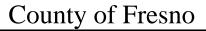


FRESNO DEPARTMENT OF AGRICULTURE



2008 AGRICULTURAL CROP AND LIVESTOCK REPORT





DEPARTMENT OF AGRICULTURE CAROL N. HAFNER

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, Chairman
Phil Larson Judith G. Case
Henry Perea Debbie Poochigian
John Navarrette,
County Administrative Officer

I am honored to submit the 2008 Fresno County Agricultural Crop and Livestock Report. This annual statistical compilation presents data pertaining to the acreage, yield, and gross value of Fresno County agricultural products. This is the first version of the annual report that will be available only in electronic format on our Department website or by CD upon request.

2008 was another record setting year in agricultural production in Fresno County exceeding the five billion dollar-mark for the second time! The total gross production value of Fresno County agricultural commodities in 2008 was \$5,662,895,000. This represents a 5.9 percent increase from the 2007 production value. Increases were seen in field crops (5.84% = \$27,853,014), seed crops (44.21% = \$11,056,999), fruit and nut crops (14.22% = \$300,358,028), livestock and poultry (7.11% = \$59,984,029) and industrial crops (23.07% = \$785,000). Decreases in vegetable crops (2.65% = \$34,274,003), nursery products (13.45% = \$5,321,001), livestock and poultry products (8.04% = \$41,471,975) and apiary and pollination services (9.33% = \$3,473,001) are also reflected in this report. Of utmost importance, it must be emphasized that the values in this report reflect gross values only and do not in any manner reflect net income or loss to the producers.

As foretold by retired Agricultural Commissioner/Sealer, Jerry Prieto, Jr., the outlook for 2009 is dire. The ability of the agriculturalists in Fresno County to produce and sustain domestic food and fiber production has already been impacted by the downturn in the economy and the drought. The continuing depression that our agricultural industry is facing due to increased fuel and transportation costs, labor laws, air and water quality regulations, the Federal Endangered Species Act and Mother Nature's miserly water allocation to California is crippling. Many have not and will not survive in 2009.

I would like to convey my deepest appreciation to the entire Department of Agriculture staff for their efforts in bringing this report to fruition, especially Thomas Nyberg, Deputy Agricultural Commissioner/Sealer; Supervising Agricultural/Standards Specialist, Scotti Walker; Agricultural/Standards Specialists, Hardip Dhillon, Elizabeth Gaspar, Koua Moua and Office Assistant, Tracy Alanis. This report exists because of the dedication and months of work done by this exceptional staff.

Without the cooperation and help from the growers and ranchers of Fresno County, related agricultural agencies and industry associations, this report could not be produced. I would like to extend my sincere thanks for their participation and sharing of data that resulted in this report.

Sincerely,

Carol N. Hafner

Carol n. Hofner

Agricultural Commissioner/Sealer

FRESNO COUNTY DEPARTMENT OF AGRICULTURE

Vision, Mission and Values

VISION

To be recognized as a department that is respected for its service to the agricultural community and the general public and strives to be the best county department of agriculture in the state of California.

MISSION

We are committed to:

- Promoting Fresno County agriculture
- ❖ Fostering public confidence by assuring a fair and equitable marketplace
- Protecting environmental quality through the sound application of pesticide and worker safety regulations
- ❖ Preserving agricultural land use for future generations
- ❖ Minimizing the pest risk pathways of exotic and harmful pests

VALUES

In fulfilling our mission, we commit to:

- ❖ Individual and collective responsibility, integrity and accountability for our actions
- Using common sense
- ❖ Treating people with respect, consistency and fairness
- ❖ Promoting collaboration and teamwork by encouraging and supporting innovation
- ❖ Fostering successful partnerships that are consistent with our mission
- * Taking pride in our work

"Worm or beetle -drought or tempest -on a farmer's land may fall,
Each is loaded full o'ruin,
but a mortgage beats 'em all."

Will Carleton 1845-1912 American poet

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This report is also available at our internet site: http://www.co.fresno.ca.us/fresnoag - fresnoag@co.fresno.ca.us

FRESNO COUNTY'S 10 LEADING CROPS

Crop	2008 Rank	2008 Dollar Value	2007 Rank	1998 Rank	1988 Rank
GRAPES	1 \$	723,211,000	1	1	1
ALMONDS	2	591,636,000	2	7	13
POULTRY	3	556,051,000	4	2	+
MILK	4	457,657,000	3	5	5
TOMATOES	5	451,512,000	5	4	3
CATTLE AND CALVES	6	323,340,000	6	8	4
PEACHES	7	190,229,000	8	6	10
ORANGES	8	177,626,000	9	9	9
GARLIC	9	169,557,000	10	12	17
NECTARINES	10	152,280,000	11	13	7

TOP TEN TOTAL

\$ 3,793,099,000

⁺ Not previously combined for ranking purposes

2008 Highlights in Retrospect

January:

Barley, oat, wheat, triticale and winter forage fields were emerging after the recent rains. Early seeded fields were being treated with herbicides and irrigated to ensure germination. Dryland grain began to emerge. Spring alfalfa fields were emerging with some fields being irrigated and treated to control weeds. Cotton plowdown deadline was announced for control of the pink bollworm. Spring sugar beets were in various stages of development with some being fertilized, irrigated, cultivated and treated to control insects, weeds and diseases. Seed alfalfa fields were growing back from the last mowing. Grape growers continued to irrigate, cultivate, prune, tie vines and treat to control weeds, diseases and insect pests. Stone fruit, pomegranate and nut cultural practices such as irrigation, pruning and treatments to control weeds and insect pests continued. Harvest of farmers market winter crops such as amaranth, basil, bok choy, beets, broccoli, cabbage, carrots, cauliflower, cilantro, choy sum, collard greens, dill, daikon, dandelion, gailon, leaf lettuce, lobok, kale, mint, mustard greens, green onions, ong choy, parsley, radishes, spinach, tatsoi, tong ho, yu choy, yam leaf and yams continued while also being weeded, irrigated, fertilized and treated to control weeds, insects and mildew. Early planted beets, broccoli, cabbage, cauliflower, carrot, onion, garlic, strawberries and lettuce fields were growing well. Blueberry bushes were planted. Harvest of mandarins, lemons, pummelos and navel oranges continued. Some citrus growers were treating to control fungus, insects and weeds; as well as irrigating, topping trees and applying foliar nutrients. Olive trees were pruned. Sheep were grazing on alfalfa fields and retired farmland. Bees were being fed and overwintered. Feedlots were in the mid-90th percentile.

February:

Barley, oat, wheat, triticale and winter forage grew well; as did dryland grains, spring alfalfa, seed alfalfa and spring sugar beets. Pre-irrigation of cotton fields was ongoing and land for sod was being prepared for planting. Grape, stone fruit, pomegranate and nut cultural practices continued. Almond buds continued to swell as were early variety stone fruit buds, while some orchards were beginning to bloom. Harvest continued of farmers market crops. Harvest of citrus continued. Sheep continued field grazing. Range conditions improved with the rains. Most bees continued to be overwintered with a few being brought into the valley in preparation for the almond and stone fruit bloom season. Feedlots continued to be in the mid-90th percentile.

March:

Barley, oat, wheat, triticale, winter forage and dryland grain continued to show good growth. Spring alfalfa and seed alfalfa field growth began to speed up. Grapevine pruning was nearly complete. Stone fruit, pomegranate and nut cultural practices continued. Almond and some early variety stone fruit and nuts were in bloom and leafing out. Bloom sprays were coming to an end. Almond orchards were in petal fall. Pear, pistachio, apple and prune trees were blooming. New orchards and kiwifruit vines continued to be planted. Root vegetables, broccoli, cabbage and lettuce fields were thriving. Asparagus harvest began by mid-month. Spring strawberries were blooming and forming berries. Blueberry plants began to bloom. Transplanting of bell pepper and tomato plants for fresh and processing markets began. Sweet corn emerged. Head lettuce harvest began. Range conditions improved with more rain. Bees were moved into almond and stone fruit orchards.

April:

Field grains and winter forage continued to thrive in the warm weather. Wheat and winter forage harvest began for silage and hay. Dryland grain fields were beginning to stunt. Alfalfa was in the summer-long cycle of being cut, windrowed, raked and baled for hay. Alfalfa seed fields were being mowed and treated for weeds. Mustard seed was in full bloom. Cotton field planting started. Safflower fields were growing. Apple, cherry, pear,

April continued:

pistachio, pomegranate and prune trees were blooming. Spring strawberries, boysenberries and blueberries were blooming, with strawberries being sold at roadside stands. Citrus harvests continued along with cultural practices. Olive trees were being trimmed. Sheep were being sheared and grazing on retired farmland, alfalfa hay fields and rangeland. Bees continued to pollinate orchards while leafcutter bees were placed near alfalfa seed fields.

May:

Grain and winter forage fields were drying. Dryland grain was being cut for hay. Cotton planting is complete. Fields were being flooded for planting rice. Garbanzo bean fields were drying down for harvest. Grape vines were leafing out. Cherries, apricots, apriums, pluots, plumcots, plums, peaches and nectarines were being harvested. Farmers market vegetable harvest and cultural practices continued. Sweet corn, onions, beans, cucumbers and summer squash were growing nicely. Spring strawberries, boysenberries, and blueberries were being harvested. Tangelo, grapefruit, lemon, and orange harvests continued. Rangeland conditions were dry.

June:

Dryland grain and barley for hay was complete. Cotton fields were growing nicely while being cultivated and side-dressed with pesticides to control insects. Garbanzo bean fields were drying down prior to harvest. Fields continued to be flooded for rice planting. Grapevines continued to leaf out and form bunches. Apricots, apriums, cherries, plums, peaches, plumcots, pluots, and nectarines were being harvested. Harvest of farmers market spring crops such as amaranth, basil, bok choy, beans, carrots, cilantro, choy sum, collard greens, cucumbers, daikon, dill, dandelion, gailon, leaf lettuce, leeks, lemongrass, kale, mint, mustard greens, green onions, ong choy, parsley, radishes, spinach, summer squash, Swiss chard, tong ho, yu choy, yam leaf, zucchini, and many different herbs continued. Spring boysenberries, blueberries and strawberries continued to be harvested with roadside stands open for business. Watermelon harvest began. Sheep were grazing on idle farmland, dryland grain fields and rangeland. Honey bees continued to pollinate melons and squash.

July:

Alfalfa seed fields were flowering. Spring sugar beet harvest ended and fall sugar beets were being irrigated and treated to control insects and diseases. Grape growers continued to harvest, irrigate, cultivate, and treat to control weeds, diseases and insect pests. Stone fruit, nut and pomegranate cultural practices such as irrigation, summer pruning and treatments to control weeds and insect pests continued. Almond branches were being propped under the heavy crop while hull split was occurring in early varieties. Peaches, plums, pluots, nectarines, figs, apples and Asian pears were harvested. Watermelon, cantaloupe, mixed melon, and honeydew harvests were in full swing. Spring harvest of boysenberries and blueberries was winding down. Asparagus ferns were being mowed to stimulate new growth and fall broccoli fields were being seeded.

August:

Barley and wheat fields continued to be windrowed and baled as straw. Harvested fields were being prepared for future crops. Cotton fields were in full bloom and setting bolls. Safflower fields were harvested. Sudan grass was being harvested for hay. Harvest was ongoing for stone fruit, figs, apples, and Asian pears. Garlic, onion, bell pepper, and processing tomato harvests continued. Milo was being harvested for bird seed. Watermelon, cantaloupe, mixed melon, and honeydew harvests were in full swing. Oranges were still being harvested. Sheep and cattle were grazing in idle fields.

September:

Fall sugar beet fields were treated and early planted fields were being harvested. Silage corn, grain and safflower were being harvested. Sudan grass was being harvested for hay. Grape harvest continued along with cultural practices. Almonds, walnuts and pistachios were in full harvest. Pomegranate harvest started and stone fruit, jujubes, apples, figs, and Asian pears continued to be harvested. Garlic and onion harvest was slowing down, bell pepper and processing tomato harvests continued. Farmers market crop harvests continued. Fall asparagus and carrot harvests started. Pumpkins were showing good growth and sizing well. Sheep and cattle were still grazing and bees continued to pollinate melons and were being stored in holding areas.

October:

Straw and stubble were being plowed under and fields were being cultivated and prepared for fall planting. Dryland grain seeds were aerially applied. Alfalfa growers continued with their summer-long cycle. Alfalfa seed and fall sugar beet harvests ended. Dry beans were being harvested. Fields of silage corn and grain were being harvested. Rice growers were draining fields in preparation for harvest. Harvesting of raisin grapes was complete. Apples, persimmons, quince, jujube, kiwifruit, and Asian pears were harvested. Fall asparagus harvest continued. Melon harvests were coming to an end. Fall broccoli was being planted.

November:

Alfalfa growers summer-long cycle of cutting, windrowing, raking, and baling for the production of alfalfa hay was coming to an end. Cotton defoliation and harvest activities were in full swing with early maturing fields receiving their second defoliation requirements; some of the earliest fields were disced and shredded in compliance with the cotton plowdown requirements. Dry bean harvest ended. The harvesting of fields of corn for silage and grain was coming to an end. Rice harvest ended. Almond, pistachio and walnut harvests continued. Stone fruit were being harvested and shipped. Almond, pistachio and pomegranate orchards were being planted. Pumpkin harvest was in full swing. Broccoli was being planted and lettuce was being harvested. Blueberry bushes were being planted. Valencia and navel oranges and lemons were being harvested. Olive fruit was being harvested.

December:

Harvest of alfalfa for hay had ended. New alfalfa fields were being seeded and irrigated. Cotton harvest activities were winding down. Harvest of corn for silage, grain, sorghum, milo, and Sudan grass ended. Table grapes were being harvested and shipped on a limited basis. Pomegranate and jujube harvest ended. Fall broccoli harvest was winding down and spring lettuce was emerging nicely with recent rains. Onions were being transplanted. Onion bulbs were planted for seed production. Lemongrass fields were being covered while winter vegetables were growing well in the cooler weather. Citrus varieties were being harvested. Spring lambs were being born. Rangeland conditions were greening nicely after the recent rains. Out-of-state bees were being brought in for spring.

FIELD CROPS: The total gross returns for field crops increased by \$27,853,000 from \$477,420,000 to \$505,093,000 or 5.84 percent from 2007. Upland cotton acreage decreased by 51.08 percent from 46,200 acres to 22,600 acres, while Pima acreage fell from 98,300 to 47,200 acres. The price per pound for acala cotton increased from .75 to .79. The total value for all cotton decreased by \$103,480,000 or 52.57 percent; and for the first time in the last thirty-two years cotton fell from Fresno County's top ten crops list to fifteenth place. Dry beans increased in total value by 17.86 percent due to an increase in acreage and price. The total value of alfalfa hay increased by 48.75 percent due to an increase in harvested acreage and an increase of 21.69 percent in price. The harvested acreage of rice increased slightly, while production per acre decreased but a \$77.00 increase in the price per ton resulted in a 22.68 percent increase to the total value. Sugar beets decreased in total value by 36.67 percent due to a decrease in the harvested acreage of 4,900 acres. The total value for corn silage almost doubled due to an increase in harvested acreage and an increase of 37.50 percent in price to \$44.00 per ton. With almost double the acreage harvested along with an increase of 61.49 percent in the price per ton, the total value for wheat rose by \$30,879,000 to \$47,060,000.

SEED CROPS: Total gross returns for all seed crops increased 44.21 percent in 2008; this was an increase of \$11,057,000 from 2007 values. The total value of <u>alfalfa</u> seed increased by 41.35 percent. The value of certified <u>cotton</u> seed experienced a decrease of 56.96 percent due to a decrease in total acreage and production. <u>Vegetable</u> seed increased in total value by 145.41 percent while the <u>other</u> category decreased by 47.97 percent.

VEGETABLE CROPS: The total value for all vegetable crops was \$1,258,826,000 in 2008; this was a decrease of 2.65 percent from 2007. Head lettuce acreage and total value both decreased (14.11 and 2.63 percent respectively). Asparagus acreage decreased by 10.34 percent while the total revenue increased by 10.76 percent, even though the price per ton increased by \$431 per ton to \$939. The fresh onion value increased by 14.01 percent due to the yield per acre increasing by 5.97 tons per acre. Tomatoes held on to the fifth spot on the top ten crop list. Total tomato values decreased 4.96 percent, due mostly to the standard and cherry tomato value decreasing by 33.05 percent. Cantaloupe experienced a decrease of 2.36 percent in value and a 9.22 percent decrease in harvested acreage, but the price per ton increased by 7.95 percent to \$326 per ton. Of all the melon crops, only honeydews showed an increase in total value, due to an increase in acreage and price. Although the price of broccoli per ton increased slightly and the price for bell peppers increased by 84.84 percent, the total value for both decreased (16.67 percent and 11.75 percent respectively).

Fruit and nut crops increased in total value by 14.22 percent or \$300,358,000 from 2007 to 2008. Since 2002 grapes have remained number one on the county's top ten crop list. Total grape value was up \$109,501,000 or 17.84 percent from 2007. The value for fresh table variety grapes increased by 30.66 percent and the total value of fresh raisin variety grapes also increased by 28.49 percent, while the value for dried raisin variety grapes decreased 9.36 percent to \$309,105,000. Almonds continued to hold the number two spot on the top ten crop list even though the price per ton for meats decreased by \$330 to \$3,460. Total value of pistachios increased by \$53,626,000 or 68.27 percent to \$132,174,000, resulting from an increase in harvested acreage and price per ton. Apricots total crop value and price per ton were both up (28.12 percent and 34.04 percent respectively) even though harvested acreage for the second year in a row decreased. Total value for fresh citrus other which includes blood oranges, grapefruit, mandarin tangerines, minneola tangelos and pummelos increased by 280.07 percent, due mostly to the increase in harvested acreage. Total value for all oranges decreased 6.56 percent or \$12,481,000, which was due mainly to the price per ton decreasing for all except one of the categories.

FRUIT AND NUT CROPS, continued:

For the second year in a row the total value for <u>plums</u> and <u>nectarines</u> decreased. Nectarines decreased in value by

\$6,750,000 or 4.26 percent from 2007. The total value for fresh plums decreased by 12.15 percent or \$16,876,000, as a result of a drop in the price per ton from \$1,036 to \$824. The total value for <u>peaches</u> decreased \$22,020,000 or 10.37 percent.

NURSERY: Nursery product sales decreased 13.45 percent or \$5,321,000 in 2008. Herbaceous and ornamental products decreased in total value and ornamental trees and shrubs also exhibited a decrease in acreage and value. The other category, which includes bareroot fruit trees, Christmas trees, citrus (budwood and trees), grapes (rootings and cuttings), vegetable transplants, and turf, also decreased in value by 8.32 percent.

LIVESTOCK AND POULTRY: The total gross returns for livestock and poultry for 2008 was \$903,385,000.

Cattle and calves decreased in value by 4.72 percent from the 2007 value or \$16,004,000. The value of hogs and pigs increased by 7.73 percent. Although the lamb price increased by 4.00 percent, the total value still fell due to a decrease in the number of head sold. The total value of turkeys increased to \$66,703,000 or 11.46 percent due to the increase price per pound. The other livestock category, which includes buffalo, chickens, ducks, fish, gamebirds, goats, beneficial insects, squab, old turkey breeders and poults, and vermiculture increased by \$69,237,000 in value or 16.34 percent.

LIVESTOCK AND POULTRY PRODUCTS: The total value of livestock and poultry products decreased by 8.04 percent to \$474,228,000. The total value for manure increased by \$1,332,000 and production increased by 2.87 percent. Milk moved from third to fourth place on the top ten crop list. The total value of manufactured and market milk decreased 69.27 and 7.03 percent respectively. Manufactured hundred weight produced decreased and market milk price per hundred weight also decreased from \$18.89 to \$16.88 (per cwt). Hatching egg production decreased, and although the price per dozen increased the total value still dropped by \$7,003,000.

APIARY PRODUCTS AND POLLINATION SERVICES: Gross returns from apiary and pollination services were down in 2008. The value represents a decrease of 9.33 percent or \$3,473,000. Both honey and beeswax showed an increase in value as well as all of the pollination categories, except the trees fruit and nut category.

INDUSTRIAL CROPS: Industrial crop values increased \$785,000 or 23.07 percent over 2007. <u>Firewood</u> realized a decrease in the number of cords sold and the value fell by 79.73 percent, while the <u>other</u> category, which includes fence posts, green compost, and wood chips for biomass and landscaping, showed a decrease of 14.39 percent. Timber saw an increase in value of 64.61 percent.

FIELD CROPS

				DUCTION		VALUE	
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
Barley	2008 2007	11,900 10,200	2.26 1.79	26,900 18,300	ton ton	•	\$ 6,725,000 \$ 2,946,000
Beans, dry ^a	2008	5,830	1.25	7,290	ton	842.00	6,138,000
	2007	4,270	1.45	6,200	ton	840.00	5,208,000
Corn							
Grain	2008 2007	2,140 8,500	5.75 5.40	12,300 45,900	ton ton	206.00 160.00	2,534,000 7,344,000
Silage	2008 2007	50,400 38,600	30.42 27.54	1,533,000 1,063,000	ton ton	$44.00^{\rm b} \\ 32.00^{\rm b}$	67,452,000 34,016,000
Cotton							
Upland Lint	2008 2007	22,600 46,200	1,378° 1,535°	62,300 ^d 142,000 ^d	bale bale	.79° .75°	24,805,000 53,676,000
Seed	2008 2007			21,700 49,400	ton ton	354.00 230.00	7,682,000 11,362,000
Pima Lint	2008 2007	47,200 98,300	1,239° 1,546°	$117,\!000^{\rm d} \\ 304,\!000^{\rm d}$	bale bale	1.22 ^e 1.01 ^e	71,941,000 154,748,000
Seed	2008 2007			46,700 119,000	ton ton	285.00 239.00	13,310,000 28,441,000
Cotton Total ^f	2008 2007	69,800 144,500					117,738,000 248,227,000
Alfalfa	2008 2007	89,600 78,000	7.67 7.20	687,000 562,000	ton ton	202.00 166.00	138,774,000 93,292,000
Other g	2008 2007	42,100 13,500	4.48 2.86	189,000 38,600	ton ton	162.00 120.00	30,618,000 4,632,000
Pasture and Ran	nge						
Field Stubble ^h	2008 2007	6,020 31,700			acre acre	106.64 69.90	642,000 2,216,000

FIELD CROPS (continued)

			PROD	UCTION	VALUE		
		HARVESTED	PER			PER	
CROP	YEAR	ACREAGE	ACRE	TOTAL	UNIT	UNIT	TOTAL
Irrigated	2008	40,000			acre	\$ 125.00	\$ 5,000,000
Pasture	2007	40,000			acre	\$ 125.00	\$ 5,000,000
Grazing	2008	850,000			acre	8.00	6,800,000
Range	2007	850,000			acre	8.00	6,800,000
Rice	2008	2,800	2.73	7,640	ton	320.00	2,445,000
	2007	2,690	3.04	8,200	ton	243.00	1,993,000
Sugar Beets	2008	5,800	33.10	192,000	ton	45.00	8,640,000
J	2007	10,700	33.55	359,000	ton	38.00	13,642,000
Wheat	2008	60,800	2.97	181,000	ton	260.00	47,060,000
	2007	33,500	3.00	100,500	ton	161.00	16,181,000
Other i	2008	106,600					64,527,000
	2007	64,800					35,743,000
Total	2008 2007	1,337,770 1,299,260					\$505,093,000 \$477,240,000

- a Includes blackeyed, garbanzo, and lima (baby and large), pinto
- **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: barley, grass, oats, pasture, rye grass, sudan, triticale, wheat, and winter forage
- **h** Not included in total field crop acreage; includes acreage from alfalfa hay (conventional and organic), barley, melons, and wheat
- i Includes oat grain, safflower, silage (alfalfa, barley, oat, sorghum, sudangrass, triticale, wheat, and winter forage), straw, sugar beet pulp, triticale; **organic:** alfalfa hay, barley, cotton (pima), rice, and wheat

SEED CROPS

			PROI	_PRODUCTION_			VALUE		
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL		
Alfalfa	2008	19,000	457	8,683,000	lb.	\$ 1.82	\$15,803,000		
Certified	2007	7,550	851	6,425,000	lb.	\$ 1.74	\$11,180,000		
Cotton a	2008	1,450		2,813,000	lb.	.11	309,000		
Certified	2007	2,300		4,223,000	lb.	.17	718,000		
Vegetable ^b	2008	940					16,666,000		
J	2007	1,450					6,791,000		
Other ^c	2008	8,930					3,288,0000		
	2007	8,040					6,320,000		
Total	2008	30,320					\$36,066,000		
	2007	17,040					\$25,009,000		

a Included in field crop acreage

b Artichoke, arugula, basil, broccoli, lettuce (head and leaf), onion, radish, and turnip; **organic**: basil, broccoli, herbs, lettuce (head and leaf), and mizuna

c Alfalfa non-certified, corn, flowers, sudan, triticale, turfgrass, and wheat

VEGETABLE CROPS

				PRODUCTION		VALUE	
		HARVESTED	PER			PER	
CROP	YEAR	ACREAGE	ACRE	TOTAL	UNIT	UNIT	TOTAL
Asparagus	2008	1,560	2.97	4,630	ton	\$ 2,500.00	\$ 11,575,000
Asparagus	2007	1,740	3.08	5,360	ton	\$ 2,420.00	\$ 12,971,000
Bell Peppers ^a	2008	1,020	17.65	18,000	ton	939.00	16,902,000
	2007	1,730	21.76	37,700	ton	508.00	19,152,000
Broccoli ^a	2008	4,700	7.50	35,300	ton	712.00	25,134,000
	2007	5,800	7.34	42,600	ton	708.00	30,161,000
Eggplant ^b	2008	730	16.83	12,300	ton	498.00	6,125,000
	2007	890	18.43	16,400	ton	574.00	9,414,000
Garlic							
Fresh	2008	5,200	9.22	47,900	ton	2,480.00	118,792,000
	2007	7,710	9.25	71,300	ton	1,920.00	136,896,000
Processed	2008	15,000	9.50	143,000	ton	355.00	50,765,000
	2007	12,500	8.23	103,000	ton	404.00	41,612,000
Head Lettuce							
Naked				29,400	ton		
Wrapped				67,900	ton		
Bulk				45,900	ton		
Spring	2008	7,500	19.09	143,200	ton	357.00	51,122,000
Season Total	2007	9,000	17.56	158,000	ton	305.00	48,190,000
Naked				21,600	ton		
Wrapped				67,600	ton		
Bulk				57,100	ton		
Fall	2008	7,100	20.61	146,300	ton	339.00	49,596,000
Season Total	2007	8,000	20.07	160,600	ton	344.00	55,246,000
Head Lettuce Totals	2008 2007	14,600 17,000		289,500 318,600			100,718,000 103,436,000

VEGETABLE CROPS (continued)

				PRODUCTION		VALUE	
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
CROP	ILAK	ACREAGE	ACRE	IOIAL	UNIT	UNII	TOTAL
Loof Lottwood	2008	0.000	10.22	122,000	ton	¢ 465 00	¢ 56 720 000
Leaf Lettuce ^c	2008 2007	9,900 11,000	12.32 15.62	122,000 172,000	ton ton	\$ 465.00 \$ 504.00	\$ 56,730,000 \$ 86,688,000
	2007	11,000	13.02	172,000	ton	ψ J0 4 .00	φ 60,000,000
Melons							
Cantaloupe ^a	2008	18,700	15.67	293,000	ton	326.00	95,518,000
•	2007	20,600	15.71	324,000	ton	302.00	97,848,000
II	2000	5 400	14.60	70.200	4	400.00	22 424 000
Honeydew	2008 2007	5,400	14.69	79,300	ton	409.00	32,434,000 29,438,000
	2007	4,900	16.73	82,000	ton	359.00	29,438,000
Mixed Melons d	2008	760	8.39	6,380	ton	565.00	3,605,000
	2007	820	9.71	7,960	ton	520.00	4,139,000
Watermelon	2008	2,340	18.56	43,400	ton	525.00	22,785,000
	2007	2,940	20.75	61,000	ton	376.00	22,936,000
Onions							
Fresh	2008	11,900	33.44	398,000	ton	244.00	97,112,000
	2007	12,300	27.47	338,000	ton	252.00	85,176,000
Processed	2008	11,200	24.63	276,000	ton	183.00	50,508,000
	2007	10,200	22.83	233,000	ton	166.00	38,678,000
Oriental	2008	1,960	6.12	12,000	ton	515.00	6,180,000
Vegetables ^e	2007	2,740	6.28	17,200	ton	507.00	8,720,000
S							
Squash f	2008	890	7.01	6,240	ton	726.00	4,530,000
	2007	930	8.02	7,460	ton	533.00	3,976,000
Sweet Corn	2008	8,410	6.77	56,900	ton	472.00	26,857,000
Sweet Com	2007	9,100	8.62	78,400	ton	347.00	27,205,000
		2,-00		, , , , , ,			_,,_,,,
Tomatoes							
Standard	2008	8,900	14.61	130,000	ton	668.00	86,840,000
and Cherry	2007	10,100	20.10	203,000	ton	639.00	129,717,000
<i>J</i>		,		,			, .,- ,-

VEGETABLE CROPS (continued)

			PRODUCTION			VALUE		
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL	
Tomatoes (contin	nued)							
Processed	2008	109,000	45.21	4,928,000	ton	\$ 74.00 \$	364,672,000	
	2007	125,000	44.56	5,570,000	ton	\$ 62.00 \$	345,340,000	
Tomatoes Total	2008	117,900					451,512,000	
	2007	135,100					475,057,000	
Other ^g	2008	12,200					81,044,000	
	2007	12,100					59,597,000	
Total	2008 2007	244,370 270,100					1,258,826,000 1,293,100,000	

- a Includes fresh and processed
- b Includes Chinese, Globe, Indian, Italian, Japanese, Philippine, 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 (long and short), chayote, daikon, donqua, gai choy, gailon, gobo/yamaino, kabocha, lemon grass, lo bok, long beans, mattea, mora, moqua, ong choy, opo, sinqua/patola, sugarcane, sugar peas (fruit and leaf), taro (root and leaves), tong ho, yam (root and leaves), and you choy
- f Includes summer and winter varieties
- g Includes artichokes, arugula, beans (fava), green/snap beans (fresh and processed), beets, cabbage, carrots (fresh and processed), cauliflower, chard (Swiss), collards, corn (cornnuts and tortilla chips), cucumbers market and pickling type (fresh and processed), endive, greens (dandelion and mustard), jicama, kale, kohlrabi, leeks, mushrooms, okra, onions (green), pea english, peanuts, peppers/chili, potatoes (regular and sweet), pumpkins, radishes, rutabagas, spinach (fresh and processed), sunchokes, tomatillos, turnips; herbs: basil, cilantro, dill, fennel, mint, parsley (dry and fresh), and spice mix; organic: bean (green snap), broccoli, carrot (processed), cabbage, cauliflower, corn (sweet), garlic (fresh and processed), herbs, lettuce (leaf and Romaine), melons (cantaloupe and honeydew), onions (fresh, dry, green, and shallots), perennials, spinach, squash (summer and winter), tomatoes (processed), and watermelon seedless

FRUIT AND NUT CROPS

			PRODUCTION			VALUE	
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
Almonds a	2008	120,400	1.32	159,000	ton	\$ 3,460.00	\$550,140,000
	2007	116,700	1.08	126,000	ton	\$ 3,790.00	\$477,540,000
Almond Hulls	2008			312,000	ton	133.00	41,496,000
	2007			251,000	ton	137.00	34,387,000
Apples a	2008	919	16.05				
• •	2007	989	17.43				
Fresh	2008			11,100	ton	967.00	10,734,000
1 10011	2007			13,300	ton	674.00	8,964,000
Processed	2008			3,700	ton	635.00	2,350,000
Flocessed	2008			4,000	ton	250.00	1,000,000
	2000	1 422	5 .5.4	10.000		1 100 00	12 041 000
Apricots a	2008 2007	1,433 1,728	7.54 6.54	10,800 11,300	ton ton	1,189.00 887.00	12,841,000 10,023,000
	2007	1,720	0.54	11,500	WII	007.00	10,023,000
Cherries	2008	2,688	4.20	11,300	ton	4,222.00	47,709,000
	2007	2,688	2.60	6,990	ton	4,535.00	31,700,000
Citrus							
Lemons	2008	1,717	14.43				
	2007	1,736	16.69				
Fresh	2008			15,600	ton	1,239.00	19,328,000
	2007			17,900	ton	1,079.00	19,314,000
Processed	2008			9,170	ton	25.00	229,000
	2007			11,100	ton	20.00	222,000
Citrus, other a, b	2008	6,078	12.11				
Citi us, other	2007	3,848	8.99				
F1	2000			((700	4	1 000 00	72 (2(000
Fresh	2008 2007			66,700 29,000	ton ton	1,089.00 659.00	72,636,000 19,111,000
	2007			27,000	WII	057.00	17,111,000
Processed	2008			6,950	ton	35.00	243,000
	2007			5,600	ton	43.00	241,000

FRUIT AND NUT CROPS (continued)

			PRODUCTION			VALUE	
СКОР	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
Oranges							
Navel ^a	2008 2007	29,908 30,193	13.88 11.79				
Fresh	2008 2007			287,000 230,000	ton ton	\$ 526.00 \$ 687.00	\$ 150,962,000 \$ 158,010,000
Processed	2008 2007			128,000 126,000	ton ton	55.00 79.00	7,040,000 9,954,000
Valencia ^a	2008 2007	3,997 4,641	12.53 9.65				
Fresh	2008 2007			35,800 26,100	ton ton	523.00 804.00	18,723,000 20,984,000
Processed	2008 2007			14,300 18,700	ton ton	63.00 62.00	901,000 1,159,000
Oranges Total	2008 2007	33,905 34,834					177,626,000 190,107,000
Grapes							
Raisin Varieties ^a	2008 2007	142,494 144,922	11.93 12.03				
Canned	2008 2007			7,100 2,700	ton ton	194.00 275.00	1,377,000 743,000
Crushed	2008 2007			323,000 235,000	ton ton	226.00 161.00	72,998,000 37,835,000
Dried	2008 2007			270,000 327,000	ton ton	1,145.00 1,043.00	309,150,000 341,061,000
Fresh	2008 2007			42,300 32,600	ton ton	1,017.00 1,027.00	43,019,000 33,480,000
Juice	2008 2007			5,000 1,700	ton ton	737.00 760.00	3,685,000 1,292,000

FRUIT AND NUT CROPS (continued)

				PRODUCTION		VALUE	
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
Grapes (continued	d)						
Table Varieties ^a	2008 2007	10,616 10,454	11.77 8.25				
Crushed	2008 2007			17,000 9,700	ton ton	\$ 187.00 \$ 156.00	\$ 3,179,000 \$ 1,513,000
Fresh	2008 2007			108,000 76,500	ton ton	1,019.00 1,101.00	110,052,000 84,227,000
Wine Varieties ^a	2008 2007	40,100 40,139	17.16 11.80				
Crushed	2008 2007			679,000 464,000	ton ton	255.00 230.00	173,145,000 106,720,000
Juice	2008 2007			9,000 9,700	ton ton	734.00 705.00	6,606,000 6,839,000
Grapes Total	2008 2007	193,210 195,515					723,211,000 613,710,000
Kiwifruit	2008 2007	254 254	5.75 4.84	1,460 1,230	ton ton	1,185.00 1,347.00	1,730,000 1,657,000
Nectarines ^a	2008 2007	17,938 18,845	10.03 9.87	180,000 186,000	ton ton	846.00 855.00	152,280,000 159,030,000
Olives, canned ^a	2008 2007	1,085 1,150	1.58 5.22	1,710 6,000	ton ton	989.00 822.00	1,691,000 4,932,000
Peaches							
Cling ^a	2008 2007	2,041 2,009	17.21 17.57	35,100 35,300	ton ton	286.00 285.00	10,039,000 10,061,000
Freestone ^a	2008 2007	18,139 19,132	10.22 10.61	185,000 203,000	ton ton	974.00 996.00	180,190,000 202,188,000
Peaches Total	2008 2007	20,180 21,139					190,229,000 212,249,000
Pears, Asian and European	2008 2007	1,251 874	10.80 11.56	13,500 10,100	ton ton	1,436.00 753.00	19,386,000 7,605,000

FRUIT AND NUT CROPS (continued)

			PRODUCTION			VALUE		
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL	
Persimmons ^a	2008 2007	786 773	4.05 6.27	3,180 4,850	ton ton	\$ 1,781.00 \$ \$ 1,151.00 \$	5,664,000 5,582,000	
Pistachios ^a	2008 2007	30,300 20,200	1.04 1.33	31,500 26,900	ton ton	4,196.00 2,920.00	132,174,000 78,548,000	
Plums ^a	2008 2007	17,026 17,624	8.71 7.60	148,000 134,000	ton ton	824.00 1,036.00	121,952,000 138,824,000	
Plums, dried ^a	2008 2007	3,078 2,990	3.87 1.65	11,900 4,930	ton ton	1,454.00 1,494.00	17,303,000 7,365,000	
Pomegranates ^a	2008 2007	4,950 3,466	4.10 2.94	20,300 10,200	ton ton	1,478.00 1,247.00	30,003,000 12,719,000	
Walnuts ^a	2008 2007	6,166 5,914	1.69 1.46	10,400 8,630	ton ton	1,481.00 2,120.00	15,402,000 18,296,000	
Other ^c	2008 2007	11,300 9,890					66,736,000 59,609,000	
Total	2008 2007	474,664 461,145					2,413,093,000 2,112,735,000	

- a Acreage, production, and value are included in other fruit and nut crops: 267 acres apricots (processed), 225 acres olive (oil), 1,613 acres peaches (processed freestone), 250 acres pomegrante (processed), 172 acres prunes (fresh and juice); organic: 1,548 acres almonds, 84 acres figs (dried), 2,233 acres grapes (raisin), 35 acres grapes (table), 101 acres grapes (wine), 118 acres nectarines, 150 acres orange (Navel), 45 acres orange (Valencia), 27 acres peach cling, 121 acres peach freestone (fresh and processed), 2 acres persimmons, 625 acres pistachios, 59 acres plums, 5 acres plumcots, 12 acres plouts, 121 acres pomegranates, 154 acres walnuts
- $\boldsymbol{b} \hspace{0.1cm} \textbf{Includes blood oranges, grape fruit, mandar in tangerines, minne ola tangelos, and pumme los and pumme los and pumme los areas and pumme los and pumme los areas areas and pumme los areas areas$
- c Includes almonds (shells and inedible), apricots (processed), avocados, blackberries, blueberries, boysenberries, cherries (processed), figs (fresh, dried, and substandard), grapes (leaves and raisin byproducts), jujubes, olives (oil), peaches (processed freestone), pecans, plumcots/pluots, pomegranates (processed), prunes (processed/juice), quince, and strawberries (fresh and processed); organic: almonds (fresh and hulls), figs (dried), grapes (raisin, table, and wine), nectarines, oranges (Navel and Valencia), peaches cling, peaches freestone (fresh and processed), persimmons, pistachios, pluots, plums, plumcot, pomegranates, and walnuts

NURSERY PRODUCTS

ITEM	YEAR	ACRES	QUANTITY	UNIT	VALUE
Howhanning	2008	20	600 000	b	¢ 2.480.000
Herbaceous Ornamentals ^a	2008 2007	29 45	688,000 5,733,000	b	\$ 2,489,000 \$ 5,587,000
Ornamental Trees	2008	69	672,000	plants	7,344,000
and Shrubs	2007	84	754,000	plants	7,350,000
Other c	2008	692	599,326,000	plants	24,422,000
	2007	1,125	193,775,000	plants	26,639,000
Total	2008	790			\$ 34,255,000
	2007	1,254			\$ 39,576,000

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)

LIVESTOCK AND POULTRY

		PRO	DUCTION			VALUE
ITEM	YEAR	NO. OF HEAD	TOTAL LIVEWEIGHT	UNIT	PER UNIT	TOTAL
Cattle and Calves						
Beef						
Breeding Stock						
Common	2008 2007	1,200 1,280		head head	\$ 949.00 \$1,109.00	\$ 1,139,000 \$ 1,420,000
Registered	2008 2007	300 320		head head	2,480.00 2,900.00	744,000 928,000
Feeders	2008 2007	81,100 79,500	349,000 321,000	cwt cwt	90.40 86.12	31,550,000 27,645,000
Calves	2008 2007	25,700 27,300	77,000 81,900	cwt cwt	101.82 99.73	7,840,000 8,168,000
Slaughter Stock	2008 2007	289,000 298,000	1,436,000 ^a 1,576,000 ^a	cwt cwt	91.50 90.02	131,394,000 141,872,000
Dairy						
Breeding Stock	2008 2007	49,500 38,000		head head	1,730.00 2,050.00	85,635,000 77,900,000
CullStock	2008 2007	38,100 37,800	495,000 491,000	cwt cwt	51.46 50.13	25,473,000 24,614,000
Calves	2008 2007	113,000 120,000	339,000 360,000	cwt cwt	116.71 157.77	39,565,000 56,797,000
Cattle and Calves Total	2008 2007					323,340,000 339,344,000
Hogs and Pigs						
Feeder Pigs and Slaughter Stock		54,300 52,900	103,000 122,000	cwt cwt	93.42 73.21	9,622,000 8,932,000

PRODUCTION VALUE NO. OF TOTAL ITEM YEAR HEAD LIVEWEIGHT UNIT UNIT TOTAL

(continued)

LIVESTOCK AND POULTRY

Sheep and Lambs

SlaughterStock						
Lambs	2008	78,000	93,600	cwt	\$109.20	\$ 10,221,000
	2007	79,900	104,000	cwt	\$105.00	\$ 10,920,000
Sheep	2008	10,500	16,700	cwt	24.31	406,000
	2007	10,700	17,100	cwt	29.59	506,000
Turkeys ^b	2008	3,744,000	101,065,000	lb	.66	66,703,000
	2007	4,477,000	115,083,000	lb	.52	59,843,000
Other ^c	2008 2007					493,093,000 423,856,000
Total	2008 2007					\$ 903,385,000 \$ 843,401,000

a Net gain

b Includes conventional and organic turkeys

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

LIVESTOCK AND POULTRY PRODUCTS

				VALUE		
ITEM	YEAR	PRODUCTION	UNIT	PER UNIT	TOTAL	
Manure ^a	2008 2007	967,000 940,000	ton ton	\$ 4.43 \$ 3.14	\$ 4,284,000 \$ 2,952,000	
Milk	2007	740,000	ton	ψ 3.14	\$ 2,732,000	
Manufacturing	2008	30,200	cwt	18.63	563,000	
	2007	97,000	cwt	18.89	1,832,000	
Market ^b	2008 2007	27,079,000 27,075,000	cwt cwt	16.88 18.16	457,094,000 491,682,000	
Wool	2008 2007	523,000 533,000	lb lb	.85 .73	445,000 389,000	
Eggs						
Hatching ^c	2008 2007	1,484,000 4,403,000	dozen dozen	7.98 4.28	11,842,000 18,845,000	
	2008 2007				\$ 474,228,000 \$ 515,700,000	

<sup>a Includes cow and poultry manure
b Includes cow milk (conventional and organic) and goat milk</sup>

c Includes balut, chicken, duck and turkey

APIARY PRODUCTS AND POLLINATION SERVICES

				VALUE		
		PRODUCTION		PER		
ITEM	YEAR	TOTAL	UNIT	UNIT	TOTAL	
Apiary Products	a					
Honey	2008	2,668,000	lb	\$1.24	\$ 3,308,000	
·	2007	2,150,000	lb	\$1.22	\$ 2,623,000	
Beeswax	2008	84,100	lb	1.81	152,000	
	2007	63,500	lb	1.70	108,000	
Pollination ^b						
Alfalfa Seed	2008	17,600	colony	39.26	691,000	
	2007	14,100	colony	37.00	522,000	
Trees, Fruit	2008	193,000	colony	146.88	28,348,000	
and Nut c	2007	248,000	colony	134.20	33,282,000	
Melon	2008	41,500	colony	30.41	1,262,000	
	2007	32,900	colony	21.25	699,000	
Total	2008 2007				\$ 33,761,000 \$ 37,234,000	

a Reflects bee colonies registered in Fresno County by commercial and semi-commercial beekeepers: 2007 - 59,848 colonies; 2008 - 56,529 colonies

b Reflects value of pollination by all bee colonies located in Fresno County for pollination services during 2008

c Almonds, cherries, and plums

INDUSTRIAL CROPS

CROP	YEAR	PRODUCTION	UNIT	VALUE
Timber ^a	2008	16,602,000	board feet	\$ 3,368,000
	2007	10,345,000	board feet	\$ 2,046,000
Firewood	2008	1,098	cords	106,000
	2007	4,971	cords	523,000
Other ^b	2008			714,000
	2007			834,000
Total	2008			\$ 4,188,000
	2007			\$ 3,403,000

a Includes government and non-government properties

b Includes fence posts, green compost, and wood chips for biomass and landscaping

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

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	-	3,440,927,000*
1992	-	2,635,447,400*	2003	-	4,073,338,500*
1993	-	3,022,311,100*	2004	-	4,603,936,200*
1994	-	3,084,870,800	2005	-	4,641,194,200
1995	-	3,142,878,300*	2006	-	4,845,737,100
1996	-	3,324,885,800	2007	-	5,347,398,000
1997	-	3,436,443,500*	2008	-	5,662,895,000
1998	-	3,257,712,600*			

SIX-YEAR COMPARISON OF GROSS PRODUCTION VALUE IN FRESNO COUNTY

CROPS		1988	1998	2005	2006	2007	2008
Field	\$	73,649,000*	\$ 466,556,000	\$ 476,554,000	\$ 437,460,000	\$ 477,240,000	\$ 505,093,000
Seed		45,216,000	33,202,000*	19,429,000	25,162,000	25,009,000	36,066,000
Vegetable		447,922,000	691,940,000	1,114,181,000	1,215,574,000	1,293,100,000	1,258,826,000
Fruit & Nut		877,319,000	1,211,362,000*	1,992,093,000	2,056,618,000	2,112,735,000	2,413,093,000
Nursery		13,805,000*	29,575,600	38,091,000	31,110,000	39,576,000	34,255,000
Livestock		477,298,000*	809,503,000	979,885,000	1,046,133,000	1,359,101,000	1,377,613,000
Apiary		5,649,500	9,008,000	15,924,200	29,492,000	37,234,000	33,761,000
Industrial	_	3,790,000	6,566,000	5,037,000	4,188,000	3,403,000	4,188,000
TOTAL	\$ 3	2.444.648.600*	\$3,257,712,600*	\$4,641,194,200	\$ 4.845,737,100	\$ 5,347,398,000	\$ 5,662,895,000

^{*}Revised

SUSTAINABLE AGRICULTURE

2008 BIOLOGICAL CONTROL ACTIVITIES

PEST	B. C. AGENT/MECHANISM	ACTIVITY
Salt Cedar	Diorhabda elongata	Recorded potential sites for beetle release.
Puncture Vine	Microlarinus lypriformis Microlarinus lareyniei	Collecting weevils for release on homeowners' properties.
Yellow Starthistle	Peacock Fly / Chaetorellia australis	Surveyed for B.C. agents present-only found Peacock Fly.
Scarlet Wisteria	Obscure Mealybug / Pseudococcus obscurus	Moving Obscure Mealybug to uninfested scarlet wisteria sites to help control outbreak.

2008 DETECTION ACTIVITIES

INSECT	TRAPS DEPLOYED	RESULTS
Medfly	638	None captured
Mexican Fruit Fly, other Anastrepha, Bactrocera and Ceratitis sp.	721	None captured
Oriental Fruit Fly	350	None captured
Melon Fly	322	None captured
Gypsy Moth	263	None captured
Japanese Beetle	173	None captured
Glassy-Winged Sharpshooter	2,424	Numerous residences positive

PEST MANAGEMENT

GLASSY-WINGED SHARPSHOOTER: GWSS continued to be controlled by Fresno County. The overall number of positive properties was up from the previous year. Nearly all positive properties and adjacent properties were treated with *Merit*. It is hoped that this will keep the GWSS population in Fresno/Clovis at a low level so that they will be less likely to move from the city into the agricultural areas.

SUSTAINABLE AGRICULTURE, continued

NEW AND UNUSUAL PEST OUTBREAKS IN 2008

Web Spinners (*Embioptera*) have recently become more common in Fresno County. We are catching many on our Glassy-Winged Sharpshooter Traps; pest control operators have had complaints from homeowners about them flying around inside their homes, and several specimens were found inside commercially harvested split pit peaches, causing some concern for the Mexico systems approach for stone fruit to Mexico. What was once an obscure species has now become rather common. The reason for this increase is not known.

The Gulf Fritillary (*Agraulis vanillae*), a common butterfly in the Gulf of Mexico, occasionally has large migrations north, sometimes flying all the way to northern California. In 2008, we received many inquiries from homeowners regarding the unusual caterpillars on their passion vines. These were caterpillars of the Gulf Fritillary, which had a major migration this year. The butterflies are often mistaken for monarchs, as they are orange with black stripes. They die out with the first frosts and remain absent for years until the next migration.

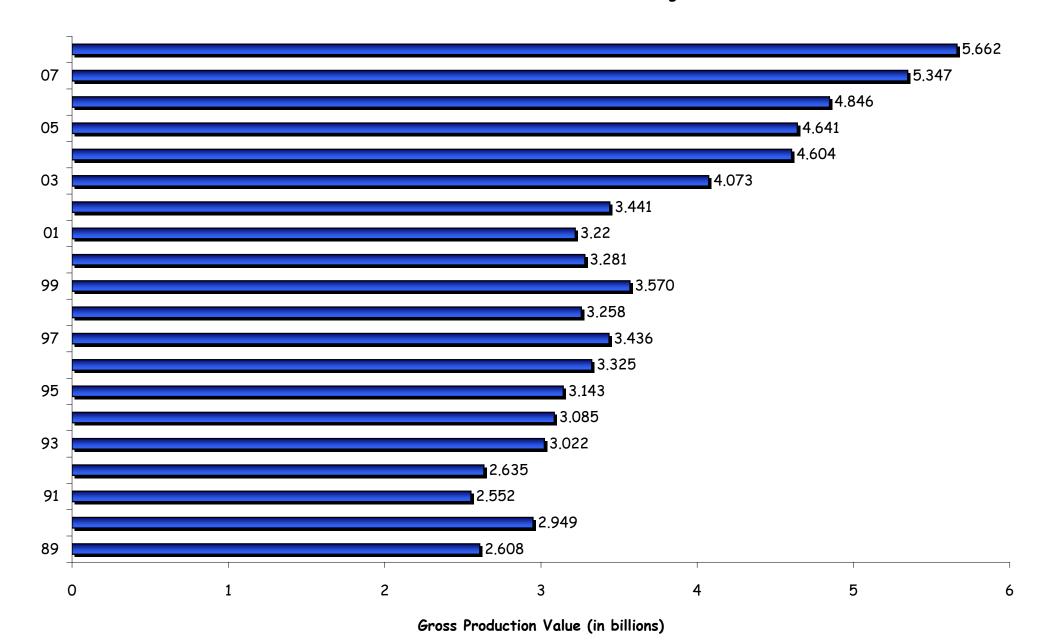
The Leaf Footed Bug (*Leptoglossus phillopus*) continues to be a problem in the urban areas of Fresno. Ever since the huge outbreak in the east side almond orchards in 2006, residents have complained of this insect on their stone fruit and pomegranates. Whether it will ever revert back to it's original levels prior to the 2006 outbreak, only time will tell.

Bed Bugs (*Cimex lectularis*) continue to increase their infestation levels in the Fresno area. One local pest control outfit has had a dramatic increase in bed bug infestation complaints. Initially, the problem was limited to hotels and motels in the area, but now they are being found in homes, too. Even with their experience and availability of stronger pesticides the pest control company is still finding them difficult to eradicate. Homeowners should not try to do this on their own. Having a reliable pest control company help with their bed bug eradication will increase their success rate.

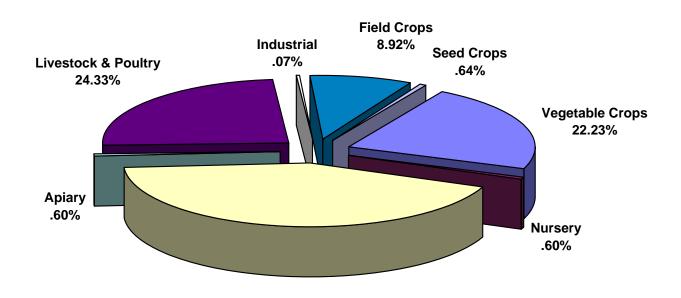
2008 ORGANIC FARMING

Gross returns for organic farming during fiscal year 2007-2008 totaled \$57,987,797. A total of one hundred-forty farms, totaling 20,376 acres, eight processors and twenty-four handlers (shippers/packers), were registered organic in Fresno County in 2008. New registrants included 19 growers. A large variety of crops were produced in compliance with current organic regulations. Crops grown, packed, and shipped include alfalfa, almonds, apples, apricots, apriums, arugula, asparagus, barley, basil, beans, beets, blueberries, broccoli, cabbage, cantaloupes, carrots, cattle, cauliflower, celeriac, celery, chard, cherries, chicken, cilantro, corn, cotton, cucumber, diakon, eggplant, fennel, figs, flowers, garlic, gourds, grapes (dried, juice, table, and wine), herbs, honeydews, kale, kiwifruit, kohlrabi, leeks, lemons, lettuce, limes, mandarins, milk, mizuna, mustard, nectarines, oats, okra, olives, onions, oranges, parsley, parsnips, peaches, pears, peas, peppers, persimmons, pistachios, plums, pluots, pomegranates, prunes, quince, radishes, rice, safflower, shallots, spinach, squash (summer and winter), strawberries, tangerines, tomatoes (fresh and processing), turkeys, turnips, walnuts, watermelon, wheat, and yams. Organically grown seeds: arugula, basil, broccoli, dill, kale, lettuce, mizuna, red mustard and watercress.

GROWTH OF FRESNO COUNTY AGRICULTURE OVER A TWENTY-YEAR SPAN 1989 through 2008



RELATIONSHIP IN TERMS OF TOTAL VALUE FOR 2008 CROP YEAR \$ 5,662,895,000



Fruit & Nut 42.61%

