b>\$32,530,600</b>

**a** Includes potted plants, bedding plants, flats, and perennials

**b** Includes flats, dozens, cans, and single plants

**c** Includes bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf

## FRESNO COUNTY

## LIVESTOCK AND POULTRY

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Cattle and Calves						
Beef						
Breeding Stock						
Common	2000	1,290		head	\$ 714.00	\$ 921,000
	1999	1,320		head	\$ 650.00	\$ 858,000
Registered	2000	320		head	1,491.00	477,000
	1999	330		head	1,358.00	448,000
Feeders	2000	135,000	269,000	cwt.	79.80	21,466,000
	1999	135,000	270,000	cwt.	72.00	19,440,000
Calves	2000	22,600	67,900	cwt.	102.90	6,987,000
	1999	23,100	69,300	cwt.	88.40	6,126,000
Slaughter Stock	2000	331,000	1,574,000 <sup>a</sup>	cwt.	68.80	108,291,000
	1999	246,000	1,177,000 <sup>a</sup>	cwt.	64.10	75,446,000
Dairy						
Breeding Stock	2000	11,700		head	1,580.00	18,486,000
	1999	11,400		head	1,480.00	16,872,000
Cull Stock	2000	26,300	342,000	cwt.	41.20	14,090,000
	1999	25,300	329,000	cwt.	40.60	13,357,000
Calves	2000	37,300	112,000	cwt.	143.00	16,016,000
	1999	34,700*	104,000*	cwt.	140.00	14,560,000*
Cattle and Calves Total	2000					186,734,000
	1999					147,107,000*
Hogs and Pigs						
Feeder Pigs and Slaughter Stock	2000	18,900	42,500	cwt.	44.09	1,874,000
	1999	24,900	50,600	cwt.	37.17	1,881,000



## FRESNO COUNTY

## LIVESTOCK AND POULTRY (continued)

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Sheep and Lambs						
Slaughter Stock						
Lambs	2000	47,900	53,900	cwt.	\$ 78.48	\$ 4,230,000
	1999	48,400	54,500	cwt.	\$ 71.40	\$ 3,891,000
Sheep	2000	11,300	15,800	cwt.	31.84	503,000
	1999	11,400	16,000	cwt.	29.00	464,000
Turkeys	2000	5,606,000	131,741,000	lb.	.40	52,696,000
	1999	7,486,000	179,589,000	lb.	.66	118,529,000
Other <sup>b</sup>	2000					347,911,000
	1999					<u>414,199,000</u>
Total	2000					\$593,948,000
	1999					\$686,071,000*

**a** Net gain

**b** Includes beneficial insects, chickens, chicks, fryers, old breeder birds, broilers, and roasters; fish; game birds; cull milk goats and kid goats; squab; turkey poults and old turkey breeder birds

\* Revised

FRESNO COUNTY

LIVESTOCK AND POULTRY PRODUCTS

ITEM	YEAR	PRODUCTION	UNIT	VALUE	
				PER UNIT	TOTAL
<b>Manure</b>	2000	323,000	ton	\$ 6.30	\$ 2,035,000
	1999	615,000 *	ton	\$ 6.00 *	\$ 3,690,000 *
<b>Milk</b>					
Manufacturing	2000	101,000	cwt.	9.40	949,000
	1999	68,000	cwt.	11.65	792,000
Market <sup>a</sup>	2000	17,449,000	cwt.	11.34	197,872,000
	1999	16,715,000	cwt.	13.28	221,975,000
<b>Wool</b>	2000	564,000	lb.	.34	192,000
	1999	570,000	lb.	.37	211,000
<b>Eggs</b>					
Chicken, Duck & Turkey <sup>b</sup>	2000	998,000	dozen	6.00	5,988,000
	1999	786,000	dozen	6.34	<u>4,983,000</u>
<b>Total</b>	<b>2000</b>				<b>\$207,036,000</b>
	<b>1999</b>				<b>\$231,651,000 *</b>

**a** Includes cow and goat milk

**b** Includes market, hatching, and excess eggs

\* Revised

FRESNO COUNTY

**APIARY PRODUCTS AND POLLINATION SERVICES**

ITEM	YEAR	PRODUCTION TOTAL	UNIT	VALUE	
				PER UNIT	TOTAL
Apiary Products <sup>a</sup>					
Honey	2000	2,243,000	lb.	\$ .51	\$ 1,144,000
	1999	2,075,000	lb.	\$ .55	\$ 1,141,000
Beeswax	2000	42,700	lb.	1.24	53,000
	1999	38,600	lb.	1.32	51,000
Pollination <sup>b</sup>					
Alfalfa Seed	2000	53,800	colony	27.16	1,461,000
	1999	97,400	colony	32.25	3,141,000
Trees, Fruit and Nut <sup>c</sup>	2000	144,000	colony	41.90	6,034,000
	1999	146,000	colony	40.44	5,904,000
Cantaloupe	2000	27,700	colony	18.66	517,000
	1999	36,900	colony	17.26	<u>637,000</u>
Total	2000				\$ 9,209,000
	1999				\$10,874,000

**a** Reflects bee colonies registered in Fresno County by commercial and semi-commercial beekeepers:  
2000 - 43,530 colonies; 1999 - 37,096 colonies

**b** Reflects value of pollination by all bee colonies located in Fresno County for pollination services  
during 2000. Estimated total colonies: 86,730

**c** Almonds, cherries, and plums

FRESNO COUNTY

INDUSTRIAL CROPS

CROP	YEAR	PRODUCTION	UNIT	VALUE
<b>Timber<sup>a</sup></b>	2000	31,683,000	board feet	\$ 8,775,000
	1999	21,010,000	board feet	\$ 5,907,000
<b>Firewood</b>	2000	3,300	cords	165,000
	1999	5,600	cords	<u>280,000</u>
<b>Total</b>	<b>2000</b>			<b>\$ 8,940,000</b>
	<b>1999</b>			<b>\$ 6,187,000</b>

**a** Includes government and non-government properties

**GROWTH IN FRESNO COUNTY AGRICULTURE AS INDICATED BY GROSS  
PRODUCTION VALUE OF AGRICULTURAL PRODUCTS OVER A TWENTY-ONE YEAR SPAN**

1980 - 2,002,448,900*	1991 - 2,552,305,040*
1981 - 1,905,289,240*	1992 - 2,635,447,400*
1982 - 1,855,733,500	1993 - 3,022,311,100*
1983 - 1,727,319,500	1994 - 3,084,870,800
1984 - 1,921,020,840*	1995 - 3,142,878,300*
1985 - 2,054,060,400*	1996 - 3,324,885,800
1986 - 2,125,721,200*	1997 - 3,436,443,500*
1987 - 2,264,044,000*	1998 - 3,257,712,600*
1988 - 2,444,732,600*	1999 - 3,570,027,600*
1989 - 2,607,648,800*	2000 - 3,427,400,400
1990 - 2,949,484,000*	

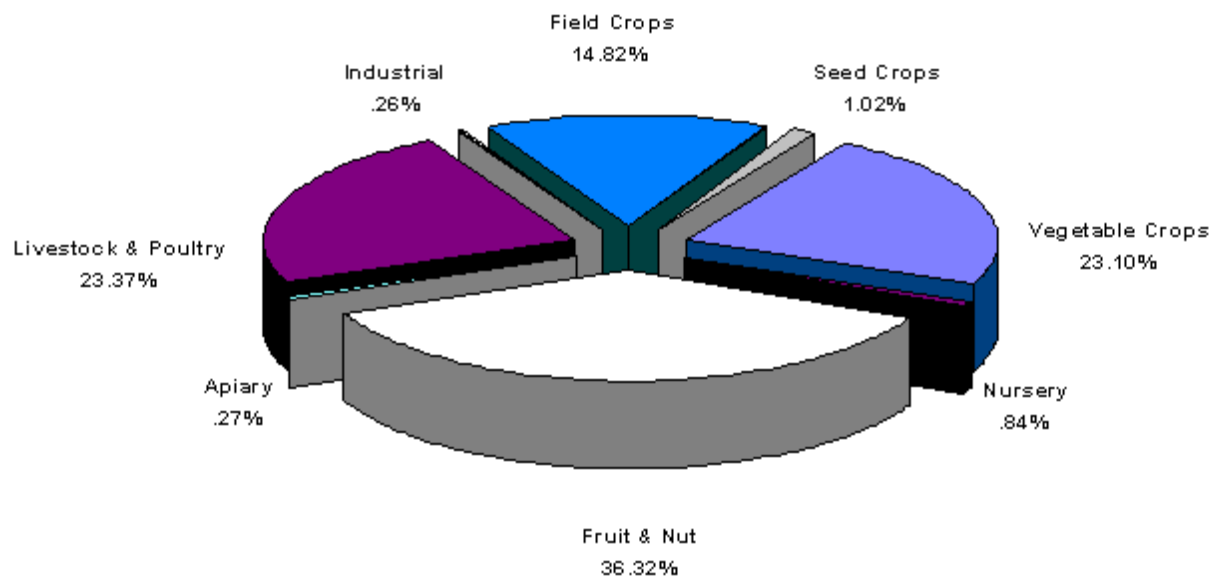
**SIX-YEAR COMPARISON OF GROSS PRODUCTION VALUE IN FRESNO COUNTY**

<b>CROPS</b>	<b>1980</b>	<b>1990</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>Field</b>	\$ 635,717,000	\$ 597,457,000	\$ 626,737,000	\$ 466,556,000	\$ 485,640,000	\$ 507,952,000
<b>Seed</b>	43,629,000	53,078,000	24,075,000	33,202,000*	43,332,000	35,068,000
<b>Vegetable</b>	186,702,000*	605,544,000	681,390,000	691,940,000	882,648,000	791,607,000
<b>Fruit &amp; Nut</b>	752,466,400	940,919,000	1,362,559,800	1,211,362,000*	1,191,094,000	1,244,735,800
<b>Nursery</b>	3,929,000	18,194,000	36,837,200	29,575,600	32,530,600	28,904,600
<b>Livestock</b>	374,215,900	715,355,000*	685,664,000*	809,503,000	917,722,000*	800,984,000
<b>Apiary</b>	5,789,600	6,844,000	8,486,000	9,008,000	10,874,000	9,209,000
<b>Industrial</b>	+	12,093,000	10,694,500	6,566,000*	6,187,000	8,940,000
<b>TOTAL</b>	<b>\$ 2,002,448,900*</b>	<b>\$2,949,484,000*</b>	<b>\$3,436,443,500*</b>	<b>\$3,257,712,600*</b>	<b>\$3,570,027,600*</b>	<b>\$3,427,400,400</b>

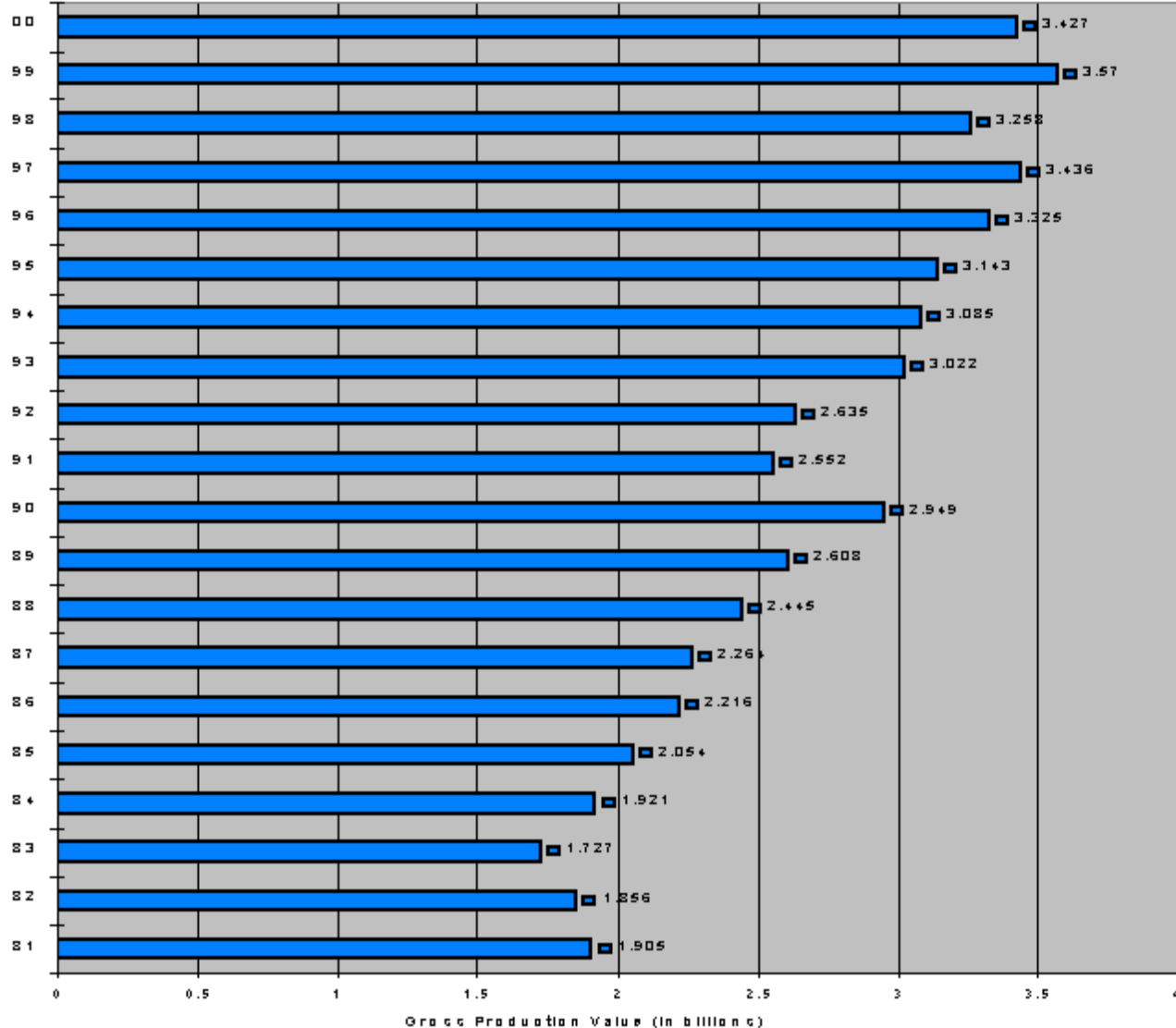
\*Revised

+Not reported

RELATIONSHIP IN TERMS OF TOTAL VALUE  
FOR 2000 CROP YEAR  
\$3,427,400,400



# GROWTH OF FRESNO COUNTY AGRICULTURE OVER A TWENTY YEAR SPAN 1981 through 2000





## Department of Agriculture

**Jerry Prieto, Jr.**

Agricultural Commissioner/  
Sealer of Weights & Measures

**Robert D. Vandergon**

Assistant Agricultural Commissioner/  
Sealer of Weights & Measures

William J. Lyons, Jr., Secretary  
California Department of Food and Agriculture

The Honorable Board of Supervisors  
County of Fresno

Bob Waterston, Chairman  
Susan B. Anderson      Juan Arambula  
Judith G. Case

Bart Bohn  
County Administrative Officer

I am pleased to submit the 2001 Fresno County Agricultural Crop and Livestock Report. This annual compilation presents statistical data pertaining to the acreage, yield, and gross value of Fresno County agricultural products.

The 2001 Agricultural Crop and Livestock report is dedicated to the memory of Deran Koligian, District 1 representative on the Fresno County Board of Supervisors from January 1, 1983, to December 11, 2001. Supervisor Koligian described himself as a "dirt farmer, nothing more and nothing less." He was an advocate for agriculture and agricultural land preservation, while representing all District 1 constituents with determination and fairness.

The total gross production value of Fresno County agricultural commodities in 2001 was \$3,220,101,800. This represents a 1.86 percent decrease from the 2000 gross production value. It must be emphasized that the values presented in this report reflect gross values only, and do not in any manner reflect net income or loss to producers.

Agriculture continues as the major industry in Fresno County and is a driving force in the county's economy. Every dollar received by Fresno County producers results in the economic extension benefit of three and one-half dollars to the total economy of the county.

I sincerely appreciate the professional and dedicated work performed by Deputy Agricultural Commissioner/Sealer Dennis C. Plann; Supervising Agricultural/Standards Specialist Bruce Clayton; Agricultural/Standards Specialists Scotti Walker, Jennifer Fulbright and Brice Gross; and Seasonal Agricultural/Standards Specialists Cézanne Baker and Royann Delgado, as well as the rest of my staff at the Department of Agriculture for the preparation of this report.

My thanks to the many individuals, related agencies, and members of the agricultural industry for their contributions to the compilation of this report.

Sincerely,

Jerry Prieto, Jr.  
Agricultural Commissioner/Sealer



## DEDICATION

### DERAN KOLIGIAN

The 2001 Crop Report is dedicated to the memory of Deran Koligian, in honor and recognition of his commitment, leadership and nineteen years of devoted service to the citizens and agriculture industry of Fresno County during his tenure as a member of the Board of Supervisors representing District 1.

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This report is also available at our internet site:  
<http://www.fresno.ca.gov/4010/agwelcm.htm>

## FRESNO COUNTY'S 10 LEADING CROPS

Crop	2001 Rank	2001 Dollar Value	2000 Rank	1991 Rank	1981 Rank
COTTON	1	\$ 368,121,000	3	2	1
GRAPES	2	343,135,000	1*	1	2
POULTRY	3	339,051,000	2	+	+
MILK	4	248,554,000	5	6	4
TOMATOES	5	206,708,000	4	3	6
CATTLE AND CALVES	6	185,500,000	6*	4*	3
ALMONDS	7	149,671,000	7	12	15
ORANGES	8	146,132,000	11	18	9
GARLIC	9	123,854,000	12	13	20
NECTARINES	10	<u>102,705,000</u>	14	10	8
TOP TEN TOTAL		\$2,213,431,000			

+ Not previously combined for ranking purposes

\* Revised

## 2001 Highlights in Retrospect

### January:

Cold, dry weather slowed growth in grains, field crops, and vegetables. Wheat, barley, and oats were fertilized and treated with herbicides. Fields were prepared for alfalfa, cotton, tomatoes, and vegetables. Grape vines were pruned and tied; brush was shredded and disced. Nut and tree fruit orchards were pruned and treated with dormant sprays and herbicides. Lettuce was thinned, weeded, and irrigated. Garlic, onions, and carrots were planted. Bok choy, broccoli, cauliflower, cabbage and napa cabbage, cilantro, and mustard greens were harvested. Navel oranges and Satsuma mandarins were picked and packed.

### February:

Heavy rain and hail on February 10 damaged approximately 75 acres of vegetable crops. Fields were prepared for the planting of cotton, tomatoes, and summer vegetable crops. Alfalfa was fertilized and treated with herbicides. Pruning, tying, brush shredding, cultivation, and insecticide application continued in grape vineyards. New grape varieties were planted or grafted onto existing rootstock. Strawberry fields were weeded and plastic row covers laid down. Bloom began in strawberries, blueberries, and early stone fruit varieties. Dormant spraying, mowing, pruning, and herbicide treatments were in progress in nut and tree fruit orchards. Beehives were placed in tree fruit and almond orchards. Broccoli, cabbage, and asparagus were harvested. Specialty crops harvested were bok choy, napa cabbage, gailon, mustard greens, swiss chard, turnips, and others.

### March:

Field work was hampered by rain early in the month. Preplant herbicides were applied in cotton fields and planting commenced near the end of the month. The first cutting in alfalfa was made; fields were treated for weevils and weeds. Almond and tree fruit orchards advanced through bloom, petal fall, and leafing out as the month progressed. Apple orchards were treated for scale and worms. Bud break began in grape vineyards; vines were treated for mealybug. Planting of eggplant, peppers, squash, sweet corn and other vegetables began. Lettuce, asparagus, and broccoli were harvested. The first strawberries of the season were picked. Bees were pollinating orchards. Choy sum, collard greens, daikon, green onions, leeks, and other specialty vegetables were harvested.

### April:

A thunderstorm on April 7 brought wind, hail, and heavy rain that damaged grapevines, cotton, grains, and vegetables; cotton fields damaged by the storm were replanted. Head development began in small grains; growers irrigated in some fields. Field corn was cultivated and treated with herbicides. Alfalfa and oat hay were cut, windrowed, and baled; alfalfa seed fields were cultivated or burned back with acid. Rice, sweet potatoes, yams, melons, and other vegetable crops were planted. Garlic fields were treated for rust. Tree fruit had set and was sizing well; thinning began in tree fruit orchards. Earlitreat peaches were harvested later this month. Bloom began in walnut, pecan, and apple orchards; apple growers applied thinning sprays. Strawberries were harvested; growth was slow due to cold weather. The official citrus bloom period was declared, restricting spraying in order to protect bees. Navel and Valencia oranges were harvested. Gailon, parsley, sugar and snap peas, turnips, and other specialty vegetables were harvested.

### May:

Strong winds on May 2 damaged numerous crops in the westside districts; damage estimates totaled nearly two million dollars. Winter forage was cut for silage and baled for hay. Oats were harvested; oat straw was cut

and baled. Cotton fields were thinned, weeded, and treated for insect pests. Sugar beets were irrigated and cultivated. Bloom began in grape vineyards; growers applied growth regulators. Peaches, plums, pluots, apricots, nectarines, and cherries were harvested. Pomegranates and olives were blooming; pecans and walnuts were irrigated. Sweet corn began to develop tassels; blueberry plants set fruit. Amaranth, basil, beets, cabbage, cauliflower, chives, navel and Valencia oranges, okra, onions, squash, spinach, sugar peas, and yam leaves were harvested.

#### June:

Wheat, oats, and barley were harvested; straw was cut and baled. Melons, garbanzo beans, silage corn, and sweet potatoes were harvested. Cotton, safflower, and alfalfa fields were blooming; alfalfa fields were cut, windrowed, and baled. Field corn, silage corn, and sugar beet fields were irrigated, cultivated, and treated for weed control. Stone fruit harvesting continued; fruit thinning and summer pruning were in progress. Table grapes were picked and packed; pomegranates were developing color. Fresh figs, blueberries, boysenberries, and blackberries were harvested. Cucumbers, coriander, sweet corn, dill, eggplant, romaine and leaf lettuce, mint, moqua, ong choy, peppers, sinqua, squash, tomatoes, and other summer vegetables were harvested.

#### July:

Wheat and barley were harvested; stubble was disced, burned, or grazed by sheep. Cotton was irrigated, cultivated, and treated for insect control. Hand crews weeded and thinned some cotton fields. Alfalfa seed fields bloomed, set seed, and were harvested; alfalfa hay was cut, windrowed, and baled. Field corn was irrigated and treated for pests. Sugar beets, silage corn, and garbanzo beans were harvested. Safflower was blooming. Stone fruit, table grapes, Valencia oranges, Gala apples, and Asian pears were harvested. Almond hull split began; growers prepared orchards for harvest. Melons, onions, tomatoes, garlic, and other summer vegetables were harvested. Range conditions were very dry with little grazing available. Specialty vegetables harvested included green beans, bittermelon, cucumbers, eggplant, opo, peppers, and squash.

#### August:

Small grain harvesting continued; straw was baled and stacked. Winter wheat, forage, and rice were planted. Cotton bloom continued and boll set began. Alfalfa hay and seed were harvested; hay fields were green chopped for dairy feed. Sugar beets, garbanzos, and other dry beans were harvested. Table, juice, raisin, and wine grapes were harvested. Numerous varieties of stone fruit were harvested, along with almonds, apples, figs, Valencia oranges, pomegranates, pears, and Asian pears. Lettuce and broccoli plants were emerging and growing well. Garlic, lemon grass, long beans, melons, onions, sugar cane, tomatoes, and other summer and specialty vegetables were harvested.

#### September:

Harvested grain fields were prepared for fall planting. Cotton bolls were opening; defoliation began in some areas. Cotton harvesting began at the end of the month. Rice, dry beans, alfalfa hay, alfalfa seed, sudan, field corn, sweet corn, sweet potatoes, and sugar beets were harvested. New alfalfa hay fields were planted; silage was chopped and stored for dairy cattle feed. Sheep grazed harvested grain and alfalfa fields. Lettuce and broccoli were irrigated, thinned, weeded, and treated for insect pests. Seed lettuce began to bloom. Table, wine, juice, and raisin grapes were harvested. Olive groves were treated for Olive Fruit Fly; harvest began at the end of the month. Apples, quince, pomegranates, pears, stone fruit, and almonds were harvested. Mixed melons, specialty, and summer vegetables were harvested.

#### October:

Winter wheat and forage was planted; other grain fields were prepared for planting. Cotton, alfalfa hay, sudan, and silage harvesting continued. Rice, seed corn, field corn, and dry beans were harvested. Raisin, wine, and juice grape harvests were completed; table grape vineyards continued to produce fruit. The stone fruit harvest was complete by the end of the month; growers were irrigating and pruning to prepare their trees for dormancy. Almonds, walnuts, pistachios, and pecans were harvested. Apples, prunes, Asian pears, pomegranates, quince, persimmons, kiwifruit, figs, and strawberries were harvested as blueberries were being pruned. The melon harvest was completed as lettuce and broccoli harvesting began; seed lettuce was blooming and maturing. Garlic, tomatoes, and other summer vegetables were harvested; fields were prepared for planting of garlic, onions, cauliflower, broccoli, and other spring vegetables. Pumpkins were picked for Jack O' Lanterns and commercial processing. Olives were harvested for processing and oil. The navel orange harvest commenced; picking and packing of Valencia oranges continued.

#### November:

Rain early in the month slowed harvest activity in cotton, vegetables and alfalfa hay. Rice, almond, walnut, and most vegetable harvests completed; lettuce, broccoli, and cauliflower harvesting continued. New fields were planted to wheat, oats, and barley. Table grape picking and packing continued; some vines were tarped to protect them from rain. Pruning and cultivating were underway in grape vineyards and tree fruit orchards. Harvesting continued in pistachios, apples, persimmons, quince, kiwifruit, and pomegranates. This month's harvested vegetables included napa cabbage, sweet corn, collard greens, daikon, eggplant, lemon grass, mint, moqua, ong choy, peanuts, peppers, potatoes, squash, taro, turnips, tomatoes, wintermelon, and yams.

#### December:

Some lodging in small grains was caused by recent storms. The cotton harvest nearly completed with the exception of a few fields hampered by wet conditions. Newly emerged fields of sugar beets, garlic, and onions were growing well. Broccoli and cabbage were harvested in the Huron district. Orchards and vineyards were removed in some locations and ground was prepared for new plantings. Strawberry plants were topped and beds covered with plastic sheeting. Navel oranges and lemons were harvested. Specialty crop growers harvested bok choy, dill, gailon, leaf lettuce, mustard greens, spinach, wintermelon, yu choy, and other cold season crops.

**FIELD CROPS:** The total gross returns for field crops increased by \$7,855,000, from \$507,952,000 to \$515,807,000. The harvested acreage of barley was up 3,000 acres and the value of the crop increased \$669,000. Cotton, the number one crop in the county for 2001, increased in value \$13,681,000. This was up 3.86 percent from 2000 and resulted from a \$85,780,000 increase in the value of the Pima lint. Returns for alfalfa hay increased \$9,274,000 in spite of a 4,000 acre reduction in crop size. Field stubble, which consists of seed and hay alfalfa, barley, beans, broccoli, lettuce, melons, oats, tomatoes, and wheat, nearly tripled in value, climbing from \$571,000 to \$1,490,000. The harvested acreage of safflower was up and the price paid to growers increased nearly \$100 a ton; the value of this years' crop was \$1,225,000. Sugar beet acreage was down for the third year in a row; the value of the crop decreased \$8,461,000.

**SEED CROPS:** Total gross returns for all seed crops decreased by \$18,036,000 from the revised 2000 value of \$60,916,000 to \$42,880,000. The returns for alfalfa seed were down 47.16 percent; cotton seed decreased in value by \$1,044,000. Vegetable seed plantings were down 76.57 percent, or 2,810 acres. The other category of seed crops lost \$3,354,000 in value.

**VEGETABLE CROPS:** The total gross returns for vegetable crops decreased \$53,615,000, from \$791,607,000 to \$737,992,000. Bell peppers increased in value by \$8,897,000 and asparagus was down \$2,570,000. The garlic crop was up in value by \$39,512,000. Fresh garlic increased in value 34.80 percent; processed 64.39 percent. The value of the spring head lettuce crop was up \$10,008,000 while fall lettuce was down \$30,860,000. Increases in the yield per acre and price pushed the value of the cantaloupe crop up \$2,152,000. Gross returns for watermelons were up 45.86 percent. The fresh onion crop increased in value by nearly 50 percent. Total gross returns for standard tomatoes dropped 32.69 percent; processed tomatoes were down 25.06 percent.

**FRUIT AND NUT CROPS:** The total gross returns for fruit and nut crops decreased by \$24,266,800, from the revised 2000 value of \$1,093,432,800 to \$1,069,166,000. The value of the almond crop increased \$31,688,000; meats were up \$27,709,000 and hulls increased \$3,979,000. The price paid to growers for cherries decreased 37.85 percent, from \$6,571.00 a ton to \$4,084.00 a ton. The value of the orange crop climbed to \$146,132,000, up 61.1 percent from last year. The value of the 2000 grape crop was revised to reflect the actual price of \$600 per ton paid to raisin growers. The value of the 2001 grape crop was \$343,135,000, down \$147,950,000 from the 2000 adjusted value of \$491,085,000. It was a good year for nectarines, the crop increased in value \$24,641,000. Peaches were up \$1,117,000 and plums decreased in value \$1,322,000. The harvested acreage of both pistachios and prunes increased significantly; pistachios were up 55.19 percent and prunes 24.88 percent. Walnut plantings increased by 175 acres; the value of the crop was up \$1,639,000.

**NURSERY:** The gross returns from the sales of nursery products increased by \$3,109,300, from \$28,904,600 to \$32,013,900. The production of Christmas trees, down by 56.83 percent, had a value of \$10,900. The returns for other nursery products, which include bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf, increased from \$16,302,000 to \$20,383,000.

**LIVESTOCK AND POULTRY:** The total gross returns for livestock and poultry decreased 6.30 percent from the 2000 revised value of \$573,288,000 to \$537,148,000. This year cattle and calves was the number seven most valuable crop in the county at \$185,500,000. The value of hogs and pigs increased by 33.67 percent, or \$1,574,000, from the revised 2000 value. Lamb production was up 1,900 head.

**LIVESTOCK AND POULTRY PRODUCTS:** The total value of livestock and poultry products increased \$61,149,000, from \$207,036,000 to \$268,185,000. The price of manure was down \$1.80 a ton but production was up 241,000 tons. Manufacturing milk production was down by 69,000 hundred weight while the price paid to dairymen increased 3.35 a hundred weight. The value of market milk was up \$50,274,000. Wool production decreased 6,000 pounds, but was up in value \$31,000. The value of chicken, duck, and turkey eggs was up \$10,882,000.

**APIARY PRODUCTS AND POLLINATION SERVICES:** Gross returns for apiary and pollination services increased by \$589,900, from \$9,209,000 to \$9,798,900. The total value of honey increased \$326,000 in 2001, while beeswax was up 43.21 percent, from \$53,000 to \$75,900. The value of pollination services for alfalfa seed fell \$647,000 as a result of a 42.38 percent reduction in the number of colonies used.

**INDUSTRIAL CROPS:** The total value of industrial crops decreased 21.19 percent or \$1,894,000. Timber production was down 15,382,000 board feet and its value fell \$3,858,000. Firewood was up 11,900 cords and increased in value \$1,386,000.

SUSTAINABLE AGRICULTURE
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## 2001 BIOLOGICAL CONTROL ACTIVITIES

PEST	B.C. AGENT/MECHANISM	ACTIVITY
Puncture Vine	Puncture Vine Weevils	Confirmed that weevils were present in good numbers. No introduction needed.
Glassy-Winged Sharpshooter	<i>Gonatocerus triguttatus</i>	Released 2000 in September and October.

## 2001 DETECTION ACTIVITIES

INSECT	TRAPS DEPLOYED	RESULTS
Medfly	818	Two sterile flies trapped
Mexican Fruit Fly	189	None captured
Oriental Fruit Fly	153	None captured
Melon Fly	146	None captured
Gypsy Moth	402	None captured
Japanese Beetle	299	None captured
Glassy-Winged Sharpshooter	800	One nursery and numerous residences positive



## SUSTAINABLE AGRICULTURE

### PEST ERADICATION

**RED IMPORTED FIRE ANT:** continues to be found in Fresno County. An infested almond orchard was discovered during a routine survey for RIFA. It was located at the southwest corner of Jensen and Westlawn. Portions of the orchard were fairly heavily infested and it appears to have been there for several years. As the state continues to survey the almond orchards in the county, it is likely that they will find some more. The State will eradicate the population as they are found.

A former RIFA site was found to have expanded its range in the Clovis area. The RIFA site at Leonard and Shaw was found in a Southeast Asian farm across the street from the original site. A re-survey of the farm turned up positive. The initial survey of the farm had been negative. The state will lease the property, have it disced and leveled and then treat it.

**GLASSY-WINGED SHARPSHOOTER:** GWSS continued to be eradicated by Fresno County. As properties were found to be positive, the county sprayed them. One streetside planting at Perrin and Shepherd was left untreated to allow for release of the parasitoid *Gonatocerus triguttatus*. It is not known yet whether the parasitoids successfully established.

### NEW AND UNUSUAL PEST OUTBREAKS IN 2001

In June, **Caribbean Fruit Fly** (*Anastrepha suspensa*) was detected in a shipment of guavas from Florida by one of our sniffer dogs. Forty-five maggots were found in the guava. This find possibly saved the county from a major eradication effort. The dogs definitely proved their worth.

**Silver Leaf Whitefly** (*Bemisia argentifoliae*), had a major outbreak late in the year. Huge clouds of adults migrated from the cotton growing areas of the Valley over to the eastside in the areas of Sanger and Reedley. Many ornamental plants and vegetable gardens were badly infested by the adults. The outbreak resulted from a very warm May and low cotton prices that prevented cotton growers from doing a lot of spraying. Populations built up in the cotton and when defoliation began they migrated out.

In July, **Striped Mealybug** (*Ferrisia virgata*) was found for the first time in Fresno County. The "B" rated pest was found on some backyard plants at a home near Bullard and First. The homeowner was going to treat her plants. The majority of specimens were found on azaleas.

### 2001 ORGANIC FARMING

Gross returns for organic farming in 2001 totaled \$14,252,000. A large variety of crops were produced in compliance with the California Organic Food Act of 1990. One hundred farms totaling 8,457 acres and 23 handlers (shippers/packers) were registered organic in Fresno County in 2001. Crops grown, packed, and shipped include alfalfa, almonds, apples, apricots, arugula, artichoke, barley, basil, beans, beets, bell peppers, blueberries, broccoli, cabbage, cantaloupes, carrots, cattle, cauliflower, celery, chard, cherries, cilantro, corn, cotton, cucumbers, daikon, eggplant, endive, fennel, figs, garlic, gourds, grapes, grapefruit, kiwifruit, leeks, lemons, lettuce, milk, nectarines, nursery plants, olives, onions, oranges, parsley, parsnip, peaches, peas, peppers, persimmons, pistachios, plums, pluots, pomegranates, potatoes, radishes, raisins, shallots, spinach, squash, strawberries, tangerines, tomatoes, turkeys, walnuts, watermelons, and wheat.

# FRESNO COUNTY

## FIELD CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Barley</b>	2001	7,100	2.61	18,500	ton	\$ 92.00	\$ 1,702,000
	2000	4,100	2.27	9,310	ton	\$ 111.00	\$ 1,033,000
<b>Beans, dry <sup>a</sup></b>	2001	11,500	.88	10,100	ton	647.00	6,535,000
	2000	13,400	1.20	16,100	ton	523.00	8,420,000
<b>Corn</b>							
Grain	2001	1,830	4.17	7,630	ton	104.00	794,000
	2000	4,000	4.30	17,200	ton	86.00	1,479,000
Silage	2001	21,200	23.30	494,000	ton	23.00 <sup>b</sup>	11,362,000
	2000	18,700	24.39	456,000	ton	27.00 <sup>b</sup>	12,312,000
<b>Cotton</b>							
Upland (Acala) Lint	2001	171,000	1,538 <sup>c</sup>	526,000 <sup>d</sup>	bale	.70 <sup>e</sup>	185,573,000
	2000	220,000	1,486 <sup>c</sup>	654,000 <sup>d</sup>	bale	.69 <sup>e</sup>	227,435,000
Seed	2001			181,000	ton	157.00	28,417,000
	2000			231,000	ton	151.00	34,881,000
Upland (Non-Acala) Lint	2001	6,230	1,172 <sup>c</sup>	14,600 <sup>d</sup>	bale	.50 <sup>e</sup>	3,679,000
	2000	38,100	1,293 <sup>c</sup>	98,500 <sup>d</sup>	bale	.66 <sup>e</sup>	32,765,000
Seed	2001			5,020	ton	157.00	788,000
	2000			34,800	ton	151.00	5,255,000
Pima Lint	2001	109,400	1,440 <sup>c</sup>	315,000 <sup>d</sup>	bale	.84 <sup>e</sup>	133,358,000
	2000	33,400	1,413 <sup>c</sup>	94,400 <sup>d</sup>	bale	1.00 <sup>e</sup>	47,578,000
Seed	2001			124,000	ton	127.00	15,748,000
	2000			37,300	ton	132.00	4,924,000
<b>Cotton Total <sup>f</sup></b>	<b>2001</b>	<b>286,630</b>					<b>367,563,000</b>
	<b>2000</b>	<b>291,500</b>					<b>352,838,000</b>
<b>Hay</b>							
Alfalfa	2001	67,400	7.63	514,000	ton	121.00	62,194,000
	2000	71,400	7.56	540,000	ton	98.00	52,920,000
Other <sup>g</sup>	2001	12,500	2.96	37,000	ton	82.00	3,034,000
	2000	10,700	4.27	45,700	ton	56.00	2,559,000

FRESNO COUNTY

FIELD CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Pasture and Range							
Field	2001	33,400			acre	\$ 44.61	\$ 1,490,000
Stubble <sup>h</sup>	2000	19,500			acre	\$ 29.28	\$ 571,000
Irrigated	2001	40,000			acre	125.00	5,000,000
Pasture	2000	40,000			acre	125.00	5,000,000
Grazing	2001	850,000			acre	8.00	6,800,000
Range	2000	850,000			acre	8.00	6,800,000
Rice	2001	5,620	3.90	21,900	ton	177.00	3,876,000
	2000	6,160	3.99	24,600	ton	186.00	4,576,000
Safflower	2001	4,500	1.11	5,000	ton	245.00	1,225,000
	2000	3,070	2.48	7,600	ton	146.00	1,110,000
Sugar Beets	2001	11,000	39.00	429,000	ton	36.00	15,444,000
	2000	19,100	35.76	683,000	ton	35.00	23,905,000
Wheat	2001	59,600	3.05	182,000	ton	115.00	20,930,000
	2000	69,500	2.95	205,000	ton	119.00	24,395,000
Other <sup>i</sup>	2001	10,800					7,858,000
	2000	<u>8,820</u>					<u>10,034,000</u>
Total	2001	1,389,680					\$515,807,000
	2000	1,410,450					\$507,952,000

**a** Includes black-eyed, garbanzo, baby lima, and pinto beans

**b** Field price

**c** Pounds of lint per acre

**d** 500 pounds lint per bale

**e** Price per pound, 504 pounds gross weight per bale

**f** Not used for top 10 ranking; does not include cotton seed for planting

**g** Includes hay from alfalfa seed, oats, pasture grass, sudan, winter forage and wheat

**h** Not included in total field crop acreage; includes acreage from alfalfa hay, seed alfalfa, barley, beans, broccoli, lettuce, melons, oats, tomatoes and wheat.

**i** Includes oats (grain and silage), ryegrass (green chopped), sorghum, straw, sugar beet pulp, sugarcane, wheat silage, and winter forage; **organic:** alfalfa, winter forage and wheat

# FRESNO COUNTY

## SEED CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Alfalfa</b>	2001	10,060	750	7,545,000	lb.	\$ 1.40	\$10,563,000
<b>Certified</b>	2000	23,800	560	13,328,000	lb.	\$ 1.50	\$19,992,000
<b>Cotton<sup>a</sup></b>	2001	6,980		5,584,000	lb.	.10	558,000
<b>Certified</b>	2000	11,200		14,560,000	lb.	.11	1,602,000
<b>Vegetable<sup>b</sup></b>	2001	860					3,331,000
	2000	3,670					7,540,000
<b>Other<sup>c</sup></b>	2001	2,680					28,428,000
	2000	<u>3,340*</u>					<u>31,782,000*</u>
<b>Total</b>	<b>2001</b>	<b>13,600</b>					<b>\$42,880,000</b>
	<b>2000</b>	<b>30,810*</b>					<b>\$60,916,000*</b>

**a** Included in field crop acreage

**b** Arugula, bok choy, kohlrabi, lettuce, mustard (Japanese and red), muzuna, onions, and tomatoes

**c** Alfalfa (non-certified), barley, corn, garbanzo beans, grain sorghum, rice, triticale, wheat (certified and non-certified); **flowers:** cosmos, gazania, purple cone, black-eyed susans, and zinnias

\* Revised

# FRESNO COUNTY

## VEGETABLE CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Asparagus<sup>a</sup></b>	2001	2,240	2.70	6,050	ton	\$ 1,564.00	\$ 9,462,000
	2000	2,590	2.62	6,790	ton	\$ 1,772.00	\$ 12,032,000
<b>Bell Peppers<sup>a</sup></b>	2001	1,640	21.95	36,000	ton	740.00	26,640,000
	2000	2,380	20.88	49,700	ton	357.00	17,743,000
<b>Broccoli<sup>a</sup></b>	2001	8,450	6.62	55,900	ton	419.00	23,422,000
	2000	7,640	8.31	63,500	ton	478.00	30,353,000
<b>Eggplant<sup>b</sup></b>	2001	845	11.74	9,920	ton	445.00	4,414,000
	2000	910	9.71	8,840	ton	528.00	4,668,000
<b>Garlic</b>							
Fresh	2001	6,280	7.36	46,200	ton	1,459.00	67,406,000
	2000	4,500	8.31	37,400	ton	1,337.00	50,004,000
Processed	2001	18,800	8.94	168,000	ton	336.00	56,448,000
	2000	13,500	8.74	118,000	ton	291.00	34,338,000
<b>Head Lettuce</b>							
Naked				38,200	ton		
Wrapped				78,500	ton		
Bulk				65,400	ton		
Spring	2001	9,840	18.51	182,100	ton	291.00	52,991,000
Season Total	2000	9,920	14.79	146,700	ton	293.00	42,983,000
Naked				33,700	ton		
Wrapped				75,100	ton		
Bulk				49,000	ton		
Fall	2001	10,300	15.32	157,800	ton	223.00	35,189,000
Season Total	2000	10,100	20.56	207,700	ton	318.00	66,049,000
<b>Head Lettuce</b>	<b>2001</b>	<b>20,140</b>		<b>339,900</b>			<b>88,180,000</b>
<b>Totals</b>	<b>2000</b>	<b>20,020</b>		<b>354,400</b>			<b>109,032,000</b>

FRESNO COUNTY

VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Leaf Lettuce</b> <sup>c</sup>	2001	5,730	9.35	53,600	ton	\$ 610.00	\$ 32,696,000
	2000	4,800	10.38	49,800	ton	\$ 842.00	\$ 41,932,000
<b>Melons</b>							
Cantaloupe <sup>a</sup>	2001	25,600	13.91	356,000	ton	227.00	80,812,000
	2000	28,700	13.24	380,000	ton	207.00	78,660,000
Honeydew	2001	5,200	13.35	69,400	ton	231.00	16,031,000
	2000	3,770	17.16	64,700	ton	310.00	20,057,000
Mixed Melons <sup>d</sup>	2001	1,540	11.75	18,100	ton	350.00	6,335,000
	2000	1,670	8.80	14,700	ton	281.00	4,131,000
Watermelon	2001	2,040	33.53	68,400	ton	198.00	13,543,000
	2000	1,720	31.57	54,300	ton	171.00	9,285,000
<b>Onions</b>							
Fresh	2001	5,880	27.72	163,000	ton	209.00	34,067,000
	2000	5,330	25.00	133,000	ton	175.00	23,275,000
Processed	2001	10,500	16.00	168,000	ton	83.00	13,944,000
	2000	9,100	18.90	172,000	ton	78.00	13,416,000
<b>Oriental Vegetables</b> <sup>e</sup>	2001	1,350	8.52	11,500	ton	449.00	5,164,000
	2000	1,350	7.41	10,000	ton	567.00	5,670,000
<b>Squash</b> <sup>f</sup>	2001	795	6.78	5,390	ton	437.00	2,355,000
	2000	820	7.00	5,740	ton	514.00	2,950,000
<b>Sweet Corn</b>	2001	6,310	11.62	73,300	ton	252.00	18,472,000
	2000	7,470	11.70	87,400	ton	259.00	22,637,000
<b>Tomatoes</b>							
Cherry	2001	210	19.14	4,020	ton	706.00	2,838,000
	2000	170	24.53	4,170	ton	862.00	3,595,000

# FRESNO COUNTY

## VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Tomatoes, continued							
Standard	2001	6,160	13.13	80,900	ton	\$ 336.00	\$ 27,182,000
	2000	6,350	16.69	106,000	ton	\$ 381.00	\$ 40,386,000
Processed	2001	106,000	34.73	3,681,000	ton	48.00	176,688,000
	2000	115,000	40.20	4,623,000	ton	51.00	235,773,000
Tomatoes Total	2001	112,370					206,708,000
	2000	121,520					279,754,000
Other <sup>g</sup>	2001	8,190					31,893,000
	2000	<u>7,540</u>					<u>31,670,000</u>
Total	2001	243,900				\$	737,992,000
	2000	245,330				\$	791,607,000

**a** Includes fresh and processed

**b** Includes Chinese, Globe, Indian, Italian, Japanese, and Philippine varieties

**c** Includes Red, Green, Butter, and Romaine varieties

**d** Includes Casaba, Crenshaw, Galia, Juan Canary, Orange Flesh, Persian, Santa Claus, Sharlyn, and Temptation varieties

**e** Includes amaranth, bittermelon, bok choy (baby, regular, and Shanghai), napa cabbage, canna lilies, chayote, daikon, donqua, gai choy, gailon, lemon grass, lo bok, long beans, moqua, opo, potato leaf, seequa, sinqua, sour leaf, sugar peas, taro root, yam leaves, and you choy

**f** Includes summer and winter varieties

**g** Includes artichokes, arugula, beans (blue, jade, fava, green, Indian guava, lima, snap and tuve Indian), beets, cabbage, carrots (fresh and processed), cauliflower, celery (fresh and processed), Swiss chard, chicory/radicchio, collards, cornnuts, cucumbers (fresh and processed), dandelion greens, endive/escarole, jicama, kale, kohlrabi, leeks, mushrooms, mustard greens, okra, green onions, parsnips, English peas, peanuts, chili peppers (fresh and processed), pumpkins, radishes, rutabagas, spinach, brussel sprouts, sunchokes, sweet potatoes/yams, tomatillos, and turnips; **herbs**: anise, basil, cilantro, dill, fennel, mint, parsley (dry), rosemary, and spice mix; **organic**: arugula, beans (green, Italian and snap), broccoli (processed), carrots, cantaloupes, Swiss chard, chickory, sweet corn, cucumbers, eggplant, endive/escarole, garlic (fresh and processed), leeks, leaf and romaine lettuce, mixed melons, mustard greens, onions (fresh and processed), bell peppers, radicchio, radish, spinach, winter squash, tomatoes (fresh and processed), and zucchini (processed); **organic herbs**: basil, cilantro, fennel, parsley (fresh and dried), and rosemary

# FRESNO COUNTY

## FRUIT AND NUT CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Almonds<sup>a</sup></b>	2001	61,896	1.06	65,610	ton	\$ 2,120.00	\$ 139,093,000
	2000	57,350	.83	47,600	ton	\$ 2,340.00	\$ 111,384,000
<b>Almond Hulls</b>	2001			123,000	ton	86.00	10,578,000
	2000			85,700	ton	77.00	6,599,000
<b>Apples<sup>a</sup></b>	2001	3,113	8.45				
	2000	3,205	11.95				
Fresh	2001			20,000	ton	565.00	11,300,000
	2000			19,800	ton	600.00	11,880,000
Processed	2001			6,320	ton	80.00	506,000
	2000			18,500	ton	65.00	1,203,000
<b>Apricots<sup>a</sup></b>	2001	1,340	6.00	8,040	ton	887.00	7,131,000
	2000	1,301	6.16	8,010	ton	878.00	7,033,000
<b>Cherries</b>	2001	1,550	2.49	3,860	ton	4,084.00	15,764,000
	2000	1,496	1.76	2,630	ton	6,571.00	17,282,000
<b>Citrus</b>							
<b>Lemons</b>	2001	828	21.81				
	2000	830	12.01*				
Fresh	2001			10,400	ton	476.00	4,950,000
	2000			4,570	ton	411.00	1,878,000
Processed	2001			7,660	ton	40.00	306,000
	2000			5,400	ton	48.00	259,000
<b>Citrus, other<sup>b</sup></b>	2001	1,578	13.17				
	2000	1,205	10.94				
Fresh <sup>a</sup>	2001			16,900	ton	497.00	8,399,000
	2000			9,200	ton	493.00	4,536,000
Processed	2001			3,880	ton	29.00	113,000
	2000			3,980	ton	10.00	39,800



## FRESNO COUNTY

## FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Oranges							
Navel <sup>a</sup>	2001	21,353	12.63				
	2000	20,717	12.31				
Fresh	2001			225,000	ton	\$ 513.00	\$ 115,425,000
	2000			193,000	ton	\$ 376.00	\$ 72,568,000
Processed	2001			44,600	ton	15.00	669,000
	2000			62,000	ton	25.00	1,550,000
Valencia	2001	5,292	15.61				
	2000	5,534	15.63				
Fresh	2001			68,700	ton	434.00	29,816,000
	2000			46,400	ton	323.00	14,987,000*
Processed	2001			13,900	ton	16.00	222,000
	2000			40,100	ton	40.00	1,604,000
Oranges Total	2001	26,645					146,132,000
	2000	26,251					90,709,000*
Grapes							
Raisin Varieties <sup>a</sup>	2001	171,900	6.93				
	2000	170,817	11.22				
Canned	2001			24,500	ton	376.00	9,212,000
	2000			9,700	ton	181.00	1,756,000
Crushed	2001			165,000	ton	86.00	14,190,000
	2000			322,000	ton	124.00	39,928,000
Dried	2001			233,000	ton	525.00	122,325,000
	2000			356,000	ton	600.00 <sup>c</sup>	213,600,000*
Fresh	2001			45,000	ton	926.00	41,670,000
	2000			55,000	ton	885.00	48,675,000
Juice	2001			1,510	ton	467.00	705,000
	2000			2,100	ton	539.00	1,132,000

## FRESNO COUNTY

## FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Grapes (continued)							
Table Varieties	2001	11,586	6.90				
	2000	10,677	9.37				
Crushed	2001			12,000	ton	\$ 76.00	\$ 912,000
	2000			15,000	ton	\$ 93.00	\$ 1,395,000
Fresh <sup>a</sup>	2001			68,000	ton	1,062.00	72,216,000
	2000			85,000	ton	956.00	81,260,000
Wine Varieties	2001	47,091	9.26				
	2000	43,782	11.11				
Crushed <sup>a</sup>	2001			432,000	ton	185.00	79,920,000
	2000			483,000	ton	210.00	101,430,000
Juice	2001			4,170	ton	476.00	1,985,000
	2000			3,510	ton	544.00	1,909,000
Grapes Total	2001	230,577					343,135,000
	2000	225,276					491,085,000*
Kiwifruit <sup>a</sup>	2001	466	6.50	3,030	ton	714.00	2,163,000
	2000	415	6.43	2,670	ton	843.00	2,251,000
Nectarines <sup>a</sup>	2001	14,808	8.31	123,000	ton	835.00	102,705,000
	2000	13,784	8.13	112,000	ton	697.00	78,064,000
Olives, canned <sup>a</sup>	2001	954	3.65	3,480	ton	690.00	2,401,000
	2000	1,230	1.87	2,300	ton	775.00	1,783,000
Peaches							
Cling	2001	1,294	17.93	23,200	ton	237.00	5,498,000
	2000	1,263	17.81	22,500	ton	232.00	5,220,000
Freestone <sup>a</sup>	2001	13,246	8.53	113,000	ton	803.00	90,739,000
	2000	12,690	9.77	124,000	ton	725.00	89,900,000
Peaches Total	2001	14,540					96,237,000
	2000	13,953					95,120,000
Pears, Asian and European	2001	898	11.47	10,300	ton	1,015.00	10,455,000
	2000	972	12.24	11,900	ton	1,013.00	12,055,000

FRESNO COUNTY

FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Persimmons	2001	439	8.50	3,730	ton	\$ 550.00	\$ 2,052,000
	2000	411	9.49	3,900	ton	\$ 697.00	\$ 2,718,000
Pistachios	2001	7,047	1.26	8,880	ton	2,280.00	20,246,000
	2000	4,541	1.45	6,580	ton	2,300.00	15,134,000
Plums <sup>a</sup>	2001	14,774	8.05	119,000	ton	802.00	95,438,000
	2000	14,841	7.95	118,000	ton	820.00	96,760,000
Pomegranates	2001	1,480	6.42	9,500	ton	751.00	7,135,000
	2000	1,089	4.80	5,230	ton	1,147.00	5,999,000
Prunes, dried <sup>a</sup>	2001	4,412	2.67	11,800	ton	650.00	7,670,000
	2000	3,533	1.85	6,540	ton	844.00	5,520,000
Strawberries <sup>a</sup>	2001	210	8.81	1,850	ton	1,951.00	3,609,000
	2000 <sup>d</sup>	494	19.25	9,510	ton	761.00	7,237,000
Walnuts <sup>a</sup>	2001	3,297	2.17	7,150	ton	1,178.00	8,423,000
	2000	3,122	1.70	5,300	ton	1,280.00	6,784,000
Other <sup>e</sup>	2001	4,440					23,290,000
	2000	<u>3,480</u>					<u>20,120,000</u>
Total	2001	395,292					\$1,069,231,000
	2000	378,779					\$1,093,432,800*

**a** Acres packed fresh or processed are included in other fruit and nut crops: 6 acres apricots (processed), 110 acres olive oil, 40 acres prunes, and 17 acres freestone peaches (processed); **organic:** 40 acres almonds, 48 acres apples, 6 acres apricots, 48 acres table grapes, 531 acres raisin grapes, 36 acres raisins (processed), 280 acres wine grapes, 11 acres kiwifruit, 4 acres mandarin tangerines, 32 acres nectarines, 54 acres navel oranges (fresh and processed), 46 acres freestone peaches, 146 acres plums, 1 acre strawberries, and 78 acres walnuts

**b** Includes blood oranges, grapefruit, mandarin tangerines, minneola tangelos, and pummelos

**c** An agreed-upon price per ton for raisins had not been reached when this report went to print in 2001. The value used, for reporting purposes only, was \$1,025 per ton, the last value offered by the Raisin Bargaining Association. The revised value of \$600 for 2000 raisin prices used in this report, reflects free tonnage, reserve tonnage and raisin diversion program tonnage.

**d** Includes fresh and processed

**e** Includes apples (dried), apricots (dried and processed), avocados, berries (other), blackberries, blueberries, boysenberries, chestnuts, figs (fresh, dried, and substandard), grapes (compost and raisin by-products), jujubes, kiwifruit, nectarines (dried and processed), olives (oil), peaches (dried and processed), pecans, plumcots/pluots, plums (processed), prunes (processed), quince, and strawberries (processed); **organic:** almonds, apples (fresh), apricots (processed), figs (dried, fresh and substandard), grape leaves, grapes (table, raisin, and wine), kiwifruit, mandarin tangerines, nectarines, navel oranges (fresh and processed), peaches, plumcots/pluots, plums, strawberries, and walnuts

\* Revised

FRESNO COUNTY

NURSERY PRODUCTS

ITEM	YEAR	ACRES	QUANTITY	UNIT	VALUE
<b>Christmas Trees</b>	2001	35	600	trees	\$ 10,900
	2000	28	1,390	trees	\$ 36,600
<b>Herbaceous Ornamentals<sup>a</sup></b>	2001	20	977,000	b	3,792,000
	2000	18	11,036,000	b	4,598,000
<b>Ornamental Trees and Shrubs</b>	2001	85	1,028,000	plants	7,828,000
	2000	90	1,074,000	plants	7,968,000
<b>Other<sup>c</sup></b>	2001	622	181,019,000	plants	20,383,000
	2000	<u>590</u>	261,995,000	plants	<u>16,302,000</u>
<b>Total</b>	<b>2001</b>	<b>762</b>			<b>\$32,013,900</b>
	<b>2000</b>	<b>726</b>			<b>\$28,904,600</b>

**a** Includes potted plants, bedding plants, flats, and perennials

**b** Includes flats, dozens, cans, and single plants

**c** Includes bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf

## FRESNO COUNTY

## LIVESTOCK AND POULTRY

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Cattle and Calves						
Beef						
Breeding Stock						
Common	2001	1,280		head	\$ 732.00	\$ 937,000
	2000	1,290		head	\$ 714.00	\$ 921,000
Registered	2001	320		head	2,800.00	896,000
	2000	320		head	1,491.00	477,000
Feeders	2001	155,000	309,000	cwt.	80.47	24,865,000
	2000	135,000	269,000	cwt.	79.80	21,466,000
Calves	2001	22,400	67,200	cwt.	100.43	6,749,000
	2000	22,600	67,900	cwt.	102.90	6,987,000
Slaughter Stock	2001	262,000	1,325,000 <sup>a</sup>	cwt.	71.43	94,645,000
	2000	253,000*	1,233,000 <sup>a*</sup>	cwt.	68.80	84,830,000*
Dairy						
Breeding Stock	2001	12,400		head	1,760.00	21,824,000
	2000	11,700		head	1,580.00	18,486,000
Cull Stock	2001	26,900	350,000	cwt.	44.06	15,421,000
	2000	26,300	342,000	cwt.	41.20	14,090,000
Calves	2001	46,900	141,000	cwt.	143.00	20,163,000
	2000	37,300	112,000	cwt.	143.00	16,016,000
Cattle and Calves Total	2001					185,500,000
	2000					163,273,000*

## FRESNO COUNTY

## LIVESTOCK AND POULTRY (continued)

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
<b>Sheep and Lambs</b>						
Slaughter Stock						
Lambs	2001	49,800	56,000	cwt.	\$ 79.36	\$ 4,444,000
	2000	47,900	53,900	cwt.	\$ 78.48	\$ 4,230,000
Sheep	2001	11,200	15,600	cwt.	31.22	487,000
	2000	11,300	15,800	cwt.	31.84	503,000
<b>Turkeys</b>	2001	5,431,000	124,587,000	lb.	.40	49,835,000
	2000	5,606,000	131,741,000	lb.	.40	52,696,000
<b>Other<sup>b</sup></b>	2001					290,633,000
	2000					<u>347,911,000</u>
<b>Total</b>	<b>2001</b>					<b>\$537,148,000</b>
	<b>2000</b>					<b>\$573,288,000*</b>

**a** Net gain

**b** Includes beneficial insects; chickens, chicks, fryers, old breeder birds, broilers, and roasters; fish; game birds; cull milk goats and kid goats; squab; turkey poults and old turkey breeder birds

\* Revised

FRESNO COUNTY

LIVESTOCK AND POULTRY PRODUCTS

ITEM	YEAR	PRODUCTION	UNIT	VALUE	
				PER UNIT	TOTAL
<b>Manure<sup>a</sup></b>	2001	564,000	ton	\$ 4.50	\$ 2,538,000
	2000	323,000	ton	\$ 6.30	\$ 2,035,000
<b>Milk</b>					
Manufacturing	2001	32,000	cwt.	12.75	408,000
	2000	101,000	cwt.	9.40	949,000
Market <sup>b</sup>	2001	18,047,000	cwt.	13.75	248,146,000
	2000	17,449,000	cwt.	11.34	197,872,000
<b>Wool</b>	2001	558,000	lb.	.40	223,000
	2000	564,000	lb.	.34	192,000
<b>Eggs</b>					
Chicken, Duck & Turkey <sup>c</sup>	2001	7,703,000	dozen	2.19	16,870,000
	2000	998,000	dozen	6.00	<u>5,988,000</u>
<b>Total</b>	<b>2001</b>				<b>\$268,185,000</b>
	<b>2000</b>				<b>\$207,036,000</b>

**a** Includes cow and poultry manure

**b** Includes cow and goat milk

**c** Includes balut, market, hatching, and excess eggs

FRESNO COUNTY

**APIARY PRODUCTS AND POLLINATION SERVICES**

ITEM	YEAR	PRODUCTION TOTAL	UNIT	VALUE	
				PER UNIT	TOTAL
Apiary Products <sup>a</sup>					
Honey	2001	2,334,000	lb.	\$ .63	\$ 1,470,000
	2000	2,243,000	lb.	\$ .51	\$ 1,144,000
Beeswax	2001	62,700	lb.	1.21	75,900
	2000	42,700	lb.	1.24	53,000
Pollination <sup>b</sup>					
Alfalfa Seed	2001	31,000	colony	26.26	814,000
	2000	53,800	colony	27.16	1,461,000
Trees, Fruit and Nut <sup>c</sup>	2001	156,000	colony	44.52	6,945,000
	2000	144,000	colony	41.90	6,034,000
Cantaloupe	2001	30,900	colony	16.00	494,000
	2000	27,700	colony	18.66	<u>517,000</u>
Total	2001				\$ 9,798,900
	2000				\$ 9,209,000

**a** Reflects bee colonies registered in Fresno County by commercial and semi-commercial beekeepers:  
2001- 47,892 colonies; 2000- 43,530 colonies

**b** Reflects value of pollination by all bee colonies located in Fresno County for pollination services  
during 2001. Estimated total colonies: 69,705

**c** Almonds, cherries, and plums



# FRESNO COUNTY

## INDUSTRIAL CROPS

CROP	YEAR	PRODUCTION	UNIT	VALUE
<b>Timber</b> <sup>a</sup>	2001	16,301,000	board feet	\$ 4,917,000
	2000	31,683,000	board feet	\$ 8,775,000
<b>Firewood</b>	2001	15,200	cords	1,551,000
	2000	3,300	cords	165,000
<b>Other</b> <sup>b</sup>	2001			578,000
	2000*			
<b>Total</b>	<b>2001</b>			<b>\$ 7,046,000</b>
	<b>2000</b>			<b>\$ 8,940,000</b>

**a** Includes government and non-government properties

**b** Includes walnut stumps and woodchips for biomass

\* Not previously reported

**GROWTH IN FRESNO COUNTY AGRICULTURE AS INDICATED BY GROSS  
PRODUCTION VALUE OF AGRICULTURAL PRODUCTS OVER A TWENTY-ONE YEAR SPAN**

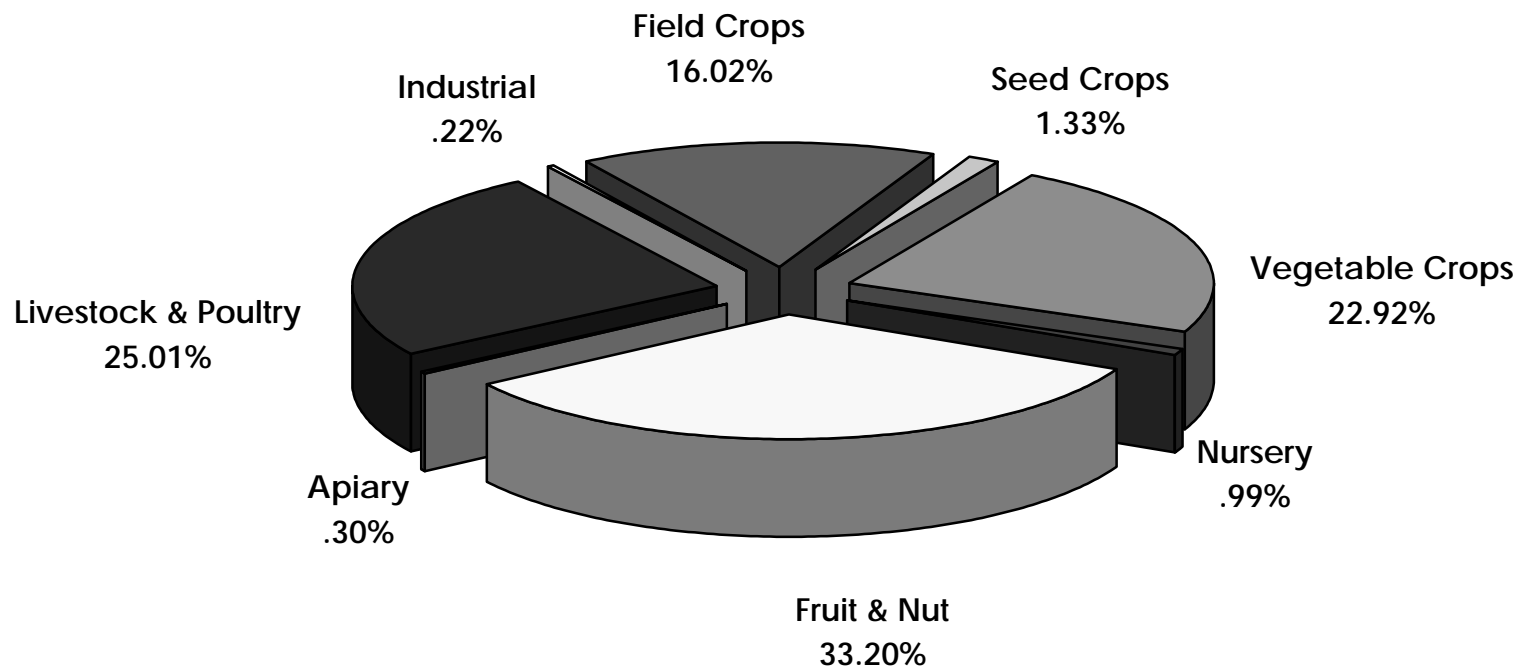
1981	-	1,905,289,240*	1992	-	2,635,447,400*
1982	-	1,855,733,500	1993	-	3,022,311,100*
1983	-	1,727,319,500	1994	-	3,084,870,800
1984	-	1,921,020,840*	1995	-	3,142,878,300*
1985	-	2,054,060,400*	1996	-	3,324,885,800
1986	-	2,125,721,200*	1997	-	3,436,443,500*
1987	-	2,264,044,000*	1998	-	3,257,712,600*
1988	-	2,444,732,600*	1999	-	3,570,027,600*
1989	-	2,607,648,800*	2000	-	3,281,285,400*
1990	-	2,949,484,000*	2001	-	3,220,101,800
1991	-	2,552,305,040*			

**SIX-YEAR COMPARISON OF GROSS PRODUCTION VALUE IN FRESNO COUNTY**

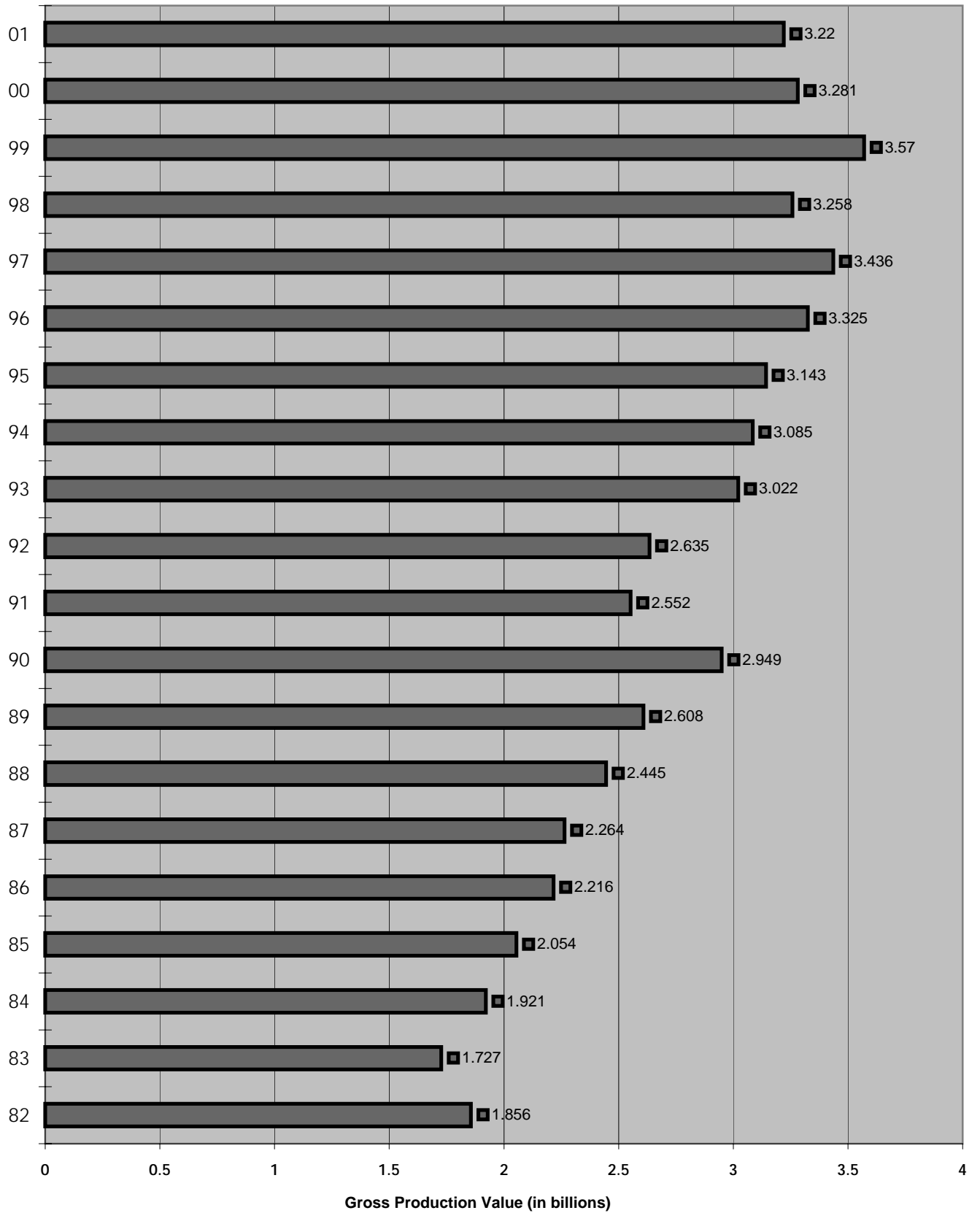
<b>CROPS</b>	<b>1981</b>	<b>1991</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
<b>Field</b>	\$ 580,238,000	\$ 500,333,000	\$ 466,556,000	\$ 485,640,000	\$ 507,952,000	\$ 515,807,000
<b>Seed</b>	46,716,000	39,729,400	33,202,000*	43,332,000	60,916,000*	42,880,000
<b>Vegetable</b>	186,262,000	524,538,000*	691,940,000	882,648,000	791,607,000	737,992,000
<b>Fruit &amp; Nut</b>	679,717,300*	798,039,840	1,211,362,000*	1,191,094,000	1,093,432,800*	1,069,231,000
<b>Nursery</b>	5,675,000	18,074,000	29,575,600	32,530,600	28,904,600	32,013,900
<b>Livestock</b>	396,568,000	657,290,000*	809,503,000	917,722,000*	780,324,000*	805,333,000
<b>Apiary</b>	5,412,940	6,027,400	9,008,000	10,874,000	9,209,000	9,798,900
<b>Industrial</b>	<u>4,700,000</u>	<u>8,273,400</u>	<u>6,566,000*</u>	<u>6,187,000</u>	<u>8,940,000</u>	<u>7,046,000</u>
<b>TOTAL</b>	<b>\$ 1,905,289,240*</b>	<b>\$2,552,305,040*</b>	<b>\$3,257,712,600*</b>	<b>\$3,570,027,600*</b>	<b>\$3,281,285,400*</b>	<b>\$3,220,101,800</b>

\*Revised

RELATIONSHIP IN TERMS OF TOTAL VALUE  
FOR 2001 CROP YEAR  
\$3,220,101,800



**GROWTH OF FRESNO COUNTY AGRICULTURE  
OVER A TWENTY YEAR SPAN  
1982 through 2001**





## Department of Agriculture

**Jerry Prieto, Jr.**

Agricultural Commissioner/  
Sealer of Weights & Measures

**Robert D. Vandergon**

Assistant Agricultural Commissioner/  
Sealer of Weights & Measures

William J. Lyons, Jr., Secretary  
California Department of Food and Agriculture

The Honorable Board of Supervisors  
County of Fresno

Juan Arambula, Chairman  
Susan B. Anderson      Judith G. Case  
Phil Larson      Bob Waterston

Bart Bohn  
County Administrative Officer

I am pleased to submit the 2002 Fresno County Agricultural Crop and Livestock Report. This annual compilation presents statistical data pertaining to the acreage, yield, and gross value of Fresno County agricultural products.

The total gross production value of Fresno County agricultural commodities in 2002 was \$3,419,087,000. This represents a 6.18 percent increase from the 2001 production value. It must be emphasized that the values presented in this report reflect gross values only, and do not in any manner reflect net income or loss to producers. The agricultural economy remains depressed. Growers continue to have difficulty meeting financial obligations and obtaining operating capital. Growers are still being adversely impacted by low commodity prices and increased production costs, particularly in the areas of labor, water, fuel and energy.

Agriculture continues as the major industry in Fresno County, and is a driving force in the county's economy. Every dollar received by Fresno County producers results in the economic extension benefit of three and one-half dollars to the total economy of the county.

I sincerely appreciate the professional and dedicated work performed by Deputy Agricultural Commissioner/Sealer Dennis C. Plann; Supervising Agricultural/Standards Specialist Bruce Clayton; Agricultural/Standards Specialists Scotti Walker, Jennifer Fulbright and Brice Gross; and Seasonal Agricultural/Standards Specialists Cézanne Baker and Royann Delgado, as well as the rest of my staff at the Department of Agriculture for the preparation of this report.

My thanks to the many individuals, related agencies, and members of the agricultural industry for their contributions to the compilation of this report.

Sincerely,

Jerry Prieto, Jr.  
Agricultural Commissioner/Sealer

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<http://www.fresno.ca.gov/4010/agwelcm.htm> - [fresnoag@fresno.ca.gov](mailto:fresnoag@fresno.ca.gov)

Equal Employment Opportunity - Affirmative Action - Disabled Employer

*"We understood the rhythms of farming. Spring meant work, summer meant harvest, fall a time for gratitude, and winter a pause for reflection."*

*"Epitaph for a Peach  
Four Seasons on My Family Farm"*

*David Mas Masumoto*

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This report is also available at our internet site:  
<http://www.fresno.ca.gov/4010/agwelcm.htm>

## FRESNO COUNTY'S 10 LEADING CROPS

Crop	2002 Rank	2002 Dollar Value	2001 Rank	1992 Rank	1982 Rank
GRAPES	1	\$ 400,255,000	2	1*	1
COTTON	2	345,189,000	1	2	2
POULTRY	3	270,851,000	3	+	+
TOMATOES	4	265,887,000	5	3	4
MILK	5	199,937,000	4	4	5
ALMONDS	6	196,565,000	7	11	15
CATTLE AND CALVES	7	177,445,000	6	5	3
ORANGES	8	138,654,000	8	7	8
GARLIC	9	131,004,000	9	16	17
PLUMS	10	<u>111,500,000</u>	12	12	7
TOP TEN TOTAL		\$2,237,287,000			

+ Not previously combined for ranking purposes

\* Revised



# 2002 Highlights in Retrospect

## January:

Mild temperatures and ample soil moisture contributed to vigorous growth in grain, vegetable, and forage crops. Wet conditions restricted most field work until late in the month. Grapevines were pruned and tied; nut and tree fruit orchards were pruned and treated for dormant season pest control. Vineyards and orchards were pulled out and new ones were planted; fresh varieties of tree fruit and grapes were grafted onto existing rootstocks. Fields were prepared for planting of summer vegetables. Navel oranges, Satsuma tangerines, and tangelos were picked.

## February:

Cold temperatures early in the month helped with chilling requirements for tree fruit, followed by warmer conditions that spurred good progress in spring crops. Tomato planting began in the west side districts. Pruning, tying, brush shredding, disking, and herbicide applications were in progress in grape vineyards. Nut and tree fruit growers applied dormant sprays and herbicides. Bloom began in almond and tree fruit orchards later in the month. Strawberry plants showed new growth. Rangeland grasses grew vigorously. Beehives were placed in almond and tree fruit orchards. Navel oranges were harvested.

## March:

Harvesting of winter forage began. Cotton and rice planting started as soil temperatures warmed. Cutting, windrowing, and drying of alfalfa hay began. Fields were prepared for planting of summer vegetables; tomato, onion, and garlic plantings were thriving. Lettuce, broccoli, and asparagus were harvested. Sugar beets and corn were planted; sprouted plants were visible by the end of the month. Strawberries and blueberries began to bloom; fields were weeded and treated to control mildew. Bloom was widespread in almond and tree fruit orchards. Bud break began in grape vineyards. Grape, nut, and tree fruit growers made applications of insecticides and fungicides.

## April:

Grain fields were irrigated and seedhead development was good. Cotton planting was in full swing; many cotton growers incorporated insecticides during planting. Hay and seed alfalfa plantings were treated to control insect pests and weeds. Sugar beet fields were irrigated, cultivated, and treated to control insect pests. Fruit set in tree fruit orchards appeared good and fruit thinning began; some tree fruit varieties were girdled to improve fruit size. Strawberries were picked and sold at roadside stands. Vegetable and melon plantings were thriving, and planting of new fields continued. Bees were active in blooming citrus and apple orchards. Valencia oranges were picked and packed.

## May:

Rain and hail on May 20 damaged tree fruit, citrus, grapes, vegetables, and hay in the Clovis, Sanger and Reedley districts. Grain plantings matured well; wheat, oat hay, and winter forage were harvested. Cotton growth was slowed by erratic weather early in the month but improved as conditions stabilized. Alfalfa hay was cut, windrowed, and baled; bloom began in seed alfalfa. Rice, field corn, and sweet corn were planted; emerged stands showed good growth. Safflower fields were in bloom. Lettuce, broccoli, asparagus, garlic, and onions were harvested. Vegetable crops were thinned, irrigated and treated to control insect pests. Sweet corn and silage corn were harvested. Boysenberry and raspberry vines bloomed and had good fruit set; strawberries and blueberries were harvested. Cherries, apricots, nectarines, and peaches were picked and packed. Tender new grape leaves were harvested for food use. Leaf and shoot thinning, and applications of growth hormones were in progress in table grape vineyards. Almonds, walnuts, pistachios, and pecans developed well and were irrigated. Pomegranates bloomed and set fruit; apple orchards were treated to control disease and insect pests. Valencia oranges were harvested; lemons and oranges were brought in from other counties for packing and shipping. Sheep were treated to their spring shearing.

#### June:

Ideal growing conditions prevailed; wheat, barley, oats, summer vegetables, melons, stone fruit, and a wide variety of specialty vegetables were harvested. Cotton plants bloomed and were weeded by hand crews. Harvesting of alfalfa hay and feed silage continued; alfalfa seed fields were in bloom and full of bees aiding in pollination. Sugar beet harvesting started in the west side districts. Safflower fields began to bloom. Fields of rice grew vigorously and were treated to control weeds. Field corn, silage corn, corn for chips and snacks, and sweet corn for human consumption were harvested. Blackeyed beans were planted. Table grape clusters were thinned and tipped to improve fruit quality. Raisin, wine, and table grape vineyards were irrigated and treated to control diseases and insect pests. Pomegranates were sizing well and developing color. Fresh figs, strawberries, blackberries, boysenberries, and blueberries were harvested. Valencia oranges were harvested; citrus orchards were irrigated, fertilized, and treated to control insect pests. Olive orchards were treated to control olive fruit fly. Bees were active in seed alfalfa and melon fields. Hot, dry conditions were the norm in rangeland; dairy cattle were cooled by fans and misters as temperatures rose.

#### July:

Harvesting of wheat, oats, and barley was complete; straw was cut, baled, and stacked. Harvested grain fields were left fallow, grazed by sheep, or disced and leveled to prepare for the next crop. Cotton bloom was widespread and good boll development was reported. Plant growth regulator was applied in some cotton fields to advance boll maturity. Alfalfa hay and alfalfa seed fields showed strong growth; alfalfa seed fields were in bloom. Safflower fields were drying in the heat. Field corn, silage corn, and sweet corn were harvested. Dry beans were growing well and being irrigated. Sugar beets and sweet potatoes developed rapidly; sugar beet harvesting continued in mature fields. Table grape harvesting began and expanded as the month progressed. Grape vineyards were irrigated and treated to control mildew, mites, and vine mealybug. Peaches, plums, nectarines, apricots, and pluots were harvested and shipped to consumers around the world. Good fruit development continued in pomegranate, apple, and persimmon orchards; Gala apples were harvested. Melons and summer vegetables were harvested throughout the county. Citrus orchards were irrigated and fruit development was steady. Almonds began to show hull split; growers prepared orchard floors for harvest. A gypsy moth was found in a trap in the Tarpey Village area of Fresno County, but a followup trapping program produced no subsequent finds.

#### August:

Harvested grain fields were left fallow or prepared for their next crop. Wheat was planted for winter forage. Good seed set took place in alfalfa seed fields; alfalfa hay and Sudan grass hay were cut, windrowed, and baled. Boll set and development progressed in cotton fields; open bolls were evident at month's end. Sugar beets, safflower, and dry beans were harvested. Rice fields were allowed to dry and mature. Stone fruit, pears, apples, pomegranates, figs, and Asian pears were picked, packed, and shipped from county orchards. Table, wine, and raisin grape harvesting was in full swing; canes were cut in DOV (dried on the vine) raisin vineyards to start fruit drying. Melons, tomatoes, onions, garlic, squash, eggplant, cucumbers, peppers, and sweet corn were harvested. Vegetable fields were planted to broccoli, lettuce, and cabbage. Steady fruit development continued in citrus orchards; irrigation, insect control treatments, and summer pruning were underway. Almond harvesting began; walnuts, pecans, and pistachios made good progress. Sheep grazed in some harvested grain and melon fields; rangeland was dry with little forage available.

#### September:

Light rain showers fell early in the month but no crop damage was reported. Harvesting of melons and summer vegetables slowed as weather cooled. Lettuce, broccoli, and cabbage plantings had emerged and were growing well. Cotton maturity advanced; defoliant was applied to prepare for harvest. Pima cotton was irrigated and treated to control insect pests. Alfalfa seed harvesting was completed; mowing, windrowing, drying, and baling of alfalfa hay and Sudan grass hay continued. Rice, dry beans, sugar beets, field corn and silage corn

#### September (continued):

harvesting continued throughout the month. Grains planted for winter forage showed good germination; preparation of new fields for winter forage planting continued. Harvesting of DOV (dried on the vine) raisins began at month's end. Raisins and excess table grapes were hauled to dehydrators for processing. Stone fruit orchards and table grape vineyards continued to produce a large variety of fruit but production slowed somewhat in response to cooler weather. Almonds, walnuts, pecans, and pistachios were shaken, raked, picked up and hauled to processors. Pomegranates, apples, figs, Asian pears, and pineapple quince were picked and packed. Valencia oranges were picked in a few orchards; some unharvested orchards were treated with growth regulators to help fruit remain on the trees. Beekeepers removed hives from the field, extracted honey, and prepared them for the dormant season.

#### October:

Cotton harvesting started with good yields reported. Fields were prepared for planting of winter grains; winter forage planted earlier was growing well. Broccoli, lettuce, cabbage, and cauliflower harvesting began, marking the start of the fall vegetable season; lettuce seed was also harvested. Melon and summer vegetable harvesting continued but was nearly complete by month's end; harvested fields were prepared for planting of garlic, onion, and other spring vegetables. Rice, sugar beets, sweet potatoes, dry beans, field corn, seed corn, and silage corn were harvested. Harvesting of alfalfa hay continued; new fields of alfalfa hay were planted. Late season table grapes were picked and packed; some vineyards were covered with plastic tarps to protect fruit from potential rain damage. Raisin harvesting was almost complete for the season; a few wine and juice grape vineyards were still being picked. Stone fruit picking was over by the end of the month; orchards were cultivated, pruned, and irrigated. A number of harvested raisin vineyards and stone fruit orchards were pulled out. Harvested almond orchards were pruned and irrigated. Strawberries were picked and sold at roadside stands. Olive harvesting began. Navel oranges, mandarins, pummelos, and lemons were harvested and packed.

#### November:

Rainfall early in the month slowed cotton harvesting; growers shredded and disced harvested fields to comply with pink bollworm plowdown requirements. New fields of winter grains and forage were planted; emerged fields grew vigorously. Alfalfa hay was cut for baled hay and green chopped for feed. Rice and sugar beet harvesting finished for the season. Table grape harvesting was essentially complete by the end of the month; pruning, cultivation, and herbicide treatments were in progress in harvested vineyards. Pruning, brush shredding, and cultivation were underway in stone fruit orchards. Orchard and vineyard removal continued; piled trees and vines were evident throughout the county. Walnuts, kiwifruit, and persimmons were harvested. Strawberries were picked for commercial packing and sales at roadside stands. Harvesting of lettuce, broccoli, cabbage, and cauliflower continued, along with sweet corn and cantaloupes in the few remaining fields. Harvested fields were prepared for planting of spring vegetables. Navel oranges, mandarins, pummelos, grapefruit, and lemons were picked and packed; new navel orange and Clementine mandarin orchards were planted.

#### December:

Cotton harvesting was complete by the end of the month with most fields shredded and disced to comply with pink bollworm plowdown requirements. Aircraft were used to plant new grain fields and apply fertilizer to emerged fields. New broccoli fields were planted while harvesting continued in existing fields. Open fields were ripped, disced, and leveled to prepare for planting of new crops. New fields of alfalfa hay, sugar beets, winter forage, onions, garlic, and lettuce were planted. Jerusalem artichokes, a native American root crop, were harvested. Dormant spray applications were underway in tree fruit orchards. Pruning, brush shredding, and cultivation were in progress in grape vineyards and tree fruit orchards. Removal of orchards and vineyards continued throughout the county. Commercial plantings of daikon, you choy, and gailon were harvested. Persimmons were picked and packed. Navel oranges, mandarins, pummelos, grapefruit, and lemons were picked, packed, and shipped. Beehives were in protected locations for overwintering.

**FIELD CROPS:** The total gross returns for field crops decreased by \$1,718,000 from \$515,807,000 to \$514,089,000. The harvested acreage of barley was up 1,500 acres and the value of the crop increased \$496,000. Cotton, last year's number one crop, fell to the number two position for 2002, decreasing in value \$22,932,000. This was down 6.23 percent from 2001. Returns for alfalfa hay increased \$10,026,000, due in part to an 8,900 acre increase from 2001. Field stubble, which includes alfalfa hay, barley, beans, broccoli, lettuce, melons, oats, tomatoes, and wheat, increased by \$211,000, up from \$1,490,000 to \$1,701,000. Sugar beet acreage increased for the first time in four years. Total production climbed 3.03 percent from 429,000 tons in 2001, resulting in a \$910,000 increase in total value.

**SEED CROPS:** Total gross returns for all seed crops increased by \$18,125,000, from a total value of \$42,880,000 to \$61,005,000. The returns for alfalfa seed were down 38.77 percent; cotton seed increased in value by \$457,000. Vegetable seed plantings were down 16.28 percent, or 140 acres. The other category of seed crops was up \$22,916,000 in value.

**VEGETABLE CROPS:** The total gross returns for vegetable crops increased \$127,460,000, from \$737,992,000 to \$865,452,000. Bell peppers decreased in value by \$9,470,000 and asparagus was up \$2,492,000. The garlic crop was up in value by \$7,150,000. Fresh garlic decreased in value 16.15 percent; processed increased 31.95 percent. The value of the head lettuce crop was down \$12,394,000 despite an increase in fall lettuce of \$4,392,000. Cantaloupes increased in both the yield per acre and price per ton, but the value of the crop dropped \$82,000, due to a reduction of 1,400 harvested acres. Gross returns for honeydew melons were up 31.97 percent. The fresh onion crop increased in value by \$27,918,000. Total gross returns for standard tomatoes increased by 38.67 percent and the processed tomato crop was up in value \$50,133,000.

**FRUIT AND NUT CROPS:** The total gross returns for fruit and nut crops increased by \$166,195,000, from a 2001 value of \$1,069,231,000 to \$1,235,426,000. The value of the almond crop increased \$46,894,000 which resulted in a move from seventh place in 2001 to sixth place in 2002 on the county's top ten crop ranking. The total value for cherries increased 74.68 percent, from \$15,764,000 in 2001 to \$27,536,000 in 2002. The value of the orange crop dropped to \$138,654,000, down 5.12 percent from last year. Grapes, previously ranked second in 2001, were reinstated as Fresno County's number one crop for 2002. The value of the grape crop was \$400,255,000, up \$57,120,000 from the 2001 value of \$343,135,000. It was a good year for nectarines, the crop increased in value \$6,867,000. Peaches were down \$2,346,000 and plums increased in value \$16,062,000. The total value of both pistachios and prunes increased; pistachios climbed 42.16 percent and prunes 7.67 percent in value. Walnut plantings increased by 342 acres, but the value of the crop was down \$777,000.

**NURSERY:** The gross returns from sales of nursery products increased by \$392,000, from \$32,013,900 to \$32,406,600. The production of Christmas trees, up by 116.67 percent, had a value of \$54,600. The returns for other nursery products, which include bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf, decreased from \$20,383,000 to \$19,786,000.

**LIVESTOCK AND POULTRY:** The total gross returns for livestock and poultry decreased 13.69 percent from the value of \$537,148,000 to \$463,635,000. For the second straight year, cattle and calves were the seventh most valuable crop in the county at \$177,445,000. The value of hogs and pigs decreased by 16.90 percent, or \$1,056,000, from the 2001 value. Total lamb production was up 2.68 percent, but decreased in total value by \$485,000, from \$4,444,000 to \$3,959,000.

**LIVESTOCK AND POULTRY PRODUCTS:** The total value of livestock and poultry products decreased \$41,387,000, from \$268,185,000 to \$226,798,000. The price of manure was down \$0.05 a ton and production was down 10,000 tons. Manufacturing milk production was down by 13,700 hundredweight in part because of a decrease of \$2.48 per hundredweight paid to dairymen. The value of market milk was down 19.50 percent. Wool production remained the same, but was up in value \$6,000. The value of chicken, duck, and turkey eggs was up \$7,297,000.

**APIARY PRODUCTS AND POLLINATION SERVICES:** Gross returns for apiary and pollination services increased by \$1,380,500, from \$9,798,900 to \$11,179,400. The total value of honey increased \$1,405,000 in 2002, while beeswax was down 19.10 percent, from \$75,900 to \$61,400. The value of pollination services for alfalfa seed fell \$485,000 as a result of a 55.81 percent reduction in the number of colonies used.

**INDUSTRIAL CROPS:** The total value of industrial crops increased 29.09 percent or \$2,050,000. Timber production was down \$4,086,000 board feet and its value fell \$1,421,000. Firewood was up 3,000 cords and increased in value \$219,000.

<b>SUSTAINABLE AGRICULTURE</b>
--------------------------------

**2002 BIOLOGICAL CONTROL ACTIVITIES**

PEST	B. C. AGENT/MECHANISM	ACTIVITY
Puncture Vine	Puncture Vine Weevils	Collected adults for release in foothills.
Yellow Starthistle	Peacock Fly	Released 300 flies at ranch in Miramonte.
Yellow Starthistle	Hairy Weevil	Released 50 pupae at ranch in Miramonte.
Various	Various	Attended Bio Control conference at U.C. Davis on August 15 and 16.

**2002 DETECTION ACTIVITIES**

INSECT	TRAPS DEPLOYED	RESULTS
Medfly	873	Two sterile flies trapped
Mexican Fruit Fly, other Anastrepha, Bactrocera and Ceratitis sp.	533	None captured
Oriental Fruit Fly	315	None captured
Melon Fly	307	None captured
Gypsy Moth	509	One trapped in Japanese Beetle trap
Japanese Beetle	320	None captured
Glassy-Winged Sharpshooter	1,411	Two nurseries and numerous residences positive

## SUSTAINABLE AGRICULTURE

### PEST ERADICATION

**RED IMPORTED FIRE ANT:** In early January, another RIFA infestation was found. A call from a homeowner/almond farmer alerted us to the infestation around his home at Thompson and Ashlan. The home was bordered by citrus on the south and east sides and by almonds on the north side. The infestations were found in the yard of the home and around some of the citrus trees. Nothing was found near the almonds. It is still not clear how they were introduced. The state is still in the process of eradicating the colonies.

**GLASSY-WINGED SHARPSHOOTER:** GWSS continued to be eradicated/controlled by Fresno County. The overall number of positive properties was way up this year as opposed to 2001. As these properties were found, they were treated with *Merit*. The general distribution though has stayed approximately the same, except for one positive find in a citrus grove near Alta and Dinuba Avenues near Orange Cove. The owner promptly treated this grove but it is not yet known how successful the treatment was.

### NEW AND UNUSUAL PEST OUTBREAKS IN 2002

Two new pests were found in Fresno County this year. The first of these was a **whitefly**, called *Aleurotuberculatus aucubae*. It is native to Japan but was found here by Agricultural/Standards Specialist, Wayne Peregrin, while doing a delimitation survey for Glassy-Winged Sharpshooter. It was initially found in the Sunnyside area of Fresno, but has subsequently been found in various parts of Fresno and Clovis. The nymphal/pupal stage is tiny and black with some white waxy filaments on top of the body and along each side. Numbers per leaf are small and they don't appear to produce much honeydew. This is the only area in the Western Hemisphere where this whitefly has been found.

The second pest was an aphid that attacks Chinese Hackberry. Commonly called the **Asian Woolly Hackberry Aphid** (*Shivaphis celti*), it was first found on some recently planted Hackberry trees at the USDA facility in Parlier. It is now also being found on more mature trees in the Fresno area. Aphids are covered with copious amounts of wax and secrete large amounts of sticky honeydew. The wax and honeydew together make a huge mess on the tree and on objects beneath it. Hackberry was a relatively pest-free tree here in Fresno, but now that will no longer be true.

### 2002 ORGANIC FARMING

Gross returns for organic farming in 2002 totaled \$16,776,177. A large variety of crops were produced in compliance with current organic regulations. Over eighty farms totaling 8,960 acres and 21 handlers (shippers/packers) were registered organic in Fresno County in 2002. Crops grown, packed, and shipped include alfalfa, almonds, apples, apricots, arugula, artichokes, barley, basil, beans, beets, bell peppers, blueberries, broccoli, cabbage, cantaloupe, carrots, cattle, cauliflower, celery, chard, cherries, cilantro, corn, cotton, cucumbers, daikon, eggplant, endive, fennel, figs, garlic, grapes, grapefruit, kiwifruit, leeks, lemons, lettuce, milk, nectarines, nursery plants, okra, olives, onions, oranges, parsley, parsnips, peaches, peas, peppers, persimmons, pistachios, plums, pluots, pomegranates, potatoes, pummelos, radishes, raisins, shallots, spinach, squash, strawberries, tangerines, tomatoes, tomatillos, turkeys, walnuts, watermelon, and wheat.

# FRESNO COUNTY

## FIELD CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Barley</b>	2002	8,600	2.66	22,900	ton	\$ 96.00	\$ 2,198,000
	2001	7,100	2.61	18,500	ton	\$ 92.00	\$ 1,702,000
<b>Beans, dry <sup>a</sup></b>	2002	12,500	1.20	15,000	ton	533.00	7,995,000
	2001	11,500	.88	10,100	ton	647.00	6,535,000
<b>Corn</b>							
Grain	2002	1,790	4.24	7,590	ton	112.00	850,000
	2001	1,830	4.17	7,630	ton	104.00	794,000
Silage	2002	24,000	25.75	618,000	ton	22.00 <sup>b</sup>	13,596,000
	2001	21,200	23.30	494,000	ton	23.00 <sup>b</sup>	11,362,000
<b>Cotton</b>							
Upland (Acala) Lint	2002	145,000	1,748 <sup>c</sup>	507,000 <sup>d</sup>	bale	.73 <sup>e</sup>	186,535,000
	2001	171,000	1,538 <sup>c</sup>	526,000 <sup>d</sup>	bale	.70 <sup>e</sup>	185,573,000
Seed	2002			188,000	ton	167.00	31,396,000
	2001			181,000	ton	157.00	28,417,000
Upland (Non-Acala) Lint	2002	5,240	1,670 <sup>c</sup>	17,500 <sup>d</sup>	bale	.65 <sup>e</sup>	5,733,000
	2001	6,230	1,172 <sup>c</sup>	14,600 <sup>d</sup>	bale	.50 <sup>e</sup>	3,679,000
Seed	2002			6,490	ton	167.00	1,084,000
	2001			5,020	ton	157.00	788,000
Pima Lint	2002	82,400	1,493 <sup>c</sup>	246,000 <sup>d</sup>	bale	.86 <sup>e</sup>	106,626,000
	2001	109,400	1,440 <sup>c</sup>	315,000 <sup>d</sup>	bale	.84 <sup>e</sup>	133,358,000
Seed	2002			100,000	ton	128.00	12,800,000
	2001			124,000	ton	127.00	15,748,000
<b>Cotton Total <sup>f</sup></b>	<b>2002</b>	<b>232,640</b>					<b>344,174,000</b>
	<b>2001</b>	<b>286,630</b>					<b>367,563,000</b>
<b>Hay</b>							
Alfalfa	2002	76,300	8.23	628,000	ton	115.00	72,220,000
	2001	67,400	7.63	514,000	ton	121.00	62,194,000
Other <sup>g</sup>	2002	26,100	2.30	60,000	ton	85.00	5,100,000
	2001	12,500	2.96	37,000	ton	82.00	3,034,000



FRESNO COUNTY

**FIELD CROPS (continued)**

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Pasture and Range							
Field	2002	36,800			acre	\$ 46.22	\$ 1,701,000
Stubble <sup>h</sup>	2001	33,400			acre	\$ 44.61	\$ 1,490,000
Irrigated	2002	40,000			acre	125.00	5,000,000
Pasture	2001	40,000			acre	125.00	5,000,000
Grazing	2002	850,000			acre	8.00	6,800,000
Range	2001	850,000			acre	8.00	6,800,000
Rice	2002	5,790	3.09	17,900	ton	178.00	3,186,000
	2001	5,620	3.90	21,900	ton	177.00	3,876,000
Safflower	2002	5,160	1.63	8,410	ton	252.00	2,119,000
	2001	4,500	1.11	5,000	ton	245.00	1,225,000
Sugar Beets	2002	11,900	37.14	442,000	ton	37.00	16,354,000
	2001	11,000	39.00	429,000	ton	36.00	15,444,000
Wheat	2002	61,000	3.21	196,000	ton	126.00	24,696,000
	2001	59,600	3.05	182,000	ton	115.00	20,930,000
Other <sup>i</sup>	2002	10,500					8,100,000
	2001	<u>10,800</u>					<u>7,858,000</u>
Total	2002	1,366,280					\$514,089,000
	2001	1,389,680					\$515,807,000

**a** Includes blackeyed, garbanzo, baby lima, and pinto beans

**b** Field price

**c** Pounds of lint per acre

**d** 500 pounds lint per bale

**e** Price per pound, 504 pounds gross weight per bale

**f** Not used for top 10 ranking; does not include cotton seed for planting

**g** Includes hay from alfalfa seed, oats, pasture grass, sudan, winter forage, and wheat

**h** Not included in total field crop acreage; includes acreage from alfalfa hay (conventional and organic), barley, beans, broccoli, lettuce, melons, oats, tomatoes, and wheat

**i** Includes canola, oats (grain and silage), sorghum, soybean, straw, sugar beet pulp, sugarcane, wheat silage, and winter forage; **organic:** alfalfa, cotton (non-acala), and wheat

FRESNO COUNTY

SEED CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Alfalfa</b>	2002	5,960	816	4,863,000	lb.	\$ 1.33	\$ 6,468,000
<b>Certified</b>	2001	10,060	750	7,545,000	lb.	\$ 1.40	\$10,563,000
<b>Cotton <sup>a</sup></b>	2002	6,440		12,687,000	lb.	.08	1,015,000
<b>Certified</b>	2001	6,980		5,584,000	lb.	.10	558,000
<b>Vegetable <sup>b</sup></b>	2002	720					2,178,000
	2001	860					3,331,000
<b>Other <sup>c</sup></b>	2002	6,280					51,344,000
	2001	<u>2,680</u>					<u>28,428,000</u>
<b>Total</b>	<b>2002</b>	<b>12,960</b>					<b>\$61,005,000</b>
	<b>2001</b>	<b>13,600</b>					<b>\$42,880,000</b>

**a** Included in field crop acreage

**b** Arugula, carrot, cauliflower, lettuce, mustard (red), mizuna, and onions

**c** Alfalfa (non-certified), beans (blackeyed and garbanzo), corn, oats, rice, grain sorghum, triticale, turf grass, wheat (certified and non-certified); **flowers:** zinnias; **organic:** lettuce

# FRESNO COUNTY

## VEGETABLE CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Asparagus</b>	2002	2,200	3.45	7,590	ton	\$ 1,575.00	\$ 11,954,000
	2001	2,240	2.70	6,050	ton	\$ 1,564.00	\$ 9,462,000
<b>Bell Peppers <sup>a</sup></b>	2002	1,500	22.67	34,000	ton	505.00	17,170,000
	2001	1,640	21.95	36,000	ton	740.00	26,640,000
<b>Broccoli <sup>a</sup></b>	2002	6,700	7.78	52,100	ton	442.00	23,028,000
	2001	8,450	6.62	55,900	ton	419.00	23,422,000
<b>Eggplant <sup>b</sup></b>	2002	759	11.41	8,660	ton	525.00	4,547,000
	2001	845	11.74	9,920	ton	445.00	4,414,000
<b>Garlic</b>							
Fresh	2002	5,210	7.47	38,900	ton	1,453.00	56,522,000
	2001	6,280	7.36	46,200	ton	1,459.00	67,406,000
Processed	2002	22,000	10.14	223,000	ton	334.00	74,482,000
	2001	18,800	8.94	168,000	ton	336.00	56,448,000
<b>Head Lettuce</b>							
Naked				29,200	ton		
Wrapped				76,600	ton		
Bulk				29,800	ton		
Spring	2002	10,600	12.79	135,600	ton	267.00	36,205,000
Season Total	2001	9,840	18.51	182,100	ton	291.00	52,991,000
Naked				37,900	ton		
Wrapped				80,000	ton		
Bulk				61,200	ton		
Fall	2002	10,280	17.42	179,100	ton	221.00	39,581,000
Season Total	2001	10,300	15.32	157,800	ton	223.00	35,189,000
<b>Head Lettuce</b>	<b>2002</b>	<b>20,880</b>		<b>314,700</b>			<b>75,786,000</b>
<b>Totals</b>	<b>2001</b>	<b>20,140</b>		<b>339,900</b>			<b>88,180,000</b>

FRESNO COUNTY

**VEGETABLE CROPS (continued)**

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Leaf Lettuce</b> <sup>c</sup>	2002	7,220	15.65	113,000	ton	\$ 451.00	\$ 50,963,000
	2001	5,730	9.35	53,600	ton	\$ 610.00	\$ 32,696,000
<b>Melons</b>							
Cantaloupe <sup>a</sup>	2002	24,200	14.50	351,000	ton	230.00	80,730,000
	2001	25,600	13.91	356,000	ton	227.00	80,812,000
Honeydew	2002	5,070	14.34	72,700	ton	291.00	21,156,000
	2001	5,200	13.35	69,400	ton	231.00	16,031,000
Mixed Melons <sup>d</sup>	2002	3,370	10.39	35,000	ton	338.00	11,830,000
	2001	1,540	11.75	18,100	ton	350.00	6,335,000
Watermelon	2002	2,000	34.25	68,500	ton	192.00	13,152,000
	2001	2,040	33.53	68,400	ton	198.00	13,543,000
<b>Onions</b>							
Fresh	2002	4,960	32.46	161,000	ton	385.00	61,985,000
	2001	5,880	27.72	163,000	ton	209.00	34,067,000
Processed	2002	9,560	18.00	172,000	ton	170.00	29,240,000
	2001	10,500	16.00	168,000	ton	83.00	13,944,000
<b>Oriental Vegetables</b> <sup>e</sup>	2002	1,250	11.60	14,500	ton	504.00	7,308,000
	2001	1,350	8.52	11,500	ton	449.00	5,164,000
<b>Squash</b> <sup>f</sup>	2002	915	8.70	7,960	ton	534.00	4,251,000
	2001	795	6.78	5,390	ton	437.00	2,355,000
<b>Sweet Corn</b>	2002	8,100	12.47	101,000	ton	232.00	23,432,000
	2001	6,310	11.62	73,300	ton	252.00	18,472,000
<b>Tomatoes</b>							
Cherry	2002	170	11.35	1,930	ton	711.00	1,372,000
	2001	210	19.14	4,020	ton	706.00	2,838,000

FRESNO COUNTY

VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Tomatoes, continued							
Standard	2002	4,500	20.89	94,000	ton	\$ 401.00	\$ 37,694,000
	2001	6,160	13.13	80,900	ton	\$ 336.00	\$ 27,182,000
Processed	2002	115,000	40.25	4,629,000	ton	49.00	226,821,000
	2001	106,000	34.73	3,681,000	ton	48.00	176,688,000
Tomatoes Total	2002	119,670					265,887,000
	2001	112,370					206,708,000
Other <sup>nc</sup>	2002	10,100					32,029,000
	2001	8,190					31,893,000
Total	2002	255,664					\$ 865,452,000
	2001	243,900					\$ 737,992,000

**a** Includes fresh and processed

**b** Includes Chinese, Globe, Italian, and Japanese varieties

**c** Includes Red, Green, Butter, and Romaine varieties

**d** Includes Casaba, Crenshaw, Galia, Juan Canary, Orange Flesh, Persian, Santa Claus, and Sharlyn varieties

**e** Includes bittermelon, bok choy (baby, regular, and Shanghai), napa cabbage, chayote, daikon, donqua, gai choy, gailon, lemon grass, lo bok, long beans, mattea/mora, ong choy, moqua, opo, sinqua/patola, sour leaves, sugar peas, taro root, yam leaves, and you choy

**f** Includes summer and winter varieties

**g** Includes artichokes, arugula, beans (fava, Indian, and pinto), beans snap (green, Italian, and yellow), beets, cabbage (fresh and processed), carrots (fresh and processed), cauliflower (fresh and processed), celery, Swiss chard, chicory/radicchio, collards, corn (cornuts, masa, and tortilla chips), cucumbers (fresh and processed), dandelion greens, endive/escarole, jicama, kale, kohlrabi, leeks, mushrooms, mustard greens, okra, green onions (fresh and processed), parsnips, English peas, peanuts, chili peppers (fresh and processed), pumpkins, radishes, rutabagas, spinach, sunchokes/Jerusalem artichokes, sweet potatoes/yams, tomatillos, and turnips; **herbs:** basil, cilantro, dill, fennel, ginger, mint, oregano, parsley (dry and fresh), rosemary, sage, spice mix, and tarragon; **organic:** beans (green and snap), broccoli, cantaloupe, sweet corn, garlic (fresh), lettuce (leaf and romaine), mustard greens (baby), spinach, squash (winter and zucchini), tomatoes (cherry, processed and specialty), and watermelon; **organic herbs:** basil and cilantro

FRESNO COUNTY

FRUIT AND NUT CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Almonds</b> <sup>a</sup>	2002	63,450	1.24	78,700	ton	\$ 2,300.00	\$ 181,010,000
	2001	61,896	1.06	65,610	ton	\$ 2,120.00	\$ 139,093,000
<b>Almond Hulls</b>	2002			168,000	ton	85.00	14,280,000
	2001			123,000	ton	86.00	10,578,000
<b>Apples</b> <sup>a</sup>	2002	2,259	11.72				
	2001	3,113	8.45				
Fresh	2002			17,000	ton	722.00	12,274,000
	2001			20,000	ton	565.00	11,300,000
Processed	2002			9,470	ton	82.00	777,000
	2001			6,320	ton	80.00	506,000
<b>Apricots</b> <sup>a</sup>	2002	1,349	6.43	8,670	ton	896.00	7,768,000
	2001	1,340	6.00	8,040	ton	887.00	7,131,000
<b>Cherries</b>	2002	1,825	3.06	5,590	ton	4,926.00	27,536,000
	2001	1,550	2.49	3,860	ton	4,084.00	15,764,000
<b>Citrus</b>							
<b>Lemons</b>	2002	873	18.09				
	2001	828	21.81				
Fresh	2002			8,220	ton	603.00	4,957,000
	2001			10,400	ton	476.00	4,950,000
Processed	2002			7,570	ton	40.00	303,000
	2001			7,660	ton	40.00	306,000
<b>Citrus, other</b> <sup>b</sup>	2002	1,384	13.44				
	2001	1,578	13.17				
Fresh <sup>a</sup>	2002			12,500	ton	899.00	11,238,000
	2001			16,900	ton	497.00	8,399,000
Processed	2002			6,100	ton	20.00	122,000
	2001			3,880	ton	29.00	113,000

FRESNO COUNTY

**FRUIT AND NUT CROPS (continued)**

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Oranges							
Navel <sup>a</sup>	2002	21,921	12.14				
	2001	21,353	12.63				
Fresh	2002			219,000	ton	\$ 481.00	\$ 105,339,000
	2001			225,000	ton	\$ 513.00	\$ 115,425,000
Processed	2002			47,100	ton	20.00	942,000
	2001			44,600	ton	15.00	669,000
Valencia	2002	5,345	15.83				
	2001	5,292	15.61				
Fresh	2002			66,300	ton	480.00	31,824,000
	2001			68,700	ton	434.00	29,816,000
Processed	2002			18,300	ton	30.00	549,000
	2001			13,900	ton	16.00	222,000
Oranges Total	2002	27,266					138,654,000
	2001	26,645					146,132,000
Grapes							
Raisin Varieties <sup>a</sup>	2002	169,783	11.24				
	2001	171,900	6.93				
Canned	2002			27,500	ton	249.00	6,848,000
	2001			24,500	ton	376.00	9,212,000
Crushed	2002			397,000	ton	76.00	30,172,000
	2001			165,000	ton	86.00	14,190,000
Dried	2002			316,000	ton	433.00	136,828,000
	2001			233,000	ton	525.00	122,325,000
Fresh	2002			58,000	ton	865.00	50,170,000
	2001			45,000	ton	926.00	41,670,000
Juice	2002			4,700	ton	446.00	2,096,000
	2001			1,510	ton	467.00	705,000

FRESNO COUNTY

**FRUIT AND NUT CROPS (continued)**

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Grapes (continued)							
Table Varieties	2002	11,456	8.13				
	2001	11,586	6.90				
Crushed	2002			9,100	ton	\$ 71.00	\$ 646,000
	2001			12,000	ton	\$ 76.00	\$ 912,000
Fresh <sup>a</sup>	2002			84,000	ton	977.00	82,068,000
	2001			68,000	ton	1,062.00	72,216,000
Wine Varieties	2002	46,397	10.56				
	2001	47,091	9.26				
Crushed <sup>a</sup>	2002			480,000	ton	180.00	86,400,000
	2001			432,000	ton	185.00	79,920,000
Juice	2002			9,800	ton	513.00	5,027,000
	2001			4,170	ton	476.00	1,985,000
Grapes Total	2002	227,636					400,255,000
	2001	230,577					343,135,000
Kiwifruit <sup>a</sup>	2002	455	3.74	1,700	ton	1,640.00	2,788,000
	2001	466	6.50	3,030	ton	714.00	2,163,000
Nectarines <sup>a</sup>	2002	15,150	9.11	138,000	ton	794.00	109,572,000
	2001	14,808	8.31	123,000	ton	835.00	102,705,000
Olives, canned <sup>a</sup>	2002	938	2.65	2,490	ton	625.00	1,556,000
	2001	954	3.65	3,480	ton	690.00	2,401,000
Peaches							
Cling	2002	1,284	19.31	24,800	ton	234.00	5,803,000
	2001	1,294	17.93	23,200	ton	237.00	5,498,000
Freestone <sup>a</sup>	2002	11,908	8.73	104,000	ton	847.00	88,088,000
	2001	13,246	8.53	113,000	ton	803.00	90,739,000
Peaches Total	2002	13,192					93,891,000
	2001	14,540					96,237,000
Pears, Asian and European	2002	962	14.45	13,900	ton	1,262.00	17,542,000
	2001	898	11.47	10,300	ton	1,015.00	10,455,000



FRESNO COUNTY

**FRUIT AND NUT CROPS (continued)**

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Persimmons</b>	2002	431	6.54	2,820	ton	\$1,032.00	\$ 2,910,000
	2001	439	8.50	3,730	ton	\$ 550.00	\$ 2,052,000
<b>Pistachios</b>	2002	7,824	1.50	11,700	ton	2,460.00	28,782,000
	2001	7,047	1.26	8,880	ton	2,280.00	20,246,000
<b>Plums <sup>a</sup></b>	2002	14,894	8.39	125,000	ton	892.00	111,500,000
	2001	14,774	8.05	119,000	ton	802.00	95,438,000
<b>Pomegranates</b>	2002	1,527	3.19	4,870	ton	1,200.00	5,844,000
	2001	1,480	6.42	9,500	ton	751.00	7,135,000
<b>Prunes, dried <sup>a</sup></b>	2002	4,031	2.75	11,100	ton	744.00	8,258,000
	2001	4,412	2.67	11,800	ton	650.00	7,670,000
<b>Walnuts <sup>a</sup></b>	2002	3,639	1.78	6,480	ton	1,180.00	7,646,000
	2001	3,297	2.17	7,150	ton	1,178.00	8,423,000
<b>Other <sup>d</sup></b>	2002	6,860					45,963,000
	2001	<u>4,440</u>					<u>23,290,000</u>
<b>Total</b>	<b>2002</b>	<b>395,945</b>					<b>\$1,235,426,000</b>
	<b>2001</b>	<b>395,292</b>					<b>\$1,069,231,000</b>

**a** Acreage, production, and value are included in other fruit and nut crops: 110 acres olive oil, 85 acres prunes (juice), and 1,408 acres freestone peaches (processed); **organic:** 118 acres almonds, 32 acres apples, 2 acres apricots (processed), 1,429 acres grapes (raisin, table, and wine), 11 acres kiwifruit, 39 acres nectarines, 57 acres navel oranges (fresh and processed), 51 acres freestone peaches, 2 acres persimmons, and 30 acres plums

**b** Includes blood oranges, grapefruit, mandarin tangerines, minneola tangelos, and pummelos

**c** Includes fresh and processed

**d** Includes almond (shells), apricots (dried and processed), apriums, avocados, blackberries, blueberries, boysenberries, chestnuts, figs (fresh, dried, and substandard), grapes (leaves, compost and raisin by-products), jujubes, nectarines (dried and processed), olive oil, peaches (dried and processed), pecans, plumcots/pluots, prunes (processed), and strawberries (fresh and processed); **organic:** almonds, apples (fresh), apricots (processed), figs (dried, fresh and substandard), grapes (raisin, juice, table, and wine), kiwifruit, nectarines, navel oranges (fresh and processed), peaches (fresh and processed), plumcots/pluots, persimmons, plums, and quince

FRESNO COUNTY

**NURSERY PRODUCTS**

ITEM	YEAR	ACRES	QUANTITY	UNIT	VALUE
<b>Christmas Trees</b>	2002	20	1,300	trees	\$ 54,600
	2001	35	600	trees	\$ 10,900
<b>Herbaceous Ornamentals <sup>a</sup></b>	2002	70	7,161,000	<sup>b</sup>	3,987,000
	2001	20	977,000	<sup>b</sup>	3,792,000
<b>Ornamental Trees and Shrubs</b>	2002	79	1,032,000	plants	8,579,000
	2001	85	1,028,000	plants	7,828,000
<b>Other <sup>c</sup></b>	2002	757	232,518,000	plants	19,786,000
	2001	<u>622</u>	181,019,000	plants	<u>20,383,000</u>
<b>Total</b>	<b>2002</b>	<b>926</b>			<b>\$32,406,600</b>
	<b>2001</b>	<b>762</b>			<b>\$32,013,900</b>

**a** Includes potted plants, bedding plants, flats, and perennials

**b** Includes flats, dozens, cans, and single plants

**c** Includes bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf

FRESNO COUNTY

**LIVESTOCK AND POULTRY**

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Cattle and Calves						
Beef						
Breeding Stock						
Common	2002	1,240		head	\$ 742.00	\$ 920,000
	2001	1,280		head	\$ 732.00	\$ 937,000
Registered	2002	310		head	2,500.00	775,000
	2001	320		head	2,800.00	896,000
Feeders	2002	130,000	259,000	cwt.	73.00	18,907,000
	2001	155,000	309,000	cwt.	80.47	24,865,000
Calves	2002	21,700	65,200	cwt.	88.34	5,760,000
	2001	22,400	67,200	cwt.	100.43	6,749,000
Slaughter Stock	2002	254,000	1,324,000 <sup>a</sup>	cwt.	67.13	88,880,000
	2001	262,000	1,325,000 <sup>a</sup>	cwt.	71.43	94,645,000
Dairy						
Breeding Stock	2002	13,100		head	1,840.00	24,104,000
	2001	12,400		head	1,760.00	21,824,000
Cull Stock	2002	28,400	370,000	cwt.	40.54	15,000,000
	2001	26,900	350,000	cwt.	44.06	15,421,000
Calves	2002	54,400	163,000	cwt.	141.71	23,099,000
	2001	46,900	141,000	cwt.	143.00	20,163,000
Cattle and Calves Total	2002					177,445,000
	2001					185,500,000
Hogs and Pigs						
Feeder Pigs and Slaughter Stock	2002	53,800	117,000	cwt.	44.38	5,193,000
	2001	51,200	104,000	cwt.	60.09	6,249,000

FRESNO COUNTY

**LIVESTOCK AND POULTRY (continued)**

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Sheep and Lambs						
Slaughter Stock						
Lambs	2002	51,200	57,500	cwt.	\$ 68.85	\$ 3,959,000
	2001	49,800	56,000	cwt.	\$ 79.36	\$ 4,444,000
Sheep	2002	11,200	15,600	cwt.	28.08	438,000
	2001	11,200	15,600	cwt.	31.22	487,000
Turkeys	2002	4,858,000	114,212,000	lb.	.38	43,401,000
	2001	5,431,000	124,587,000	lb.	.40	49,835,000
Other <sup>b</sup>	2002					233,199,000
	2001					<u>290,633,000</u>
Total	2002					\$463,635,000
	2001					\$537,148,000

**a** Net gain

**b** Includes buffalo; chickens (broilers, chicks, fryers, old breeder birds, and roasters); ducks (meat and ducklings); fish (bass, carp, and channel cat); game birds (chukar, pheasants and quail); goats (cull milk, kid, and meat); insects (beneficial); rabbits (meat); squab; turkeys (old breeder birds and poults); vermiculture; and Zebu cattle

FRESNO COUNTY

**LIVESTOCK AND POULTRY PRODUCTS**

ITEM	YEAR	PRODUCTION	UNIT	VALUE	
				PER UNIT	TOTAL
<b>Manure</b> <sup>a</sup>	2002	554,000	ton	\$ 4.45	\$ 2,465,000
	2001	564,000	ton	\$ 4.50	\$ 2,538,000
<b>Milk</b>					
Manufacturing	2002	18,300	cwt.	10.27	188,000
	2001	32,000	cwt.	12.75	408,000
Market <sup>b</sup>	2002	18,444,000	cwt.	10.83	199,749,000
	2001	18,047,000	cwt.	13.75	248,146,000
<b>Wool</b>	2002	558,000	lb.	.41	229,000
	2001	558,000	lb.	.40	223,000
<b>Eggs</b>					
Chicken, Duck & Turkey <sup>c</sup>	2002	11,789,000	dozen	2.05	24,167,000
	2001	7,703,000	dozen	2.19	<u>16,870,000</u>
	<b>2002</b>				<b>\$226,798,000</b>
	<b>2001</b>				<b>\$268,185,000</b>

**a** Includes cow and poultry manure

**b** Includes cow milk (conventional and organic) and goat milk

**c** Includes balut, market, hatching, and excess eggs

FRESNO COUNTY

**APIARY PRODUCTS AND POLLINATION SERVICES**

ITEM	YEAR	PRODUCTION TOTAL	UNIT	VALUE	
				PER UNIT	TOTAL
Apiary Products <sup>a</sup>					
Honey	2002	2,282,000	lb.	\$ 1.26	\$ 2,875,000
	2001	2,334,000	lb.	\$ .63	\$ 1,470,000
Beeswax	2002	53,400	lb.	1.15	61,400
	2001	62,700	lb.	1.21	75,900
Pollination <sup>b</sup>					
Alfalfa Seed	2002	13,700	colony	24.00	329,000
	2001	31,000	colony	26.26	814,000
Trees, Fruit and Nut <sup>c</sup>	2002	160,000	colony	46.42	7,427,000
	2001	156,000	colony	44.52	6,945,000
Melon	2002	27,900	colony	17.45	487,000
	2001	30,900	colony	16.00	<u>494,000</u>
Total	2002				\$11,179,400
	2001				\$ 9,798,900

**a** Reflects bee colonies registered in Fresno County by commercial and semi-commercial beekeepers:  
2002- 52,302 colonies; 2001- 47,892 colonies

**b** Reflects value of pollination by all bee colonies located in Fresno County for pollination services  
during 2002. Estimated total colonies: 49,831

**c** Almonds, cherries, and plums

# FRESNO COUNTY

## INDUSTRIAL CROPS

CROP	YEAR	PRODUCTION	UNIT	VALUE
<b>Timber<sup>a</sup></b>	2002	12,215,000	board feet	\$ 3,496,000
	2001	16,301,000	board feet	\$ 4,917,000
<b>Firewood</b>	2002	18,200	cords	1,770,000
	2001	15,200	cords	1,551,000
<b>Other<sup>b</sup></b>	2002			3,830,000
	2001			<u>578,000</u>
<b>Total</b>	<b>2002</b>			<b>\$ 9,096,000</b>
	<b>2001</b>			<b>\$ 7,046,000</b>

**a** Includes government and non-government properties

**b** Includes walnut stumps (burl wood), walnut trees (hardwood lumber), and woodchips (biomass and landscaping)

**GROWTH IN FRESNO COUNTY AGRICULTURE AS INDICATED BY GROSS  
PRODUCTION VALUE OF AGRICULTURAL PRODUCTS OVER A TWENTY-ONE YEAR SPAN**

1982 - 1,855,733,500	1993 - 3,022,311,100*
1983 - 1,727,319,500	1994 - 3,084,870,800
1984 - 1,921,020,840*	1995 - 3,142,878,300*
1985 - 2,054,060,400*	1996 - 3,324,885,800
1986 - 2,125,721,200*	1997 - 3,436,443,500*
1987 - 2,264,044,000*	1998 - 3,257,712,600*
1988 - 2,444,732,600*	1999 - 3,570,027,600*
1989 - 2,607,648,800*	2000 - 3,281,285,400*
1990 - 2,949,484,000*	2001 - 3,220,101,800
1991 - 2,552,305,040*	2002 - 3,419,087,000
1992 - 2,635,447,400*	

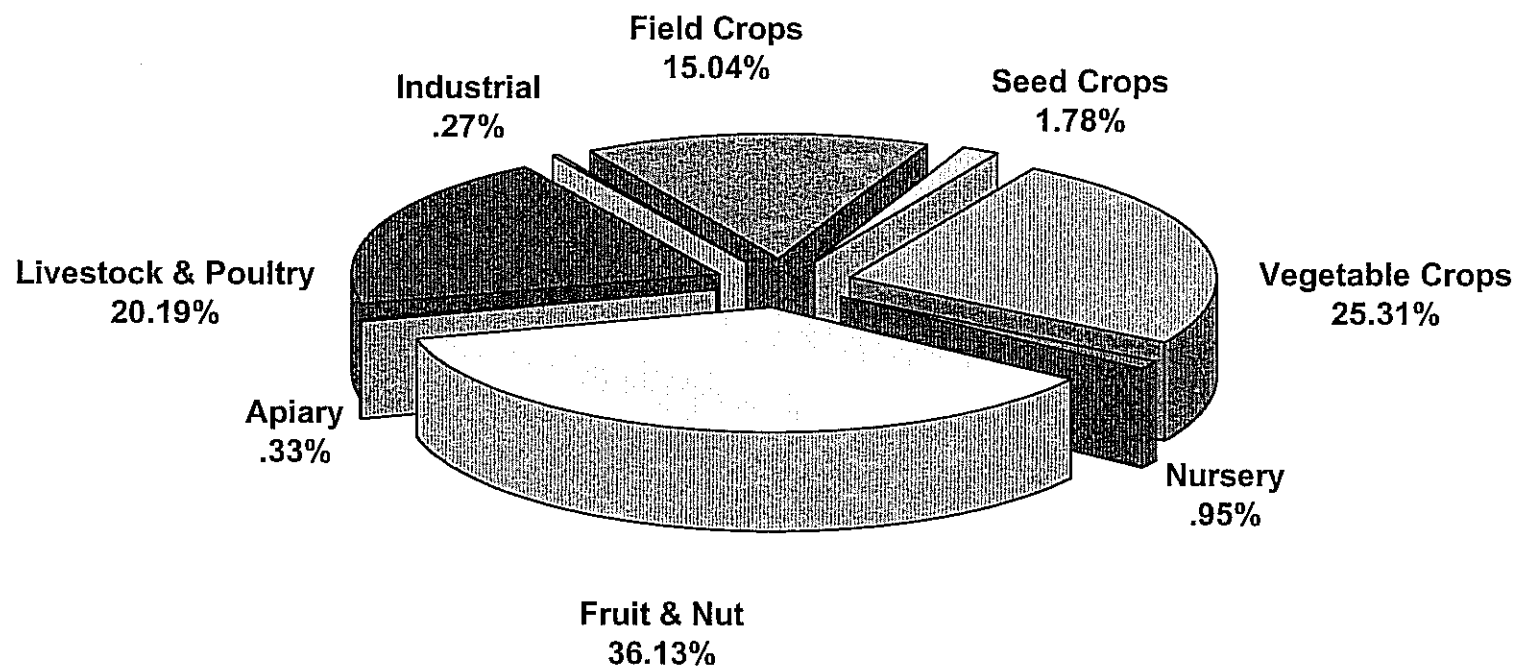
**SIX-YEAR COMPARISON OF GROSS PRODUCTION VALUE IN FRESNO COUNTY**

<b>CROPS</b>	<b>1982</b>	<b>1992</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
<b>Field</b>	\$ 510,565,000	\$ 549,162,000	\$ 485,640,000	\$ 507,952,000	\$ 515,807,000	\$ 514,089,000
<b>Seed</b>	40,420,000	31,035,000	43,332,000	60,916,000*	42,880,000	61,005,000
<b>Vegetable</b>	268,132,000	453,325,000	882,648,000	791,607,000	737,992,000	865,452,000
<b>Fruit &amp; Nut</b>	650,412,500	932,394,000*	1,191,094,000	1,093,432,800*	1,069,231,000	1,235,426,000
<b>Nursery</b>	5,360,000	16,747,000	32,530,600	28,904,600	32,013,900	32,406,600
<b>Livestock</b>	368,995,000	642,060,000*	917,722,000*	780,324,000*	805,333,000	690,433,000
<b>Apiary</b>	6,539,000	5,303,000	10,874,000	9,209,000	9,798,900	11,179,400
<b>Industrial</b>	<u>5,310,000</u>	<u>5,421,200</u>	<u>6,187,000</u>	<u>8,940,000</u>	<u>7,046,000</u>	<u>9,096,000</u>
<b>TOTAL</b>	<b>\$ 1,855,733,500</b>	<b>\$2,635,447,200*</b>	<b>\$3,570,027,600*</b>	<b>\$3,281,285,400*</b>	<b>\$3,220,101,800</b>	<b>\$3,419,087,000</b>

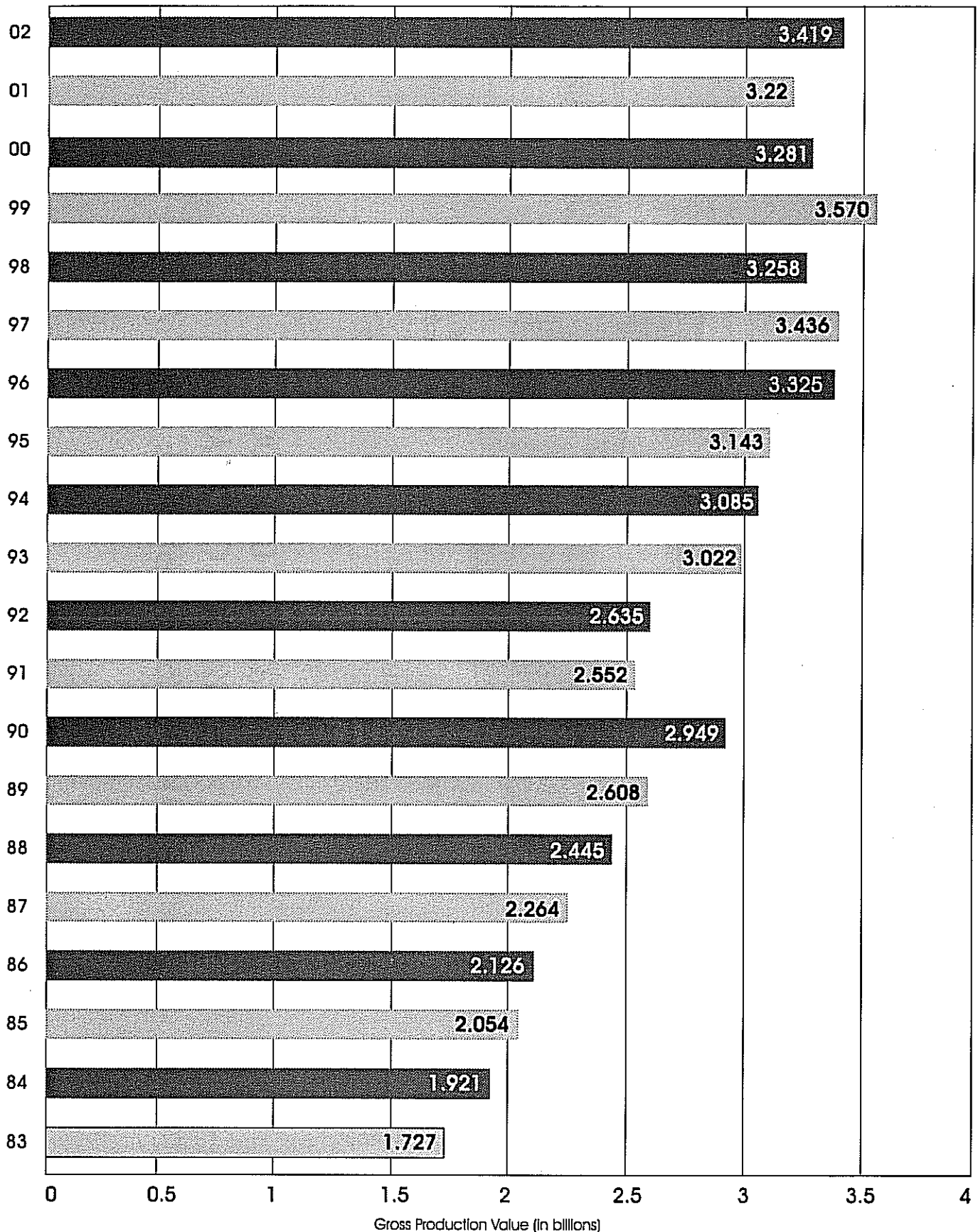
\*Revised



RELATIONSHIP IN TERMS OF TOTAL VALUE  
FOR 2002 CROP YEAR  
\$3,419,087,000



# GROWTH OF FRESNO COUNTY AGRICULTURE OVER A TWENTY-YEAR SPAN 1983 through 2002





## Department of Agriculture

**Jerry Prieto, Jr.**

Agricultural Commissioner/  
Sealer of Weights & Measures

**Robert D. Vandergon**

Assistant Agricultural Commissioner/  
Sealer of Weights & Measures

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

The Honorable Board of Supervisors  
County of Fresno

Susan B. Anderson, Chair  
Juan Arambula  
Phil Larson  
Judith G. Case  
Bob Waterston

Bart Bohn  
County Administrative Officer

I am pleased to submit the 2003 Fresno County Agricultural Crop and Livestock Report. This annual compilation presents statistical data pertaining to the acreage, yield, and gross value of Fresno County agricultural products.

Fresno County set a new production value record in 2003 by reaching the four billion-dollar mark. The total gross production value of Fresno County agricultural commodities in 2003 was \$4,055,963,500. This represents a 17.87 percent increase from the 2002 production value. Substantial increases were seen in vegetable, fruit and nut crops as well as livestock and poultry. It must be emphasized that the values presented in this report reflect gross values only and do not in any manner reflect net income or loss to producers. The agricultural economy is improving. However, some growers continue to have difficulty meeting financial obligations and obtaining operating capital. Some commodities have increased in value, while others have decreased. The increased commodity prices have been offset by the increased cost of complying with new air and water regulations, coupled with increased costs for fuel, workers' compensation and health insurance benefits.

Agriculture continues as the major industry in Fresno County and is a driving force in the county's economy. Every dollar received by Fresno County producers results in the economic extension benefit of three and one-half dollars to the total economy of the county.

I sincerely appreciate the professional and dedicated work performed by Deputy Agricultural Commissioner/Sealer Dennis C. Plann; Supervising Agricultural/Standards Specialist Scotti Walker; Agricultural/Standards Specialists Jennifer Fulbright and Brice Gross; and Seasonal Agricultural/Standards Specialist Cézanne Baker, as well as the rest of our staff at the Department of Agriculture for the preparation of this report.

My thanks to the many individuals, related agencies, and members of the agricultural industry for their contributions to the compilation of this report.

Sincerely,

Jerry Prieto, Jr.  
Agricultural Commissioner/Sealer

*"Cultivators of the earth are the most valuable citizens.  
They are the most vigorous, the most independent, the most  
virtuous, and they are tied to their country, and wedded to  
its liberty and interests, by the most lasting bonds."*

***Thomas Jefferson***

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This report is also available at our internet site:  
<http://www.co.fresno.ca.us/4010/agwelcm.htm>

## FRESNO COUNTY'S 10 LEADING CROPS

Crop	2003 Rank	2003 Dollar Value	2002 Rank	1993 Rank	1983 Rank
GRAPES	1	\$ 400,842,000	1	1	2
TOMATOES	2	384,290,000	4	3	4
COTTON	3	341,666,000	2	2	1
CATTLE AND CALVES	4	263,510,000	6*	5	3
POULTRY	5	246,520,000	3	+	+
MILK	6	221,199,000	5	4	5
ORANGES	7	215,349,000	8	9	7
ALMONDS	8	201,596,000	7*	7	13
ONIONS	9	164,766,000	13	15	17
PEACHES	10	<u>158,470,000</u>	12	11	11
TOP TEN TOTAL		\$2,598,208,000			

+ Not previously combined for ranking purposes

\* Revised

# 2003 Highlights in Retrospect

## January:

Wet conditions early in the month restricted field work but activity picked up as fields dried. Pruning, dormant sprays, weed control work, cane tying, and grafting of new varieties were underway in vineyards and tree fruit orchards. Vegetables planted for the spring harvest were growing well; new fields were prepared for planting of summer vegetables. Vineyards and orchards were removed to make way for new fruit varieties. Winter vegetables and several varieties of citrus were harvested throughout the county for commercial sales and farmers' markets. Slow but steady growth continued in grain fields.

## February:

Cold nights were offset by mild days, promoting good growth in grain, feed, and vegetable crops. Periodic rains helped maintain soil moisture. Fields were prepared for planting warm season crops; processing tomatoes were planted late in the month. Dormant season sprays and herbicide treatments were underway in nut and stone fruit orchards; blooms began to show in early variety orchards by the middle of the month. Brush shredding, cultivating, and pruning continued in grape vineyards. Strawberry plants showed strong new growth. Rangeland conditions improved and grazing cattle appeared content. Bees were active in almond and tree fruit orchards. Navel oranges, lemons, and tangerines were picked, packed, and exported.

## March:

Excellent growing conditions prevailed throughout the month except for a few light rainstorms. Grain plantings made good progress; some fields were treated to control broadleaf weeds. Harvesting of winter forage and alfalfa hay began. Cotton planting started later in the month. Tomatoes, sweet corn, peppers, melons, and other summer vegetables were planted. Harvesting of lettuce, broccoli, and asparagus was in full swing. Sugar beets grew vigorously and new fields were planted. Strawberries and blueberries were blooming. Bloom was widespread in almond and tree fruit orchards and bud break began in grape vineyards. Grape, nut, and tree fruit growers began treatments to control insect pests, diseases, and weeds. Cattle and sheep were moved into foothill rangeland to graze.

## April:

A thunderstorm early in the month brought rain, hail, cold temperatures, and many problems: Cotton planting was slowed; lodging showed in some grain fields; stone fruit suffered pitting, cracking, and leaf damage; wheat rust developed in many fields; and nut set in pistachio orchards was reduced. Rain later in the month slowed field work and increased the threat of fungal and disease problems. Bloom started in citrus, pear, apple, and pomegranate orchards. Bees were active in flowering orchards and fields. Irrigation and pest control treatments were underway in grape vineyards and tree fruit orchards. Picking began in early variety cherry and peach orchards. Silage and alfalfa hay were cut and baled or chopped for feed. Corn for feed and seed was planted and growing rapidly by the month's end. Summer vegetables made good progress; hot caps and plastic row covers in most fields were removed. Strawberry picking began, filling roadside stands with delicious fruit. Harvesting of asparagus, broccoli, lettuce, and other spring vegetables continued throughout the month. Oranges and lemons were picked, packed, and shipped.

## May:

Grain harvesting began in mature fields; stubble was windrowed, dried, and baled. Cotton planting continued; replanting was needed in some fields that were adversely affected by the recent storms. Sugar beet growth was steady; irrigation, cultivation, and pest control treatments were underway. Alfalfa hay and winter forage were harvested; maturing fields showed robust growth. Corn planted for seed, animal feed, and chips, snacks, and tortillas was growing well. Rice fields were planted and safflower bloomed late in the month. Stone fruit picking was well underway as the month progressed; bloom began in grape vineyards later in the month.

May (continued):

Walnut and pecan orchards were blooming, and heavily laden almond branches were supported with props. Spring vegetables were harvested and summer vegetables matured rapidly as weather warmed. Beehives were moved into vegetable fields to aid pollination. Citrus bloom ended and fertilizer and pest control treatments commenced in many orchards. Blueberry picking began and strawberry fields continued to produce fruit. Harvesting of onions and garlic started. Rangeland grasses matured and were grazed by contented cattle.

June:

Warm, stable weather spurred good growth in most crops. Squares showed in some cotton fields; irrigation, cultivation, and pest control work were ongoing. Small grain harvesting continued; stubble was cut, windrowed, and baled. Sugar beet harvesting began; maturing fields were irrigated and treated to control disease and insect pests. Rice, alfalfa, and grains for silage were growing well; harvesting of alfalfa hay and silage continued as fields matured. Safflower and seed alfalfa were blooming and maturing rapidly. Picking in stone fruit orchards continued, along with irrigation, fruit thinning, and pest control treatments. Bloom sprays were applied to table grapes to enhance fruit quality; vineyards were irrigated and treated to control disease and insect pests. Grape leaves were harvested for gourmet food use. Nut development was steady in most almond, walnut, and pecan orchards. Harvesting of sweet corn, cucumbers, eggplant, tomatoes, and other summer vegetables began. Strawberries, blackberries, and blueberries were harvested. Valencia oranges were picked; irrigation and fertilization continued in many citrus orchards. Olive orchards were treated to control Olive Fruit Fly.

July:

The county's fields and orchards produced a bountiful harvest of tree fruit, grapes, grains, vegetable, berries, melons, root crops, herbs, oil seed, hay, and specialty vegetables; much of it was shipped away to consumers or processors. Irrigation, pest control treatments, and other field work was ongoing in tree fruit orchards and grape vineyards. Hot, humid conditions reportedly caused rot and berry cracks in some table grape varieties, and fruit drop and pit burn in several stone fruit orchards. Cotton bloom was widespread; fields were treated for diseases, weeds, and insect pests. Straw in harvested grain fields was baled and stacked. Almonds were maturing and hull split started; growers prepared orchard floors for harvest. Pomegranates, apples, and persimmons were developing well. Picking of Valencia oranges continued, and olive and citrus orchards were irrigated. Fields were prepared for the fall strawberry crop. Fans and misters were used to cool dairy cattle. Rangeland conditions were hot and dry with limited grazing available.

August:

Light showers near the end of the month gave growers a scare but no crop damage was reported. Grain was harvested for seed; harvested grain fields were used for grazing, left fallow, or disced to prepare for the next crop. Wheat was planted for winter forage. Cotton bloom proceeded with good boll set and development noted. Dry beans bloomed and showed good pod development. Alfalfa seed was harvested; alfalfa hay was cut, windrowed, baled, and stacked. Corn for seed, feed, and human consumption grew rapidly. Silage corn was chopped and hauled to dairies for storage. Sugar beet harvesting continued; maturing fields were growing well and being irrigated. Raisins were picked and laid out on trays to dry; cultivation and terracing to prepare raisin vineyards was in progress throughout the county. Cane cutting began in DOV (dried on the vine) raisin vineyards to initiate fruit drying. Harvesting continued in table grape vineyards and started in juice and wine vineyards. Harvesting began in almond, apple, and Asian pear orchards; stone fruit picking and packing continued steady. The west side melon harvest continued at full speed; field preparation and planting of fall vegetables began in several districts. Trapping began in citrus orchards to monitor the presence of glassy-winged sharpshooter and other significant pests.



#### September:

The raisin harvest progressed smoothly with 95 percent of the crop picked and nearly 30 percent picked up and in bins by month's end. Fruit drying in DOV (dried on the vine) vineyards made good progress. Deliveries to raisin processors began. Table, wine, and juice grape harvesting also continued with many harvested vineyards given a last irrigation for the season. Asparagus harvesting began in the west side districts; broccoli, lettuce seed, sugar beets, and corn for seed, feed, and human consumption were harvested. Open bolls began to show in cotton fields and growers began to prepare fields for defoliation. Winter forage showed good emergence; planting of new fields continued. Picking of late variety stone fruit continued, along with Asian pears, melons, tomatoes, eggplant, squash, and peppers.

#### October:

Cotton harvesting proceeded steadily with more than 50 percent of the crop baled by the end of the month and many fields shredded and disced to comply with pink bollworm plowdown requirements. Some winter forage and grain planting was underway. Lettuce, broccoli, and asparagus were harvested in the west side districts. Raisin harvesting was completed by the end of the month, but rolled trays were still out in a few vineyards. Table grapes and late variety stone fruit were harvested; irrigation, weed control work, and pruning were in progress in harvested orchards and vineyards to prepare for the dormant season. Alfalfa hay, rice, sweet potatoes, blackeye beans, melons, summer vegetables, and corn for animal feed were harvested but their season was nearly over. Chiseling, leveling, and cultivation to prepare for planting next year's field crops continued throughout the county. Almond, walnut, and pistachio harvesting continued throughout the month. Strawberries were picked for sales at roadside stands and to commercial outlets. Olives, persimmons, quince, and pomegranates were harvested. Valencia oranges were harvested in a few locations and picking began in several early Navel orange orchards. Fruit in citrus orchards was sizing well and developing color. Sheep grazed on stubble in harvested grain and alfalfa fields.

#### November:

Light rains early in the month gave cotton and vegetable growers some nervous moments but had little effect on harvest activity. Nearly 90 percent of cotton fields were harvested by the end of the month; shredding and discing continued in harvested fields. Removal of vineyards and orchards continued throughout the county; brush was piled for burning or recycling. Picking continued in late variety table grapes and tree fruit orchards. Some alfalfa was cut for hay and green chopped for feed, but cooler weather slowed growth and marked the end of the hay season. Winter grains for both food and forage had emerged and were growing well; field preparation and planting continued. Some harvesting of rice and sugar beets was underway, but few unharvested fields remained. Pruning, brush shredding, irrigation, and cultivation were underway in grape vineyards and tree fruit orchards. Walnut, kiwifruit, and persimmons were harvested. Strawberries were picked and sold at roadside stands until the end of the month. Harvesting of lettuce, broccoli, cabbage, and cauliflower continued in the few remaining west side fields. Harvested fields throughout the county were prepared for planting of spring vegetables; garlic, onions, lettuce, other spring vegetables planted earlier had emerged and showed good development. Navel oranges and mandarins were picked, packed, and shipped. Beekeepers prepared their hives for overwintering.

#### December:

Several rainstorms passed through during the month, slowing field work and providing moisture to crops and rangeland grasses. The cotton season was essentially complete by the end of the month with only a few fields yet to be shredded and disced after the harvest. Grains for food and feed were growing well; fertilizer applications and herbicide treatments were made as conditions allowed. Harvesting of cabbage, cauliflower, and broccoli continued in a few west side fields. Planting of new fields of spring vegetables, grains, sugar beets, winter forage, and alfalfa was ongoing. Vineyard and orchard operations included pruning, brush shredding, cultivation, cover crop planting, and dormant sprays. Navel oranges and mandarins were picked; oranges were brought from other counties to Fresno area citrus packing houses.

**FIELD CROPS:** The total gross returns for field crops decreased by \$14,395,000 from \$514,089,000 to \$499,694,000, representing a 2.80 percent reduction from 2002. The harvested acreage for barley was down 1,500 acres but the total value of the crop increased \$128,000. This increase in value is partially explained by an 18.75 percent increase in price per ton paid to the grower. Beans, dry dropped considerably in acreage from 12,500 in 2002 to 6,880 in 2003. This reflects a 44.96 percent decrease from last year. Upland Acala cotton acreage was up from 145,000 acres to 187,000 acres, while Pima acreage fell 45.51 percent. The overall value of cotton decreased slightly from \$344,174,000 to \$340,782,000. Grower returns for alfalfa hay were down by \$7,645,000 due in part to a \$10 decrease from the 2002 price per ton. Total gross returns for rice increased 52.23 percent despite a 10.54 percent decrease in harvested acres. Sugar beets and wheat both decreased in total value due to a decrease in acreage planted.

**SEED CROPS:** Total gross returns for all seed crops decreased by \$23,582,000, from the total value of \$61,005,000 to \$37,423,000. The returns for alfalfa seed were down 51.92 percent, due to the acreage decreasing by more than half, while cotton seed also decreased in value by \$131,000. Vegetable seed plantings increased by 61.11 percent, or 440 acres. Vegetable seed was the only category which increased its total value in 2003. The other category of seed crops dropped \$32,021,000 in value.

**VEGETABLE CROPS:** This year two vegetable crops made it into the top ten leading crops: tomatoes jumped from fourth in 2002 to second, and onions increased four spots to be the ninth leading crop in the county. The total gross returns for vegetable crops increased \$387,692,000, from \$865,452,000 to \$1,253,144,000. The total value and harvested acreage of bell peppers and broccoli more than doubled, increasing the value of vegetable crops by \$79,080,000. The garlic crop was up in value by \$20,898,000. Fresh garlic increased in value by \$25,908,000, while the total value of processed garlic fell, due to a decrease in harvested acreage. The value of the head lettuce crop increased by \$43,035,000 thanks to an increase in the fall price of 73.3 percent. Cantaloupes increased in value by \$24,190,000 to \$104,920,000. The fresh onion crop increased in value 106.85 percent to \$128,216,000. Total gross returns for standard tomatoes increased by \$73,186,000, and the processed tomato crop was up in value by \$45,297,000. Gross returns for watermelons were up by 75.22 percent to \$23,045,000.

**FRUIT AND NUT CROPS:** The total gross returns for fruit and nut crops increased by \$211,855,000 to \$1,447,281,000. Even though the value of the almond crop increased \$8,302,000, it wasn't enough to keep almonds from falling to eighth on the top ten crop list after three years at number seven. The total value for cherries increased by 19.56 percent, from \$27,536,000 in 2002 to \$32,924,000 in 2003. The value of the orange crop rose to \$215,349,000, up 55.31 percent from last year, due to an increase in harvested acreage and yield. Grapes rose in value slightly to \$400,842,000 from the 2002 total of \$400,255,000. Nectarines had another good year; the crop value increased \$43,494,000 to a total of \$153,066,000. Peaches increased in value by \$64,579,000. The total value of the pistachio crop fell dramatically by 52.03 percent to \$13,807,000, due to a decrease in yield of 54.67 percent. The value of the persimmon crop doubled to \$5,822,000.

**NURSERY:** The gross returns from sales of nursery products increased by \$318,100, from \$32,406,600 to \$32,724,700. The production of Christmas trees, up by 107.69 percent to 2,700 trees, had a value of \$58,700. Ornamental trees and shrubs significantly increased, from 1,032,000 plants to 1,228,000 plants, with a gain of \$1,363,000. The returns for other nursery products, which includes bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf, decreased to \$18,845,000.

**LIVESTOCK AND POULTRY:** The total gross returns for livestock and poultry increased 8.39 percent to \$526,191,000. This year cattle and calves moved from the sixth position on the top ten crop list to be ranked number four, with a value of \$263,510,000. The value of cattle rose this year due to increased beef prices. The price for calves rose 3.32 percent, while the feeder price increased to \$87.88 per hundred weight, or 20.38 percent from last year's price. The value of hogs and pigs increased by 17.89 percent, or \$929,000, from the 2002 value. The price of lamb increased by \$25.51 per hundred weight, which increased the total value to \$6,464,000. The total value of turkeys increased slightly to \$44,177,000, even though the number of head and total liveweight decreased. The other livestock category which includes: buffalo, chickens, ducks, fallow deer, fish, game birds, goats, beneficial insects, rabbits, squab, old turkey breeders and poults, vermiculture, water buffalo, and Zebu cattle, decreased in value by \$27,788,000.

**LIVESTOCK AND POULTRY PRODUCTS:** The total value of livestock and poultry products increased \$15,686,000, from \$226,798,000 to \$242,484,000. The price of manure was down \$0.86 a ton, however, the production was up 95,000 tons. The total value of manufacturing milk increased more than four times from last year's price, due an increase of 48,100 hundredweight sold, and a 15.09 percent increase in price. The value of market milk also increased in total value by 10.35 percent. Wool production decreased, but due to the substantial increase in price from \$0.41 per pound to \$0.82 per pound, total value increased by \$183,000, to \$412,000.

**APIARY PRODUCTS AND POLLINATION SERVICES:** Gross returns for apiary and pollination services decreased by \$115,600, from \$11,179,400 to \$11,063,800. The total value of honey decreased by \$176,000 in 2003, even though the price per pound increased 8.37 percent. The total production of beeswax fell by 500 pounds which caused a 9.77 percent decrease in total value. Due to an increase in production and value per unit, pollination services for tree fruit and nuts gained \$341,000 in total value.

**INDUSTRIAL CROPS:** The total value of industrial crops decreased 34.50 percent, or \$3,138,000. Timber production was up 530,000 board feet but its value fell \$299,000. Firewood was down by 10,800 cords and decreased in value \$918,000.

## SUSTAINABLE AGRICULTURE

### 2003 BIOLOGICAL CONTROL ACTIVITIES

PEST	B. C. AGENT/MECHANISM	ACTIVITY
Water Hyacinth	Neochetina eichhorniae Neochetina bruchi Water Hyacinth Weevils	Checked to see if old release sites still had bio-control agents. They did not.
Glassy-Winged Sharpshooter	Gonatocerus triguttatus	Released 1,000 parasitoids at 4 different sites in Fresno
Red Gum Lerp Psyllid	Psyllaephagus bliteus	Confirming establishment of parasitoid of RGLP. Parasites were found.

### 2003 DETECTION ACTIVITIES

INSECT	TRAPS DEPLOYED	RESULTS
Medfly	794	One sterile fly trapped
Mexican Fruit Fly, other Anastrepha, Bactrocera and Ceratitis sp.	554	One sterile fly trapped
Oriental Fruit Fly	318	None captured
Melon Fly	304	None captured
Gypsy Moth	479	One trapped in Japanese Beetle trap
Japanese Beetle	327	None captured
Glassy-Winged Sharpshooter	967	One nursery, one cropland, and two residences positive

## SUSTAINABLE AGRICULTURE

### PEST ERADICATION

**GLASSY-WINGED SHARPSHOOTER:** GWSS continued to be eradicated/controlled by Fresno County. The overall number of positive properties was about the same as last year. Nearly all positive properties were treated with *Merit*. It is hoped that this will keep the GWSS population in Fresno at a low level so that they will be less likely to move from the city into the agricultural areas. So far, we have been successful at this. One adult GWSS was found in a commercial orange grove near Reedley, but an immediate spraying of the orchard prevented it from spreading. No other GWSS were found during later surveys.

### NEW AND UNUSUAL PEST OUTBREAKS IN 2003

**False Chinch Bugs** (*Nysius raphanus*), are often numerous in June and July in the Fresno area, but in 2003 they were extremely bad in many parts of the city. Late spring rains produced lush weed growth in fields that had been plowed earlier in the year, producing abundant food for the emerging nymphs. New housing areas in north Fresno and Clovis that were next to fallow fields were hit especially hard. Some homes in south Fresno near ponding basins were also heavily infested. Once landowners and developers learn what causes these infestations, they will be less likely to allow it to happen again in the future. The best way to control them is to prevent fallow fields from developing weeds, thereby preventing the nymphs from developing.

No new pests were found in Fresno in 2003.

### 2003 ORGANIC FARMING

Gross returns for organic farming in 2003 totaled \$15,640,998. A large variety of crops were produced in compliance with current organic regulations. Over sixty farms, totaling 11,349 acres and 14 handlers (shippers/packers), were registered organic in Fresno County in 2003. Crops grown, packed, and shipped include alfalfa, almonds, apples, apricots, arugula, artichokes, barley, basil, beans, beets, bell peppers, blueberries, broccoli, cabbage, cantaloupes, carrots, cattle, cauliflower, celery, chard, cherries, cilantro, corn, cotton, cucumbers, daikon, eggplant, endive, fennel, figs, garlic, grapes, grapefruit, kiwifruit, leeks, lemons, lettuce, milk, nectarines, nursery plants, okra, olives, onions, oranges, parsley, parsnips, peaches, peas, peppers, persimmons, pistachios, plums, pluots, pomegranates, potatoes, pummelos, radishes, raisins, shallots, spinach, squash, strawberries, tangerines, tomatoes, tomatillos, turkeys, walnuts, watermelon, and wheat.

# FRESNO COUNTY

## FIELD CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Barley</b>	2003	7,100	2.87	20,400	ton	\$ 114.00	\$ 2,326,000
	2002	8,600	2.66	22,900	ton	\$ 96.00	\$ 2,198,000
<b>Beans, dry <sup>a</sup></b>	2003	6,880	1.54	10,600	ton	589.00	6,243,000
	2002	12,500	1.20	15,000	ton	533.00	7,995,000
<b>Corn</b>							
Grain	2003	1,980	4.33	8,570	ton	112.00	960,000
	2002	1,790	4.24	7,590	ton	112.00	850,000
Silage	2003	25,900	22.47	582,000	ton	24.00 <sup>b</sup>	13,968,000
	2002	24,000	25.75	618,000	ton	22.00 <sup>b</sup>	13,596,000
<b>Cotton</b>							
Upland (Acala) Lint	2003	187,000	1,430 <sup>c</sup>	535,000 <sup>d</sup>	bale	.79 <sup>e</sup>	213,016,000
	2002	145,000	1,748 <sup>c</sup>	507,000 <sup>d</sup>	bale	.73 <sup>e</sup>	186,535,000
Seed	2003			203,000	ton	185.00	37,555,000
	2002			188,000	ton	167.00	31,396,000
Upland (Non-Acala) Lint	2003	5,690	1,380 <sup>c</sup>	15,700 <sup>d</sup>	bale	.87 <sup>e</sup>	6,884,000
	2002	5,240	1,670 <sup>c</sup>	17,500 <sup>d</sup>	bale	.65 <sup>e</sup>	5,733,000
Seed	2003			5,970	ton	185.00	1,104,000
	2002			6,490	ton	167.00	1,084,000
Pima Lint	2003	44,900	1,347 <sup>c</sup>	121,000 <sup>d</sup>	bale	1.21 <sup>e</sup>	73,791,000
	2002	82,400	1,493 <sup>c</sup>	246,000 <sup>d</sup>	bale	.86 <sup>e</sup>	106,626,000
Seed	2003			49,600	ton	170.00	8,432,000
	2002			100,000	ton	128.00	12,800,000
<b>Cotton Total <sup>f</sup></b>	<b>2003</b>	<b>237,590</b>					<b>340,782,000</b>
	<b>2002</b>	<b>232,640</b>					<b>344,174,000</b>
<b>Hay</b>							
Alfalfa	2003	78,400	7.84	615,000	ton	105.00	64,575,000
	2002	76,300	8.23	628,000	ton	115.00	72,220,000
Other <sup>g</sup>	2003	25,100	2.18	54,700	ton	92.00	5,032,000
	2002	26,100	2.30	60,000	ton	85.00	5,100,000

# FRESNO COUNTY

## FIELD CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Pasture and Range							
Field	2003	65,100			acre	\$ 22.30	\$ 1,452,000
Stubble <sup>h</sup>	2002	36,800			acre	\$ 46.22	\$ 1,701,000
Irrigated	2003	40,000			acre	125.00	5,000,000
Pasture	2002	40,000			acre	125.00	5,000,000
Grazing	2003	850,000			acre	8.00	6,800,000
Range	2002	850,000			acre	8.00	6,800,000
Rice	2003	5,180	3.75	19,400	ton	250.00	4,850,000
	2002	5,790	3.09	17,900	ton	178.00	3,186,000
Sugar Beets	2003	11,700	31.71	371,000	ton	38.00	14,098,000
	2002	11,900	37.14	442,000	ton	37.00	16,354,000
Wheat	2003	59,000	3.07	181,000	ton	128.00	23,168,000
	2002	61,000	3.21	196,000	ton	126.00	24,696,000
Other <sup>i</sup>	2003	19,800					10,440,000
	2002	15,660*					10,219,000*
Total	2003	1,368,630					\$499,694,000
	2002	1,366,280					\$514,089,000

**a** Includes blackeyed, garbanzo, and lima (baby and large)

**b** Field price

**c** Pounds of lint per acre

**d** 500 pounds lint per bale

**e** Price per pound, 504 pounds gross weight per bale

**f** Not used for top 10 ranking; does not include cotton seed for planting

**g** Includes hay from alfalfa seed, barley, oats, pasture grass, rye grass, sudan, winter forage, and wheat

**h** Not included in total field crop acreage; includes acreage from alfalfa hay (conventional and organic), barley, beans, broccoli, lettuce, melons, oats, tomatoes, and wheat

**i** Includes oat grain, safflower, silage (alfalfa, barley, bean, oat, sorghum, sudan grass, and wheat), sorghum milo, straw, sugar beet pulp, sugarcane, and winter forage; **organic:** alfalfa hay, cotton (acala), and wheat

\* Revised

## FRESNO COUNTY

## SEED CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Alfalfa</b>	2003	2,510	911	2,287,000	lb.	\$ 1.36	\$ 3,110,000
<b>Certified</b>	2002	5,960	816	4,863,000	lb.	\$ 1.33	\$ 6,468,000
<b>Cotton<sup>a</sup></b>	2003	3,400		6,800,000	lb.	.13	884,000
<b>Certified</b>	2002	6,440		12,687,000	lb.	.08	1,015,000
<b>Vegetable<sup>b</sup></b>	2003	1,160					14,106,000
	2002	720					2,178,000
<b>Other<sup>c</sup></b>	2003	7,070					19,323,000
	2002	<u>6,280</u>					<u>51,344,000</u>
<b>Total</b>	<b>2003</b>	<b>10,740</b>					<b>\$37,423,000</b>
	<b>2002</b>	<b>12,960</b>					<b>\$61,005,000</b>

**a** Included in field crop acreage

**b** Broccoli, carrot, cauliflower, lettuce (head and leaf), mizuna, mustard (red), and onions

**c** Alfalfa (non-certified), barley, beans (blackeyed and garbanzo), corn, oats, rice, sorghum (grain), sudan grass, triticale, turfgrass, wheat (certified and non-certified); **flowers:** daisy, malva, and primrose; **organic:** cantaloupe, gourd, lettuce (head), and pepper (chili)



## FRESNO COUNTY

## VEGETABLE CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Asparagus</b>	2003	2,200	3.71	8,160	ton	\$ 2,440.00	\$ 19,910,000
	2002	2,200	3.45	7,590	ton	\$ 1,575.00	\$ 11,954,000
<b>Bell Peppers <sup>a</sup></b>	2003	2,480	29.60	73,400	ton	564.00	41,398,000
	2002	1,500	22.67	34,000	ton	505.00	17,170,000
<b>Broccoli <sup>a</sup></b>	2003	10,600	11.32	120,000	ton	649.00	77,880,000
	2002	6,700	7.78	52,100	ton	442.00	23,028,000
<b>Eggplant <sup>b</sup></b>	2003	789	13.31	10,500	ton	510.00	5,355,000
	2002	759	11.41	8,660	ton	525.00	4,547,000
<b>Garlic</b>							
Fresh	2003	6,600	9.78	64,600	ton	1,276.00	82,430,000
	2002	5,210	7.47	38,900	ton	1,453.00	56,522,000
Processed	2003	19,800	10.50	208,000	ton	334.00	69,472,000
	2002	22,000	10.14	223,000	ton	334.00	74,482,000
<b>Head Lettuce</b>							
Naked				32,400	ton		
Wrapped				83,200	ton		
Bulk				55,500	ton		
Spring	2003	9,980	17.14	171,100	ton	264.00	45,170,000
Season Total	2002	10,600	12.79	135,600	ton	267.00	36,205,000
Naked				33,700	ton		
Wrapped				95,500	ton		
Bulk				63,100	ton		
Fall	2003	9,560	20.12	192,300	ton	383.00	73,651,000
Season Total	2002	10,280	17.42	179,100	ton	221.00	39,581,000
<b>Head Lettuce</b>	<b>2003</b>	<b>19,540</b>		<b>363,400</b>			<b>118,821,000</b>
<b>Totals</b>	<b>2002</b>	<b>20,880</b>		<b>314,700</b>			<b>75,786,000</b>

## FRESNO COUNTY

## VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Leaf Lettuce</b> <sup>c</sup>	2003	6,690	9.27	62,000	ton	\$ 799.00	\$ 49,538,000
	2002	7,220	15.65	113,000	ton	\$ 451.00	\$ 50,963,000
<b>Melons</b>							
Cantaloupe <sup>a</sup>	2003	26,400	13.03	344,000	ton	305.00	104,920,000
	2002	24,200	14.50	351,000	ton	230.00	80,730,000
Honeydew	2003	4,910	13.38	65,700	ton	333.00	21,878,000
	2002	5,070	14.34	72,700	ton	291.00	21,156,000
Mixed Melons <sup>d</sup>	2003	1,500	10.67	16,000	ton	415.00	6,640,000
	2002	3,370	10.39	35,000	ton	338.00	11,830,000
Watermelon	2003	2,590	32.35	83,800	ton	275.00	23,045,000
	2002	2,000	34.25	68,500	ton	192.00	13,152,000
<b>Onions</b>							
Fresh	2003	12,300	30.57	376,000	ton	341.00	128,216,000
	2002	4,960	32.46	161,000	ton	385.00	61,985,000
Processed	2003	10,200	21.08	215,000	ton	170.00	36,550,000
	2002	9,560	18.00	172,000	ton	170.00	29,240,000
<b>Oriental Vegetables</b> <sup>e</sup>	2003	1,470	12.20	17,900	ton	579.00	10,364,000
	2002	1,250	11.60	14,500	ton	504.00	7,308,000
<b>Squash</b> <sup>f</sup>	2003	828	8.12	6,720	ton	511.00	3,434,000
	2002	915	8.70	7,960	ton	534.00	4,251,000
<b>Sweet Corn</b>	2003	9,840	12.30	121,000	ton	251.00	30,371,000
	2002	8,100	12.47	101,000	ton	232.00	23,432,000
<b>Tomatoes</b>							
Cherry	2003	170	10.35	1,760	ton	734.00	1,292,000
	2002	170	11.35	1,930	ton	711.00	1,372,000

# FRESNO COUNTY

## VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Tomatoes, continued							
Standard	2003	6,830	22.55	154,000	ton	\$ 720.00	\$ 110,880,000
	2002	4,500	20.89	94,000	ton	\$ 401.00	\$ 37,694,000
Processed	2003	119,000	40.12	4,774,000	ton	57.00	272,118,000
	2002	115,000	40.25	4,629,000	ton	49.00	226,821,000
Tomatoes Total	2003	126,000					384,290,000
	2002	119,670					265,887,000
Other <sup>g</sup>	2003	9,650					38,632,000
	2002	10,100					32,029,000
Total	2003	274,387					\$1,253,144,000
	2002	255,664					\$ 865,452,000

**a** Includes fresh and processed

**b** Includes Black Beauty, Chinese, Globe, Indian, Italian, Japanese, Phillipine, and Thai varieties

**c** Includes Red, Green, Butter, and Romaine varieties

**d** Includes Casaba, Crenshaw, Galia, Juan Canary, Orange Flesh, Persian, Santa Claus, and Sharlyn varieties

**e** Includes bitter leaf, bittermelon, bok choy (baby, regular, and Shanghai), napa cabbage, chayote, daikon, donqua, gailon, kabocha, lemon grass, lo bok, long beans, mattea, mora, moqua, ong choy, opo, sinqua/patola, sugar peas, taro root, tong ho, yam leaves, and you choy

**f** Includes summer and winter varieties

**g** Includes artichokes, arugula, beans (fava and garbanzo), green/snap beans (fresh and processed), beets, cabbage (processed), carrots (fresh and processed), cauliflower, Swiss chard, collards, corn (cornnuts, and tortilla chips), cucumbers (fresh and processed), endive/escarole, ginger, greens (dandelion, gai choy, mizuna, and mustard), jicama, kale, kohlrabi, leeks, mushrooms, okra, green onions, peanuts, chili peppers, pumpkins, radicchio, radishes, rutabagas, spinach, sunchokes/Jerusalem artichokes, sweet potatoes/yams, tomatillos, and turnips; **herbs:** anise, basil, chives, cilantro, dill, fennel, ginger, and parsley (dry); **organic:** arugula, green/snap beans (fresh and processed), cantaloupe, cardoon, carrots, Swiss chard, chicory, corn (sweet and tortilla chips), endive, eggplant, garlic, leeks, lettuce (head, leaf and romaine), mesclun mix greens, mustard greens (baby), onions, pepper (bell, Italian, and chili), radicchio, radishes, shallots, spinach, squash, and tomatoes (cherry, processed and specialty); **organic herbs:** basil, cilantro, dill, fennel, and parsley (fresh and dry)

# FRESNO COUNTY

## FRUIT AND NUT CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Almonds<sup>a</sup></b>	2003	65,018	1.07	69,600	ton	\$ 2,720.00	\$ 189,312,000
	2002	63,450	1.24	78,700	ton	\$ 2,300.00	\$ 181,010,000
<b>Almond Hulls</b>	2003			148,000	ton	83.00	12,284,000
	2002			168,000	ton	85.00	14,280,000
<b>Apples<sup>a</sup></b>	2003	1,951	12.84				
	2002	2,259	11.72				
Fresh	2003			16,300	ton	631.00	10,285,000
	2002			17,000	ton	722.00	12,274,000
Processed	2003			8,760	ton	108.00	946,000
	2002			9,470	ton	82.00	777,000
<b>Apricots<sup>a</sup></b>	2003	1,717	6.06	10,400	ton	860.00	8,944,000
	2002	1,349	6.43	8,670	ton	896.00	7,768,000
<b>Cherries<sup>b</sup></b>	2003	1,927	3.42	6,590	ton	4,996.00	32,924,000
	2002	1,825	3.06	5,590	ton	4,926.00	27,536,000
<b>Citrus</b>							
<b>Lemons</b>	2003	1,131	26.15				
	2002	873	18.09				
Fresh	2003			27,600	ton	566.00	15,622,000
	2002			8,220	ton	603.00	4,957,000
Processed	2003			1,970	ton	27.00	53,000
	2002			7,570	ton	40.00	303,000
<b>Citrus, other<sup>c</sup></b>	2003	2,016	16.73				
	2002	1,384	13.44				
Fresh	2003			25,100	ton	655.00	16,441,000
	2002			12,500	ton	899.00	11,238,000
Processed	2003			8,650	ton	20.00	173,000
	2002			6,100	ton	20.00	122,000

## FRESNO COUNTY

## FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Oranges							
Navel <sup>a</sup>	2003	28,469	17.35				
	2002	21,921	12.14				
Fresh	2003			412,000	ton	\$ 439.00	\$ 180,868,000
	2002			219,000	ton	\$ 481.00	\$ 105,339,000
Processed	2003			82,000	ton	31.00	2,542,000
	2002			47,100	ton	20.00	942,000
Valencia	2003	5,923	16.45				
	2002	5,345	15.83				
Fresh	2003			72,900	ton	425.00	30,983,000
	2002			66,300	ton	480.00	31,824,000
Processed	2003			24,500	ton	39.00	956,000
	2002			18,300	ton	30.00	549,000
Oranges Total	2003	34,392					215,349,000
	2002	27,266					138,654,000
Grapes							
Raisin Varieties <sup>a</sup>	2003	163,012	8.95				
	2002	169,783	11.24				
Canned	2003			18,300	ton	248.00	4,538,000
	2002			27,500	ton	249.00	6,848,000
Crushed	2003			223,000	ton	95.00	21,185,000
	2002			397,000	ton	76.00	30,172,000
Dried	2003			254,000	ton	595.00	151,130,000
	2002			316,000	ton	433.00	136,828,000
Fresh	2003			47,300	ton	1,095.00	51,794,000
	2002			58,000	ton	865.00	50,170,000
Juice	2003			2,700	ton	604.00	1,631,000
	2002			4,700	ton	446.00	2,096,000

## FRESNO COUNTY

## FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Grapes (continued)							
Table Varieties	2003	12,210	7.60				
	2002	11,456	8.13				
Crushed	2003			13,600	ton	\$ 94.00	\$ 1,278,000
	2002			9,100	ton	\$ 71.00	\$ 646,000
Fresh <sup>a</sup>	2003			79,200	ton	971.00	76,903,000
	2002			84,000	ton	977.00	82,068,000
Wine Varieties	2003	43,135	10.92				
	2002	46,397	10.56				
Crushed <sup>a</sup>	2003			462,000	ton	188.00	86,856,000
	2002			480,000	ton	180.00	86,400,000
Juice	2003			8,900	ton	621.00	5,527,000
	2002			9,800	ton	513.00	5,027,000
Grapes Total	2003	218,357					400,842,000
	2002	227,636					400,255,000
Kiwifruit <sup>a</sup>	2003	396	4.24	1,680	ton	1,120.00	1,882,000
	2002	455	3.74	1,700	ton	1,640.00	2,788,000
Nectarines <sup>a, e</sup>	2003	21,688	8.95	194,000	ton	789.00	153,066,000
	2002	15,150	9.11	138,000	ton	794.00	109,572,000
Olives, canned <sup>a</sup>	2003	1,007	3.45	3,470	ton	462.00	1,603,000
	2002	938	2.65	2,490	ton	625.00	1,556,000
Peaches <sup>e</sup>							
Cling	2003	1,266	16.51	20,900	ton	233.00	4,870,000
	2002	1,284	19.31	24,800	ton	234.00	5,803,000
Freestone <sup>a</sup>	2003	19,667	9.76	192,000	ton	800.00	153,600,000
	2002	11,908	8.73	104,000	ton	847.00	88,088,000
Peaches Total	2003	20,933					158,470,000
	2002	13,192					93,891,000
Pears, Asian and European	2003	1,021	16.45	16,800	ton	1,035.00	17,388,000
	2002	962	14.45	13,900	ton	1,262.00	17,542,000

FRESNO COUNTY

FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Persimmons<sup>a</sup></b>	2003	615	8.52	5,240	ton	\$1,111.00	\$ 5,822,000
	2002	431	6.54	2,820	ton	\$1,032.00	\$ 2,910,000
<b>Pistachios</b>	2003	7,684	.68	5,230	ton	2,640.00	13,807,000
	2002	7,824	1.50	11,700	ton	2,460.00	28,782,000
<b>Plums<sup>a,e</sup></b>	2003	18,005	8.89	160,000	ton	776.00	124,160,000
	2002	14,894	8.39	125,000	ton	892.00	111,500,000
<b>Plums, dried<sup>a</sup></b>	2003	4,531	2.80	12,700	ton	693.00	8,801,000
	2002	4,031	2.75	11,100	ton	744.00	8,258,000
<b>Pomegranates</b>	2003	2,160	4.81	10,400	ton	1,228.00	12,771,000
	2002	1,527	3.19	4,870	ton	1,200.00	5,844,000
<b>Walnuts<sup>a</sup></b>	2003	3,432	2.48	8,510	ton	1,080.00	9,191,000
	2002	3,639	1.78	6,480	ton	1,180.00	7,646,000
<b>Other<sup>d</sup></b>	2003	14,700					37,145,000
	2002	<u>6,860</u>					<u>45,963,000</u>
<b>Total</b>	<b>2003</b>	<b>422,681</b>					<b>\$1,447,281,000</b>
	<b>2002</b>	<b>395,945</b>					<b>\$1,235,426,000</b>

**a** Acreage, production, and value are included in other fruit and nut crops: 110 acres olive oil, 40 acres dried plums (juice), and 1,555 acres freestone peaches (processed), 1 acre persimmons; **organic:** 150 acres almonds, 5 acres apples, 10 acres apricots, 1,198 acres grapes (raisin, table, and wine), 10 acres kiwifruit, 10 acres mandarin tangerines, 108 acres nectarines, 78 acres navel oranges (fresh and processed), 82 acres freestone peaches, 6 acres plumcots/pluots, 55 acres plums, 27 acres pomegranates, and 96 acres walnuts

**b** Excludes 134 acres cherries (fresh) 100 percent loss due to rain and hail storms during April and May

**c** Includes blood oranges, grapefruit, mandarin tangerines, minneola tangelos, and pummelos

**d** Includes almonds (shells), apricots (dried and processed), apriums, avocados, blackberries, blueberries, boysenberries, cherries (processed), chestnuts, dried fruit, figs (fresh, dried, and substandard), grapes (compost and raisin by-products), jujubes, kiwifruit (processed), marionberries, nectarines (juice), olives (fresh and oil), peaches (juice and processed), pecans, persimmons, plumcots/pluots, plums dried (fresh), quince, and strawberries (fresh and processed); **organic:** almonds, apples (fresh), apricots, figs (dried and fresh), grape leaves, grapes (raisin, table, and wine), mandarin tangerines, nectarines, navel oranges (fresh and processed), peaches, plumcots/pluots, plums, pomegranates, and walnuts

**e** Stone fruit acreage increase reflects updated county planting data

FRESNO COUNTY

NURSERY PRODUCTS

ITEM	YEAR	ACRES	QUANTITY	UNIT	VALUE
<b>Christmas Trees</b>	2003	22	2,700	trees	\$ 58,700
	2002	20	1,300	trees	\$ 54,600
<b>Herbaceous Ornamentals<sup>a</sup></b>	2003	30	6,515,000	<sup>b</sup>	3,879,000
	2002	70	7,161,000	<sup>b</sup>	3,987,000
<b>Ornamental Trees and Shrubs</b>	2003	93	1,228,000	plants	9,942,000
	2002	79	1,032,000	plants	8,579,000
<b>Other<sup>c</sup></b>	2003	975	220,145,000	plants	18,845,000
	2002	<u>757</u>	232,518,000	plants	<u>19,786,000</u>
<b>Total</b>	<b>2003</b>	<b>1,120</b>			<b>\$32,724,700</b>
	<b>2002</b>	<b>926</b>			<b>\$32,406,600</b>

**a** Includes potted plants, bedding plants, flats, and perennials

**b** Includes flats, dozens, cans, and single plants

**c** Includes bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf



## FRESNO COUNTY

## LIVESTOCK AND POULTRY

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Cattle and Calves						
Beef						
Breeding Stock						
Common	2003	1,200		head	\$ 832.50	\$ 999,000
	2002	1,240		head	\$ 742.00	\$ 920,000
Registered	2003	300		head	2,867.00	860,000
	2002	310		head	2,500.00	775,000
Feeders	2003	106,000	324,000	cwt.	87.88	28,473,000
	2002	101,000*	313,000*	cwt.	73.00	22,849,000*
Calves	2003	26,000	78,000	cwt.	91.26	7,118,000
	2002	26,800*	80,400*	cwt.	88.33*	7,102,000*
Slaughter Stock	2003	297,000	1,753,000 <sup>a</sup>	cwt.	78.86	138,242,000
	2002	254,000*	1,352,000 <sup>a*</sup>	cwt.	66.63*	90,084,000*
Dairy						
Breeding Stock	2003	13,800		head	1,720.00	23,736,000
	2002	13,100		head	1,840.00	24,104,000
Cull Stock	2003	30,100	391,000	cwt.	45.78	17,900,000
	2002	28,400	370,000	cwt.	40.54	15,000,000
Calves	2003	103,000	308,000	cwt.	149.94	46,182,000
	2002	97,300*	292,000*	cwt.	131.68*	38,451,000*
Cattle and Calves Total	2003					263,510,000
	2002					199,285,000*
Hogs and Pigs						
Feeder Pigs and Slaughter Stock	2003	60,600	131,000	cwt.	46.73	6,122,000
	2002	53,800	117,000	cwt.	44.38	5,193,000

FRESNO COUNTY

**LIVESTOCK AND POULTRY (continued)**

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Sheep and Lambs						
Slaughter Stock						
Lambs	2003	50,700	68,500	cwt.	\$ 94.36	\$ 6,464,000
	2002	51,200	57,500	cwt.	\$ 68.85	\$ 3,959,000
Sheep	2003	11,200	16,700	cwt.	30.36	507,000
	2002	11,200	15,600	cwt.	28.08	438,000
Turkeys <sup>b</sup>	2003	4,263,000	102,738,000	lb.	.43	44,177,000
	2002	4,858,000	114,212,000	lb.	.38	43,401,000
Other <sup>c</sup>	2003					205,411,000
	2002					<u>233,199,000</u>
Total	2003					\$526,191,000
	2002					\$485,475,000*

**a** Net gain

**b** Includes conventional, organic, and heritage breed type of turkeys

**c** Includes buffalo; chickens (chicks, fryers, and old breeder birds); ducks (ducklings, old hens, and drakes); fallow deer; fish (bass, carp, and channel cat); game birds (chukar, pheasants and quail); goats (cull milk, kid, and meat); insects (beneficial); rabbits (meat); squab; turkeys (old breeder birds and poults); vermiculture; water buffalo and Zebu cattle

Revised

\*

FRESNO COUNTY

LIVESTOCK AND POULTRY PRODUCTS

ITEM	YEAR	PRODUCTION	UNIT	VALUE	
				PER UNIT	TOTAL
<b>Manure<sup>a</sup></b>	2003	649,000	ton	\$ 3.59	\$ 2,330,000
	2002	554,000	ton	\$ 4.45	\$ 2,465,000
<b>Milk</b>					
Manufacturing	2003	66,400	cwt.	11.82	785,000
	2002	18,300	cwt.	10.27	188,000
Market <sup>b</sup>	2003	19,267,000	cwt.	11.44	220,414,000
	2002	18,444,000	cwt.	10.83	199,749,000
<b>Wool</b>	2003	502,000	lb.	.82	412,000
	2002	558,000	lb.	.41	229,000
<b>Eggs</b>					
Chicken, Duck & Turkey <sup>c</sup>	2003	6,919,000	dozen	2.68	18,543,000
	2002	<u>11,789,000</u>	dozen	2.05	<u>24,167,000</u>
	<b>2003</b>				<b>\$242,484,000</b>
	<b>2002</b>				<b>\$226,798,000</b>

**a** Includes cow and poultry manure

**b** Includes cow milk (conventional and organic) and goat milk

**c** Includes balut, commercial, and hatching eggs

FRESNO COUNTY

**APIARY PRODUCTS AND POLLINATION SERVICES**

ITEM	YEAR	PRODUCTION TOTAL	UNIT	VALUE	
				PER UNIT	TOTAL
Apiary Products <sup>a</sup>					
Honey	2003	1,970,000	lb.	\$ 1.37	\$ 2,699,000
	2002	2,282,000	lb.	\$ 1.26	\$ 2,875,000
Beeswax	2003	52,900	lb.	1.15	60,800
	2002	53,400	lb.	1.15	61,400
Pollination <sup>b</sup>					
Alfalfa Seed	2003	7,100	colony	24.00	170,000
	2002	13,700	colony	24.00	329,000
Trees, Fruit and Nut <sup>c</sup>	2003	161,000	colony	48.25	7,768,000
	2002	160,000	colony	46.42	7,427,000
Melon	2003	21,200	colony	17.26	366,000
	2002	27,900	colony	17.45	487,000
Total	2003				\$11,063,800
	2002				\$11,179,400

**a** Reflects bee colonies registered in Fresno County by commercial and semi-commercial beekeepers:  
2003- 43,336 colonies; 2002- 52,302 colonies

**b** Reflects value of pollination by all bee colonies located in Fresno County for pollination services  
during 2003

**c** Almonds, cherries, and plums

## FRESNO COUNTY

## INDUSTRIAL CROPS

CROP	YEAR	PRODUCTION	UNIT	VALUE
<b>Timber<sup>a</sup></b>	2003	12,745,000	board feet	\$ 3,197,000
	2002	12,215,000	board feet	\$ 3,496,000
<b>Firewood</b>	2003	7,400	cords	852,000
	2002	18,200	cords	1,770,000
<b>Other<sup>b</sup></b>	2003			1,909,000
	2002			<u>3,830,000</u>
<b>Total</b>	<b>2003</b>			<b>\$ 5,958,000</b>
	<b>2002</b>			<b>\$ 9,096,000</b>

**a** Includes government and non-government properties

**b** Includes decorative greenery (moss and limbs), fence posts, pine cones, and wood chips (biomass and landscaping)

**GROWTH IN FRESNO COUNTY AGRICULTURE AS INDICATED BY GROSS  
PRODUCTION VALUE OF AGRICULTURAL PRODUCTS OVER A TWENTY-ONE YEAR SPAN**

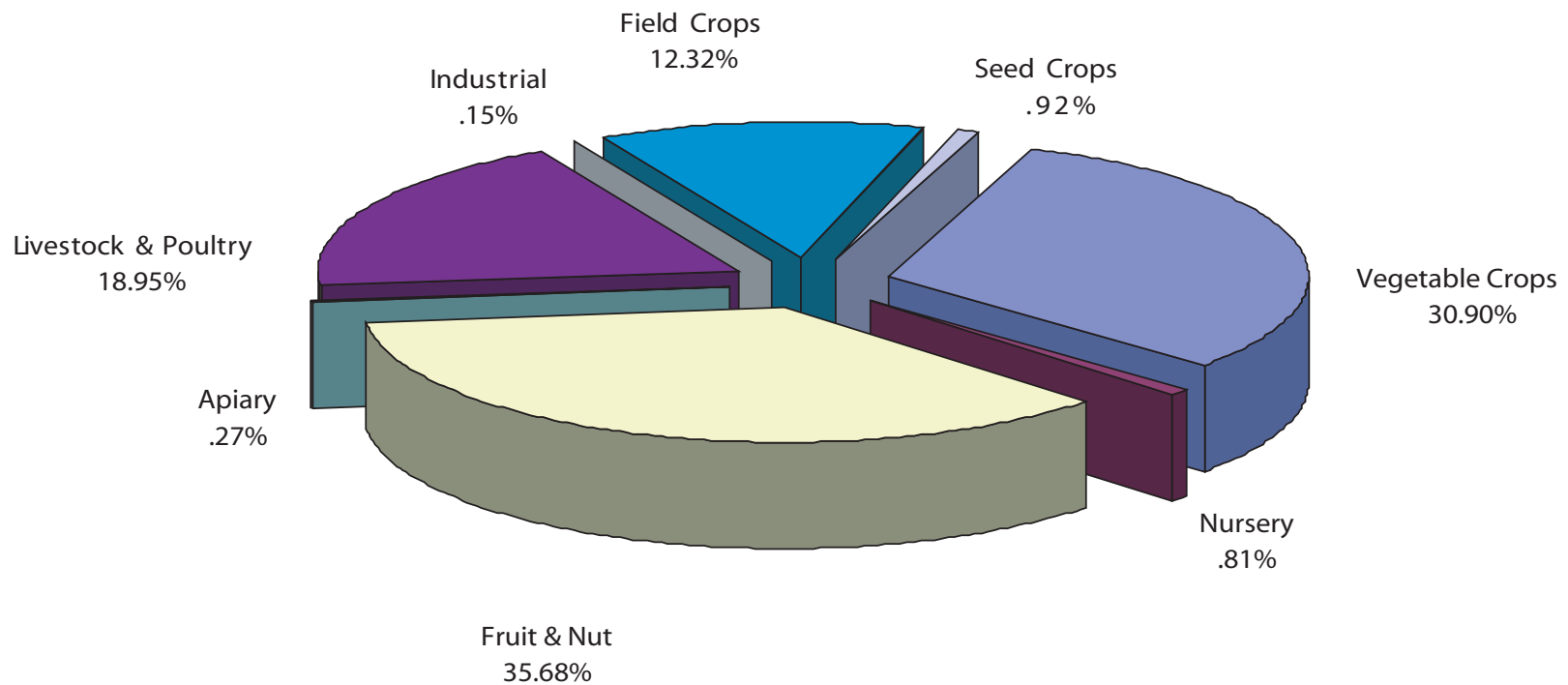
1983 - 1,727,319,500	1994 - 3,084,870,800
1984 - 1,921,020,840*	1995 - 3,142,878,300*
1985 - 2,054,060,400*	1996 - 3,324,885,800
1986 - 2,125,721,200*	1997 - 3,436,443,500*
1987 - 2,264,044,000*	1998 - 3,257,712,600*
1988 - 2,444,732,600*	1999 - 3,570,027,600*
1989 - 2,607,648,800*	2000 - 3,281,285,400*
1990 - 2,949,484,000*	2001 - 3,220,101,800
1991 - 2,552,305,040*	2002 - 3,440,926,400*
1992 - 2,635,447,400*	2003 - 4,055,963,500
1993 - 3,022,311,100*	

**SIX-YEAR COMPARISON OF GROSS PRODUCTION VALUE IN FRESNO COUNTY**

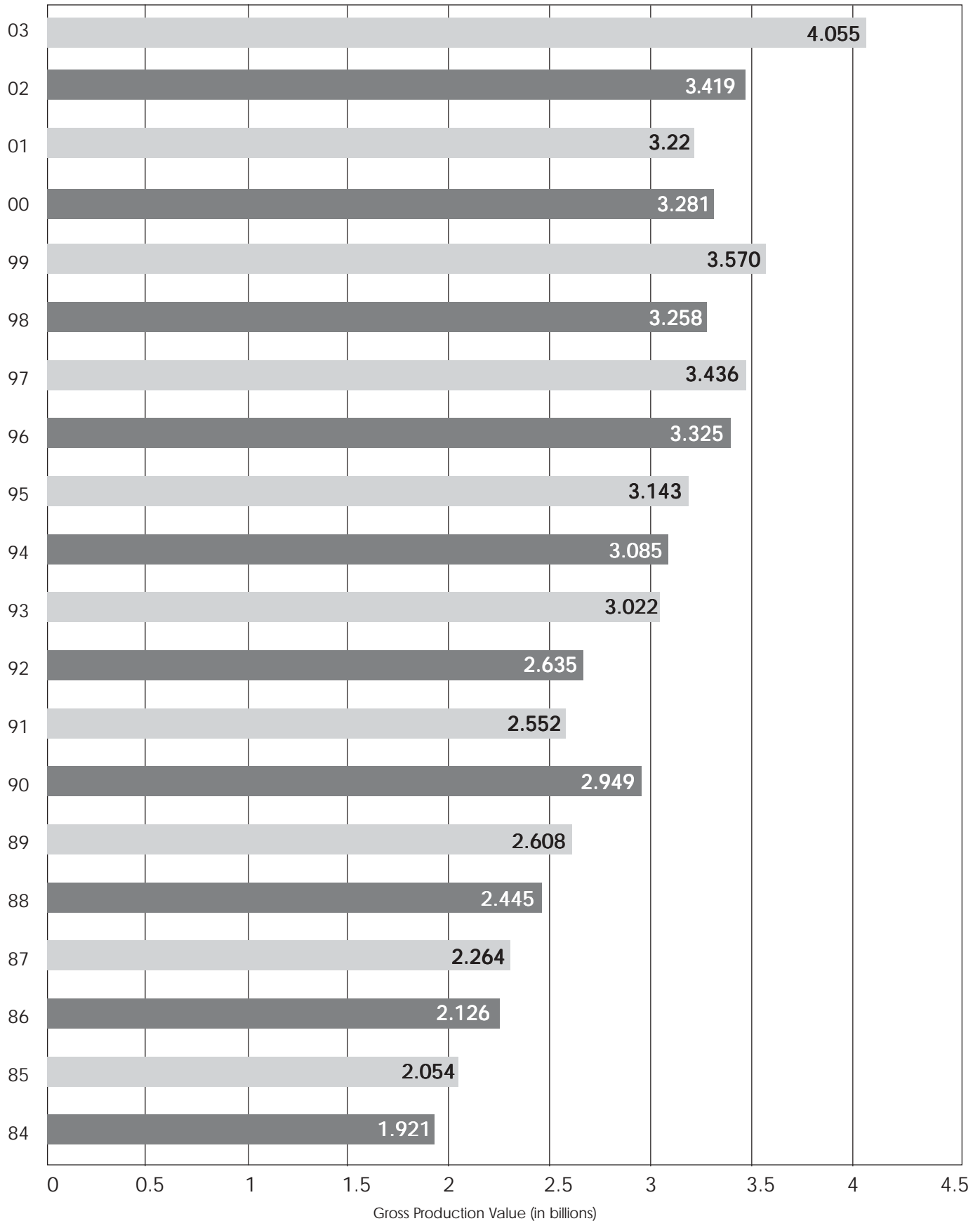
<b>CROPS</b>	<b>1983</b>	<b>1993</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
<b>Field</b>	\$ 481,053,000	\$ 607,058,000	\$ 507,952,000	\$ 515,807,000	\$ 514,089,000	\$ 499,694,000
<b>Seed</b>	40,261,000	34,577,000	60,916,000*	42,880,000	61,005,000	37,423,000
<b>Vegetable</b>	290,898,000	609,714,000	791,607,000	737,992,000	865,452,000	1,253,144,000
<b>Fruit &amp; Nut</b>	562,116,400	1,010,509,400	1,093,432,800*	1,069,231,000	1,235,426,000	1,447,281,000
<b>Nursery</b>	5,240,000	21,294,000*	28,904,600	32,013,900	32,406,000	32,724,700
<b>Livestock</b>	338,694,000	724,953,000	780,324,000*	805,333,000	712,273,000*	768,675,000
<b>Apiary</b>	5,643,100	6,052,000	9,209,000	9,798,900	11,179,400	11,063,800
<b>Industrial</b>	<u>3,414,000</u>	<u>8,153,700</u>	<u>8,940,000</u>	<u>7,046,000</u>	<u>9,096,000</u>	<u>5,958,000</u>
<b>TOTAL</b>	<b>\$ 1,727,319,500</b>	<b>\$ 3,022,311,100*</b>	<b>\$ 3,281,285,400*</b>	<b>\$ 3,220,101,800</b>	<b>\$ 3,440,926,400*</b>	<b>\$ 4,055,963,500</b>

\*Revised

RELATIONSHIP IN TERMS OF TOTAL VALUE  
FOR 2003 CROP YEAR  
\$ 4,055,963,500



# GROWTH OF FRESNO COUNTY AGRICULTURE OVER A TWENTY-YEAR SPAN 1984 through 2003







## County of Fresno

### Department of Agriculture

**Jerry Prieto, Jr.**

Agricultural Commissioner/  
Sealer of Weights & Measures

**Robert D. Vandergon**

Assistant Agricultural Commissioner/  
Sealer of Weights & Measures

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

The Honorable Board of Supervisors  
County of Fresno

Judith G. Case, Chair

Susan B. Anderson

Phil Larson

Henry Perea

Bob Waterston

Bart Bohn

County Administrative Officer

I am pleased to submit the 2004 Fresno County Agricultural Crop and Livestock Report. This annual compilation presents statistical data pertaining to the acreage, yield, and gross value of Fresno County agricultural products.

Fresno County set a new production value record in 2004 by exceeding the four billion-dollar mark for the second consecutive year. The total gross production value of Fresno County agricultural commodities in 2004 was \$4,691,224,200. This represents a 15.17 percent increase from the 2003 production value. Increases were seen in vegetable, fruit and nut crops as well as livestock and poultry. Although some commodities have increased in value others have decreased. It must be emphasized that the values presented in this report reflect gross values only and do not in any manner reflect net income or loss to producers. The agricultural economy is improving. The 2004 production year marked the beginning of a recovery for the raisin industry. Unusually warm weather during the dried plum bloom significantly reduced fruit set. Higher than normal spring temperatures affected fruit sizing in fresh plums and reduced packouts. Drought conditions during late spring and summer months reduced native forage for grazing on rangelands and forced livestock ranchers to purchase supplemental feed. Some growers are still unable to meet financial obligations or obtain adequate operating capital. Growers continue to see increased commodity prices offset by the increased costs for labor, water, fuel, energy and regulatory mandates.

Agriculture continues as the major industry in Fresno County and is a driving force in the county's economy. Every dollar received by Fresno County producers results in the economic extension benefit of three and one-half dollars to the total economy of the county.

I sincerely appreciate the professional and dedicated work performed by Deputy Agricultural Commissioner/Sealer Dennis C. Plann; Supervising Agricultural/Standards Specialist Scotti Walker; Agricultural/Standards Specialists Jennifer Fulbright, Brice Gross, Crystal Linder and Richard Stoltz; and Seasonal Agricultural/Standards Specialist Luz M. Desilagua as well as the rest of our staff at the Department of Agriculture for the preparation of this report.

My thanks to the many individuals, related agencies, and members of the agricultural industry for their contributions to the compilation of this report.

Sincerely,

Jerry Prieto, Jr.  
Agricultural Commissioner/Sealer

*"Agriculture not only gives riches to a nation,  
but the only riches she can call her own."*

***Samuel Johnson***

*English poet, critic and writer, 1709-1784*

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This report is also available at our internet site:  
<http://www.co.fresno.ca.us/4010/agwelcm.htm>

## FRESNO COUNTY'S 10 LEADING CROPS

Crop	2004 Rank	2004 Dollar Value	2003 Rank	1994 Rank	1984 Rank
GRAPES	1	\$ 592,099,000	1	2	2
COTTON	2	418,726,000	3	1	1
TOMATOES	3	408,030,000	2	4	4
ALMONDS	4	388,725,000	6*	7	13
MILK	5	317,618,000	7	5	5
CATTLE AND CALVES	6	311,164,000	4	6	3
POULTRY	7	270,169,000	5	3	+
ONIONS	8	219,244,000	9	16	18
ORANGES	9	190,512,000	8	10	7
PEACHES	10	<u>177,703,000</u>	10	12	14
TOP TEN TOTAL		\$3,293,990,000			

+ Not previously combined for ranking purposes

\* Revised

## 2004 Highlights in Retrospect

### January:

Wet conditions early in the month provided ample moisture for continued steady growth in small grain fields. Little field work was noted except for the application of fertilizer and herbicide. Lettuce, cabbage, broccoli, and other vegetables planted for the spring harvest were growing well; new fields were prepared for planting of summer vegetables. Breaks in the weather allowed growers to prune and shred brush in vineyards and fruit and nut orchards. Vineyards and orchards were removed and chipped to make room for new plantings. Winter vegetables such as spinach, kale, green onions, radishes, turnips, and winter fruits including navel oranges, lemons, and grapefruit were harvested throughout the county for commercial sales and farmers' markets. Rangeland grass growth was excellent with the abundance of rain and moderate temperatures.

### February:

Wet conditions at the beginning of the month supplied ample amounts of moisture for small grain plantings, and field and vegetable crops. Warmer temperatures for the rest of the month offset the rain and helped to bring the first blooms of the season in almonds and early variety nectarine and plum orchards. Fields were prepared for planting cotton by cultivating, leveling, and pre-irrigating. Growth was excellent in fields of lettuce, cabbage, broccoli, asparagus and other spring vegetables. Pruning, cane tying, and general maintenance was done in many wine, table, and raisin grape vineyards. Pruning, shredding, and herbicide applications were ongoing in stone fruit and nut orchards. Rangeland conditions improved and grazing cattle appeared to be gaining sufficient weight. Bees were placed in almond and tree fruit orchards. Navel oranges were picked and packed while lemons, tangerines, tangelos, and blood oranges were exported.

### March:

Moderate temperatures provided excellent growing conditions throughout the month except for a few light rainstorms. Good growth was observed in small grains; some fields were reported to have some lodging from the recent storms. Some herbicides were applied by air on fields intended for cotton planting that would start later in the month. Many winter forage and alfalfa hay fields were cut and windrowed for drying. Fields not yet ready for harvest were being irrigated and growing well. Bok choy, daikon, sugar peas, mustard greens and other spring vegetables were harvested for commercial operations. Sweet corn, melons, tomatoes, and other vegetables were planted and making excellent progress. Harvesting of lettuce, broccoli, and asparagus was in full swing by the middle of the month with good yields reported. Sugar beets grew heartily and Mylar tape was put up to keep birds away from the young plants. Strawberries and blueberries were blooming. Bloom came to an end across most of the county in almond and tree fruit orchards, and bud break and leafing out began in most grape vineyards. Grape, nut, and tree fruit growers began using aircraft and ground rigs to apply treatments to control insect pests, diseases and weeds. Cattle and sheep were moved into foothill rangeland to graze, and feedlots were at an average 90 percent capacity.

### April:

Warm and sunny days created ideal growing conditions for many crops. Cotton planting was in full swing. Mature fields of alfalfa and oat hay were cut, windrowed and baled. Grains planted for use as silage were cut and hauled to dairies for storage. Fruit thinning was underway in most stone fruit orchards; some girdling was also utilized to increase the size and quality. Blooms began to appear in citrus, pear, apple, and pomegranate orchards. Bees were placed and were very active in flowering citrus groves and fields. Irrigation and pest control treatments were underway in grape vineyards and tree fruit orchards. Small flower clusters could be seen in many grape vineyards and many growers irrigated, cultivated, and applied herbicide and fungicide treatments as well. Picking began in early variety cherry, apricot, and peach orchards toward the end of the

#### April, continued:

month. Corn for feed and seed was planted and growing rapidly. Summer vegetables made good progress. Strawberry picking began with excellent yields reported and many roadside stands were filled with delicious fruit. Harvesting of asparagus, broccoli, lettuce and other spring vegetables was ongoing throughout the month. Navel oranges, Valencia oranges, mandarins, and lemons were picked, packed and exported to Japan, the Republic of Korea, Hong Kong, Indonesia, New Zealand, the People's Republic of China, the United Kingdom and French Polynesia.

#### May:

Small grain development continued in most fields; seed heads had filled out and plants were starting to dry. Some lodging was noted due to high winds. Harvesting began in mature fields; stubble was raked and baled toward the end of the month. Irrigation and cultivation were underway in cotton fields; stands looked good with uniform emergence and good plant growth. Good emergence continued in recently planted fields of cotton. Sugar beets showed rapid growth; irrigation, cultivation and pest control treatments were underway. Alfalfa hay and winter forage continued to be harvested. Corn planted for seed, animal feed, and chips, snacks and tortillas was growing well with the warm days. Rice fields were planted and safflower bloomed late in the month. Stone fruit picking was well underway as the month progressed; bloom began in grape vineyards later in the month. Pomegranate orchards were in full bloom. Walnut, almond, and pecan orchards all showed steady crop development with good nut size. Heavily laden branches were supported with props. Spring vegetables were harvested and summer vegetables matured rapidly as weather warmed. Beekeepers began extracting honey produced during the recent stone fruit and citrus bloom. Citrus bloom ended, and fertilizer and pest control treatments started in many orchards. The blueberry harvest began, and strawberry fields continued to produce fruit. Harvesting of onions and garlic for fresh market and processing started. Rangeland grasses matured and were grazed by sheep and cattle. Cucumbers, green beans, fava beans, turnips, green onions, and other various vegetables and herbs were harvested for sale at farmers' markets.

#### June:

Good crop growth was encouraged by the ideal weather conditions. Squares showed in some cotton fields as plants developed. Irrigation, cultivation, and pest control work were ongoing. Small grains such as wheat, oat and barley continued to be harvested. Sugar beet plantings were irrigated and treated to control disease and insect pests. Rice, alfalfa, and grains for silage were growing well; harvesting of alfalfa hay and silage continued as fields matured. Safflower and seed alfalfa were blooming and maturing rapidly. Corn fields were irrigated and cultivated; all stages of plant growth were good and the staggered planting dates were very obvious. Picking in stone fruit orchards continued, along with irrigation, fruit thinning, and pest control treatments. Rapid growth was evident in most raisin, wine, and table grape vineyards with full canopy development, plentiful fruit clusters, and good berry size noted; grape leaves were harvested for gourmet food use. Vineyards were irrigated and treated to control disease and insect pests. Harvest of stone fruit gained momentum and good yields were reported. Nut development continued in almond, walnut, and pecan orchards. Fertilizer application, irrigation, cultivation, and weeding were ongoing in fields of squash, peppers, eggplants, and green beans. Harvesting summer vegetables such as sweet corn, watermelons, cantaloupes, tomatoes, onions, and other vegetables began. Blackberries and blueberries were harvested, and fields of producing strawberries decreased. Valencia oranges were picked in several east side districts; irrigation and weed control continued in many citrus orchards. Oranges were exported to Japan and Mexico.

#### July:

There was a Japanese beetle found by a seasonal agricultural aide and additional traps were placed in the vicinity to determine if there was an established population of beetles. No additional beetles were trapped.

#### July, continued:

The stone fruit harvest continued to pick up pace throughout the county; varieties packed included Black Amber plums, Prince Jim nectarines, Elegant Lady peaches and many more. Irrigation, pest control treatments, and other field work was ongoing in tree fruit orchards and grape vineyards. The county's fields, vineyards, and orchards produced a bountiful harvest of grapes, fruit, grains, vegetables, berries, melons, root crops, herbs, oil seed, hay, and specialty vegetables that were shipped to retailers, wholesalers and processors or exported. Bloom in cotton and seed alfalfa fields was widespread; fields were treated for diseases, weeds, and insect pests. Straw was baled and stacked in a number of grain fields. Almonds were maturing and hull split was noted. Pomegranates, apples, and persimmons were maturing steadily and gaining size. Picking of Valencia oranges continued, and applications to control red scale were made in some orchards. Fans and misters were used to cool dairy cattle in the hot weather. Sheep grazed on the stubble of harvested grain fields. Rangeland conditions were hot and dry with limited grazing available. Feed lot capacity averaged 90 percent. Bees were moved into melon and seed alfalfa fields to aid in pollination.

#### August:

Grain harvest was completed; harvested grain fields were used for grazing, left fallow, or disced to prepare for the next crop. Stacks of baled straw could be seen in a few fields. Good boll set and development was noted in cotton fields. Black-eyed bean plantings showed good pod development. Alfalfa seed was harvested; alfalfa hay was irrigated, cut, windrowed, baled, and stacked. Fields of Sudan and alfalfa hay continued to grow well. Corn for seed, feed, and human consumption grew vigorously in the hot weather. Silage corn was again chopped and hauled to dairies for storage. Sugar beet harvesting continued in most districts; good yields were reported with steady crop development. The raisin harvest began in a number of vineyards and became widespread by month's end. To initiate fruit drying, cane cutting began in dried on the vine (DOV) raisin vineyards. Harvesting continued in table, wine, and juice grape vineyards. Varieties harvested include Thompson seedless, Princess Exotic, Red Globe, and more. Harvesting began in almond, apple, and Asian pear orchards; stone fruit picking and packing continued steady. The melon harvest continued in full swing; field preparation and planting of fall vegetables such as lettuce, broccoli, spinach, and cauliflower began in several districts.

#### September:

The raisin harvest was underway at full speed with 90 percent of the crop picked and roughly 75 percent picked up and in bins by month's end. Fruit drying in DOV vineyards was progressing well, but there were still a few vineyards that had not been harvested. Table, wine, and juice grape harvesting was ongoing with good yields reported. Fields of lettuce and broccoli were growing well with adequate irrigation, and new fields continued to be planted. Open bolls began to show in many cotton fields and growers began to prepare fields for the season's last irrigation. Strawberry plants were growing well and some blossoms were noted. Harvested grain fields were disced and leveled in preparation for next year's crop. The almond and pistachio harvest was underway; maturing nuts in walnuts and pecans promised a good crop. Picking continued in stone fruit orchards as some late varieties continued to mature. Asian pears, apples, pears, and pomegranates were picked in several districts with excellent yields reported.

#### October:

Cotton harvesting activities were ongoing throughout the month. Toward the end of the month rainstorms prevented cotton growers from being able to finish harvesting or disking their fields to comply with the pink bollworm requirements. Rice was harvested. Pre-plant activities of leveling, disking, and irrigation were ongoing in small grain fields as weather permitted. Lettuce, broccoli, and asparagus were harvested in the



#### October, continued:

west side districts. Raisin harvesting was finished by the end of the month, and most of the DOV vineyards were harvested before the rain began. Picking and packing continued in a few table grape vineyards. By the month's end there were no reports of stone fruit being picked in any of the districts. Pomegranates, kiwifruit, quince, and olives were all harvested with good yields reported. The harvest of many nut varieties including pecans, walnuts, almonds, and pistachios, continued during the month. Squash, peppers, sweet corn, and eggplants were harvested but field activities were slowed by muddy conditions. Some lodging was noted in a few fields of sweet corn due to the rain. Chiseling, leveling, and cultivation to prepare for planting next year's field crops continued throughout many districts within the county. Strawberries continued to be picked for sales at roadside stands during the month. Weed control and irrigation were ongoing in many citrus groves as well as the application of copper. Navel oranges were sizing well and developing good color; harvest began at the end of the month. Sheep were grazing on fallow land. Beekeepers placed beehives in sites where there were blooming flowers and weeds.

#### November:

Harvest activities were on-again, off-again throughout the entire month due to the rain. Most of the cotton fields were harvested by the end of the month; shredding and discing continued. Pruning and brush shredding were ongoing as weather permitted; some vineyards and orchards were removed to make room for new plantings. Picking of a few late table grape and stone fruit varieties continued. Some alfalfa was chopped, windrowed, and baled. Rice harvest continued with only a few fields left to harvest. Sugar beet growers were preparing ground for planting, and black-eyed bean growers continued to wait for drier conditions prior to harvesting. Winter grains for both food and forage had emerged and were growing well; field preparation and planting also continued. Walnuts, kiwifruit, and persimmons were harvested. Strawberries were picked and sold at roadside stands through the end of the month. In a few remaining west side fields lettuce, broccoli, cabbage, and cauliflower continued to be harvested. Spring lettuce, onions, and garlic were planted and showed good growth. Lemons, pomelos, and tangerines were picked, packed, and shipped. Beekeepers prepared their hives for overwintering. The rains brought a flush of green grass to the rangeland.

#### December:

A few rainstorms during the month slowed field work, but provided moisture to crops and rangeland grasses. The cotton season was winding down by the end of the month with only a few fields left to be shredded and disced. Field preparation continued for small grain planting with growers discing, leveling, pre-irrigating, and planting wheat, barley, and oats. Grains that had been planted previously were growing well; fertilizer and herbicide applications were made. Harvesting of turnips, lettuce, and broccoli continued in a few west side fields. Planting of spring vegetables, sugar beets, and alfalfa was ongoing. Cover crops were planted and dormant sprays were applied in orchards as weather conditions allowed. Navel oranges and mandarins were picked and packed; oranges were exported to Japan, Taiwan, the People's Republic of China, Australia, and New Zealand.



**FIELD CROPS:** The total gross returns for field crops increased by \$95,034,000, from \$499,694,000 to \$594,728,000. This represents an increase of 19.02 percent from 2003. Upland Acala cotton acreage decreased by 19.25 percent but Pima acreage increased by 111.14 percent, or 49,900 acres. The total value cotton increased by 22.52 percent and moved in the top ten ranking from third to second place in 2004. Beans, dry decreased in value by 48 percent due to drops in acreage and per acre yield. Alfalfa hay increased in value by 11.10 percent. This was due to yield and price increases as acreage dropped 4.34 percent, or 3,400 acres. The harvested acreage of rice increased 27.41 percent and the total value was up \$574,000. Sugar beets increased in value 21.72 percent due to the yield increasing 7.58 tons per acre; acreage was down 500 acres. Wheat acreage decreased by 8,000 acres and the price received was up 6.25 percent. Total wheat value was down \$1,408,000 from the 2003 value.

**SEED CROPS:** Total gross returns for all seed crops dropped 49.3 percent in 2004; this was a decrease of \$18,451,000 from 2003 values. The value of alfalfa seed increased by 67.3 percent as harvested acreage increased by 47.01 percent or 1,180 acres. An increase of 96.76 percent in harvested acreage of certified cotton seed, along with a 74.72 percent increase in total production, led to an increase in value of \$304,000 when compared to 2003. Vegetable seed and other categories decreased in value by 55.74 percent and 67.2 percent respectively.

**VEGETABLE CROPS:** The total value for all vegetable crops was \$1,273,871,000 in 2004; this was an increase of 3.89 percent from 2003. Tomatoes increased in value by \$23,592,000, but still fell from the number two spot on the top ten leading crop list to number three. Processed tomatoes dropped in value by 10.06 percent; the primary causal factors were decreases in harvested acreage (7.56 percent) and price (12.28 percent). Even though asparagus acreage dropped 13.18 percent, an increase in per acre yield and price led to a value of \$25,521,000, up from \$19,910,000 in 2003. Both fresh and processed garlic decreased in value in 2004. Fresh garlic acreage dropped 25.3 percent and processed acreage dropped 25.25 percent. Total value for fresh garlic was down \$18,132,000 and processed was down \$17,368,000. The fresh onion yield increased by 51.13 percent from 2003 yield figures. Value for fresh onions increased 46.33 percent or \$59,408,000 when compared to the 2003 value of \$128,216,000. Oriental vegetables increased in value by \$5,399,000, or 52.09 percent from 2003. This was primarily due to an increase in harvested acreages. Sweet corn harvested acreage decreased 26.83 percent; per acre yield was also down, and the value of the crop decreased by 29.23 percent.

**FRUIT AND NUT CROPS:** Fruit and nut crops increased in value by 21.28 percent or \$317,374,000 in 2004. Grape values were up 47.71 percent, or an increase of \$191,257,000 over 2003. Since 2002 grapes have remained at number one on the top ten crop list. Almonds moved from sixth to fourth on the top ten leading crop list, increasing in value to \$388,725,000. This increase was due, in large part, to a 59.45 percent increase in price. The total value of the cherry crop was down 30.67 percent. This was precipitated by a drop in per acre yield and price deterioration. Oranges also decreased in value in by \$24,837,000 when compared to 2003. The fresh price received for oranges and all other citrus increased, while the processing price fell. Pistachios increased in value by \$49,229,000, or 356.55 percent, recovering nicely after last year's disaster. Total yield was up 293.88 percent with grower prices up 15.91 percent, or \$420 per ton. Walnut production was mostly unchanged but harvested acres were up 53.64 percent, resulting in an increase of \$4,709,000 over 2003 figures.

**NURSERY:** Nursery product sales increased in 2004. The value in 2003 was \$32,724,700 while 2004 sales were \$35,067,000, or an increase of 7.16 percent. Herbaceous and ornamental products decreased in value while ornamental trees and shrubs exhibited strong increases in production but a modest increase in value. The other category, which includes bareroot fruit trees, Christmas trees, citrus (budwood and trees), grapes (rootings and cuttings), vegetable transplants, and turf, increased in value by 9.42 percent.

**LIVESTOCK AND POULTRY:** The total gross returns for livestock and poultry for 2004 was \$603,804,000. Cattle and calves increased in value by 18.08 percent over 2003 or an increase in value of \$47,654,000. However, this increase was not enough to keep cattle and calves from dropping from number four in the top ten list to number six. The value of hogs and pigs increased by 20.04 percent, or \$1,227,000 from the 2003 value. The lamb price increased by 6.63 percent which increased the total value to \$10,666,000. The total value of turkeys decreased to \$39,698,000 due to decreases in the number of head and total liveweight. The other livestock category, which includes buffalo, chickens, ducks, fallow deer, fish, gamebirds, goats, beneficial insects, rabbits, cattle semen, squab, old turkey breeders and poults, and vermiculture increased \$28,976,000 in value.

**LIVESTOCK AND POULTRY PRODUCTS:** The total value of livestock and poultry products increased by 39.32 percent to a total value of \$337,840,000. The price of manure was up 3.62 percent but production was down 4.78 percent, resulting in a 1.33 percent reduction in total value from 2003. The total value of manufacturing milk increased almost five times from last year's price due to an increase of 186,600 hundred weight sold, and a 28.60 percent increase in price. The value of market milk also increased in total value by 42.36 percent. Wool production increased and total value increased to \$430,000 even though there was a 6.10 percent reduction in price per pound. Egg production decreased by 581,000 dozen resulting in a 5.66 percent reduction in value from 2003.

**APIARY PRODUCTS AND POLLINATION SERVICES:** Gross returns from apiary and pollination services were up in 2004 compared to 2003. The value represents an increase of 4.88 percent, or \$539,400. Both honey and beeswax showed decreases in value, but all of the pollination categories increased in value.

**INDUSTRIAL CROPS:** Industrial crop values increased \$335,000, or 5.62 percent over 2003. Timber values dropped as did firewood. However, the other category, which includes fence posts, green compost, and wood chips for biomass and landscaping, showed a strong increase of 50.71 percent.

## FRESNO COUNTY

# SUSTAINABLE AGRICULTURE

### 2004 BIOLOGICAL CONTROL ACTIVITIES

PEST	B. C. AGENT/MECHANISM	ACTIVITY
Glassy-Winged Sharpshooter	Gonatocerus triguttatus	Released 2,840 parasitoids at 8 different sites in Fresno

### 2004 DETECTION ACTIVITIES

INSECT	TRAPS DEPLOYED	RESULTS
Medfly	598	None captured
Mexican Fruit Fly, other Anastrepha, Bactrocera and Ceratitis sp.	939	None captured
Oriental Fruit Fly	250	None captured
Melon Fly	276	None captured
Gypsy Moth	398	None captured
Japanese Beetle	402	One trapped, no more found in subsequent deployment
Glassy-Winged Sharpshooter	2,400	Numerous residences positive

### PEST ERADICATION

**GLASSY-WINGED SHARPSHOOTER:** GWSS continued to be eradicated/controlled by Fresno County. The overall number of positive properties was about the same as last year. Nearly all positive properties were treated with *Merit*. It is hoped that this will keep the GWSS population in Fresno at a low level so that they will be less likely to move from the city into the agricultural areas. So far, we have been successful at this.

**NEW AND UNUSUAL PEST OUTBREAKS IN 2004**

California Department of Food and Agriculture (CDFA) Biologist Art Gilbert, and Fresno County Department of Agriculture Staff Entomologist, Norman Smith, were placing bark beetle traps out in Woodward Park and the Fresno Zoo for the month of May and June. Some beetles collected in May were new to California and to Fresno County. The Mediterranean Pine Engraver Beetle (*Orthotomicus erosus*) was later found during a survey of Woodward Park damaging some Japanese Black Pine Trees. Subsequent surveys of the Central Valley showed it to be present in numerous other sites. It is not known how serious the infestation will become, or what action CDFA will take pertaining to control. Control may not be possible, but generally, if pines are kept healthy and avoid stress, they should not be attractive to the adults, or at least the pines should be able to fight off an infestation.

A new greenhouse pest, the Solanum Mealybug (*Phenacoccus solani*), was discovered for the first time in a Fresno County greenhouse. Though known to occur in Fresno County in the past, this is the first time it has been found to be a pest in a local greenhouse, where it was seriously damaging tomatoes. This mealybug is known to be a serious pest of greenhouse peppers in Israel.

There is a new mealybug attacking pistachios in the Central Valley. Known as *Ferrisia gilli*, it is quickly spreading throughout the pistachio growing areas in Tulare, Kings, Madera, and Fresno Counties. It produces copious amounts of white wax and honeydew, making the nut bunches a sticky mess. Pistachio growers will have to add this pest to their growing list of problem insects. Infestations are still few and scattered but there is a huge potential for serious problems in the future.

A new cockroach was discovered in Fresno County by a local pest control operator. The Turkestan Roach (*Blatta lateralis*) was found infesting some school administration buildings in the downtown area of Clovis. This roach was previously found infesting military facilities in California but has now evidently expanded out of its usual range. The male and female do not look alike, which is rather unusual. Males are about an inch long, narrow and light beige in color. Females are about the same length, but wider and dark brown in color. Normal procedures for controlling roaches were followed by the pest control operator.

**2004 ORGANIC FARMING**

Gross returns for organic farming in 2004 totaled \$21,793,427. A total of eighty-five farms, totaling 12,044 acres, and fifteen handlers (shippers/packers), were registered organic in Fresno County in 2004. New registrants included 18 growers and 2 handlers. A large variety of crops were produced in compliance with current organic regulations. Crops grown, packed, and shipped include alfalfa, almonds, apples, apricots, arugula, artichokes, barley, basil, beans, beets, bell peppers, blueberries, broccoli, cabbage, cantaloupes, carrots, cattle, cauliflower, celery, chard, cherries, cilantro, corn, cotton, cucumbers, daikon, eggplant, endive, fennel, figs, garlic, grapes, grapefruit, kiwifruit, leeks, lemons, lettuce, milk, nectarines, nursery plants, okra, olives, onions, oranges, parsley, parsnips, peaches, peas, peppers, persimmons, pistachios, plums, pluots, pomegranates, potatoes, pummelos, radishes, raisins, rice, shallots, spinach, squash, strawberries, tangerines, tomatoes, tomatillos, turkeys, walnuts, watermelon, and wheat.

# FRESNO COUNTY

## FIELD CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Barley</b>	2004	7,800	2.76	21,500	ton	\$ 115.00	\$ 2,473,000
	2003	7,100	2.87	20,400	ton	\$ 114.00	\$ 2,326,000
<b>Beans, dry <sup>a</sup></b>	2004	3,790	1.35	5,120	ton	634.00	3,246,000
	2003	6,880	1.54	10,600	ton	589.00	6,243,000
<b>Corn</b>							
Grain	2004	2,860	4.80	13,700	ton	122.00	1,671,000
	2003	1,980	4.33	8,570	ton	112.00	960,000
Silage	2004	30,000	24.30	729,000	ton	23.00 <sup>b</sup>	16,767,000
	2003	25,900	22.47	582,000	ton	24.00 <sup>b</sup>	13,968,000
<b>Cotton</b>							
Upland (Acala) Lint	2004	151,000	1,831 <sup>c</sup>	553,000 <sup>d</sup>	bale	.71 <sup>e</sup>	197,886,000
	2003	187,000	1,430 <sup>c</sup>	535,000 <sup>d</sup>	bale	.79 <sup>e</sup>	213,016,000
Seed	2004			200,000	ton	172.00	34,400,000
	2003			203,000	ton	185.00	37,555,000
Upland (Non-Acala) Lint	2004	14,200	1,979 <sup>c</sup>	56,200 <sup>d</sup>	bale	.69 <sup>e</sup>	19,544,000
	2003	5,690	1,380 <sup>c</sup>	15,700 <sup>d</sup>	bale	.87 <sup>e</sup>	6,884,000
Seed	2004			20,200	ton	172.00	3,474,000
	2003			5,970	ton	185.00	1,104,000
Pima Lint	2004	94,800	1,619 <sup>c</sup>	307,000 <sup>d</sup>	bale	.93 <sup>e</sup>	143,897,000
	2003	44,900	1,347 <sup>c</sup>	121,000 <sup>d</sup>	bale	1.21 <sup>e</sup>	73,791,000
Seed	2004			123,900	ton	148.00	18,337,000
	2003			49,600	ton	170.00	8,432,000
<b>Cotton Total <sup>f</sup></b>	<b>2004</b>	<b>260,000</b>					<b>417,538,000</b>
	<b>2003</b>	<b>237,590</b>					<b>340,782,000</b>
<b>Hay</b>							
Alfalfa	2004	75,000	8.11	608,000	ton	118.00	71,744,000
	2003	78,400	7.84	615,000	ton	105.00	64,575,000
Other <sup>g</sup>	2004	13,700	3.19	43,700	ton	99.00	4,326,000
	2003	25,100	2.18	54,700	ton	92.00	5,032,000

# FRESNO COUNTY

## FIELD CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Pasture and Range							
Field	2004	29,800			acre	\$ 49.40	\$ 1,472,000
Stubble <sup>h</sup>	2003	65,100			acre	\$ 22.30	\$ 1,452,000
Irrigated Pasture	2004	40,000			acre	125.00	5,000,000
	2003	40,000			acre	125.00	5,000,000
Grazing Range	2004	850,000			acre	8.00	6,800,000
	2003	850,000			acre	8.00	6,800,000
Rice	2004	6,600	3.42	22,600	ton	240.00	5,424,000
	2003	5,180	3.75	19,400	ton	250.00	4,850,000
Sugar Beets	2004	11,200	39.29	440,000	ton	39.00	17,160,000
	2003	11,700	31.71	371,000	ton	38.00	14,098,000
Wheat	2004	51,000	3.14	160,000	ton	136.00	21,760,000
	2003	59,000	3.07	181,000	ton	128.00	23,168,000
Other <sup>i</sup>	2004	25,100					19,347,000
	2003	19,800					10,440,000
Total	2004	1,377,050					\$594,728,000
	2003	1,368,630					\$499,694,000

**a** Includes blackeyed, garbanzo, and lima (baby and large)

**b** Field price

**c** Pounds of lint per acre

**d** 500 pounds lint per bale

**e** Price per pound, 504 pounds gross weight per bale

**f** Not used for top 10 ranking; does not include cotton seed for planting

**g** Includes hay from alfalfa mix, barley, oats, pasture grass, rye grass, sorghum/milo, sudan, winter forage, and wheat

**h** Not included in total field crop acreage; includes acreage from alfalfa hay (conventional and organic), barley, beans, broccoli, lettuce, melons, oats, tomatoes, and wheat

**i** Includes oat grain, safflower, silage (alfalfa, barley, bean, oat, sorghum, sudan grass, and wheat), sorghum/milo, straw, sugar beet pulp, sugarcane, and winter forage; **organic:** alfalfa hay, cotton (acala), oat hay, rice, and wheat

# FRESNO COUNTY

## SEED CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Alfalfa</b>	2004	3,690	1,000	3,690,000	lb.	\$ 1.41	\$ 5,203,000
<b>Certified</b>	2003	2,510	911	2,287,000	lb.	\$ 1.36	\$ 3,110,000
<b>Cotton<sup>a</sup></b>	2004	6,690		11,881,000	lb.	.10	1,188,000
<b>Certified</b>	2003	3,400		6,800,000	lb.	.13	884,000
<b>Vegetable<sup>b</sup></b>	2004	990					6,243,000
	2003	1,160					14,106,000
<b>Other<sup>c</sup></b>	2004	9,660					6,338,000
	2003	7,070					19,323,000
<b>Total</b>	<b>2004</b>	<b>14,340</b>					<b>\$18,972,000</b>
	<b>2003</b>	<b>10,740</b>					<b>\$37,423,000</b>

**a** Included in field crop acreage

**b** Broccoli, carrot, green onion, lettuce (Butter, head, leaf, and Romaine), mustard, and onions;  
**organic:** basil, dill, gourds, lettuce, and parsley

**c** Alfalfa (non-certified), barley, beans (garbanzo), corn, oats, rice, triticale, turfgrass, and wheat;  
**flowers:** mixed and zinnias; **organic:** lettuce (head) and oats

# FRESNO COUNTY

## VEGETABLE CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Asparagus</b>	2004	1,910	4.74	9,050	ton	\$ 2,820.00	\$ 25,521,000
	2003	2,200	3.71	8,160	ton	\$ 2,440.00	\$ 19,910,000
<b>Bell Peppers <sup>a</sup></b>	2004	1,930	27.62	53,300	ton	692.00	36,884,000
	2003	2,480	29.60	73,400	ton	564.00	41,398,000
<b>Broccoli <sup>a</sup></b>	2004	12,600	7.00	88,200	ton	595.00	52,479,000
	2003	10,600	7.38*	78,200*	ton	649.00	50,752,000*
<b>Eggplant <sup>b</sup></b>	2004	830	15.18	12,600	ton	499.00	6,287,000
	2003	789	13.31	10,500	ton	510.00	5,355,000
<b>Garlic</b>							
Fresh	2004	4,930	8.95	44,100	ton	1,458.00	64,298,000
	2003	6,600	9.78	64,600	ton	1,276.00	82,430,000
Processed	2004	14,800	10.54	156,000	ton	334.00	52,104,000
	2003	19,800	10.50	208,000	ton	334.00	69,472,000
<b>Head Lettuce</b>							
Naked				26,900	ton		
Wrapped				75,800	ton		
Bulk				45,000	ton		
Spring	2004	9,300	15.88	147,700	ton	258.00	38,107,000
Season Total	2003	9,980	17.14	171,100	ton	264.00	45,170,000
Naked				41,600	ton		
Wrapped				94,000	ton		
Bulk				70,700	ton		
Fall	2004	10,400	19.84	206,300	ton	288.00	59,414,000
Season Total	2003	9,560	20.12	192,300	ton	383.00	73,651,000
<b>Head Lettuce</b>	<b>2004</b>	<b>19,700</b>		<b>354,000</b>			<b>97,521,000</b>
<b>Totals</b>	<b>2003</b>	<b>19,540</b>		<b>363,400</b>			<b>118,821,000</b>



FRESNO COUNTY

VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Leaf Lettuce</b> <sup>c</sup>	2004	8,900	10.83	96,400	ton	\$ 611.00	\$ 58,900,000
	2003	6,690	9.27	62,000	ton	\$ 799.00	\$ 49,538,000
<b>Melons</b>							
Cantaloupe <sup>a</sup>	2004	25,500	15.18	387,000	ton	273.00	105,651,000
	2003	26,400	13.03	344,000	ton	305.00	104,920,000
Honeydew	2004	5,100	14.92	76,100	ton	356.00	27,092,000
	2003	4,910	13.38	65,700	ton	333.00	21,878,000
Mixed Melons <sup>d</sup>	2004	1,290	14.57	18,800	ton	455.00	8,554,000
	2003	1,500	10.67	16,000	ton	415.00	6,640,000
Watermelon	2004	2,550	25.69	65,500	ton	302.00	19,781,000
	2003	2,590	32.35	83,800	ton	275.00	23,045,000
<b>Onions</b>							
Fresh	2004	10,800	46.20	499,000	ton	376.00	187,624,000
	2003	12,300	30.57	376,000	ton	341.00	128,216,000
Processed	2004	7,700	24.16	186,000	ton	170.00	31,620,000
	2003	10,200	21.08	215,000	ton	170.00	36,550,000
<b>Oriental Vegetables</b> <sup>e</sup>	2004	2,035	13.91	28,300	ton	557.00	15,763,000
	2003	1,470	12.20	17,900	ton	579.00	10,364,000
<b>Squash</b> <sup>f</sup>	2004	752	8.64	6,500	ton	584.00	3,796,000
	2003	828	8.12	6,720	ton	511.00	3,434,000
<b>Sweet Corn</b>	2004	7,200	11.22	80,800	ton	266.00	21,493,000
	2003	9,840	12.30	121,000	ton	251.00	30,371,000
<b>Tomatoes</b>							
Standard and Cherry	2004	11,700	17.78	208,000	ton	785.00	163,280,000
	2003*	7,000	22.29	156,000	ton	720.00	112,320,000

# FRESNO COUNTY

## VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Tomatoes (continued)							
Processed	2004	110,000	44.50	4,895,000	ton	\$ 50.00	\$ 244,750,000
	2003	119,000	40.12	4,774,000	ton	\$ 57.00	\$ 272,118,000
Tomatoes Total	2004	121,700					408,030,000
	2003	126,000					384,438,000*
Other <sup>g</sup>	2004	11,400					50,473,000
	2003	9,650					38,632,000
Total	2004	261,627					\$1,273,871,000
	2003	274,387					\$1,226,164,000*

**a** Includes fresh and processed

**b** Includes Black Beauty, Chinese, Globe, Indian, Italian, Japanese, Phillipine, and Thai varieties

**c** Includes Red, Green, Butter, and Romaine varieties

**d** Includes Casaba, Crenshaw, Galia, Juan Canary, Orange Flesh, Persian, Santa Claus, and Sharlyn varieties

**e** Includes amaranth, bittermelon (fruit and leaf), bok choy (baby, regular, and Shanghai), napa cabbage, chayote, daikon, donqua, gailon, Indian pea, kabocha, lemon grass, lo bok, long beans, mattea, mora, moqua, muop, ong choy, opo, sinqua/patola, snake squash, sugarcane, sugar peas (fruit and leaf), taro root, tong ho, yam leaves, and you choy

**f** Includes summer and winter varieties

**g** Includes artichokes, arugula, beans (fava and garbanzo), green/snap beans (fresh and processed), beets, cabbage (fresh), carrots (fresh and processed), cauliflower (fresh and processed), Swiss chard, collards, corn (cornnuts and tortilla chips), cucumbers (fresh and processed), endive/escarole, ginger, greens (dandelion, gai choy, mizuna, and mustard), jicama, kale, kohlrabi, leeks, mushrooms, okra, green onions, peanuts, chili peppers (fresh and processed), potato, pumpkins, radicchio, radishes, rapini, rutabagas, shallots, spinach, sunchokes/Jerusalem artichokes, sweet potatoes/yams, tomatillos, turnips, and watercress; **herbs:** basil, cilantro, dill, fennel, ginger, mint, parsley (dry), and spice mix; **organic:** arugula, asparagus, green/snap beans (fresh and processed), broccoli, cantaloupe, carrots, Swiss chard, chicory, corn (sweet and tortilla chips), endive, eggplant, garlic, leeks, lettuce (head, leaf and Romaine), mesclun mix greens, mustard greens (baby), onions, pepper (bell, Italian, and chili), radicchio, radishes, shallots, spinach, squash, and tomatoes (cherry, processed and specialty); **organic herbs:** basil (fresh and processed), cilantro, dill, fennel, and parsley (fresh and dry)

\* Revised

## FRESNO COUNTY

## FRUIT AND NUT CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Almonds<sup>a</sup></b>	2004	82,700	1.04	86,000	ton	\$ 4,337.00	\$ 372,982,000
	2003	79,300*	1.07	84,900*	ton	\$ 2,720.00	\$ 230,928,000*
<b>Almond Hulls</b>	2004			173,000	ton	91.00	15,743,000
	2003			181,000*	ton	83.00	15,023,000*
<b>Apples<sup>a</sup></b>	2004	1,829	14.74				
	2003	1,951	12.84				
Fresh	2004			18,800	ton	546.00	10,265,000
	2003			16,300	ton	631.00	10,285,000
Processed	2004			8,160	ton	196.00	1,599,000
	2003			8,760	ton	108.00	946,000
<b>Apricots<sup>a</sup></b>	2004	1,849	6.27	11,600	ton	766.00	8,886,000
	2003	1,717	6.06	10,400	ton	860.00	8,944,000
<b>Cherries<sup>a</sup></b>	2004	2,144	3.05	6,540	ton	3,490.00	22,825,000
	2003	1,927	3.42	6,590	ton	4,996.00	32,924,000
<b>Citrus</b>							
<b>Lemons</b>	2004	1,080	22.49				
	2003	1,131	26.15				
Fresh	2004			17,500	ton	721.00	12,618,000
	2003			27,600	ton	566.00	15,622,000
Processed	2004			6,790	ton	23.00	156,000
	2003			1,970	ton	27.00	53,000
<b>Citrus, other<sup>b</sup></b>	2004	2,488	15.15				
	2003	2,016	16.73				
Fresh	2004			23,700	ton	794.00	18,818,000
	2003			25,100	ton	655.00	16,441,000
Processed	2004			14,000	ton	15.00	210,000
	2003			8,650	ton	20.00	173,000

## FRESNO COUNTY

## FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Oranges							
Navel <sup>a</sup>	2004	26,522	15.08				
	2003	28,469	17.35				
Fresh	2004			324,000	ton	\$ 516.00	\$ 167,184,000
	2003			412,000	ton	\$ 439.00	\$ 180,868,000
Processed	2004			76,100	ton	23.00	1,750,000
	2003			82,000	ton	31.00	2,542,000
Valencia	2004	5,097	12.38				
	2003	5,923	16.45				
Fresh	2004			38,000	ton	550.00	20,900,000
	2003			72,900	ton	425.00	30,983,000
Processed	2004			25,100	ton	27.00	678,000
	2003			24,500	ton	39.00	956,000
Oranges Total	2004	31,619					190,512,000
	2003	34,392					215,349,000
Grapes							
Raisin Varieties <sup>a</sup>	2004	155,174	8.51				
	2003	163,012	8.95				
Canned	2004			9,700	ton	243.00	2,357,000
	2003			18,300	ton	248.00	4,538,000
Crushed	2004			437,000	ton	200.00	87,400,000
	2003			223,000	ton	95.00	21,185,000
Dried	2004			203,000	ton	1,242.00	252,126,000
	2003			254,000	ton	595.00	151,130,000
Fresh	2004			28,400	ton	1,019.00	28,940,000
	2003			47,300	ton	1,095.00	51,794,000
Juice	2004			7,800	ton	695.00	5,421,000
	2003			2,700	ton	604.00	1,631,000

## FRESNO COUNTY

## FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Grapes (continued)							
Table Varieties	2004	10,259	7.76				
	2003	12,210	7.60				
Crushed	2004			13,600	ton	\$ 200.00	\$ 2,720,000
	2003			13,600	ton	\$ 94.00	\$ 1,278,000
Fresh <sup>a</sup>	2004			66,000	ton	1,726.00	113,916,000
	2003			79,200	ton	971.00	76,903,000
Wine Varieties	2004	41,531	9.70				
	2003	43,135	10.92				
Crushed <sup>a</sup>	2004			392,000	ton	228.00	89,376,000
	2003			462,000	ton	188.00	86,856,000
Juice	2004			10,900	ton	903.00	9,843,000
	2003			8,900	ton	621.00	5,527,000
Grapes Total	2004	206,964					592,099,000
	2003	218,357					400,842,000
Kiwifruit <sup>a</sup>	2004	321	6.23	2,000	ton	1,164.00	2,328,000
	2003	396	4.24	1,680	ton	1,120.00	1,882,000
Nectarines <sup>a</sup>	2004	21,213	8.72	185,000	ton	769.00	142,265,000
	2003	21,688	8.95	194,000	ton	789.00	153,066,000
Olives, canned <sup>a</sup>	2004	940	3.04	2,860	ton	660.00	1,888,000
	2003	1,007	3.45	3,470	ton	462.00	1,603,000
Peaches							
Cling	2004	1,283	16.68	21,400	ton	231.00	4,943,000
	2003	1,266	16.51	20,900	ton	233.00	4,870,000
Freestone <sup>a</sup>	2004	20,747	13.50	280,000	ton	617.00	172,760,000
	2003	19,667	9.76	192,000	ton	800.00	153,600,000
Peaches Total	2004	22,030					177,703,000
	2003	20,933					158,470,000
Pears, Asian and European	2004	1,062	25.24	26,800	ton	693.00	18,572,000
	2003	1,021	16.45	16,800	ton	1,035.00	17,388,000

## FRESNO COUNTY

## FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
<b>Persimmons<sup>a</sup></b>	2004	564	7.78	4,390	ton	\$ 880.00	\$ 3,863,000
	2003	615	8.52	5,240	ton	\$1,111.00	\$ 5,822,000
<b>Pistachios</b>	2004	9,800	2.10	20,600	ton	3,060.00	63,036,000
	2003	7,684	.68	5,230	ton	2,640.00	13,807,000
<b>Plums<sup>a</sup></b>	2004	16,070	5.95	95,600	ton	974.00	93,114,000
	2003	18,005	8.89	160,000	ton	776.00	124,160,000
<b>Plums, dried<sup>a</sup></b>	2004	3,603	1.37	4,940	ton	959.00	4,737,000
	2003	4,531	2.80	12,700	ton	693.00	8,801,000
<b>Pomegranates</b>	2004	2,304	3.56	8,200	ton	1,271.00	10,422,000
	2003	2,160	4.81	10,400	ton	1,228.00	12,771,000
<b>Walnuts<sup>a</sup></b>	2004	5,273	2.50	13,200	ton	1,053.00	13,900,000
	2003	3,432	2.48	8,510	ton	1,080.00	9,191,000
<b>Other<sup>c</sup></b>	2004	15,800					30,469,000
	2003	14,700					37,145,000
<b>Total</b>	<b>2004</b>	<b>429,653</b>					<b>\$1,809,010,000</b>
	<b>2003</b>	<b>436,963*</b>					<b>\$1,491,636,000*</b>

**a** Acreage, production, and value are included in other fruit and nut crops: 57 acres olive oil, and 567 acres freestone peaches (processed), 1 acre persimmons; **organic:** 586 acres almonds, 9 acres apples, 5 acres apricots, 1,117 acres grapes (raisin, table, and wine), 51 acres kiwifruit, 8 acres mandarin tangerines, 50 acres nectarines, 273 acres navel oranges (fresh and processed), 54 acres freestone peaches, 14 acres plumcots/pluots, 27 acres plums, and 96 acres walnuts

**b** Includes blood oranges, grapefruit, mandarin tangerines, minneola tangelos, and pummelos

**c** Includes almonds (shells and processed), apricots (dried and processed), apriums, avocados, blackberries, blueberries, boysenberries, cherries (processed), dried fruit, figs (fresh, dried, and standard), grapes (compost and raisin by-products), jujubes, olives (fresh and oil), peaches (processed), pecans, persimmons, plumcots/pluots, quince, and strawberries (fresh and processed); **organic:** almonds, apples (fresh), apricots (processed), figs (dried and fresh), grape leaves, grapes (raisin, table, and wine), kiwifruit (fresh), mandarin tangerines, nectarines (fresh), navel oranges (fresh and processed), peaches (fresh and processed), plumcots/pluots, plums (fresh and processed), and walnuts

\* Revised

FRESNO COUNTY

NURSERY PRODUCTS

ITEM	YEAR	ACRES	QUANTITY	UNIT	VALUE
<b>Herbaceous</b>	2004	29	5,404,000	<sup>b</sup>	\$ 3,716,000
<b>Ornamentals<sup>a</sup></b>	2003	30	6,515,000	<sup>b</sup>	\$ 3,879,000
<b>Ornamental Trees</b>	2004	116	1,845,000	plants	10,666,000
<b>and Shrubs</b>	2003	93	1,228,000	plants	9,942,000
<b>Other<sup>c</sup></b>	2004	951	259,125,000	plants	20,685,000
	2003*	997	220,147,700	plants	18,903,700
<b>Total</b>	<b>2004</b>	<b>1,096</b>			<b>\$35,067,000</b>
	<b>2003</b>	<b>1,120</b>			<b>\$32,724,700</b>

**a** Includes potted plants, bedding plants, flats, and perennials

**b** Includes flats, dozens, cans, and single plants

**c** Includes bareroot fruit trees, Christmas trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf (in square feet)

\* Revised

## FRESNO COUNTY

## LIVESTOCK AND POULTRY

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Cattle and Calves						
Beef						
Breeding Stock						
Common	2004	1,170		head	\$1,012.00	\$ 1,184,000
	2003	1,200		head	\$ 832.50	\$ 999,000
Registered	2004	300		head	3,250.00	975,000
	2003	300		head	2,867.00	860,000
Feeders	2004	101,000	265,000	cwt.	88.98	23,580,000
	2003	106,000	324,000	cwt.	87.88	28,473,000
Calves	2004	25,200	75,600	cwt.	106.69	8,066,000
	2003	26,000	78,000	cwt.	91.26	7,118,000
Slaughter Stock	2004	299,000	1,893,000 <sup>a</sup>	cwt.	83.13	157,365,000
	2003	297,000	1,753,000 <sup>a</sup>	cwt.	78.86	138,242,000
Dairy						
Breeding Stock	2004	17,300		head	1,945.00	33,649,000
	2003	13,800		head	1,720.00	23,736,000
Cull Stock	2004	28,500	371,000	cwt.	50.00	18,550,000
	2003	30,100	391,000	cwt.	45.78	17,900,000
Calves	2004	121,000	362,000	cwt.	187.28	67,795,000
	2003	103,000	308,000	cwt.	149.94	46,182,000
Cattle and Calves Total	2004					311,164,000
	2003					263,510,000
Hogs and Pigs						
Feeder Pigs and Slaughter Stock	2004	50,100	105,000	cwt.	69.99	7,349,000
	2003	60,600	131,000	cwt.	46.73	6,122,000



## FRESNO COUNTY

## LIVESTOCK AND POULTRY (continued)

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Sheep and Lambs						
Slaughter Stock						
Lambs	2004	80,800	106,000	cwt.	\$ 100.62	\$ 10,666,000
	2003	50,700	68,500	cwt.	\$ 94.36	\$ 6,464,000
Sheep	2004	11,200	17,900	cwt.	32.18	576,000
	2003	11,200	16,700	cwt.	30.36	507,000
Turkeys <sup>b</sup>	2004	3,497,000	92,321,000	lb.	.43	39,698,000
	2003	4,263,000	102,738,000	lb.	.43	44,177,000
Other <sup>c</sup>	2004					234,387,000
	2003					205,411,000
Total	2004					\$603,840,000
	2003					\$526,191,000

**a** Net gain

**b** Includes conventional, organic, and heritage breed type of turkeys

**c** Includes buffalo; chickens (chicks, fryers, and old breeder birds); ducks (ducklings, old hens, and drakes); fallow deer; fish (bass, carp, and channel cat); game birds (chukar, pheasants and quail); goats (cull milk, kid, and meat); insects (beneficial); rabbits (meat); cattle semen; squab; turkeys (old breeder birds and poults); and vermiculture.

FRESNO COUNTY

LIVESTOCK AND POULTRY PRODUCTS

ITEM	YEAR	PRODUCTION	UNIT	VALUE	
				PER UNIT	TOTAL
<b>Manure<sup>a</sup></b>	2004	618,000	ton	\$ 3.72	\$ 2,299,000
	2003	649,000	ton	\$ 3.59	\$ 2,330,000
<b>Milk</b>					
Manufacturing	2004	253,000	cwt.	15.20	3,846,000
	2003	66,400	cwt.	11.82	785,000
Market <sup>b</sup>	2004	21,316,000	cwt.	14.72	313,772,000
	2003	19,267,000	cwt.	11.44	220,414,000
<b>Wool</b>	2004	558,000	lb.	.77	430,000
	2003	502,000	lb.	.82	412,000
<b>Eggs</b>					
Chicken, Duck & Turkey <sup>c</sup>	2004	6,338,000	dozen	2.76	17,493,000
	2003	6,919,000	dozen	2.68	18,543,000
	<b>2004</b>				<b>\$337,840,000</b>
	<b>2003</b>				<b>\$242,484,000</b>

**a** Includes cow and poultry manure

**b** Includes cow milk (conventional and organic) and goat milk

**c** Includes commercial and hatching eggs

FRESNO COUNTY

**APIARY PRODUCTS AND POLLINATION SERVICES**

ITEM	YEAR	PRODUCTION TOTAL	UNIT	VALUE	
				PER UNIT	TOTAL
Apiary Products <sup>a</sup>					
Honey	2004	1,865,000	lb.	\$ .94	\$ 1,753,000
	2003	1,970,000	lb.	\$ 1.37	\$ 2,699,000
Beeswax	2004	42,900	lb.	1.24	53,200
	2003	52,900	lb.	1.15	60,800
Pollination <sup>b</sup>					
Alfalfa Seed	2004	9,100	colony	24.70	225,000
	2003	7,100	colony	24.00	170,000
Trees, Fruit and Nut <sup>c</sup>	2004	168,000	colony	54.00	9,072,000
	2003	161,000	colony	48.25	7,768,000
Melon	2004	29,400	colony	17.00	500,000
	2003	21,200	colony	17.26	366,000
Total	2004				\$11,603,200
	2003				\$11,063,800

**a** Reflects bee colonies registered in Fresno County by commercial and semi-commercial beekeepers:  
2003- 43,336 colonies; 2004- 40,061 colonies

**b** Reflects value of pollination by all bee colonies located in Fresno County for pollination services  
during 2004

**c** Almonds, cherries, and plums

## FRESNO COUNTY

## INDUSTRIAL CROPS

CROP	YEAR	PRODUCTION	UNIT	VALUE
<b>Timber</b> <sup>a</sup>	2004	10,458,000	board feet	\$ 2,674,000
	2003	12,745,000	board feet	\$ 3,197,000
<b>Firewood</b>	2004	6,519	cords	742,000
	2003	7,400	cords	852,000
<b>Other</b> <sup>b</sup>	2004			2,877,000
	2003			1,909,000
<b>Total</b>	<b>2004</b>			<b>\$ 6,293,000</b>
	<b>2003</b>			<b>\$ 5,958,000</b>

**a** Includes government and non-government properties

**b** Includes fence posts, green compost, and wood chips (biomass and landscaping)

**GROWTH IN FRESNO COUNTY AGRICULTURE AS INDICATED BY GROSS  
PRODUCTION VALUE OF AGRICULTURAL PRODUCTS OVER A TWENTY-ONE YEAR SPAN**

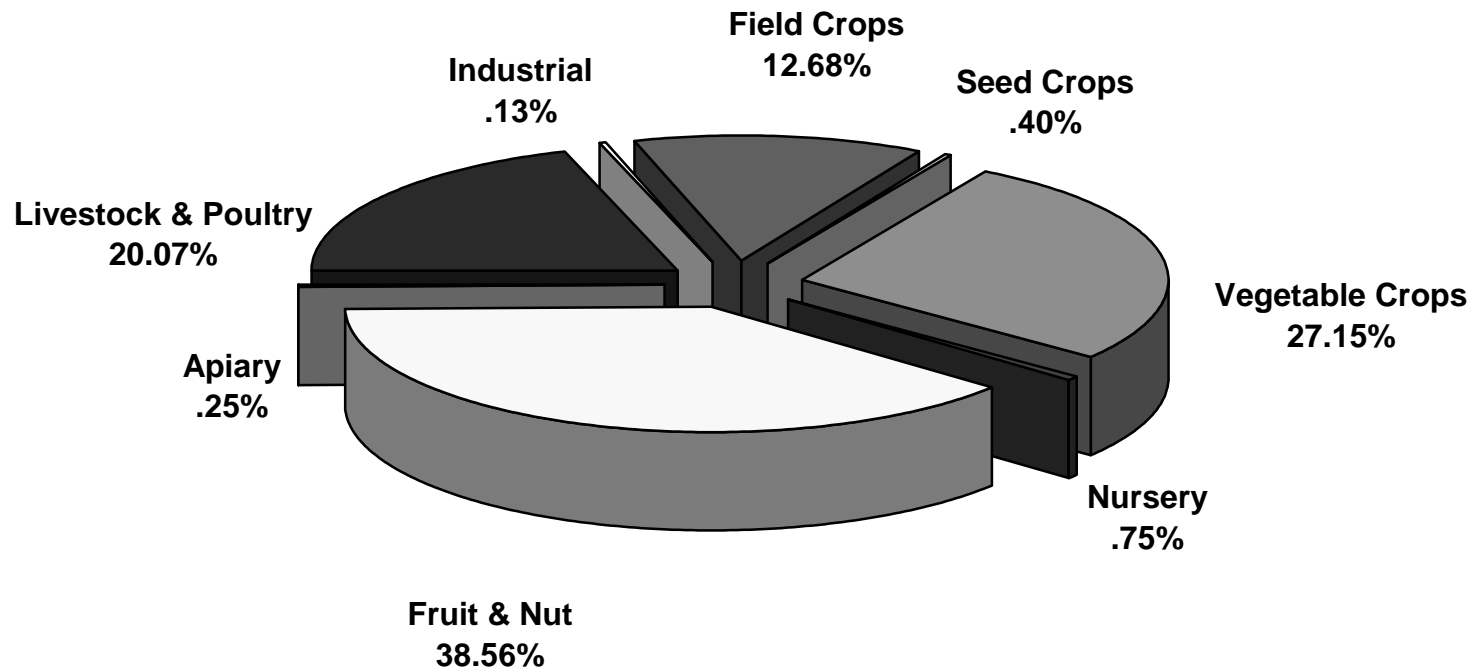
1984 - 1,922,407,840*	1995 - 3,142,878,300*
1985 - 2,054,060,400*	1996 - 3,324,885,800
1986 - 2,125,721,200*	1997 - 3,436,443,500*
1987 - 2,264,044,000*	1998 - 3,257,712,600*
1988 - 2,444,732,600*	1999 - 3,570,027,600*
1989 - 2,607,648,800*	2000 - 3,281,285,400*
1990 - 2,949,484,000*	2001 - 3,220,101,800
1991 - 2,552,305,040*	2002 - 3,440,926,400*
1992 - 2,635,447,400*	2003 - 4,073,338,500*
1993 - 3,022,311,100*	2004 - 4,691,224,200
1994 - 3,084,870,800	

**SIX-YEAR COMPARISON OF GROSS PRODUCTION VALUE IN FRESNO COUNTY**

<b>CROPS</b>	<b>1984</b>	<b>1994</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
<b>Field</b>	\$ 522,738,000	\$ 661,062,000	\$ 515,807,000	\$ 514,089,000	\$ 499,694,000	\$ 594,728,000
<b>Seed</b>	46,251,000	38,398,000	42,880,000	61,005,000	37,423,000	18,972,000
<b>Vegetable</b>	319,163,000*	674,231,000	737,992,000	865,452,000	1,226,164,000*	1,273,871,000
<b>Fruit &amp; Nut</b>	580,953,600	992,109,900	1,069,231,000	1,235,426,000	1,491,636,000*	1,809,010,000
<b>Nursery</b>	8,255,000	23,945,000	32,013,900	32,406,600	32,724,700	35,067,000
<b>Livestock</b>	434,595,000*	673,275,000	805,333,000	712,273,000	768,675,000	941,680,000
<b>Apiary</b>	6,040,240	6,015,000	9,798,900	11,179,400	11,063,800	11,603,200
<b>Industrial</b>	4,412,000	15,834,900	7,046,000	9,096,000	5,958,000	6,293,000
<b>TOTAL</b>	<b>\$ 1,922,407,840*</b>	<b>\$ 3,084,870,800</b>	<b>\$ 3,220,101,800</b>	<b>\$ 3,440,926,400</b>	<b>\$ 4,073,338,500*</b>	<b>\$ 4,691,224,200</b>

\*Revised

RELATIONSHIP IN TERMS OF TOTAL VALUE  
FOR 2004 CROP YEAR  
\$ 4,691,224,200



# GROWTH OF FRESNO COUNTY AGRICULTURE OVER A TWENTY-YEAR SPAN 1985 through 2004

