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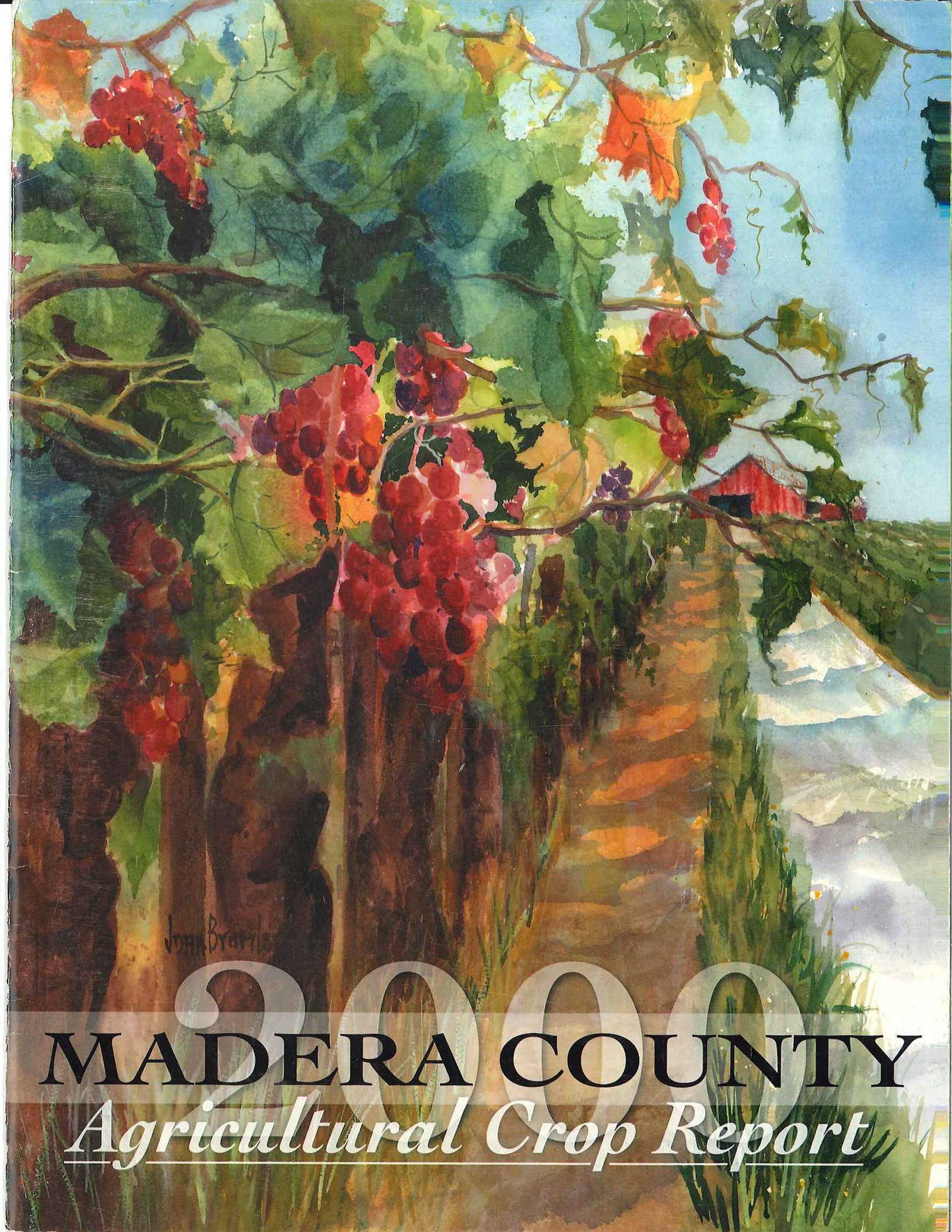
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California Department of Food and Agriculture

Agricultural Commissioners' Crop Reports

Madera County

2000-2004



John Brant

MADERA COUNTY
Agricultural Crop Report

The richness of Madera County's history owes much to the variety and abundance of its natural resources. Development of the many resources, under harsh conditions using primitive equipment, required a large and ingenious workforce. Evident in the varied solutions to the challenges before them is the diversity that continues to be a hallmark of production agriculture in our county today.

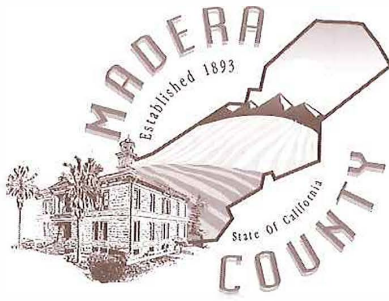
Gold miners working the hills and streams of Eastern Madera County in 1849 numbered up to 15,000 men. The value of the gold taken during the early years is difficult to quantify, as it was used for money until 1865. By 1880, sixty-seven mines were operating locally, and three of these were the stuff of legends. The Gambetta, Josephine, and Enterprise mines, located within three miles of each other, yielded over seventy percent of the gold produced in our county in the ensuing twenty-four years, with the total exceeding \$2.5 million. Madera County mines also yielded silver, copper, nickel, cobalt, tungsten, the largest deposits of iron found in California, turquoise, garnets, and granite, which is still quarried today.

The timber, or "green gold," industry grew in tandem with the gold rush, as lumber was required in mines and emerging towns. The first sawmill, powered by an over-shot water wheel, was set up in 1852 along California Creek, about eight miles north of Oakhurst. Oxen were used to "skid" logs to the mill, and thus operation of the mill was dependent on the availability of grass for grazing. Later, steam-powered "spool donkeys" replaced oxen, and, as logging moved farther from the mills, locomotives would be used. In 1874, construction began on a 63-mile-long flume, which would carry rough-cut lumber in flowing water from the mountain sawmills to a planing mill in the emerging town of Madera, for shipment on the recently constructed Union Pacific Railroad. Water from the flume was diverted into canals for the irrigation of valley crops. Demand grew nationally, and then internationally, for clear sugar pine; its uses ranged from piano key bases to window sashes to ships. In 1902, two carloads were shipped to Washington for use in construction of the White House.

In the 1850's, all freight and passengers came to the mountains by stage or wagon. Teams of eight horses, or mules, were used to pull heavy freight wagons, with spare teams placed every ten miles or so, depending on the steepness of the grade. As work forces grew, the transport of supplies became more burdensome. Workers, lacking fruits and vegetables in their diets, began to suffer from "land scurvy." Recognizing the need for local sources of food, disenchanted miners turned to farming and ranching. Apple, pear, and walnut orchards were planted, as were the first field crops: wheat, barley and beans. Vegetable gardens yielded produce, and local poultry keepers supplied eggs, chickens and turkeys. Cattle and sheep were grazed in mountain meadows as far north as Yosemite. Hogs were raised in increasing numbers; eventually there would be annual drives to Stockton, on foot, for shipment by boat to San Francisco.

Settlement crept but slowly down the mountain toward the vast grazing lands of the valley, until ranchers were required to install fencing. The open grazing land of the valley almost overnight became an unfathomable expanse of wheat. Individual holdings encompassed as many as 50,000 acres; single furrows stretched twenty miles. Repeated plantings depleted the soil, however, and the era of wheat passed. As agricultural colonics set aside blocks of land for a variety of plantings, we began to see the diversity of crops in orchards and fields that Madera County enjoys today.

The cover illustration was created by Joan Brunley, a renowned local artist who has received a number of awards for her agricultural watercolors.



Madera County Department of Agriculture Weights and Measures

Robert J. Rolan, Agricultural Commissioner
Sealer of Weights and Measures

David A. Robinson, Assistant
Commissioner/Sealer

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

and

The Honorable Board of Supervisors

In accordance with the provisions of Section 2279 of the California Food and Agricultural Code, I am pleased to submit the 2000 Agricultural Crop Report.

The estimated value of Madera County agricultural production totaled \$750,271,000 in 2000. This represents a 6.8% increase over the 1999 production value.

Field crop acreage increased in 2000, boosted by increased planting of dryland wheat. Yields for the major field crops were strong across the board, resulting in an overall increase of 3% in field crop production value.

Fruit and nut acreage also climbed in 2000. Favorable weather encouraged heavy production, particularly in grapes and pistachios. Oranges and olives, rebounding from last year's freeze, showed significant increases in production. Market conditions, affected by an international economy in transition, continued to challenge growers.

Dairy herd numbers continued to grow during 2000. Increasing production of market milk, together with rising numbers of replacement heifers, was sufficient to offset a substantial reduction in milk prices.

Nursery production values rose for the third consecutive year, to a record \$37,500,000.

The preparation of a report of this type requires extensive collaboration, and I sincerely appreciate the contributions of our growers, the staff of the University of California Cooperative Extension, and industry representatives. Additionally, I would like to thank the members of my staff who assisted in the gathering of data, and Marilyn Key, for compiling the information into its final form.

Our crop report for the year 2000 celebrates the agricultural history of Madera County. I thank Joan Brumley, who produced an original watercolor for our cover; the many contributors of historical pictures, including the Madera County Historical Society; and Creative Copy Printing and Graphics, for assistance in designing this report.

Respectfully Submitted,

Robert J. Rolan
Agricultural Commissioner

MADERA COUNTY HIGHLIGHTS

County Established	March 11, 1893
County Seat	Madera (city)
Population ^a	123,109

Total County Acreage ^b	1,368,587
2000 Harvested Acreage	661,850
Field Crop Acreage	116,620
Fruit and Nut Acreage	188,090
Nursery Acreage	740
Vegetable Acreage	3,400
Rangeland Acreage	353,000
Forest Acreage	414,290
U. S. Parkland Acreage	82,973

Bordering Counties	
Merced County	Northwest
Mariposa County	North
Mono County	East
Fresno County	South and West

Statewide Ranking of County	
Population ^a	35
Total Acreage	24
Total Agricultural Production ^b	14

Commodity, by value ^c	
Figs	1
Grapes, Raisin Variety	2
Pistachios	2
Almonds	5
Grapes, Wine Variety	5
Grapes, Table Variety	5
Olives	6
Milk	9

San Francisco

Lake Tahoe

Yosemite
National
Park

a/ US Bureau of Census, 2000
 b/ USDA Ag Census, 1997
 c/ County Agricultural
 Commissioner's Data, 1999

MADERA COUNTY

Agricultural Crop Report

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District 2

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District 3

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District 4

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District 5

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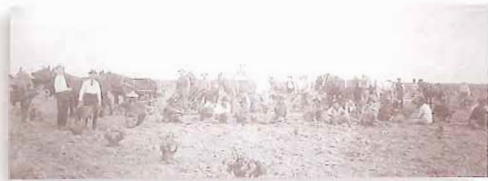
CLERICAL STAFF

Lore Ciuffoli, Administrative Assistant

Tammy Dodson, Program Assistant II

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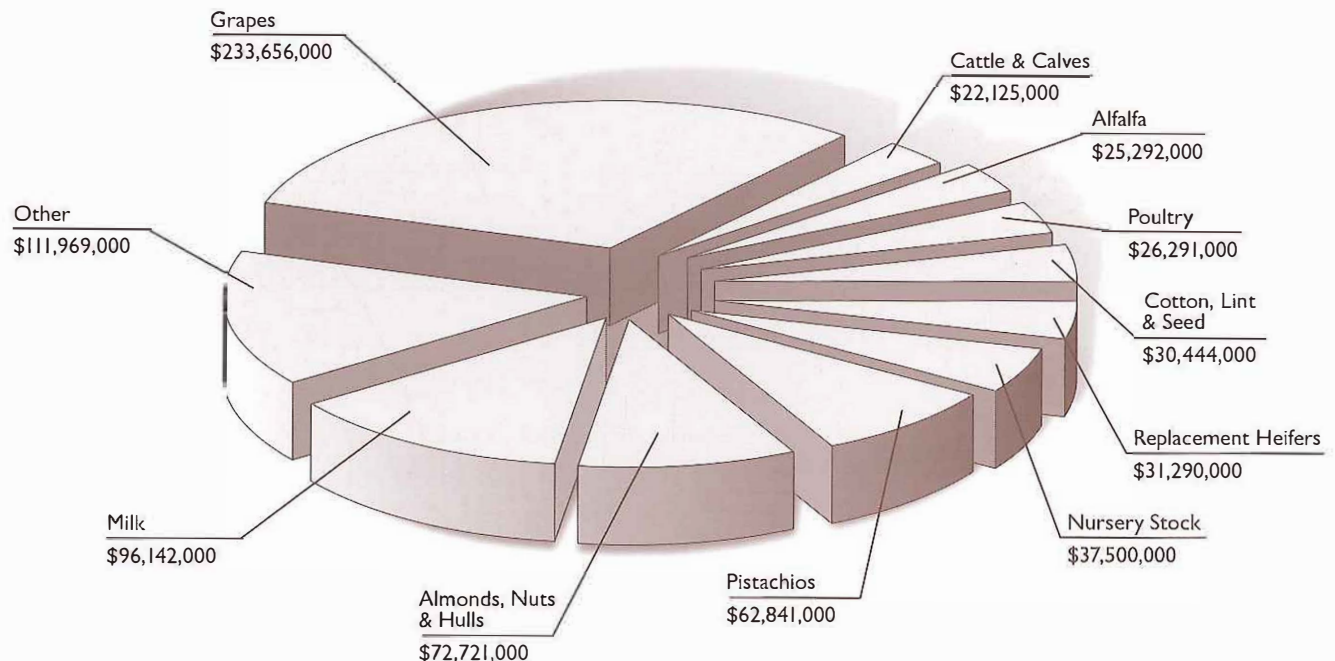


Planting grapes in Madera County (ca 1850)

TEN LEADING CROPS MADERA COUNTY - 2000

COMMODITY	2000 RANK	2000 DOLLAR VALUE	1999 RANK
Grapes	1	\$233,656,000	1
Milk	2	\$96,142,000	2
Almonds, Nuts & Hulls	3	\$72,721,000	3
Pistachios	4	\$62,841,000	4
Nursery Stock	5	\$37,500,000	5
Replacement Heifers	6	\$31,290,000	7
Cotton, Lint & Seed	7	\$30,444,000	6
Poultry	8	\$26,291,000	9
Alfalfa	9	\$25,292,000	8
Cattle and Calves	10	\$22,125,000	10

Diversity, which serves to strengthen the agricultural economy of Madera County, is evident in this listing of our Ten Leading Crops, which include fruit and nut crops, field crops, nursery stock, dairy and beef cattle. The wide range of commodities produced in our county is further underscored by that segment of the chart entitled "Other," which includes such diverse products as kiwifruit, frogs, sweet basil, wool, cutting flowers, eggplant, firewood, and beeswax.





MADERA COUNTY AGRICULTURAL PRODUCTION & VALUE

The information in the following tables is compiled and made available in order to provide an annual record of agricultural production within the county. Yield, production, and pricing information is gathered from both growers and processors. Acreages shown are not intended to reflect planted acreage, but rather the total acreage harvested during the current growing season. Weighted averages of yields and unit values are then prepared for the individual commodities, allowing determination of countywide totals for production and value. Values represent the gross value of the commodities produced; no attempt is made to reflect the cost of production and marketing, or net income to the producer.



Harvesting dryland grain on the east side (ca 1920)



Gathering hay. O'Neals (ca 1920)

FIELD CROPS

Item	Year	PRODUCTION			VALUE		
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Alfalfa							
Hay	2000	36,500	7.08	258,420	Ton	\$94.00	\$24,291,000
	1999	37,810	7.12	269,207	Ton	96.00	25,844,000
	1998	37,313	6.98	260,445	Ton	105.00	27,347,000
Silage ^a	2000			41,718	Ton	24.00	1,001,000
	1999 ^b			33,488	Ton	22.00	737,000
Total	2000	36,500					25,292,000
	1999	37,810					26,581,000
Beans, Dry^c							
	2000	200	1.45	290	Ton	487.00	141,000
	1999	2,600	1.26	3,276	Ton	448.00	1,468,000
	1998	2,100	1.33	2,793	Ton	567.00	1,584,000
Corn							
Grain	2000	5,800	4.66	27,028	Ton	106.00	2,865,000
	1999	5,820	4.69	27,296	Ton	121.00	3,303,000
	1998	8,372	4.52	37,841	Ton	101.00	3,822,000
Silage	2000	11,300	27.11	306,343	Ton	18.00	5,514,000
	1999	10,400	24.37	253,448	Ton	18.00	4,562,000
	1998	6,961	25.00	174,025	Ton	18.00	3,132,000
Total	2000	17,100					8,379,000
	1999	16,220					7,865,000
	1998	15,333					6,954,000
Cotton							
Lint	2000	27,500	1,338 ^d	76,656	Bale ^e	.69 ^f	25,389,000
	1999	26,540	1,303	72,045	Bale	.69	23,861,000
	1998	27,130	950	53,695	Bale	.71	18,299,000
Seed	2000			33,474	Ton	151.00	5,055,000
	1999			31,401	Ton	150.00	4,710,000
	1998			23,403	Ton	175.00	4,096,000
Oat							
Hay	2000	4,200	2.48	10,416	Ton	69.00	719,000
	1999 ^g	2,500	2.74	6,850	Ton	62.00	425,000
Pasture							
Irrigated ^d	2000	4,500 ⁱ			Acre	125.00	563,000
	1999	5,500			Acre	120.00	660,000
	1998	5,500			Acre	120.00	660,000
Rangeland^h							
	2000	353,000			Acre	9.00	3,177,000
	1999	353,000 ⁱ			Acre	9.00	3,177,000
	1998	381,000			Acre	8.00	3,048,000



Harvesting hay. Friant (ca 1920)

FIELD CROPS

Item	Year	Harvested Acreage	PRODUCTION			VALUE	
			Per Acre	Total	Unit	Per Unit	Total
Sugar Beets	2000	620	29.66	18,389	Ton	\$35.00	\$644,000
	1999	580	36.13	20,955	Ton	30.00	629,000
	1998	440	31.50	13,860	Ton	37.00	513,000
Wheat							
Grain	2000	12,500	1.95	24,375	Ton	114.00	2,779,000
	1999 ^j	6,000	2.33	13,980	Ton	102.00	1,426,000
Silage	2000	11,100	11.98	132,978	Ton	16.00	2,128,000
	1999 ^j	11,000	16.07	176,770	Ton	17.00	3,005,000
Total	2000	23,600					4,907,000
	1999	17,000					4,431,000
	1998	14,000					3,083,000
Winter Forage	2000	1,000	13.26	13,260	Ton	15.00	199,000
	1999 ^b	2,430	12.62	30,670	Ton	17.00	521,000
Miscellaneous^k	2000	1,400					3,718,000
	1999	2,600					1,552,000
	1998	8,288					3,268,000
TOTAL	2000	469,620					\$78,183,000
	1999	466,780					75,880,000
	1998	491,104					68,852,000

a/ Alfalfa acreage yields both hay and silage

b/ Reported previously under Silage. Other

c/ Includes black-eyes, kidneys and limas

d/ Pounds

e/ Bale: 480 pounds

f/ Per pound

g/ Reported previously under Miscellaneous

h/ Reported previously under Pasture, Other

i/ Change due to improved mapping

j/ Reported previously under Wheat

k/ Includes barley, rice, safflower, sorghum, Sudan grass, seed crops, field stubble and straw



Transporting sacked grain. Madera (ca 1890)



Early stonefruit orchard, Madera (ca 1920)

FRUIT & NUT CROPS

Item	Year	PRODUCTION			VALUE		
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Almonds ^a	2000	47,600	.70	33,320 ^b	Ton	\$2,040.00	\$67,973,000
	1999	46,200	1.01	46,662	Ton	1,734.00	80,912,000
	1998	43,635	.67	29,235	Ton	3,100.00	90,629,000
Almond Hulls	2000			63,308	Ton	75.00	4,748,000
	1999			88,658	Ton	60.00	5,319,000
	1998			58,470	Ton	70.00	4,093,000
Apples	2000	2,300	8.70	20,010	Ton	521.00	10,425,000
	1999	2,400	6.90	16,560	Ton	474.00	7,849,000
	1998	2,726	7.78	21,208	Ton	445.00	9,437,000
Figs	2000	9,550	1.63	15,567	Ton	591.00	9,200,000
	1999	9,520	1.27	12,090	Ton	519.00	6,275,000
	1998	9,430	1.32	12,448	Ton	751.00	9,348,000
Grapes							
Raisin Varieties							
Crushed	2000	8,640	10.45	90,288	Ton	119.00	10,744,000
	1999	8,810	7.82	68,894	Ton	202.00	13,917,000
	1998	9,960	8.60	85,656	Ton	165.00	14,133,000
Dried	2000	34,640	2.64	91,450	Ton	1,025.00 ^c	93,736,000
	1999	32,780	1.87	61,299	Ton	1,228.00	75,275,000
	1998	30,738	1.72	52,869	Ton	1,158.00	61,222,000
Fresh	2000	2,520	7.85	19,782	Ton	893.00	17,665,000
	1999	2,660	6.91	18,381	Ton	986.00	18,123,000
	1998	3,200	6.02	19,264	Ton	911.00	17,550,000
Table Varieties	2000	2,640	7.27	19,193	Ton	960.00	18,425,000
	1999	2,590	7.68	19,891	Ton	1,067.00	21,224,000
	1998	2,544	6.65	16,918	Ton	1,005.00	17,923,000
Wine Varieties ^d							
Red	2000	24,030	9.6	230,688	Ton	237.00	54,673,000
Varieties	1999	21,690	7.78	168,748	Ton	328.00	55,349,000
	1998	17,477	8.36	146,108	Ton	325.00	47,485,000
White	2000	23,740	10.05	238,587	Ton	161.00	38,413,000
Varieties	1999	23,700	9.02	213,774	Ton	209.00	44,679,000
	1998	22,789	10.39	236,777	Ton	206.00	48,776,000
Total Grapes	2000	96,210					233,656,000
	1999	92,230					228,567,000
	1998	86,708					207,089,000
Nectarines	2000	610	7.59	4,630	Ton	626.00	2,898,000
	1999	530	7.03	3,726	Ton	655.00	2,441,000
	1998	640	5.86	3,750	Ton	580.00	2,175,000



Thompson seedless vineyard, Chowchilla (ca 1920)

FRUIT & NUT CROPS

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Olives	2000	1,780	3.84	6,835	Ton	\$736.00	\$5,031,000
	1999	1,370	1.43 ^e	1,959	Ton	473.00	927,000
	1998	1,160	5.48	6,357	Ton	482.00	3,064,000
Oranges	2000	3,830	12.37	47,377	Ton	128.00	6,064,000
	1999	600 ^f	11.62	6,972	Ton	240.00	1,673,000
	1998	3,931	18.00	70,758	Ton	175.00	12,383,000
Peaches							
Cling	2000	1,130	18.83	21,278	Ton	220.00	4,681,000
	1999 ^g	1,030	17.67	18,200	Ton	237.00	4,313,000
Freestone	2000	950	12.69	12,056	Ton	359.00	4,328,000
	1999	830	10.43	8,657	Ton	424.00	3,671,000
	1998	876	10.62	9,303	Ton	436.00	4,056,000
Pistachios	2000	19,270	1.59	30,639^b	Ton	2,051.00	62,841,000
	1999	18,510	0.83	15,363	Ton	2,901.00	44,568,000
	1998	17,854	1.00	17,854	Ton	2,215.00	39,547,000
Plums	2000	990	10.50	10,395	Ton	634.00	6,590,000
	1999	1,020	8.23	8,395	Ton	718.00	6,028,000
	1998	1,204	9.55	11,498	Ton	717.00	8,244,000
Plums, Dried^h	2000	1,580	2.63	4,155	Ton	926.00	3,848,000
	1999	1,440	2.68	3,859	Ton	997.00	3,847,000
	1998	946	2.12	2,005	Ton	917.00	1,839,000
Walnuts	2000	1,210	1.33	1,609	Ton	1,290.00	2,076,000
	1999	1,050	1.75	1,838	Ton	879.00	1,616,000
	1998	977	1.57	1,534	Ton	962.00	1,476,000
Miscellaneous							
Fruits & Nuts ⁱ	2000	1,080					4,394,000
	1999	480					1,888,000
	1998	1,568					7,748,000
Orchard							
Firewood	2000			5,000	Cord		525,000
	1999 ^j			5,000	Cord		455,000
TOTAL	2000	188,090					\$429,278,000
	1999	177,210					400,349,000
	1998	171,655					401,128,000

a/ Meat basis

b/ Reflects total production, including imperfect stock; price weighted accordingly

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 \$1.025 per ton on October 17, 2000 and is being used for reporting purposes only. *This price reflects free tonnage only.* It is in no way intended to influence the arbitrated price which is yet to be determined. The final price will be published in the 2001 crop report.

d/ Includes table grapes crushed

e/ Yield impacted by freezing temperatures

f/ Harvestable acreage impacted by fruit loss due to freeze

g/ Reported previously under Miscellaneous

h/ Reported previously under Prunes; dried weight

i/ Includes apricots, berries, cherries, kiwis, pears, pecans, persimmons, pomegranates, tangelos, tangerines, and strawberries

j/ Not previously reported



Planting seedling tomatoes, Madera (ca 1940)

VEGETABLE CROPS

Item	Year	Harvested Acreage	Total Value
Vegetables ^a	2000	3,400	\$15,400,000
	1999	4,300	16,222,000
	1998	4,816	10,600,000

a/ Includes artichokes, all cabbage, carrots, cucumbers, eggplant, garlic, herbs, melons, onions, all peppers, potatoes, all squash, all tomatoes, and miscellaneous truck crops

LIVESTOCK AND POULTRY



Tending dairy cattle, Madera (ca 1920)

Item	Year	Head	Liveweight	Unit	Per Unit	Total
Cattle and Calves ^a	2000	50,700	375,000	CWT ^b	\$59.00	\$22,125,000
	1999	42,500	293,250	CWT	69.00	20,234,000
	1998	41,000	282,900	CWT	64.00	18,106,000
Replacement Heifers ^c	2000	21,000			1,490.00	31,290,000
	1999 ^d	20,000			1,380.00	27,600,000
Poultry ^e	2000					26,291,000
	1999					23,881,000
	1998					22,215,000
TOTAL	2000					\$79,706,000
	1999					71,715,000
	1998					40,321,000

a/ Range and dairy cattle sold for beef

b/ Hundredweight: 100 pounds

c/ Milk cows

d/ Not previously reported

e/ Previously reported separately under Chickens, Turkeys



Grazing sheep, Madera (ca 1850)



Cultivating vegetable seedlings, Madera (ca 1940)

NURSERY PRODUCTS

Item	Year	Field Acres	House Sq. Ft.	Total Value
Nursery Stock ^a	2000	740	515,000	\$37,500,000
	1999	1,135	552,000 ^b	30,200,000
	1998	671		15,128,000

a/ Includes grapevines, fruit trees, nut trees and ornamentals

b/ Not previously reported



Feeding poultry, Friant (ca 1920)

LIVESTOCK AND POULTRY PRODUCTS

Item	Year	PRODUCTION		VALUE	
		Production	Unit	Per Unit	Per Total
Milk Market ^a	2000	8,442,327	CWT	\$11.30	\$95,389,000
	1999	7,147,793	CWT	13.18	94,208,000
	1998	6,088,877	CWT	14.65	89,213,000
Milk Manufacturing ^a	2000	73,977	CWT	10.19	753,000
	1999	206,197	CWT	13.14	2,709,000
	1998	146,919	CWT	14.93	2,194,000
Other Products ^b	2000				5,992,000
	1999				3,486,000
	1998				2,165,000
TOTAL	2000				\$102,134,000
	1999				100,403,000
	1998				93,572,000

a/ Madera County has 50 dairies, with 36,500 lactating cows

b/ Includes sheep, lambs and wool, hogs, market eggs, manure, aquaculture, and beneficial insect production



Bringing cows in for milking, Friant (ca 1920)



Transporting hives for pollination

APIARY PRODUCTS

Item	Year	PRODUCTION		VALUE	
		Total	Unit	Per Unit	Total
Apiary Products					
Beeswax	2000	14,500	Pound	\$1.20	\$17,000
	1999 ^a	13,000	Pound	1.00	13,000
Honey	2000	664,200	Pound	0.49	325,000
	1999	596,740	Pound	0.55	328,000
	1998	580,800	Pound	.60	348,000
Pollination	2000	131,900	Colony	40.90	5,393,000
	1999	118,500	Colony	40.60	4,811,000
	1998	109,500	Colony	39.80	4,358,000
TOTAL	2000				\$5,735,000
	1999				5,152,000
	1998				4,706,000

a/ Not previously reported



Logging in Sugar Pine (ca 1850)

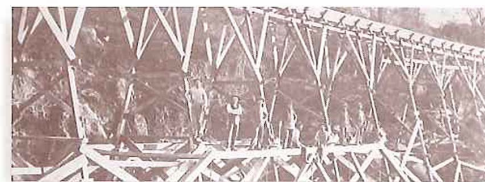
FOREST PRODUCTS

Item	Year	Production	Unit	Total Value
Timber	2000	8,228	MBF ^a	\$2,082,000
	1999	8,982	MBF	2,142,000
	1998	9,978	MBF	2,413,000
Firewood	2000	2,970	Cords ^c	253,000
	1999 ^b	3,765	Cords	320,000
TOTAL	2000			\$2,335,000
	1999			2,462,000

a/ Million Board Feet

b/ Not previously reported

c/ Cord: 128 cubic feet



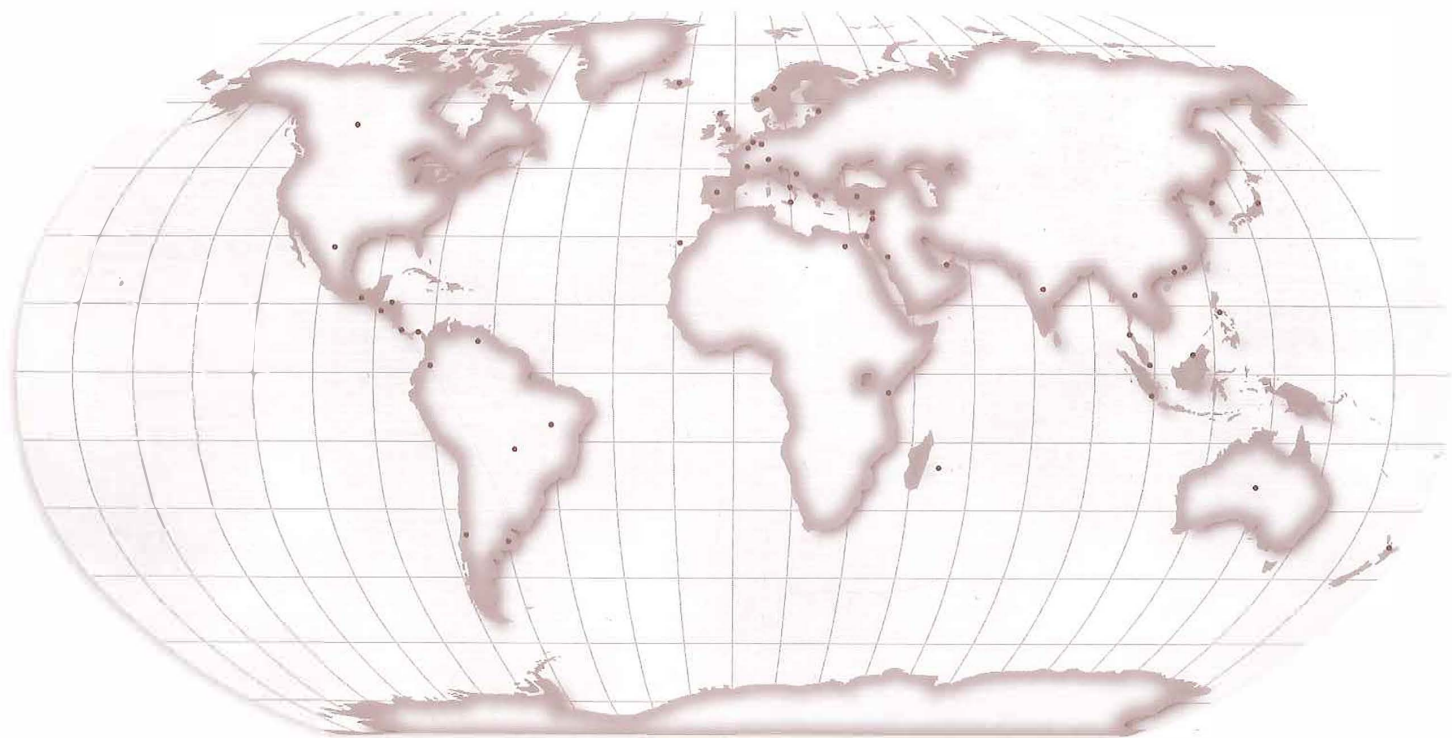
Logging flume, connecting Sugar Pine to Madera (ca 1870)



Drying peaches, early Madera

COUNTRIES RECEIVING MADERA COUNTY PRODUCE IN 2000

Argentina	India	New Zealand
Australia	Indonesia	Panama
Austria	Israel	Paraguay
Belgium	Italy	Philippines
Brazil	Iceland	Saudi Arabia
Canada	Japan	Scotland
Canary Islands	Jordan	Singapore
Chile	Kenya	Slovenia
Colombia	Korea	Spain
Costa Rica	Latvia	Sweden
Egypt	Lebanon	Taiwan
El Salvador	Macau	Thailand
France	Malaysia	Turkey
Germany	Malta	United Arab Emirates
Greece	Mauritius	United Kingdom
Guatemala	Mexico	Venezuela
Honduras	Norway	
Hong Kong	Netherlands	





Glass houses covering trees
for propagating beneficial insects (ca 1920)

SUSTAINABLE AGRICULTURE REPORT

PEST PREVENTION

The **Pest Exclusion Program** prevents the introduction of injurious pests that are not of common occurrence in the county. In Madera County, inspections ensuring pest cleanliness were performed at 24 nursery locations. In addition, incoming shipments of plant material were inspected for potentially injurious pests. Incoming beehives, transported into the county for pollination, were inspected for Red Imported Fire Ant (*Solenopsis invicta*), a significant quarantine pest. Nearly 20% of the almond acreage in the county was surveyed and baited for the Red Imported Fire Ant; discovery of the pest resulted in the treatment of fruit and nut orchards covering 742 acres. Further, over 1,200 phytosanitary inspections were performed on agricultural products destined for export.

Horticultural Quarantine is one of the most important departments of the Board. The greater part of our injurious insects are introduced species. In every section to which an insect is indigenous are found other insects that are parasitic upon it. This is Nature's method of preventing the overwhelming and destructive increase of any species. If, however, these destructive insects are introduced into a section where their natural enemies do not exist, their increase, being unchecked, is alarming and their destructiveness unlimited. Instances of this are seen in the work of the Gypsy Moth in Massachusetts, the spread of the San Jose Scale over a large portion of the Eastern States, and the destructive work of the Cottony Cushion Scale and other pests introduced in California before the establishment of our Horticultural Quarantine System. Under this system all plants, trees, shrubs, fruits, etc., coming into the State are carefully inspected by competent entomologists, and if found infested with pests not found in the State they are returned to the point of shipment or destroyed; and if found infested with insects already here, are fumigated.

from the *Report of the California State Board of Horticulture, 1899-1900*

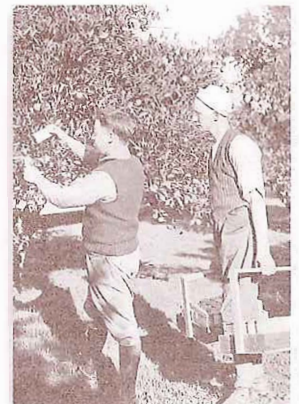
The **Pest Detection Program** utilizes insect traps and surveys for the detection of foreign pests which may have eluded exclusion efforts. The trapping program in Madera County targeted multiple pests, including the following:

Caribbean Fruit Fly (*Anastrepha suspensa*)
Mediterranean Fruit Fly (*Ceratitis capitata*)
Melon Fly (*Dacus cucurbitae*)
Mexican Fruit Fly (*Anastrepha ludens*)
Olive Fruit Fly (*Bactrocera oleae*)
Oriental Fruit Fly (*Dacus dorsalis*)

Apple Maggot (*Rhagoletis pomonella*)
Gypsy Moth (*Lymantria dispar*)
Japanese Beetle (*Popillia japonica*)
Khapra Beetle (*Trogoderma granarium*)
European Corn Borer (*Ostrinia nubilalis*)
European Pine Shoot Moth (*Rhyacionia buoliana*)

Over 1,100 traps were placed in the county, with 13,772 trap servicings performed during the 2000 season. A total of 38 Olive Fruit Flies were trapped in Madera County during the season; initial finds resulted in delimitation trapping and, in two cases, grower treatment.

The **Integrated Pest Control Program** strives to eradicate infestations of new pests before they become widespread. Pink Bollworm (*Pectinophora gossypiella*), a non-established and economically significant pest of cotton, is controlled by post-season plowdown of cotton plants. In Madera County, plowdown of nearly 25,000 acres was verified, ensuring the destruction of habitat supportive of this pest.



Releasing beneficial insects
in orchards (ca 1920)

PEST MANAGEMENT

The **Biological Control Program** involves the utilization of natural parasites and predators to reduce populations of insects or weeds. We have distributed biological control agents active against one insect pest as well as three invasive weeds.

Pest:

Ash Whitefly (*Siphoninus phillyreae*)

Klamath Weed (*Hypericum perforatum*)

Puncturevine (*Tribulus terrestris*)

Yellow Starthistle (*Centaurea solstitialis*)

Control Agent:

Parasitic wasp (*Encarsia nr. inaron*)

Leaf beetle (*Chrysolina quadrigemina*)

Stem and seed weevils

(*Microlarinus lypriformis* and *lareynii*)

Bud weevil (*Bangasternus orientalis*)

Hairy weevil (*Eustenopus villosus*)

Peacock fly (*Chaetorellia australis*)

Seed head gall fly (*Urophora sirunaseva*)

Control agents against the Ash Whitefly and puncturevine were released countywide. Control agents against Klamath Weed and Yellow Starthistle were released at three locations each.

The Legislature of 1899 empowered the Board to send an expert entomologist to foreign countries to collect and import into the State beneficial insects for general distribution. George Compere of Los Angeles was appointed, and sailed on July 21st for Australia, making a stop at Honolulu, from which place he collected and forwarded several lots of beneficial insects. Since then he has traveled over a large area of country, visiting the Hawaiian Islands, Fiji, New Zealand, New South Wales, Queensland, Victoria, Java, Tasmania, and Japan, where he has investigated the injurious insects of these Sections, and has devoted his time to the discovery of their natural enemies.

from the *Report of the California State Board of Horticulture, 1899-1900*

The **Glassy-winged Sharpshooter Program** serves to detect and control the vector of Pierce's Disease, a potentially catastrophic disease of vineyards. Following the detection of four sharpshooters, a delimitation program was initiated in Madera County. The program involved the placement of 2,021 traps, with 17,500 subsequent trap servicings, as well as survey work examining both incoming shipments of host material and susceptible county plantings. No additional sharpshooters were detected.

The **Vertebrate Pest Management Program** provides expertise and materials, to growers and homeowners, for the control of certain depredating vertebrate pests.

ORGANIC FARMING

Eighteen organic farms, totaling 1846 acres, were registered in Madera County in 2000. Utilizing organic principles defined in the California Organic Food Act of 1990, these farms produce a wide array of commodities: almonds, apples, figs, grapes and raisins, prunes, cotton, and vegetables. The total value of organic production in Madera County during 2000 was \$3,173,000.



Horticulture commission office, with insectary and breeding jars in background (ca 1900)



Harvesting oat hay, Chowhilla (ca 1920)

AGRICULTURAL CROP REPORT SUMMARY

Item	Year	Harvested Acreage	Total Value
Apiary	2000		\$5,735,000
	1999		5,152,000
	1998		4,706,000
Field Crops	2000	469,620	78,183,000
	1999	466,780	75,880,000
	1998	491,104	68,852,000
Fruit and Nut Crops	2000	188,090	429,278,000
	1999	177,210	400,349,000
	1998	171,655	401,128,000
Livestock and Poultry	2000		79,706,000
	1999		71,715,000
	1998		40,321,000
Livestock and Poultry Products	2000		102,134,000
	1999		100,403,000
	1998		93,572,000
Nursery	2000	740	37,500,000
	1999	1135	30,200,000
	1998	671	14,128,000
Timber Products	2000		2,335,000
	1999		2,462,000
	1998		2,413,000
Vegetable Crops	2000	3,400	15,400,000
	1999	4,300	16,222,000
	1998	4,816	10,600,000
TOTAL	2000		\$750,271,000
	1999		702,383,000
	1998		636,720,000



Stacking hay, Friant (ca 1920)

REPORT OF STATE BOARD OF HORTICULTURE

MADERA COUNTY.

To the Honorable the State Board of Horticulture:

GENTLEMEN: The year 1900 has been one of great activity in the fruit interest in this county. Large numbers of trees and vines were planted, and all seem to be doing finely. This stock was nearly all examined by one or more of the members of the County Board. Some trees and vines, however, were brought into our county and planted before we were appointed.

We have been comparatively free from ravages of insect pests, except from the destructive *Diabrotica*, which appeared in large quantities in some localities. We applied Paris green in the proportion of one pound of Paris green to two hundred gallons of water. Where these insects appeared in large quantities they destroyed the foliage of peach, apricot, and sometimes umbrella trees. They remained in destructive quantities for about six weeks, after which they gradually disappeared. Some of our farmers claimed that they were very destructive on the first and second crops of alfalfa, destroying the blossoms. So far, we have been unable to find out how these bugs multiply, where they lay their eggs, and at what time of the year the majority of the young appear. We are of the opinion that some poisonous spray might be successfully used in the spring or winter and destroy many of the young.

The red spider made its appearance in a few places, and we advised the use of the formula given in your bulletin on page 9. We distributed the literature that your honorable body sent us, and we have heard many kind words from the growers in appreciation of the same.

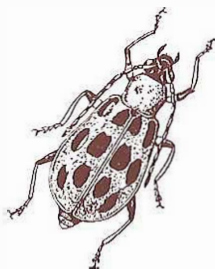
It has been rather difficult in quarantining and examining all of the plants, bulbs, vines, trees, and fruits that come into our county, on account of not being able to know when the same arrives. We have asked the depot agents and the express agent to notify us of the arrival of the same, but they have not always done so.

The fruit crop was above the average in all departments, and of most excellent quality. Late frosts did some damage to grapes, but still the crop was good.

C. M. PETTY,
Secretary.

MADERA, November 2, 1900.

from the Seventh Biennial report of the State Board of Horticulture, 1899-1900



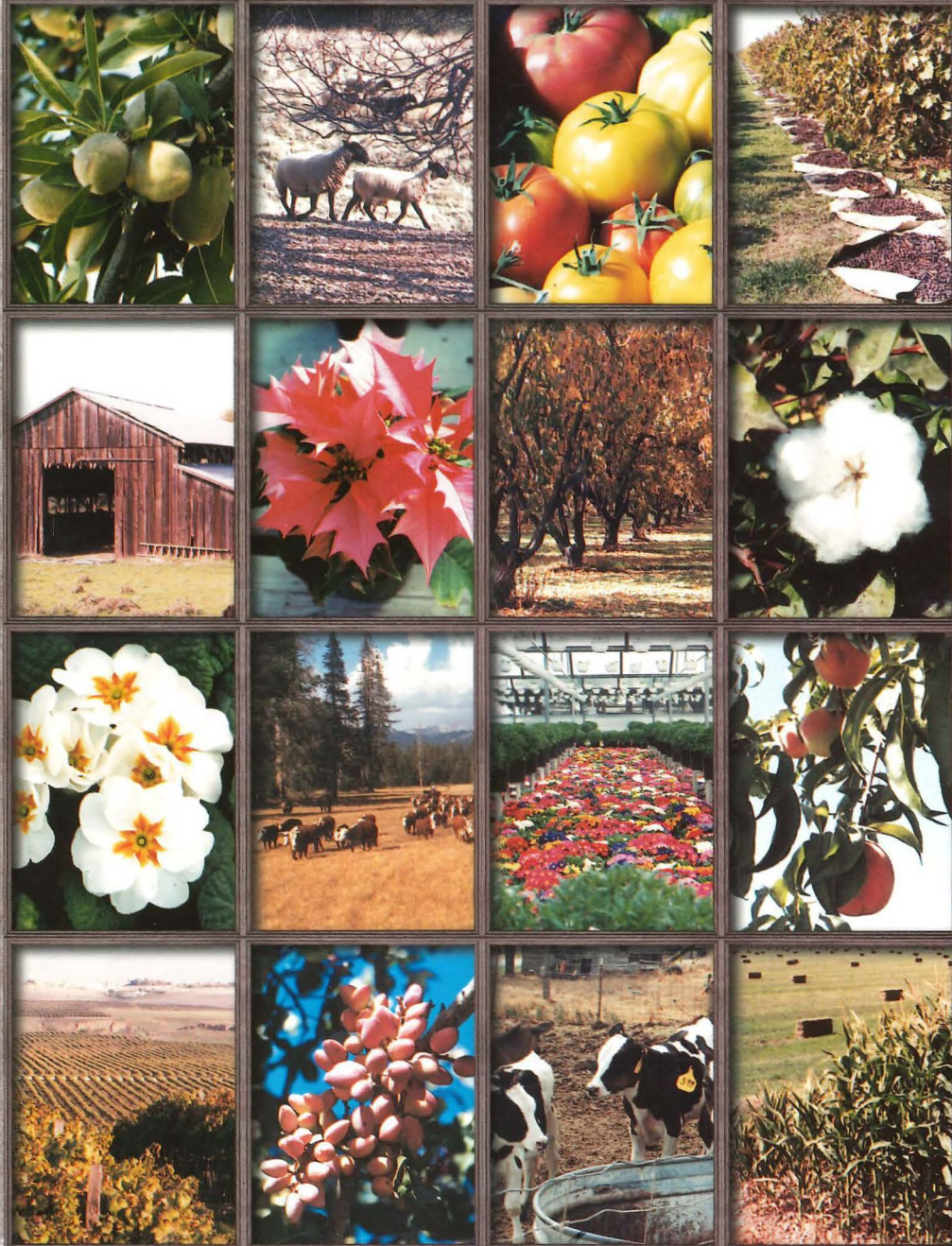
...*Diabrotica undecimpunctata*
(Spotted Cucumber Beetle,
actual length 1/5 inch)

Summer Remedy.

Sulphur	3 pounds.
Caustic soda (98 per cent)	2 pounds.
Whale-oil soap	25 pounds.
Solution (in all)	100 gallons.

from the State Bulletin of 1899, page 9

MADERA COUNTY



2014
Agricultural Crop Report

The 2001 growing season challenged the growers and producers of Madera County on multiple fronts. The year brought weather injurious to many of our commodities, as well as a problematic market, buffeted by an international economy in transition. The importance of agricultural diversity, engendering both strength and stability in the industry, was again underscored.

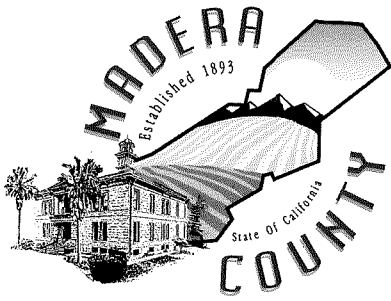
Diversity in planting and production emerged in Madera agriculture over a century ago, as vast expanses of wheat gave way to a rich variety of orchards, vineyards and field crops. Thirty years later, Madera already enjoyed 20,000 acres of vineyard; 5,000 acres of peaches, apricots, and plums; 1,500 acres of figs; 300 acres of almonds; and 164,000 acres of assorted field crops.

Vineyard acreage has since doubled and re-doubled in Madera County; over 94,000 acres of vineyard were harvested during 2001. Grapes, our leading commodity, are an example of diversity within diversity. Raisin varieties may be dried, crushed for juice, or sold for fresh use. Wine varieties may be white or red, with 14 varieties of white and 28 varieties of red being harvested within Madera County. In addition, we produce 17 varieties of table grapes. Hailstorms and freezing temperatures in April decreased production totals, but the greater challenge was the market. Grape prices fell in every category, resulting in an overall decrease of \$60 million from the 2000 total. With lower prices, reduction in costs becomes imperative, and research is active in machine pruning and dried-on-the-vine technology, as well as innovative trellising systems.

Dairy herd numbers continued to grow in Madera County during 2001. Increased production of milk, our second leading commodity, together with higher milk prices, caused the milk production value to increase \$30 million over the 2000 total. Replacement heifers, generated by dairies to increase herd sizes or replace older milk cows, increased in conjunction with dairy herd numbers. Production increases in the dairy industry, then, offset over half of the loss suffered in the grape sector, significantly reducing the blow to our local economy.

Harvested almond acres increased 1,600 acres in 2001. Yield was up, and in spite of lowered prices, overall production value for our third leading commodity rose \$14 million. Increases in almond and dairy values, taken together, offset three-quarters of the loss in production value sustained by our grape industry.

Diversity thus protects the agricultural industry, and thereby our local economy, from many of the effects resulting from fluctuations in production or price. Six of our ten leading commodities increased in production value during 2001, with the remaining four receding from their 2000 value. Amid the gyrations of the emerging, and therefore unpredictable, world market, this is an affirmation of the ability and resilience of our growers. Given the almost immeasurable worth they provide to the community--in the production of safe food and fiber, in the support of workers and industry, and in the preservation of our rural countryside--they deserve our whole-hearted support.



Madera County Department of Agriculture Weights and Measures

Robert J. Rolan, Agricultural Commissioner
Sealer of Weights and Measures

David A. Robinson, Assistant
Commissioner/Sealer

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

The Honorable Board of Supervisors

In accordance with the provisions of Section 2279 of the California Food and Agricultural Code, I am pleased to submit the 2001 Agricultural Crop Report.

The gross production value of Madera County agricultural commodities in 2001 was \$651,794,000. This represents an 8.4% decrease from the 2000 production value.

Field crop production values increased virtually across the board in 2001. Increases in yield or price offset declines in harvested acreage. Alfalfa hay prices increased 32%, resulting in the 2001 production value for this commodity jumping nearly \$8 million over the 2000 value. In addition to gains made by the major field crops, significant increases occurred in acreage devoted to minor field crops, including barley, oats, safflower, Sudan grass and winter forage. Taken together, these factors resulted in an overall increase of 14% in the production value of field crops in 2001.

Freezing temperatures and hailstorms during the month of April adversely impacted fruit and nut crop yields, and, in the case of stone fruit, also affected the quality. The raisin price, having dropped nearly 49% in 2000, declined still further in 2001. Lower prices, combined with declining production, resulted in a decrease of \$22 million in raisin production value. Prices for crushed grapes also fell, with red wine varieties suffering a \$16 million loss in production value. Almonds fared better, with increases in acreage and yield, and a resulting \$13 million increase in production value. Overall, the production value of Madera County fruit and nut crops decreased nearly 23% from the 2000 value.

Dairy herd numbers continued to grow in Madera County during 2001. Increasing milk production, combined with higher prices, resulted in a 30% increase—nearly \$29 million—over the 2000 value.

Nursery production values fell \$13 million in 2001, primarily as a result of decreased demand for vine cuttings.

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 preparation of a report of this type requires extensive collaboration, and I sincerely appreciate the contributions of our growers, the staff of the University of California Cooperative Extension, and industry representatives. Additionally, I would like to thank Marilyn Key, for compiling the information into its final form; and Creative Copy Printing and Graphics, for assistance in designing this report.

Sincerely,

A handwritten signature in black ink, reading "Robert J. Rolan". The signature is written in a cursive style with a long, sweeping underline.

Robert J. Rolan
Agricultural Commissioner

MADERA COUNTY HIGHLIGHTS

County Established	March 11, 1893
County Seat	Madera (city)
Population ^a	123,109

Total County Acreage ^b	1,368,587
2001 Harvested Acreage	658,880
Field Crop Acreage	115,750
Fruit and Nut Acreage	186,170
Nursery Acreage	860
Vegetable Acreage	3,100
Rangeland Acreage	353,000

Forest Acreage	414,290
U. S. Parkland Acreage	82,973

Bordering Counties	
Merced County	Northwest
Mariposa County	North
Mono County	East
Fresno County	South and West

Lake Tahoe

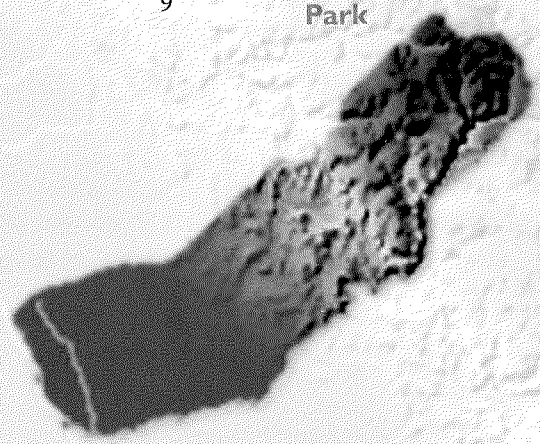
Statewide Ranking of County	
Population ^a	35
Total Acreage	24
Total Agricultural Production ^b	14

Commodity, by value ^c	
Figs	1
Grapes, Raisin Variety	2
Pistachios	2
Olives	4
Almonds	5
Grapes, Wine Variety	5
Grapes, Table Variety	6
Milk	9

Yosemite National Park

San Francisco

a/ US Bureau of Census, 2000
 b/ USDA Ag Census, 1997
 c/ County Agricultural Commissioner's Data, 2000



MADERA COUNTY

MADERA COUNTY BOARD OF SUPERVISORS

Frank Bigelow
District 1

Vern Moss
District 2

Ronn Dominici
District 3

John Silva
District 4

Gary Gilbert
District 5

COUNTY ADMINISTRATIVE OFFICER

Stell Manfredi

AGRICULTURAL COMMISSIONER/ SEALER OF WEIGHTS & MEASURES

Robert J. Rolan

ASSISTANT AGRICULTURAL COMMISSIONER/SEALER

David A. Robinson

AGRICULTURAL & STANDARDS INSPECTORS

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Molly LaDou

Judy Cumming

Carol Massetti-Walters

Scott Gaarde

Eric Mayberry

Marilyn Key

Debbie L. McDougald

Bruce H. Rohn

PEST DETECTION TRAPPERS

Jaime Whatley

OFFICE SUPPORT STAFF

Lore Ciuffoli, Office Services Supervisor

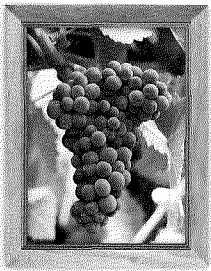
Tammy Dodson, Program Assistant II

Mary Arias, Office Assistant II

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Agricultural Crop Report

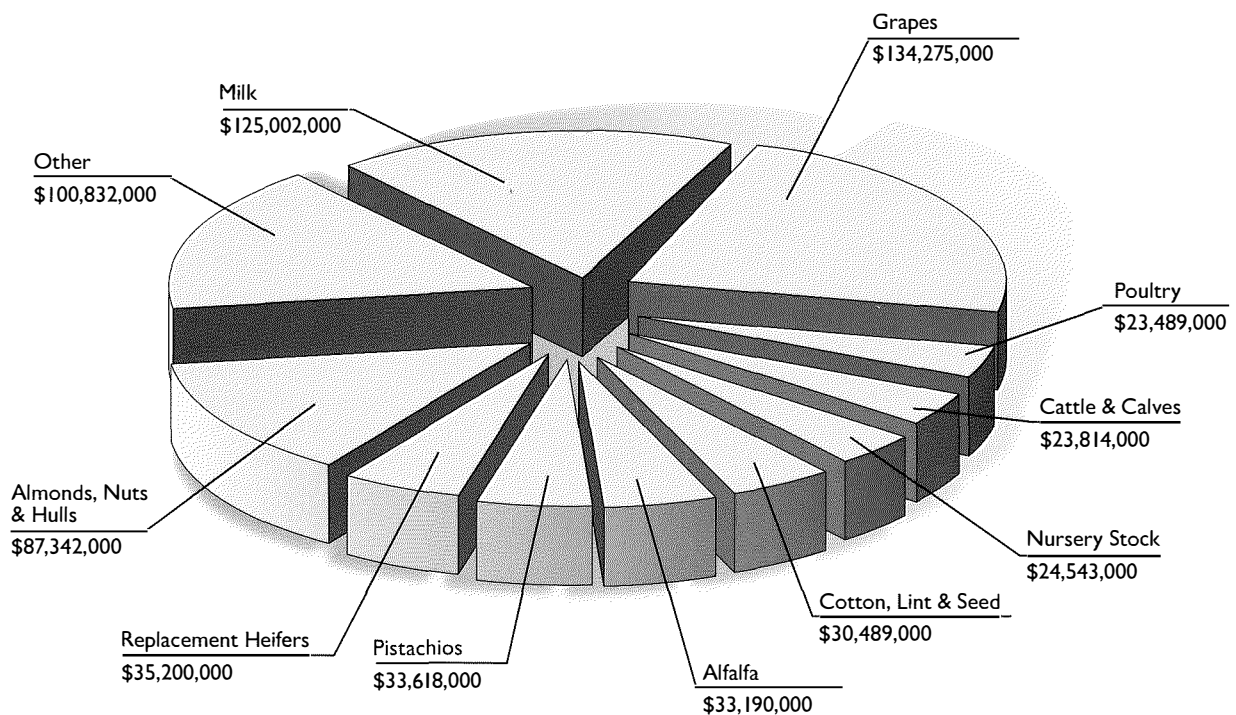


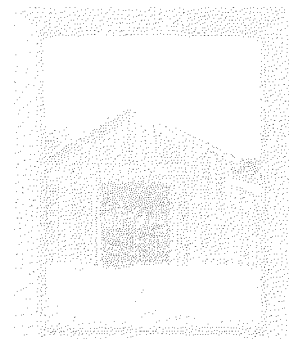
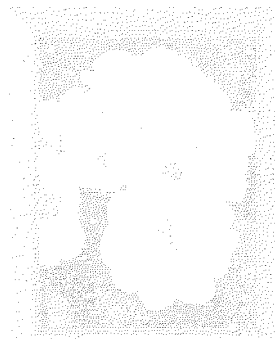
TEN LEADING CROPS

MADERA COUNTY - 2001

COMMODITY	2001 RANK	2001 DOLLAR VALUE	2000 RANK
Grapes	1	\$134,275,000	1
Milk	2	\$125,002,000	2
Almonds, Nuts & Hulls	3	\$87,342,000	3
Replacement Heifers	4	\$35,200,000	6
Pistachios	5	\$33,618,000	4
Alfalfa	6	\$33,190,000	9
Cotton, Lint & Seed	7	\$30,489,000	7
Nursery Stock	8	\$24,543,000	5
Cattle and Calves	9	\$23,814,000	10
Poultry	10	\$23,489,000	8

Diversity, which serves to strengthen the agricultural economy of Madera County, is evident in this listing of our Ten Leading Crops, which include fruit and nut crops, field crops, nursery stock, dairy and beef cattle. The wide range of commodities produced in our county is further underscored by that segment of the chart entitled "Other," which includes such diverse products as kiwifruit, frogs, sweet basil, wool, cutting flowers, eggplant, firewood, and beeswax.





MADERA COUNTY AGRICULTURAL PRODUCTION & VALUE

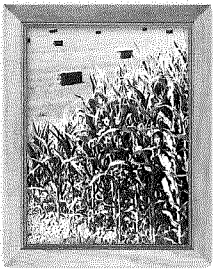
The information in the following tables is compiled and made available in order to provide an annual record of agricultural production within the county. Yield, production, and pricing information is gathered from both growers and processors. Acreages shown are not intended to reflect planted acreage, but rather the total acreage harvested during the current growing season. Weighted averages of yields and unit values are then prepared for the individual commodities, allowing determination of countywide totals for production and value. Values represent the gross value of the commodities produced; no attempt is made to reflect the cost of production and marketing, or net income to the producer.





FIELD CROPS

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Alfalfa							
Hay	2001	34,500	7.50	258,750	Ton	\$124.00	\$32,085,000
	2000	36,500	7.08	258,420	Ton	94.00	24,291,000
	1999	37,810	7.12	269,207	Ton	96.00	25,844,000
Silage ^a	2001			38,112	Ton	29.00	1,105,000
	2000			41,718	Ton	24.00	1,001,000
	1999			33,488	Ton	22.00	737,000
Total	2001	34,500					33,190,000
	2000	36,500					25,292,000
	1999	37,810					26,581,000
Beans, Dry^b							
	2001	220	1.35	297	Ton	562.00	167,000
	2000	200	1.45	290	Ton	487.00	141,000
	1999	2,600	1.26	3,276	Ton	448.00	1,468,000
Corn							
Grain	2001	2,000	4.24	8,480	Ton	131.00	1,111,000
	2000	5,800	4.66	27,028	Ton	106.00	2,865,000
	1999	5,820	4.69	27,296	Ton	121.00	3,303,000
Silage	2001	15,600	25.75	401,700	Ton	21.00	8,436,000
	2000	11,300	27.11	306,343	Ton	18.00	5,514,000
	1999	10,400	24.37	253,448	Ton	18.00	4,562,000
Total	2001	17,600					9,547,000
	2000	17,100					8,379,000
	1999	16,220					7,865,000
Cotton							
Lint	2001	25,500	1,471^c	78,147	Bale^d	.68^e	25,507,000
	2000	27,500	1,338	76,656	Bale	.69	25,389,000
	1999	26,540	1,303	72,045	Bale	.69	23,861,000
Seed	2001			34,125	Ton	146.00	4,982,000
	2000			33,474	Ton	151.00	5,055,000
	1999			31,401	Ton	150.00	4,710,000
Oat							
Hay	2001	4,500	3.26	14,670	Ton	89.00	1,306,000
	2000	4,200	2.48	10,416	Ton	69.00	719,000
	1999	2,500	2.74	6,850	Ton	62.00	425,000



FIELD CROPS

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Pasture							
Irrigated	2001	4,800			Acre	\$125.00	\$600,000
	2000	4,500			Acre	125.00	563,000
	1999	5,500			Acre	120.00	660,000
Rangeland							
	2001	353,000			Acre	9.00	3,177,000
	2000	353,000			Acre	9.00	3,177,000
	1999	353,000			Acre	9.00	3,177,000
Sugar Beets							
	2001	630	30.00	18,900	Ton	37.00	699,000
	2000	620	29.66	18,389	Ton	35.00	644,000
	1999	580	36.13	20,955	Ton	30.00	629,000
Wheat							
Grain	2001	13,500	2.68	36,180	Ton	110.00	3,980,000
	2000	12,500	1.95	24,375	Ton	114.00	2,779,000
	1999	6,000	2.33	13,980	Ton	102.00	1,426,000
Silage	2001	8,500	10.27	87,295	Ton	18.00	1,571,000
	2000	11,100	11.98	132,978	Ton	16.00	2,128,000
	1999	11,000	16.07	176,770	Ton	17.00	3,005,000
Total	2001	22,000					5,551,000
	2000	23,600					4,907,000
	1999	17,000					4,431,000
Winter Forage							
	2001	2,000	12.40	24,800	Ton	15.00	372,000
	2000	1,000	13.26	13,260	Ton	15.00	199,000
	1999	2,430	12.62	30,670	Ton	17.00	521,000
Miscellaneous^f							
	2001	4,000					3,681,000
	2000	1,400					3,718,000
	1999	2,600					1,552,000
TOTAL							
	2001	468,750					\$88,779,000
	2000	469,620					78,183,000
	1999	466,780					75,880,000

a/ Alfalfa acreage yields both hay and silage

b/ Includes black-eyes, kidneys and limas

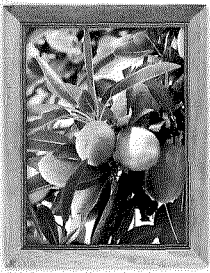
c/ Pounds

d/ Bale: 480 pounds

e/ Per pound

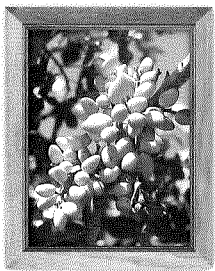
f/ Includes barley, rice, safflower, Sudan grass, seed crops, field stubble and straw





FRUIT & NUT CROPS

Item	Year	PRODUCTION			VALUE		
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Almonds^a	2001	49,200	.90	44,280^b	Ton	\$1,830.00	\$81,032,000
	2000	47,600	.70	33,320	Ton	2,040.00	67,973,000
	1999	46,200	1.01	46,662	Ton	1,734.00	80,912,000
Almond Hulls	2001			84,132	Ton	75.00	6,310,000
	2000			63,308	Ton	75.00	4,748,000
	1999			88,658	Ton	60.00	5,319,000
Apples	2001	1,880	6.68	12,558	Ton	215.00	2,700,000
	2000	2,300	8.70	20,010	Ton	521.00	10,425,000
	1999	2,400	6.90	16,560	Ton	474.00	7,849,000
Figs	2001	8,510	1.43	12,169	Ton	912.00	11,098,000
	2000	9,550	1.63	15,567	Ton	591.00	9,200,000
	1999	9,520	1.27	12,090	Ton	519.00	6,275,000
Grapes							
Raisin Varieties							
Crushed	2001	7,800	7.16	55,848	Ton	78.00	4,356,000
	2000	8,640	10.45	90,288	Ton	119.00	10,744,000
	1999	8,810	7.82	68,894	Ton	202.00	13,917,000
Dried	2001	33,480	1.87	62,608	Ton	525.00	32,869,000
	2000	34,640	2.64	91,450	Ton	600.00 ^c	54,870,000*
	1999	32,780	1.87	61,299	Ton	1,228.00	75,275,000
Fresh	2001	2,480	7.00	17,360	Ton	690.00	11,978,000
	2000	2,520	7.85	19,782	Ton	893.00	17,665,000
	1999	2,660	6.91	18,381	Ton	986.00	18,123,000
Table Varieties	2001	2,580	7.08	18,266	Ton	700.00	12,786,000
	2000	2,640	7.27	19,193	Ton	960.00	18,425,000
	1999	2,590	7.68	19,891	Ton	1,067.00	21,224,000
Wine Varieties ^d							
Red Varieties	2001	24,780	8.26	204,683	Ton	188.00	38,480,000
	2000	24,030	9.60	230,688	Ton	237.00	54,673,000
	1999	21,690	7.78	168,748	Ton	328.00	55,349,000
White Varieties	2001	23,390	9.09	212,615	Ton	159.00	33,806,000
	2000	23,740	10.05	238,587	Ton	161.00	38,413,000
	1999	23,700	9.02	213,774	Ton	209.00	44,679,000
Total Grapes	2001	94,510					134,275,000
	2000	96,210					194,790,000*
	1999	92,230					228,567,000
Nectarines	2001	690	4.74	3,271	Ton	615.00	2,011,000
	2000	610	7.59	4,630	Ton	626.00	2,898,000
	1999	530	7.03	3,726	Ton	655.00	2,441,000



FRUIT & NUT CROPS

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Olives	2001	1,730	4.88	8,442	Ton	\$728.00	\$6,146,000
	2000	1,780	3.84	6,835	Ton	736.00	5,031,000
	1999	1,370	1.43 ^e	1,959	Ton	473.00	927,000
Oranges	2001	3,460	10.73	37,126	Ton	169.00	6,274,000
	2000	3,830	12.37	47,377	Ton	128.00	6,064,000
	1999	600 ^f	11.62	6,972	Ton	240.00	1,673,000
Peaches							
Cling	2001	940	10.27	9,654	Ton	221.00	2,133,000
	2000	1,130	18.83	21,278	Ton	220.00	4,681,000
	1999	1,030	17.67	18,200	Ton	237.00	4,313,000
Freestone	2001	870	10.76	9,361	Ton	357.00	3,342,000
	2000	950	12.69	12,056	Ton	359.00	4,328,000
	1999	830	10.43	8,657	Ton	424.00	3,671,000
Pistachios	2001	19,600	0.80	15,680^b	Ton	2,144.00	33,618,000
	2000	19,270	1.59	30,639	Ton	2,051.00	62,841,000
	1999	18,510	0.83	15,363	Ton	2,901.00	44,568,000
Plums	2001	1,050	5.87	6,164	Ton	525.00	3,236,000
	2000	990	10.50	10,395	Ton	634.00	6,590,000
	1999	1,020	8.23	8,395	Ton	718.00	6,028,000
Plums, Dried^g	2001	1,750	2.56	4,480	Ton	756.00	3,387,000
	2000	1,580	2.63	4,155	Ton	926.00	3,848,000
	1999	1,440	2.68	3,859	Ton	997.00	3,847,000
Walnuts	2001	1,020	1.37	1,397	Ton	1,226.00	1,713,000
	2000	1,210	1.33	1,609	Ton	1,290.00	2,076,000
	1999	1,050	1.75	1,838	Ton	879.00	1,616,000
Miscellaneous							
Fruits & Nuts ^h	2001	960					3,167,000
	2000	1,080					4,394,000
	1999	480					1,888,000
Orchard Firewood	2001			6,000	Cord		660,000
	2000			5,000	Cord		525,000
	1999 ⁱ			5,000	Cord		455,000
TOTAL	2001	186,170					\$301,102,000
	2000	188,090					390,412,000*
	1999	177,210					400,349,000

a/ Meat basis

b/ Reflects total production, including imperfect stock; price weighted accordingly

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 table grapes crushed

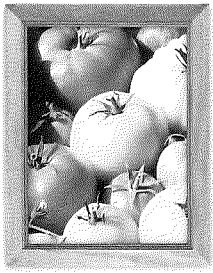
e/ Yield impacted by freezing temperatures

f/ Harvestable acreage impacted by fruit loss due to freeze

g/ Reported previously under Prunes; dried weight

h/ Includes apricots, berries, cherries, kiwis, pears, pecans, persimmons, pomegranates, tangelos, tangerines, and strawberries

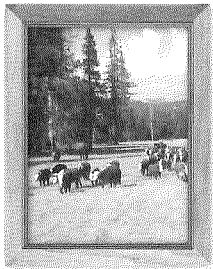
* Revised



VEGETABLE CROPS

Item	Year	Harvested Acreage	Total Value
Vegetables^a	2001	3,100	\$13,602,000
	2000	3,400	15,400,000
	1999	4,300	16,222,000

a/ Includes artichokes, all cabbage, carrots, cucumbers, eggplant, garlic, herbs, melons, onions, all peppers, potatoes, all squash, all tomatoes, and miscellaneous truck crops



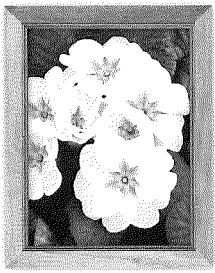
LIVESTOCK AND POULTRY

Item	Year	Head	Liveweight	Unit	Per Unit	Total
Cattle and Calves^a	2001	52,600	390,400	CWT^b	\$61.00	\$23,814,000
	2000	50,700	375,000	CWT	59.00	22,125,000
	1999	42,500	293,250	CWT	69.00	20,234,000
Replacement Heifers^c	2001	22,000			1,600.00	35,200,000
	2000	21,000			1,490.00	31,290,000
	1999	20,000			1,380.00	27,600,000
Poultry	2001					23,489,000
	2000					26,291,000
	1999					23,881,000
TOTAL	2001					\$82,503,000
	2000					79,706,000
	1999					71,715,000

a/ Range and dairy cattle sold for beef

b/ Hundredweight: 100 pounds

c/ Milk cows



NURSERY PRODUCTS

Item	Year	Field Acres	House Sq. Ft.	Total Value
Nursery Stock^a	2001	860	507,000	\$24,543,300
	2000	740	515,000	37,500,000
	1999	1,135	552,000	30,200,000

a/ Includes grapevines, fruit trees, nut trees and ornamentals



LIVESTOCK AND POULTRY PRODUCTS

Item	Year	PRODUCTION		VALUE	
		Production	Unit	Per Unit	Per Total
Milk Market^a	2001	9,039,069	CWT	\$13.76	\$124,345,000
	2000	8,442,327	CWT	11.30	95,389,000
	1999	7,147,793	CWT	13.18	94,208,000
Milk Manufacturing^a	2001	47,386	CWT	13.86	657,000
	2000	73,977	CWT	10.19	753,000
	1999	206,197	CWT	13.14	2,709,000
Other Products^b	2001				8,798,000
	2000				5,992,000
	1999				3,486,000
TOTAL	2001				\$133,800,000
	2000				102,134,000
	1999				100,403,000

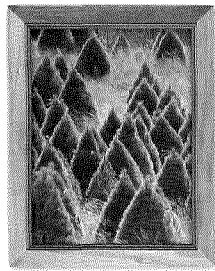
a/ Madera County has 59 dairies, with 38,300 lactating cows

b/ Includes sheep, lambs and wool, hogs, ducks, market eggs, manure, aquaculture, and beneficial insect production



APIARY PRODUCTS

Item	Year	PRODUCTION		VALUE	
		Total	Unit	Per Unit	Total
Apiary Products					
Beeswax	2001	10,300	Pound	\$1.04	\$11,000
	2000	14,500	Pound	1.20	17,000
	1999	13,000	Pound	1.00	13,000
Honey	2001	668,000	Pound	0.53	354,000
	2000	664,200	Pound	0.49	325,000
	1999	596,740	Pound	0.55	328,000
Pollination	2001	124,800	Colony	43.50	5,429,000
	2000	131,900	Colony	40.90	5,393,000
	1999	118,500	Colony	40.60	4,811,000
TOTAL	2001				\$5,794,000
	2000				5,735,000
	1999				5,152,000

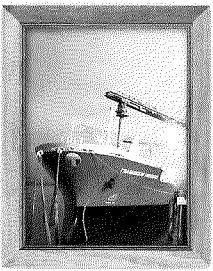


FOREST PRODUCTS

Item	Year	Production	Unit	Total Value
Timber	2001	6,672	MBF^a	\$1,353,000
	2000	8,228	MBF	2,082,000
	1999	8,982	MBF	2,142,000
Firewood	2001	2,970	Cords^b	318,000
	2000	2,970	Cords	253,000
	1999	3,765	Cords	320,000
TOTAL	2001			\$1,671,000
	2000			2,335,000
	1999			2,462,000

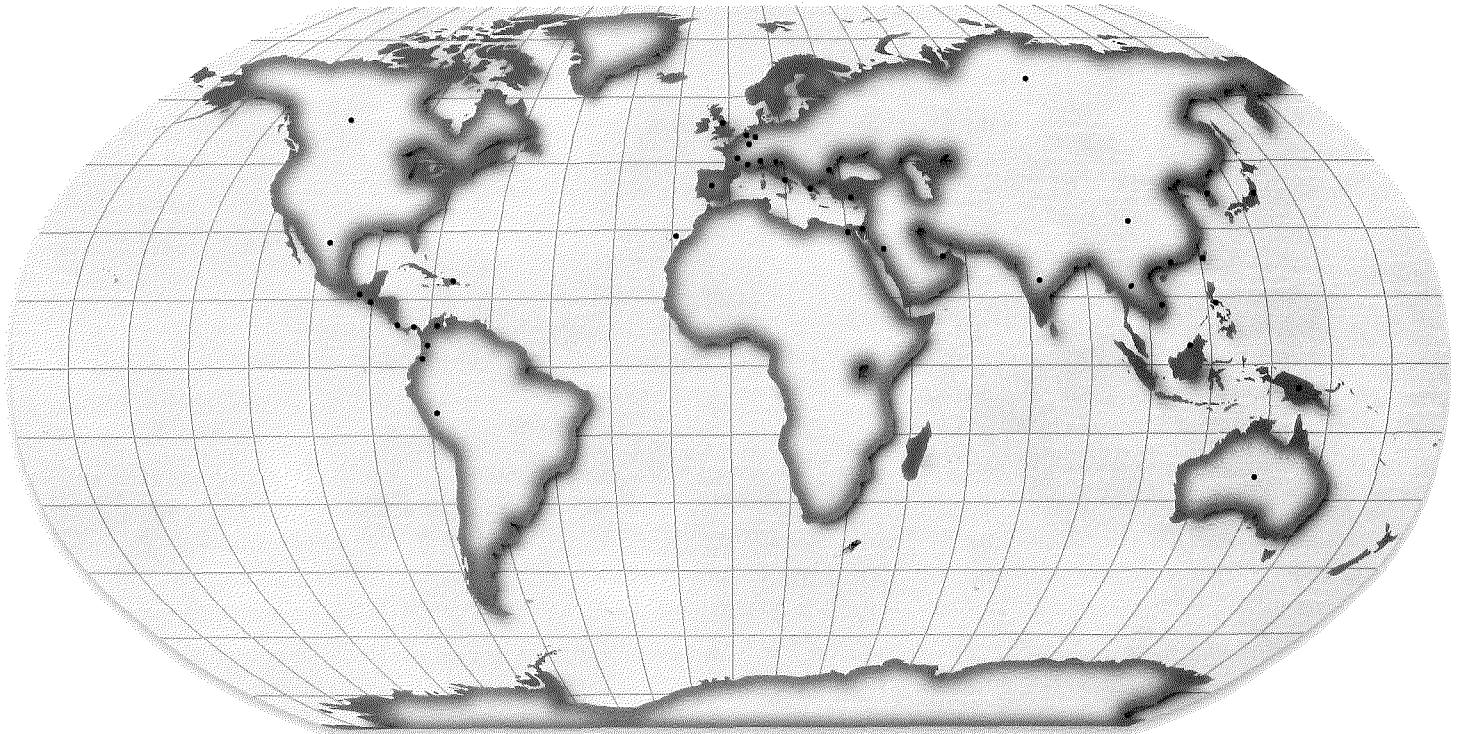
a/ Million Board Feet

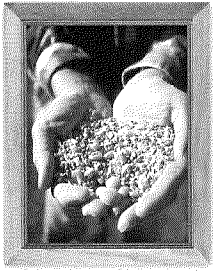
b/ Cord: 128 cubic feet



COUNTRIES RECEIVING MADERA COUNTY PRODUCE IN 2001

Australia	Hong Kong	Poland
Austria	India	Romania
Belgium	Israel	Russian Federation
Canada	Italy	Saudi Arabia
Canary Islands	Japan	Singapore
Columbia	Korea	Spain
Costa Rica	Kuwait	Switzerland
Denmark	Latvia	Taiwan
Dominican Republic	Malaysia	Thailand
Ecuador	Mexico	Turkey
Egypt	Netherlands	United Arab Emirates
El Salvador	New Zealand	United Kingdom
France	Panama	Venezuela
Germany	People's Republic of China	Vietnam
Greece	Peru	
Guatemala	Philippines	





SUSTAINABLE AGRICULTURE REPORT

PEST PREVENTION

Pest prevention programs are mandated by the California Food and Agricultural Code to prevent the introduction and spread of pests in California. Pest prevention involves three strata: pest exclusion, pest detection, and integrated pest control.

The **Pest Exclusion Program** prevents the introduction of injurious pests that are not of common occurrence in the county.

Twenty-four nursery locations were inspected to ensure pest cleanliness. Viable egg masses of the Glassy-winged Sharpshooter were identified at one location, and pest management procedures were implemented. In addition, shipments of plant material, received by nurseries, were inspected for potentially injurious pests prior to retail sale.

Over 8,000 beehives, transported into the county for pollination, were inspected for Red Imported Fire Ants (*Solenopsis invicta*). One load of hives was found to be infested, and the hives were treated. Of the 742 acres under treatment for Red Imported Fire Ants in 2000, 170 acres continued to be treated.

Countries receiving agricultural commodities require certification that the commodities are free from potentially injurious pests. Over 1,700 phytosanitary inspections were performed on Madera County commodities destined for export.

The **Pest Detection Program** utilizes insect traps and surveys for the detection of foreign pests which may have eluded exclusion efforts.

The trapping program in Madera County targeted multiple pests, including the following:

Apple Maggot (<i>Rhagoletis pomonella</i>)	Caribbean Fruit Fly (<i>Anastrepha suspense</i>)
Gypsy Moth (<i>Lymantria dispar</i>)	Mediterranean Fruit Fly (<i>Ceratitis capitata</i>)
Japanese Beetle (<i>Popillia japonica</i>)	Melon Fly (<i>Dacus cucurbitae</i>)
Khapra Beetle (<i>Trogoderma granarium</i>)	Mexican Fruit Fly (<i>Anastrepha ludens</i>)
European Corn Borer (<i>Ostrinia nubilalis</i>)	Oriental Fruit Fly (<i>Dacus dorsalis</i>)
European Pine Shoot Moth (<i>Rhyacionia buoliana</i>)	

Over 465 pest detection traps were placed in the county, with 6,655 trap servicings performed during the 2001 season. Routine trap servicing revealed one male Gypsy Moth. Delimitation trapping, involving 201 traps and 1516 trap servicings, found no additional Gypsy Moths.

Inspection of tangerines from Spain revealed live Mediterranean fruit fly larvae in many of the fruit, resulting in the removal of the tangerines from retail shelves.

The **Integrated Pest Control Program** strives to eradicate infestations of new pests before they become widespread. Pink Bollworm (*Pectinophora gossypiella*), a non-established and economically significant pest of cotton, is controlled by post-season plowdown of cotton plants. In Madera County, plowdown of 25,500 acres was verified, ensuring the destruction of habitat supportive of this pest.

PEST MANAGEMENT

The **Biological Control Program** involves the utilization of natural parasites and predators to reduce populations of insects or weeds. We have distributed biological control agents active against one insect pest as well as three invasive weeds.

Pest:	Control Agent(s):
Ash Whitefly (<i>Siphoninus phillyreae</i>)	Parasitic wasp (<i>Encarsia nr. inaron</i>)
Klamath Weed (<i>Hypericum perforatum</i>)	Leaf beetle (<i>Chrysolina quadrigemina</i>)
Puncturevine (<i>Tribulus terrestris</i>)	Stem and seed weevils (<i>Microlarinus lypriformis</i> and <i>lareynii</i>)
Yellow Starthistle (<i>Centaurea solstitialis</i>)	Bud weevil (<i>Bangasternus orientalis</i>) Hairy weevil (<i>Eustenopus villosus</i>) Peacock fly (<i>Chaetorellia australis</i>) Seed head gall fly (<i>Urophora sirunaseva</i>)

Control agents against the Ash Whitefly and puncturevine were released countywide. Control agents against Klamath Weed and Yellow Starthistle were released at three locations each.

The **Glassy-winged Sharpshooter Program** serves to detect and control the vector of Pierce's Disease, a potentially catastrophic disease of vineyards. This program involved the placement of 1,722 traps, with 15,759 subsequent trap servicings. In addition, incoming shipments of host material and susceptible county plantings were inspected.

The **Vertebrate Pest Management Program** provides expertise and materials, to growers and homeowners, for the control of certain depredating vertebrate pests.

ORGANIC FARMING

Twenty organic farms, totaling 3,100 acres, were registered in Madera County in 2001. Utilizing organic principles defined in the California Organic Food Act of 1990, these farms produce a wide array of commodities:

almonds, apples, artichokes, arugula, basil, green beans, beets, cantaloupe, carrots, cherries, cotton, cucumbers, daikon, eggplant, figs, grapes (table, raisin, wine), leeks, lettuce, nectarines, onions, peaches, peas, sweet peppers, pistachios, plums, dried plums, potatoes, rutabagas, spinach, squash, tomatoes, watermelon

The total value of organic production in Madera County during 2001 was \$5,294,000.



AGRICULTURAL CROP REPORT SUMMARY

Item	Year	Harvested Acreage	Total Value
Apiary	2001		\$5,794,000
	2000		5,735,000
	1999		5,152,000
Field Crops	2001	468,750	88,779,000
	2000	469,620	78,183,000
	1999	466,780	75,880,000
Fruit and Nut Crops	2001	186,170	301,102,000
	2000	188,090	390,412,000*
	1999	177,210	400,349,000
Livestock and Poultry	2001		82,503,000
	2000		79,706,000
	1999		71,715,000
Livestock and Poultry Products	2001		133,800,000
	2000		102,134,000
	1999		100,403,000
Nursery	2001	860	24,543,000
	2000	740	37,500,000
	1999	1135	30,200,000
Timber Products	2001		1,671,000
	2000		2,335,000
	1999		2,462,000
Vegetable Crops	2001	3,100	13,602,000
	2000	3,400	15,400,000
	1999	4,300	16,222,000
TOTAL	2001		\$651,794,000
	2000		711,405,000*
	1999		702,383,000

* Revised

MADERA COUNTY DEPARTMENT OF AGRICULTURE

WEIGHTS AND MEASURES

Our mission is to preserve and protect agriculture. Plantings must be protected from diseases and pests, including weeds. To prevent the introduction of injurious pests, we inspect incoming nursery stock, and sample seed for purity. Specialized traps are used to detect exotic insects, which may have "hitched a ride" into our county. We also inspect beehives, brought into the county for pollination, to ensure that they do not harbor Red Imported Fire Ants.

Established pests of agriculture must be managed. We regulate the purchase, use, and storage of pesticides; inspecting fields prior to application, ensuring that pesticide applicators are qualified, monitoring applications, ensuring that application records are maintained, and investigating any problems that may occur. Investigations can offer insight into what went wrong, and thus allow improvement in regulations designed to ensure the safety of our food, the agricultural workers, the people of our community, and our environment. We present educational seminars to ensure that growers are abreast of changes in the regulations, and provide information helpful in the training of applicators. We offer expertise and management tools for the control of depredating vertebrate pests.

Commodities that reach the market should be mature and of good quality. Inspections are conducted at time of harvest, and at the marketplace, ensuring that fruits and vegetables meet standards set by law. Commodities bound for export are inspected to ensure freedom from injurious pests; phytosanitary certification allows import into foreign countries. We also monitor the production of organic commodities.

A companion mission is to ensure fairness in business transactions. Regulation requires that packages be labeled to inform the consumer of the contents. We inspect packages, counting or weighing or measuring the contents to verify that the label is correct. We measure bulk firewood, ensuring that the advertised quantity was delivered.

Each of the commercial scales in the county is checked for accuracy, including scales used to weigh grocery items, cattle, prescription medicines, bulk feed or hardware, recycled cans, trucks, or train cars. Commercial meters are also tested, ensuring that petroleum products, propane, water, and electricity are delivered as advertised.

We verify that prices advertised by stores are honored, checking price tags, signs, and advertisements against scanner prices. We routinely make undercover purchases, and investigate overcharges reported by consumers.

Our office provides agricultural information to growers, industry, and the public. We prepare a comprehensive annual report of county agricultural production, and assess and quantify weather-related crop damage.

Finally, the Agricultural Commissioner is involved on a fundamental level with other governmental agencies and industry to ensure the safety of our food supply; safeguard schoolchildren from pesticides; protect our animal industry from disease; control invasive and injurious pests; and protect air and groundwater from pollution.



MADERA
COUNTY

Department of Agriculture

332 Madera Avenue
Madera, California 93637

MADERA county



Agricultural Crop Report



MADERA COUNTY DEPARTMENT OF AGRICULTURE

What We Do...

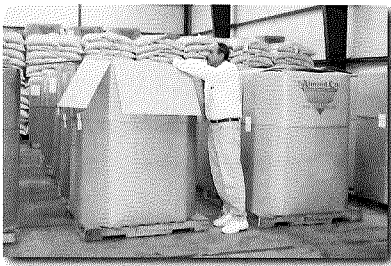
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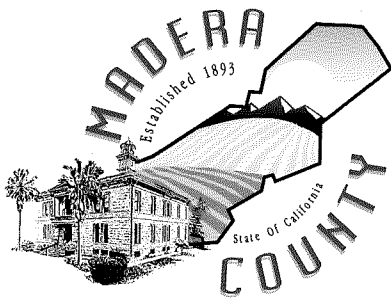
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Madera County Department of Agriculture Weights and Measures

Robert J. Rolan, Agricultural Commissioner
Sealer of Weights and Measures

Jay Seslowe, Assistant Agricultural
Commissioner/Sealer

William J. Lyons, Jr., Secretary
California Department of Food and Agriculture
and
The Honorable Board of Supervisors

In accordance with the provisions of Section 2279 of the California Food and Agricultural Code, I am pleased to submit the 2002 Agricultural Crop Report.

The gross production value of Madera County agricultural commodities in 2002 was \$779,510,000. This represents an increase of nearly 20% over the 2001 production value.

Field crop production values increased for most commodities, mirroring the continuing rise in dairy production in Madera County. Cotton was a notable exception. Production costs have outpaced production values in many cases, and the resulting decline in cotton acreage caused production values to fall \$8.6 million. Alfalfa acreage rose 18% in 2002; however, an accompanying drop in price resulted in a slight loss overall in production value. Production of silage climbed, with wheat silage production increasing more than two-fold. Alfalfa, corn, oat, and winter forage also showed increases in production, and in production values. Increases were not enough to offset cotton declines, however, and the overall production value of field crops in Madera County decreased 8.7% in 2002.

With few exceptions, Madera County producers of fruits and nuts enjoyed a bountiful season in 2002. Pistachio production values climbed \$60 million, a 178% increase over 2001. Almond production values grew \$34 million, a 42% increase. Grape production values gained \$21 million overall, a 15% increase. Grape yields increased across the board in 2002; prices, on the other hand, fell for the third consecutive year for raisins, as well as grapes sent to crush. Table grapes were the exception, with prices climbing 44%. Peaches and figs also enjoyed production value increases, of \$4.8 million and \$4.4 million, respectively. Overall, the production value of Madera County fruit and nut crops increased nearly 44%, a gain of \$133 million over the 2001 value.

Dairy herd numbers continued to grow in Madera County during 2002. Market milk production increased 11%; but the gain was accompanied by a 22% drop in price, resulting in a \$6 million loss in production value. Replacement heifers saw increases in both production number and value, with an overall increase of 24%--nearly \$8.6 million--over the 2001 production value.

Nursery production values declined 26% in 2002. Demand for vine cuttings remained low during 2002, resulting in a \$6 million decrease in nursery production values. Vegetable crops, in contrast, enjoyed an 89% increase in overall production values.

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 preparation of a report of this type requires extensive collaboration, and I sincerely appreciate the contributions of our growers, the staff of the University of California Cooperative Extension, and industry representatives. Additionally, I would like to thank Marilyn Key, for compiling the information found in this report; and Molly LaDou, who, together with Creative Copy Printing and Graphics, designed the report.

Sincerely,

Robert J. Rolan
Agricultural Commissioner

MADERA COUNTY HIGHLIGHTS

County Established	March 11, 1893
County Seat	Madera (city)
Population ^a	123,109

Total County Acreage ^b	1,368,587
2002 Harvested Acreage	667,000
Field Crop Acreage	121,000
Fruit and Nut Acreage	189,000
Nursery Acreage	300
Vegetable Acreage	3,700
Rangeland Acreage	353,000

Forest Acreage	414,290
U. S. Parkland Acreage	82,973

Bordering Counties	
Merced County	Northwest
Mariposa County	North
Mono County	East
Fresno County	South and West

Statewide Ranking of County	
Population ^a	35
Total Acreage	24
Total Agricultural Production ^b	14

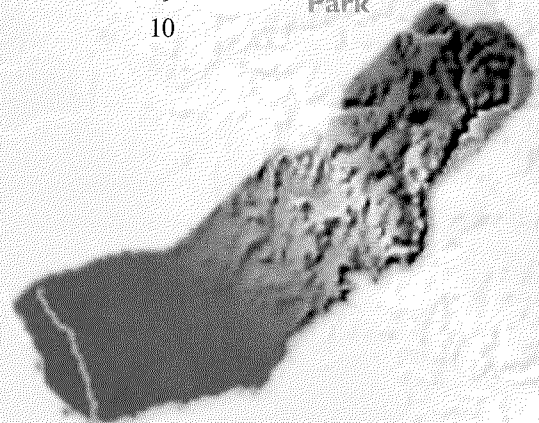
Commodity, by value ^c	
Figs	1
Grapes, Raisin Variety	2
Pistachios	2
Olives	4
Almonds	5
Grapes, Table Variety	5
Grapes, Wine Variety	9
Milk, Market	10

San Francisco

Lake Tahoe

Yosemite
National
Park

a/ US Bureau of Census, 2000
 b/ USDA Ag Census, 1997
 c/ County Agricultural
 Commissioner's Data, 2001



MADERA county

MADERA COUNTY BOARD OF SUPERVISORS

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OFFICE SUPPORT STAFF

Lore Ciuffoli, Office Services Supervisor

Tammy Dodson, Program Assistant II

Mary Arias, Office Assistant II

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**Agricultural
Crop Report**

2002

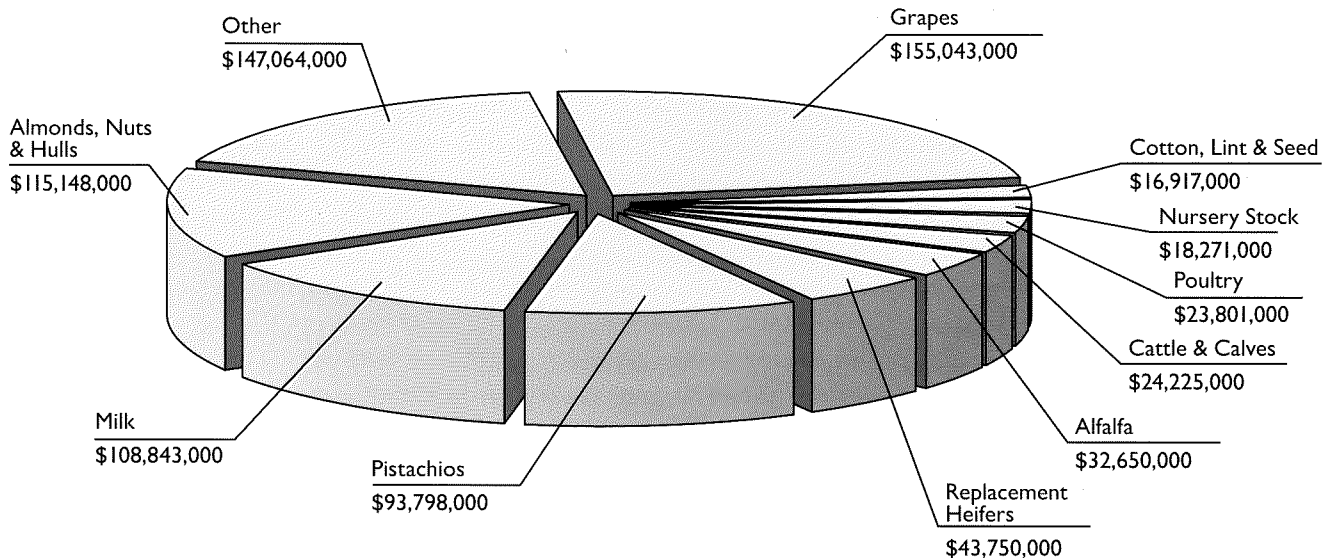


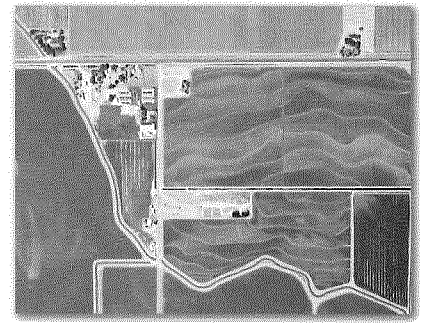
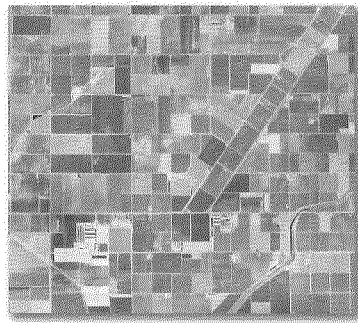
TEN LEADING CROPS

MADERA COUNTY - 2002

COMMODITY	2002 RANK	2002 DOLLAR VALUE	2001 RANK
Grapes	1	\$155,043,000	1
Almonds, Nuts & Hulls	2	\$115,148,000	3
Milk	3	\$108,843,000	2
Pistachios	4	\$93,798,000	5
Replacement Heifers	5	\$43,750,000	4
Alfalfa	6	\$32,650,000	6
Cattle and Calves	7	\$24,225,000	9
Poultry	8	\$23,801,000	10
Nursery Stock	9	\$18,271,000	8
Cotton, Lint & Seed	10	\$16,917,000	7

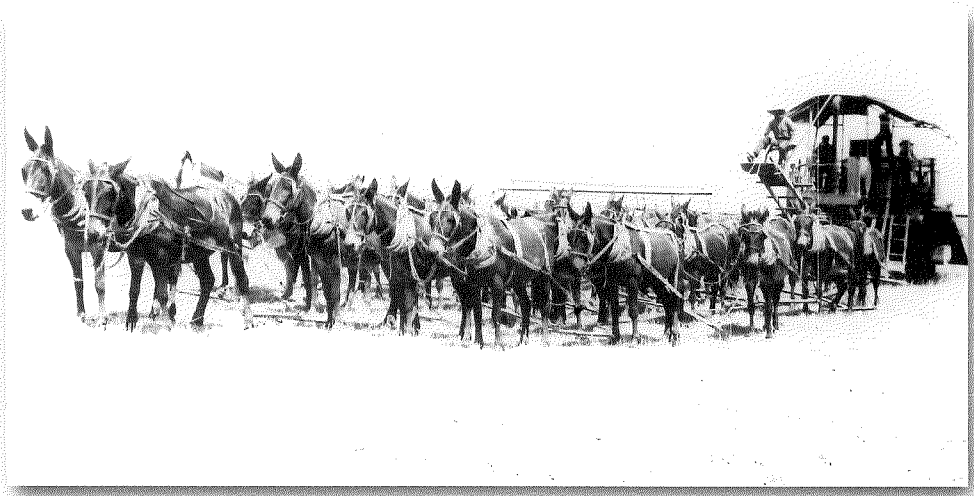
Diversity, which serves to strengthen the agricultural economy of Madera County, is evident in this listing of our Ten Leading Crops, which include fruit and nut crops, field crops, nursery stock, dairy and beef cattle. The wide range of commodities produced in our county is further underscored by that segment of the chart entitled "Other," which includes such diverse products as kiwifruit, frogs, sweet basil, wool, cutting flowers, eggplant, firewood, and beeswax.

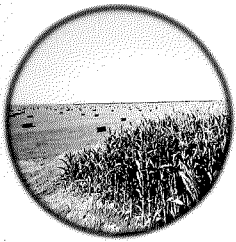




MADERA COUNTY AGRICULTURAL PRODUCTION & VALUE

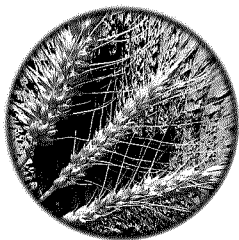
The information in the following tables is compiled and made available in order to provide an annual record of agricultural production within the county. Yield, production, and pricing information is gathered from both growers and processors. Acreages shown are not intended to reflect planted acreage, but rather the total acreage harvested during the current growing season. Weighted averages of yields and unit values are then prepared for the individual commodities, allowing determination of countywide totals for production and value. Values represent the gross value of the commodities produced; no attempt is made to reflect the cost of production and marketing, or net income to the producer.





FIELD CROPS

Item	Year	PRODUCTION			VALUE		
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Alfalfa							
Hay	2002	40,700	7.42	301,994	Ton	\$102.00	\$30,803,000
	2001	34,500	7.50	258,750	Ton	124.00	32,085,000
	2000	36,500	7.08	258,420	Ton	94.00	24,291,000
Silage ^a	2002			63,700	Ton	29.00	1,847,000
	2001			38,112	Ton	29.00	1,105,000
	2000			41,718	Ton	24.00	1,001,000
Total	2002	40,700					32,650,000
	2001	34,500					33,190,000
	2000	36,500					25,292,000
Beans, Dry^b							
	2002	460	1.35	621	Ton	616.00	383,000
	2001	220	1.35	297	Ton	562.00	167,000
	2000	200	1.45	290	Ton	487.00	141,000
Corn							
Grain	2002	2,700	5.13	13,851	Ton	136.00	1,884,000
	2001	2,000	4.24	8,480	Ton	131.00	1,111,000
	2000	5,800	4.66	27,028	Ton	106.00	2,865,000
Silage	2002	18,700	25.48	476,476	Ton	20.00	9,530,000
	2001	15,600	25.75	401,700	Ton	21.00	8,436,000
	2000	11,300	27.11	306,343	Ton	18.00	5,514,000
Total	2002	21,400					11,414,000
	2001	17,600					9,547,000
	2000	17,100					8,379,000
Cotton							
Lint	2002	17,300	1,438^c	51,828	Bale^d	.68^e	16,917,000
	2001	25,500	1,471	78,147	Bale	.68	25,507,000
	2000	27,500	1,338	76,656	Bale	.69	25,389,000
Seed	2002			20,735	Ton	154.00	3,193,000
	2001			34,125	Ton	146.00	4,982,000
	2000			33,474	Ton	151.00	5,055,000
Oat							
Hay	2002	5,900	2.99	17,641	Ton	80.00	1,411,000
	2001	4,500	3.26	14,670	Ton	89.00	1,306,000
	2000	4,200	2.48	10,416	Ton	69.00	719,000



FIELD CROPS

Item	Year	PRODUCTION			VALUE		
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Pasture							
Irrigated	2002	4,900			Acre	\$125.00	\$613,000
	2001	4,800			Acre	125.00	600,000
	2000	4,500			Acre	125.00	563,000
Rangeland	2002	353,000			Acre	9.00	3,177,000
	2001	353,000			Acre	9.00	3,177,000
	2000	353,000			Acre	9.00	3,177,000
Sugar Beets	2002	300	33.00	9,900	Ton	37.00	366,000
	2001	630	30.00	18,900	Ton	37.00	699,000
	2000	620	29.66	18,389	Ton	35.00	644,000
Wheat							
Grain	2002	5,900	2.85	16,815	Ton	113.00	1,900,000
	2001	13,500	2.68	36,180	Ton	110.00	3,980,000
	2000	12,500	1.95	24,375	Ton	114.00	2,779,000
Silage	2002	17,800	13.48	239,944	Ton	17.00	4,079,000
	2001	8,500	10.27	87,295	Ton	18.00	1,571,000
	2000	11,100	11.98	132,978	Ton	16.00	2,128,000
Total	2002	23,700					5,979,000
	2001	22,000					5,551,000
	2000	23,600					4,907,000
Winter Forage	2002	2,800	14.94	41,832	Ton	15.00	627,000
	2001	2,000	12.40	24,800	Ton	15.00	372,000
	2000	1,000	13.26	13,260	Ton	15.00	199,000
Miscellaneous^f	2002	3,800					4,340,000
	2001	4,000					3,681,000
	2000	1,400					3,718,000
TOTAL	2002	474,000					\$81,070,000
	2001	468,750					88,779,000
	2000	469,620					78,183,000

a/ Alfalfa acreage yields both hay and silage

b/ Includes black-eyes, kidneys and limas

c/ Pounds

d/ Bale: 480 pounds

e/ Per pound

f/ Includes barley, rice, safflower, Sudan grass, seed crops, field stubble and straw





FRUIT & NUT CROPS

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Almonds ^a	2002	52,900	1.04	55,016^b	Ton	\$2,093.00	\$115,148,000
	2001	49,200	.90	44,280	Ton	1,830.00	81,032,000
	2000	47,600	.70	33,320	Ton	2,040.00	67,973,000
Almond Hulls	2002			104,530	Ton	77.00	8,049,000
	2001			84,132	Ton	75.00	6,310,000
	2000			63,308	Ton	75.00	4,748,000
Apples	2002	1,670	8.90	14,863	Ton	236.00	3,508,000
	2001	1,880	6.68	12,558	Ton	215.00	2,700,000
	2000	2,300	8.70	20,010	Ton	521.00	10,425,000
Figs	2002	8,330	1.89	15,744	Ton	985.00	15,508,000
	2001	8,510	1.43	12,169	Ton	912.00	11,098,000
	2000	9,550	1.63	15,567	Ton	591.00	9,200,000
Grapes							
Raisin Varieties							
Crushed	2002	16,300	11.23	183,049	Ton	76.00	13,912,000
	2001	7,800	7.16	55,848	Ton	78.00	4,356,000
	2000	8,640	10.45	90,288	Ton	119.00	10,744,000
Dried	2002	19,300	2.77	53,461	Ton	433.00	23,149,000
	2001	33,480	1.87	62,608	Ton	525.00	32,869,000
	2000	34,640	2.64	91,450	Ton	600.00	54,870,000
Fresh	2002	2,380	9.68	23,038	Ton	997.00	22,969,000
	2001	2,480	7.00	17,360	Ton	690.00	11,978,000
	2000	2,520	7.85	19,782	Ton	893.00	17,665,000
Table Varieties	2002	2,370	8.11	19,221	Ton	1,006.00	19,336,000
	2001	2,580	7.08	18,266	Ton	700.00	12,786,000
	2000	2,640	7.27	19,193	Ton	960.00	18,425,000
Wine Varieties ^c							
Red Varieties	2002	27,300	10.23	279,279	Ton	161.00	44,964,000
	2001	24,780	8.26	204,683	Ton	188.00	38,480,000
	2000	24,030	9.60	230,688	Ton	237.00	54,673,000
White Varieties	2002	24,000	9.55	229,200	Ton	134.00	30,713,000
	2001	23,390	9.09	212,615	Ton	159.00	33,806,000
	2000	23,740	10.05	238,587	Ton	161.00	38,413,000
Total Grapes	2002	91,650					155,043,000
	2001	94,510					134,275,000
	2000	96,210					194,790,000
Nectarines	2002	450	7.66	3,447	Ton	530.00	1,827,000
	2001	690	4.74	3,271	Ton	615.00	2,011,000
	2000	610	7.59	4,630	Ton	626.00	2,898,000



FRUIT & NUT CROPS

Item	Year	PRODUCTION			VALUE		
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Olives	2002	1,820	5.63	10,247	Ton	\$625.00	\$6,404,000
	2001	1,730	4.88	8,442	Ton	728.00	6,146,000
	2000	1,780	3.84	6,835	Ton	736.00	5,031,000
Oranges	2002	3,910	10.42	40,742	Ton	208.00	8,474,000
	2001	3,460	10.73	37,126	Ton	169.00	6,274,000
	2000	3,830	12.37	47,377	Ton	128.00	6,064,000
Peaches							
Cling	2002	990	17.08	16,909	Ton	211.00	3,568,000
	2001	940	10.27	9,654	Ton	221.00	2,133,000
	2000	1,130	18.83	21,278	Ton	220.00	4,681,000
Freestone	2002	940	14.50	13,630	Ton	490.00	6,679,000
	2001	870	10.76	9,361	Ton	357.00	3,342,000
	2000	950	12.69	12,056	Ton	359.00	4,328,000
Pistachios	2002	21,500	1.87	40,205^b	Ton	2,333.00	93,798,000
	2001	19,600	0.80	15,680	Ton	2,144.00	33,618,000
	2000	19,270	1.59	30,639	Ton	2,051.00	62,841,000
Plums	2002	970	8.48	8,226	Ton	535.00	4,401,000
	2001	1,050	5.87	6,164	Ton	525.00	3,236,000
	2000	990	10.50	10,395	Ton	634.00	6,590,000
Plums, Dried^d	2002	1,810	3.60	6,516	Ton	793.00	5,167,000
	2001	1,750	2.56	4,480	Ton	756.00	3,387,000
	2000	1,580	2.63	4,155	Ton	926.00	3,848,000
Walnuts	2002	940	1.25	1,175	Ton	1,126.00	1,323,000
	2001	1,020	1.37	1,397	Ton	1,226.00	1,713,000
	2000	1,210	1.33	1,609	Ton	1,290.00	2,076,000
Miscellaneous							
Fruits & Nuts ^e	2002	1,180					4,203,000
	2001	960					3,167,000
	2000	1,080					4,394,000
Orchard Firewood	2002			6,600	Cord		759,000
	2001			6,000	Cord		660,000
	2000			5,000	Cord		525,000
TOTAL	2002	189,000					\$433,859,000
	2001	186,170					301,102,000
	2000	188,090					390,412,000

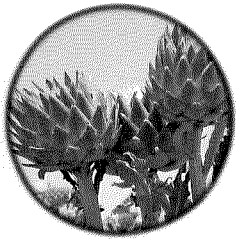
a/ Meat basis

b/ Reflects total production, including imperfect stock; price weighted accordingly

c/ Includes table grapes crushed

d/ Reported previously under Prunes; dried weight

e/ Includes apricots, berries, cherries, kiwis, pears, pecans, persimmons, pomegranates, tangelos, tangerines, and strawberries



VEGETABLE CROPS

Item	Year	Harvested Acreage	Total Value
Vegetables ^a	2002	3,700	\$25,763,000
	2001	3,100	13,602,000
	2000	3,400	15,400,000

a/ Includes artichokes, all cabbage, carrots, cucumbers, eggplant, garlic, herbs, melons, onions, all peppers, potatoes, all squash, all tomatoes, and miscellaneous truck crops



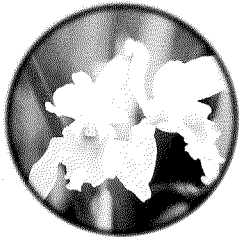
LIVESTOCK AND POULTRY

Item	Year	Head	Liveweight	Unit	Per Unit	Total
Cattle and Calves ^a	2002	57,800	425,000	CWT ^b	\$57.00	\$24,225,000
	2001	52,600	390,400	CWT	61.00	23,814,000
	2000	50,700	375,000	CWT	59.00	22,125,000
Replacement Heifers ^c	2002	25,000			1,750.00	43,750,000
	2001	22,000			1,600.00	35,200,000
	2000	21,000			1,490.00	31,290,000
Poultry	2002					23,801,000
	2001					23,489,000
	2000					26,291,000
TOTAL	2002					\$91,776,000
	2001					82,503,000
	2000					79,706,000

a/ Range and dairy cattle sold for beef

b/ Hundredweight: 100 pounds

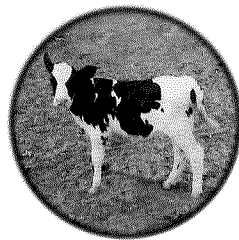
c/ Milk cows



NURSERY PRODUCTS

Item	Year	Field Acres	House Sq. Ft.	Total Value
Nursery Stock ^a	2002	300	555,000	\$18,271,000
	2001	860	507,000	24,543,300
	2000	740	515,000	37,500,000

a/ Includes grapevines, fruit trees, nut trees and ornamentals

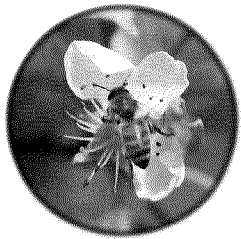


LIVESTOCK AND POULTRY PRODUCTS

Item	Year	PRODUCTION		VALUE	
		Production	Unit	Per Unit	Per Total
Milk Market ^a	2002	10,073,081	CWT	\$10.73	\$108,120,000
	2001	9,039,069	CWT	13.76	124,345,000
	2000	8,442,327	CWT	11.30	95,389,000
Milk Manufacturing ^a	2002	65,472	CWT	11.04	723,000
	2001	47,386	CWT	13.86	657,000
	2000	73,977	CWT	10.19	753,000
Other Products ^b	2002				10,779,000
	2001				8,798,000
	2000				5,992,000
TOTAL	2002				\$119,622,000
	2001				133,800,000
	2000				102,134,000

a/ Madera County has 56 dairies, with 40,800 lactating cows

b/ Includes aquaculture, beneficial insect production, ducks, market eggs, hogs, manure, sheep, lambs and wool



APIARY PRODUCTS

Item	Year	PRODUCTION		VALUE	
		Total	Unit	Per Unit	Total
Apiary Products					
Beeswax	2002	11,900	Pound	\$1.00	\$12,000
	2001	10,300	Pound	1.04	11,000
	2000	14,500	Pound	1.20	17,000
Honey	2002	815,000	Pound	1.24	1,011,000
	2001	668,000	Pound	0.53	354,000
	2000	664,200	Pound	0.49	325,000
Pollination	2002	146,000	Colony	45.90	6,701,000
	2001	124,800	Colony	43.50	5,429,000
	2000	131,900	Colony	40.90	5,393,000
TOTAL	2002				\$7,724,000
	2001				5,794,000
	2000				5,735,000

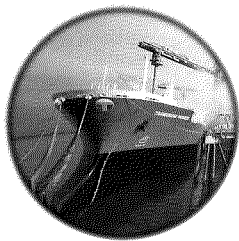


FOREST PRODUCTS

Item	Year	Production	Unit	Total Value
Timber	2002	5,905	MBF^a	\$1,125,000
	2001	6,672	MBF	1,353,000
	2000	8,228	MBF	2,082,000
Firewood	2002	3,000	Cords^b	300,000
	2001	3,530	Cords	318,000
	2000	2,970	Cords	253,000
TOTAL	2002			\$1,425,000
	2001			1,671,000
	2000			2,335,000

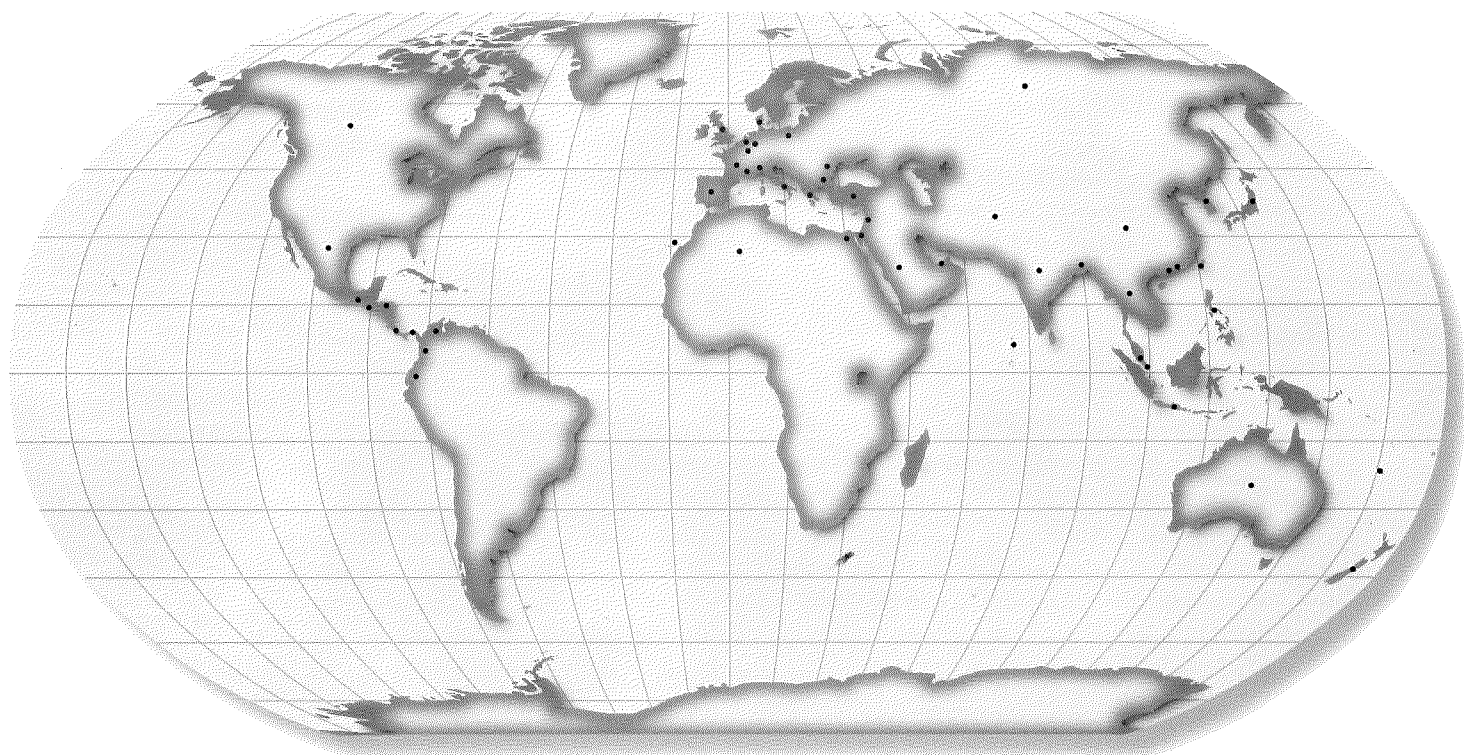
a/ Million Board Feet

b/ Cord: 128 cubic feet



COUNTRIES RECEIVING MADERA COUNTY PRODUCE IN 2002

Afghanistan	Guatemala	People's Republic of
Algeria	Honduras	China
Australia	Hong Kong	Philippines
Austria	India	Poland
Bangladesh	Indonesia	Romania
Belgium	Israel	Russian Federation
Bulgaria	Italy	Saudi Arabia
Canada	Japan	Singapore
Canary Islands	Korea	Spain
Columbia	Lebanon	Switzerland
Costa Rica	Macau	Taiwan
Denmark	Malaysia	Thailand
Ecuador	Maldives	Turkey
Egypt	Mexico	United Arab Emirates
El Salvador	Netherlands	United Kingdom
France	New Caledonia	Venezuela
Germany	New Zealand	
Greece	Panama	





SUSTAINABLE AGRICULTURE REPORT

PEST PREVENTION

Pest prevention programs are mandated by the California Food and Agricultural Code to prevent the introduction and spread of pests in California. Pest prevention involves three strata: pest exclusion, pest detection, and integrated pest control.

The **Pest Exclusion Program** prevents the introduction of injurious pests that are not of common occurrence in the county.

Twenty-one nursery locations were inspected to ensure pest cleanliness. In addition, 650 shipments of plant material, received by nurseries, were inspected for potentially injurious pests prior to retail sale.

Over 4,000 beehives, transported into the county for pollination, were inspected for Red Imported Fire Ants (*Solenopsis invicta*). Over 17,000 acres were surveyed for the presence of Red Imported Fire Ants. An infestation was discovered on a 40-acre site; the infestation was treated. Of the 742 acres under treatment for Red Imported Fire Ants in 2000, 122 acres continue to be treated.

Countries receiving agricultural commodities require certification that the commodities are free from potentially injurious pests. Over 1,550 phytosanitary inspections were performed on Madera County commodities destined for export.

The **Pest Detection Program** utilizes insect traps and surveys for the detection of foreign pests which may have eluded exclusion efforts.

The trapping program in Madera County targeted multiple pests, including the following:

Apple Maggot (<i>Rhagoletis pomonella</i>)	Caribbean Fruit Fly (<i>Anastrepha suspense</i>)
Gypsy Moth (<i>Lymantria dispar</i>)	Mediterranean Fruit Fly (<i>Ceratitis capitata</i>)
Japanese Beetle (<i>Popillia japonica</i>)	Melon Fly (<i>Dacus cucurbitae</i>)
Khapra Beetle (<i>Trogoderma granarium</i>)	Mexican Fruit Fly (<i>Anastrepha ludens</i>)
European Corn Borer (<i>Ostrinia nubilalis</i>)	Oriental Fruit Fly (<i>Dacus dorsalis</i>)
European Pine Shoot Moth (<i>Rhyacionia buoliana</i>)	

Over 1,000 traps were placed in the county, with 11,500 trap servicings performed during the 2002 season.

On May 9, 2002, routine trap servicing revealed a single male Oriental Fruit Fly, the first ever found in the history of Madera County. Over 340 traps were immediately deployed over an 81-square-mile area, centered on the initial find. Nearly 4,000 trap servicings over the ensuing three months revealed no additional Oriental Fruit Flies.

The **Integrated Pest Control Program** strives to eradicate infestations of new pests before they become widespread. Pink Bollworm (*Pectinophora gossypiella*), a non-established and economically significant pest of cotton, is controlled by post-season plowdown of cotton plants. In Madera County, plowdown of 17,300 acres was verified, ensuring the destruction of habitat supportive of this pest.

PEST MANAGEMENT

The Biological Control Program involves the utilization of natural parasites and predators to reduce populations of insects or weeds. We have distributed biological control agents active against one insect pest as well as three invasive weeds.

Pest:	Control Agent(s):
Ash Whitefly (<i>Siphoninus phillyreae</i>)	Parasitic wasp (<i>Encarsia nr. inaron</i>)
Klamath Weed (<i>Hypericum perforatum</i>)	Leaf beetle (<i>Chrysolina quadrigemina</i>)
Puncturevine (<i>Tribulus terrestris</i>)	Stem and seed weevils (<i>Microlarinus typriformis and lareynii</i>)
Yellow Starthistle (<i>Centaurea solstitialis</i>)	Bud weevil (<i>Bangasternus orientalis</i>) Hairy weevil (<i>Eustenopus villosus</i>) Peacock fly (<i>Chaetorellia australis</i>) Seed head gall fly (<i>Urophora sirunaseva</i>)

Control agents against the Ash Whitefly and puncturevine were released countywide. Control agents against Klamath Weed and Yellow Starthistle were released at three locations each.

The **Glassy-winged Sharpshooter Program** serves to detect and control the vector of Pierce's Disease, a potentially catastrophic disease of vineyards. This program involved the placement of 640 traps, with 9,000 subsequent trap servicings. In addition, incoming shipments of host material and susceptible county plantings were inspected.

The **Vertebrate Pest Management Program** provides expertise and materials, to growers and homeowners, for the control of certain depredating vertebrate pests.

ORGANIC FARMING

Thirty organic farms, totaling 3,850 acres, were registered in Madera County in 2002. Utilizing organic principles defined in the California Organic Food Act of 1990, these farms produce a wide array of commodities:

almonds, apples, artichokes, arugula, basil, green beans, beets, broccoli, brussels sprouts, cabbage, cantaloupe, cardoon, carrots, celery, chard, cherries, chicory, cilantro, collards, sweet corn, cotton, cucumbers, eggplant, fennel, figs, edible flowers, garlic, gourds, grapes (table, raisin, wine), honeydew, kale, kohlrabi, leeks, lettuce, nectarines, okra, onions, parsley, parsnips, peaches, peas, peppers, plums, dried plums, potatoes, radish, spinach, squash, tomatillos, tomatoes, turnips, watermelons

The total value of organic production in Madera County during 2002 was \$5,382,000.



AGRICULTURAL CROP REPORT SUMMARY

Item	Year	Harvested Acreage	Total Value
Apiary	2002		\$7,724,000
	2001		5,794,000
	2000		5,735,000
Field Crops	2002	474,000	81,070,000
	2001	468,750	88,779,000
	2000	469,620	78,183,000
Fruit and Nut Crops	2002	189,000	433,859,000
	2001	186,170	301,102,000
	2000	188,090	390,412,000
Livestock and Poultry	2002		91,776,000
	2001		82,503,000
	2000		79,706,000
Livestock and Poultry Products	2002		119,622,000
	2001		133,800,000
	2000		102,134,000
Nursery	2002	300	18,271,000
	2001	860	24,543,000
	2000	740	37,500,000
Timber Products	2002		1,425,000
	2001		1,671,000
	2000		2,335,000
Vegetable Crops	2002	3,700	25,763,000
	2001	3,100	13,602,000
	2000	3,400	15,400,000
TOTAL	2002		\$779,510,000
	2001		651,794,000
	2000		711,405,000

MADERA COUNTY DEPARTMENT OF AGRICULTURE

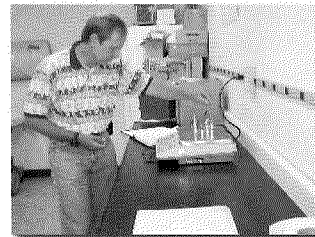
WEIGHTS AND MEASURES

What We Do...

Our mission is to ensure fairness in business transactions. Regulation requires that packages be labeled to inform the consumer of the contents. We inspect packages, counting or weighing or measuring the contents to verify that the label is correct. We measure bulk firewood, ensuring that the advertised quantity was delivered.



Each of the commercial scales in the county is checked for accuracy, including scales used to weigh grocery items, cattle, prescription medicines, bulk feed or hardware, recycled cans, trucks, or train cars. Commercial meters are also tested, ensuring that petroleum products, propane, water, and electricity are delivered as advertised.



We verify that prices advertised by stores are honored, checking price tags, signs, and advertisements against scanner prices. We routinely make undercover purchases, and investigate overcharges reported by consumers.



On any given day in Madera County, there may be as many as 100 heavy-capacity scales in use. Scales are considered to be in the heavy-capacity category when they are capable of receiving loads of one thousand pounds or more.

Our department is responsible for ensuring that each scale has been installed properly and is being used correctly for its intended purpose. Madera County personnel regularly inspect and test each of the 70 vehicle scales used to determine the weight, and therefore the value, of truckloads of grapes, nuts, tomatoes, or hay.

Inspectors also test the 30 large-capacity platform scales, used to weigh bins of raisins, nuts or fruits, as well as bales of cotton.

These scales are tested using a heavy-capacity test truck. The ten-wheel diesel truck is modified with a hydraulic crane capable of lifting four 1,000-lb weights. The truck carries a motorized weight mover capable of transporting up to three 1,000-lb weights. The weight mover is used during the shift test, in which weight is moved across the surface of the scale. The shift test ensures that the scale provides an accurate weight, unchanged by the position of the load on the surface of the scale.



Madera County
Department of Agriculture
332 Madera Avenue
Madera, California 93637

Madera County

Agricultural Crop Report
-2003-



Madera County Department of Agriculture Weights and Measures

Robert J. Rolan, Agricultural Commissioner
Sealer of Weights and Measures

Jay Seslowe, Assistant Agricultural
Commissioner/Sealer

A. G. Kawamura, Secretary
California Department of Food and Agriculture
and
The Honorable Board of Supervisors
Frank Bigelow, Vern Moss, Ronn Dominici, John Silva, and Gary Gilbert

In accordance with the provisions of Section 2279 of the California Food and Agricultural Code, I am pleased to submit the 2003 Agricultural Crop Report.

The gross production value of Madera County agricultural commodities in 2003 was \$760,784,000. This represents a decrease of 2.4% from the 2002 production value.

Field crop production decreased slightly for most commodities. Wheat production fell more significantly, with over two-thirds of Madera County wheat acreage affected by wheat stripe rust early in the season.

Almonds, enjoying continuing increases in acreage and a 42% increase in production value, became the number one crop in Madera County in 2003. Grape values were recovering, though not enough to offset substantial decreases in harvested acreage and yield per acre. Pistachio pollination was jeopardized by uneven temperatures, resulting in a 70% decrease in yield. Apples, olives, and many of the stone fruits saw increases in yield as less-productive orchards were pulled out of production.

Dairy herd numbers continued to grow in Madera County during 2003. Market milk production increased over 14% during 2003, resulting in an \$18.8 million increase in production value. Replacement heifers also saw increases in production value, with an overall increase of nearly \$3.3 million over the 2002 production value.

Nursery production acreage increased 58% in 2003, with an accompanying increase in production value of nearly \$2.4 million. In contrast, vegetable crop production values decreased over \$7 million.

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 preparation of a report of this type requires extensive collaboration, and I sincerely appreciate the contributions of our growers, the staff of the University of California Cooperative Extension, industry representatives, and my staff.

Sincerely,

Robert J. Rolan
Agricultural Commissioner

Field Crops

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Alfalfa							
Hay	2003	40,100	7.19	288,319	Ton	\$102.00	\$29,409,000
	2002	40,700	7.42	301,994	Ton	102.00	30,803,000
	2001	34,500	7.50	258,750	Ton	124.00	32,085,000
Silage ^a	2003			61,400	Ton	32.00	1,965,000
	2002			63,700	Ton	29.00	1,847,000
	2001			38,112	Ton	29.00	1,105,000
Total	2003	40,100					31,374,000
	2002	40,700					32,650,000
	2001	34,500					33,190,000
Beans, Dry^b							
	2003	980	1.42	1,392	Ton	526.00	732,000
	2002	460	1.35	621	Ton	616.00	383,000
	2001	220	1.35	297	Ton	562.00	167,000
Corn							
Grain	2003	2,900	4.17	12,093	Ton	112.00	1,354,000
	2002	2,700	5.13	13,851	Ton	136.00	1,884,000
	2001	2,000	4.24	8,480	Ton	131.00	1,111,000
Silage	2003	18,800	23.89	449,132	Ton	21.00	9,432,000
	2002	18,700	25.48	476,476	Ton	20.00	9,530,000
	2001	15,600	25.75	401,700	Ton	21.00	8,436,000
Total	2003	21,700					10,786,000
	2002	21,400					11,414,000
	2001	17,600					9,547,000
Cotton							
Lint	2003	18,700	1,295^c	50,451	Bale^d	.75^e	18,162,000
	2002	17,300	1,438	51,828	Bale	.68	16,917,000
	2001	25,500	1,471	78,147	Bale	.68	25,507,000
Seed	2003			20,163	Ton	179.00	3,609,000
	2002			20,735	Ton	154.00	3,193,000
	2001			34,125	Ton	146.00	4,982,000
Oat							
Hay	2003	4,600	2.81	12,926	Ton	79.00	1,021,000
	2002	5,900	2.99	17,641	Ton	80.00	1,411,000
	2001	4,500	3.26	14,670	Ton	89.00	1,306,000
Pasture							
Irrigated	2003	5,000			Acre	130.00	650,000
	2002	4,900			Acre	125.00	613,000
	2001	4,800			Acre	125.00	600,000

Field Crops

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Rangeland	2003	353,000			Acre	\$10.00	\$3,530,000
	2002	353,000			Acre	9.00	3,177,000
	2001	353,000			Acre	9.00	3,177,000
Wheat							
Grain	2003	4,500	1.79	8,055	Ton	125.00	1,007,000
	2002	5,900	2.85	16,815	Ton	113.00	1,900,000
	2001	13,500	2.68	36,180	Ton	110.00	3,980,000
Silage	2003	15,100	12.99	196,149	Ton	18.00	3,531,000
	2002	17,800	13.48	239,944	Ton	17.00	4,079,000
	2001	8,500	10.27	87,295	Ton	18.00	1,571,000
Total	2003	19,600					4,538,000
	2002	23,700					5,979,000
	2001	22,000					5,551,000
Winter Forage	2003	3,200	11.51	36,832	Ton	15.00	552,000
	2002	2,800	14.94	41,832	Ton	15.00	627,000
	2001	2,000	12.40	24,800	Ton	15.00	372,000
Miscellaneous^f	2003	2,700					3,420,000
	2002	3,800					4,340,000
	2001	4,000					3,681,000
TOTAL	2003	469,600					\$78,374,000
	2002	474,000					81,070,000
	2001	468,750					88,779,000

a/ Alfalfa acreage yields both hay and silage

b/ Includes black-eyes, kidneys and limas

c/ Pounds

d/ Bale: 480 pounds

e/ Per pound

f/ Includes barley, rice, safflower, Sudan grass, seed crops, sugar beets, field stubble and straw

Vegetable Crops

Item	Year	Harvested Acreage	Total Value
Vegetables^a	2003	3,600	\$18,317,000
	2002	3,700	25,763,000
	2001	3,100	13,602,000

a/ Includes artichokes, all cabbage, carrots, cucumbers, eggplant, garlic, herbs, melons, onions, all peppers, potatoes, all squash, all tomatoes, and miscellaneous truck crops

Fruit & Nut Crops

		PRODUCTION				VALUE	
Item	Year	Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Almonds^a	2003	55,200	0.94	51,888^b	Ton	\$2,987.00	\$154,989,000
	2002	52,900	1.04	55,016	Ton	2,093.00	115,148,000
	2001	49,200	.90	44,280	Ton	1,830.00	81,032,000
Almond Hulls	2003			98,587	Ton	78.00	7,690,000
	2002			104,530	Ton	77.00	8,049,000
	2001			84,132	Ton	75.00	6,310,000
Apples	2003	1,420	15.20	21,584	Ton	221.00	4,770,000
	2002	1,670	8.90	14,863	Ton	236.00	3,508,000
	2001	1,880	6.68	12,558	Ton	215.00	2,700,000
Figs	2003	8,200	1.72	14,104	Ton	957.00	13,498,000
	2002	8,330	1.89	15,744	Ton	985.00	15,508,000
	2001	8,510	1.43	12,169	Ton	912.00	11,098,000
Grapes							
Raisin Varieties							
Crushed	2003	12,400	9.14	113,336	Ton	93.00	10,540,000
	2002	16,300	11.23	183,049	Ton	76.00	13,912,000
	2001	7,800	7.16	55,848	Ton	78.00	4,356,000
Dried	2003	20,700	2.12	43,884	Ton	595.00	26,111,000
	2002	19,300	2.77	53,461	Ton	433.00	23,149,000
	2001	33,480	1.87	62,608	Ton	525.00	32,869,000
Fresh	2003	1,980	9.12	18,058	Ton	1,033.00	18,654,000
	2002	2,380	9.68	23,038	Ton	997.00	22,969,000
	2001	2,480	7.00	17,360	Ton	690.00	11,978,000
Table Varieties	2003	1,960	6.57	12,877	Ton	1,204.00	15,504,000
	2002	2,370	8.11	19,221	Ton	1,006.00	19,336,000
	2001	2,580	7.08	18,266	Ton	700.00	12,786,000
Wine Varieties ^c							
Red Varieties	2003	29,000	8.72	252,880	Ton	178.00	45,013,000
	2002	27,300	10.23	279,279	Ton	161.00	44,964,000
	2001	24,780	8.26	204,683	Ton	188.00	38,480,000
White Varieties	2003	21,200	10.70	226,840	Ton	143.00	32,438,000
	2002	24,000	9.55	229,200	Ton	134.00	30,713,000
	2001	23,390	9.09	212,615	Ton	159.00	33,806,000
Total Grapes	2003	87,240					148,260,000
	2002	91,650					155,043,000
	2001	94,510					134,275,000
Nectarines	2003	590	8.73	5,151	Ton	609.00	3,137,000
	2002	450	7.66	3,447	Ton	530.00	1,827,000
	2001	690	4.74	3,271	Ton	615.00	2,011,000

Fruit & Nut Crops

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Olives	2003	1,490	6.14	9,149	Ton	\$420.00	\$3,842,000
	2002	1,820	5.63	10,247	Ton	625.00	6,404,000
	2001	1,730	4.88	8,442	Ton	728.00	6,146,000
Oranges	2003	3,710	14.36	53,276	Ton	124.00	6,606,000
	2002	3,910	10.42	40,742	Ton	208.00	8,474,000
	2001	3,460	10.73	37,126	Ton	169.00	6,274,000
Peaches							
Cling	2003	560	16.74	9,374	Ton	222.00	2,081,000
	2002	990	17.08	16,909	Ton	211.00	3,568,000
	2001	940	10.27	9,654	Ton	221.00	2,133,000
Freestone	2003	1,010	12.01	12,130	Ton	278.00	3,372,000
	2002	940	14.50	13,630	Ton	490.00	6,679,000
	2001	870	10.76	9,361	Ton	357.00	3,342,000
Pistachios	2003	22,900	0.55	12,595^b	Ton	2,532.00	31,891,000
	2002	21,500	1.87	40,205	Ton	2,333.00	93,798,000
	2001	19,600	0.80	15,680	Ton	2,144.00	33,618,000
Plums	2003	810	7.78	6,302	Ton	434.00	2,735,000
	2002	970	8.48	8,226	Ton	535.00	4,401,000
	2001	1,050	5.87	6,164	Ton	525.00	3,236,000
Plums, Dried^d	2003	1,560	2.77	4,321	Ton	729.00	3,150,000
	2002	1,810	3.60	6,516	Ton	793.00	5,167,000
	2001	1,750	2.56	4,480	Ton	756.00	3,387,000
Walnuts	2003	1,030	1.53	1,576	Ton	1,065.00	1,678,000
	2002	940	1.25	1,175	Ton	1,126.00	1,323,000
	2001	1,020	1.37	1,397	Ton	1,226.00	1,713,000
Miscellaneous							
Fruits & Nuts ^e	2003	1,480					6,193,000
	2002	1,180					4,203,000
	2001	960					3,167,000
Orchard Firewood	2003			6,000	Cord		810,000
	2002			6,600	Cord		759,000
	2001			6,000	Cord		660,000
<hr/>							
TOTAL	2003	187,200					\$394,702,000
	2002	189,000					433,859,000
	2001	186,170					301,102,000

a/ Meat basis

b/ Reflects total production, including imperfect stock; price weighted accordingly

c/ Includes table grapes crushed

d/ Reported previously under Prunes; dried weight

e/ Includes apricots, berries, cherries, kiwis, pears, pecans, persimmons, pomegranates, tangelos, tangerines, and strawberries

Forest Products

Item	Year	Production	Unit	Total Value
Timber	2003	3,189	MBF^a	\$538,000
	2002	5,905	MBF	1,125,000
	2001	6,672	MBF	1,353,000
Firewood	2003	1,360	Cords^b	141,000
	2002	3,000	Cords	300,000
	2001	3,530	Cords	318,000
TOTAL	2003			\$679,000
	2002			1,425,000
	2001			1,671,000

a/ Million Board Feet
b/ Cord: 128 cubic feet

Nursery Products

Item	Year	Field Acres	House Sq. Ft.	Total Value
Nursery Stock^a	2003	475	570,000	\$20,660,000
	2002	300	555,000	18,271,000
	2001	860	507,000	24,543,300

a/ Includes grapevines, fruit trees, nut trees and ornamentals

Apiary Products

Item	Year	PRODUCTION		VALUE	
		Total	Unit	Per Unit	Total
Apiary Products					
Beeswax	2003	12,400	Pound	\$ 0.93	\$12,000
	2002	11,900	Pound	1.00	12,000
	2001	10,300	Pound	1.04	11,000
Honey	2003	659,000	Pound	1.31	863,000
	2002	815,000	Pound	1.24	1,011,000
	2001	668,000	Pound	0.53	354,000
Pollination	2003	151,000	Colony	51.40	7,761,000
	2002	146,000	Colony	45.90	6,701,000
	2001	124,800	Colony	43.50	5,429,000
TOTAL	2003				\$8,636,000
	2002				7,724,000
	2001				5,794,000

Livestock and Poultry

PRODUCTION					VALUE	
Item	Year	Head	Liveweight	Unit	Per Unit	Total
Cattle and Calves ^a	2003	61,700	449,000	CWT ^b	\$65.00	\$29,185,000
	2002	57,800	425,000	CWT	57.00	24,225,000
	2001	52,600	390,400	CWT	61.00	23,814,000
Replacement Heifers ^c	2003	28,500			1,650.00	47,025,000
	2002	25,000			1,750.00	43,750,000
	2001	22,000			1,600.00	35,200,000
Poultry	2003					22,125,000
	2002					23,801,000
	2001					23,489,000
TOTAL	2003					\$98,335,000
	2002					\$91,776,000
	2001					82,503,000

a/ Range and dairy cattle sold for beef

b/ Hundredweight: 100 pounds

c/ Milk cows

Livestock and Poultry Products

PRODUCTION				VALUE	
Item	Year	Production	Unit	Per Unit	Total
Milk Market ^a	2003	11,541,302	CWT	\$ 11.00	\$126,954,000
	2002	10,073,081	CWT	10.73	108,120,000
	2001	9,039,069	CWT	13.76	124,345,000
Milk Manufacturing ^a	2003	170,804	CWT	11.82	2,019,000
	2002	65,472	CWT	11.04	723,000
	2001	47,386	CWT	13.86	657,000
Other Products ^b	2003				12,108,000
	2002				10,779,000
	2001				8,798,000
TOTAL	2003				\$141,081,000
	2002				119,622,000
	2001				133,800,000

a/ Madera County has 56 dairies, with 45,700 lactating cows

b/ Includes aquaculture, beneficial insect production, ducks, market eggs, hogs, manure, sheep, lambs and wool

2003 Sustainable Agriculture Report

The **Pest Exclusion Program** prevents the introduction of injurious pests that are not of common occurrence in the county.

Twenty nursery locations were inspected for pests and plant pathogens. In addition, 650 shipments of plant material, received by nurseries, were inspected for potentially injurious pests prior to retail sale.

Over 140 locations were surveyed for Red Imported Fire Ants, including commercial nurseries, recently-landscaped residential developments, and orchards pollinated by out-of-state beehives. Nearly 350 acres are under treatment for Red Imported Fire Ants.

Countries receiving agricultural commodities require certification that the commodities are free from potentially injurious pests. Over 1,690 phytosanitary inspections were performed on Madera County commodities destined for export.

The **Pest Detection Program** utilizes insect traps and surveys for the detection of foreign pests which may have eluded exclusion efforts.

The trapping program in Madera County targeted multiple pests, including the following:

<i>Apple Maggot</i>	<i>Khapra Beetle</i>	<i>Mediterranean Fruit Fly</i>
<i>Gypsy Moth</i>	<i>European Corn Borer</i>	<i>Melon Fly</i>
<i>Japanese Beetle</i>	<i>European Pine Shoot Moth</i>	<i>Mexican Fruit Fly</i>
<i>Oriental Fruit Fly</i>	<i>Caribbean Fruit Fly</i>	

Over 1,060 traps were deployed in the county, with 12,035 trap servicings performed during the 2003 season.

The **Integrated Pest Control Program** strives to eradicate infestations of new pests before they become widespread. Pink Bollworm was controlled by post-season plowdown of 18,680 acres of cotton plants.

The **Glassy-winged Sharpshooter Program** serves to detect and control the vector of Pierce's Disease, a potentially catastrophic disease of vineyards. This program involved the placement of 690 traps, with 9,600 subsequent trap servicings. In addition, incoming shipments of host materials and susceptible county plantings were inspected

The **Vertebrate Pest Management Program** provides expertise and materials, to growers and homeowners, for the control of certain depredating vertebrate pests.

Thirty-four **Organic Farms**, totaling 3,550 acres, were registered in Madera County in 2003. Utilizing organic principals defined in the California Organic Food Act of 1990, these farms produce a wide array of commodities:

almonds, apples, apricots, artichoke, arugula, basil, green beans, beets, broccoli, brussels sprouts, cabbage, cantaloupe, cardoon, carrots, celery, chard, cherries, chicory, cilantro, collards, sweet corn, cotton, cucumbers, eggplant, fennel, figs, edible flowers, garlic, gourds, grapes (table, raisin, wine), honeydew, kale, kohlrabi, leeks, lettuce, nectarines, okra, onions, parsley, parsnips, peaches, peas, peppers, pistachio, plums, dried plums, potatoes, prunes, radish, rutabagas, spinach, squash, sudangrass, tomatillos, tomatoes, turnips, watermelons

The total value organic production in Madera County during 2003 was \$5,387,000.

Madera County
Department of Agriculture

332 Madera Avenue • Madera, CA 93637

MADERA COUNTY


AGRICULTURAL CROP REPORT

ONE

BILLION

DOLLARS

- 2004 -



The agricultural industry in Madera County has, for the first time, surpassed one billion dollars in production value. This equates to an average production value of \$2.9 million dollars per day.

This number reflects not net income, but gross income. Out of this figure flows money for production costs—money spent on seed and fertilizer and pesticides, farm equipment and fuel. Wages are paid to those who prune vines and trees, to irrigators and harvesters, to packers and processors. This money in turn is spent on housing, at grocery stores and other local businesses. Taxes are paid, both on farming property and on the income derived, supporting local schools and roads and safety personnel.

The ramifications of the success of this industry, so deeply interwoven into the fabric of the lives of the citizenry, are vast. Can this record production be sustained?

We believe that the one billion dollar benchmark will be sustained in upcoming seasons, based on the stability and diversity of commodities coming together to produce this historic high.

We expect almond production will continue to increase as newly planted acreage goes into production. We anticipate that grape values will continue to be high. We expect milk production to continue to increase, as our dairy herds grow in number. Mirroring this increase, we anticipate that replacement heifers will also increase, along with the production of field crops that feed the dairy cattle. Though pistachios are an alternate-bearing crop, and 2005 will be an “off” year, we fully expect growth in the other Madera commodities to offset this.

In addition to our ten leading crops, Madera County produces a wide range of commodities with combined values of over \$130 million. While individual crops may suffer adverse weather or pest conditions, the sheer variety of commodities included in this total provides inherent protection against significant losses on the whole.

This report, then, celebrates not only a record production value for agriculture in Madera County, but a viable and sustaining industry for the continuing growth and development of our community.



Madera County Department of Agriculture Weights and Measures

Robert J. Rolan, Agricultural Commissioner
Sealer of Weights and Measures

Jay Seslowe, Assistant Agricultural
Commissioner/Sealer

A. G. Kawamura, Secretary
California Department of Food and Agriculture
and
The Honorable Board of Supervisors

In accordance with the provisions of Section 2279 of the California Food and Agricultural Code, I am pleased to submit the 2004 Agricultural Crop Report.

Madera County set a new production record in 2004, for the first time surpassing the one billion-dollar mark. The gross production value of agricultural commodities was \$1,074,578,000, the highest in the history of Madera County. This represents a 41% increase beyond the production value achieved in 2003.

Agricultural diversity remains our strength, and this diversity is apparent in the variety of thriving commodities contributing to this production value record. Almonds remained the number one crop in Madera County for a second year. Enjoying increased acreage, and a 42% increase in value, almond production values increased \$73.4 million above the 2003 total. Grapes, having suffered depressed values for four successive years, finally saw values rebound in 2004. Despite decreased acreage, grapes attained production values \$57.5 million above the 2003 total. Pistachios, an alternate-bearing crop, produced a total tonnage triple that of 2003. In addition to high yields, pistachios enjoyed increasing acreage and value, and achieved a production value \$89.6 million above the 2003 total.

Dairy herd numbers continued to grow in Madera County during 2004. Milk production increased, as did value, resulting in a production value \$66.5 million above the 2003 total. Mirroring the increase in dairy herds, alfalfa production values increased \$6.1 million above the 2003 total. Vegetable crops gained \$6.0 million above the preceding year. Production values for nursery crops increased \$10.2 million above the 2003 total.

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 preparation of a report of this type requires extensive collaboration, and I sincerely appreciate the contributions of our growers, the staff of the University of California Cooperative Extension, industry representatives, and my staff.

Sincerely,

Robert J. Rolan
Agricultural Commissioner

MADERA COUNTY HIGHLIGHTS

County Established	March 11, 1893
County Seat	Madera (city)
Population ^a	123,109

Total County Acreage^b	1,366,951
2004 Harvested Acreage	665,800
Field Crop Acreage	122,200
Fruit and Nut Acreage	185,400
Nursery Acreage	700
Vegetable Acreage	4,500
Rangeland Acreage	353,000

Forest Acreage	414,300
U. S. Parkland Acreage	83,000

Bordering Counties

Merced County	Northwest
Mariposa County	North
Mono County	East
Fresno County	South and West

Statewide Ranking of County

Population ^a	35
Total Acreage	24
Total Agricultural Production ^b	14

Commodity, by value^c

Figs	1
Grapes, Raisin Variety	2
Pistachios	3
Olives	4
Almonds	5
Grapes, Table Variety	5
Grapes, Wine Variety	7
Milk, Market	10

Nationwide Ranking of County

Total Agricultural Production ^b	23
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a/ US Bureau of Census, 2000
b/ USDA Ag Census, 2002
c/ County Agricultural
Commissioner's Data, 2003

San Francisco

Lake Tahoe

Yosemite
National
Park

MADERA COUNTY AGRICULTURAL CROP REPORT

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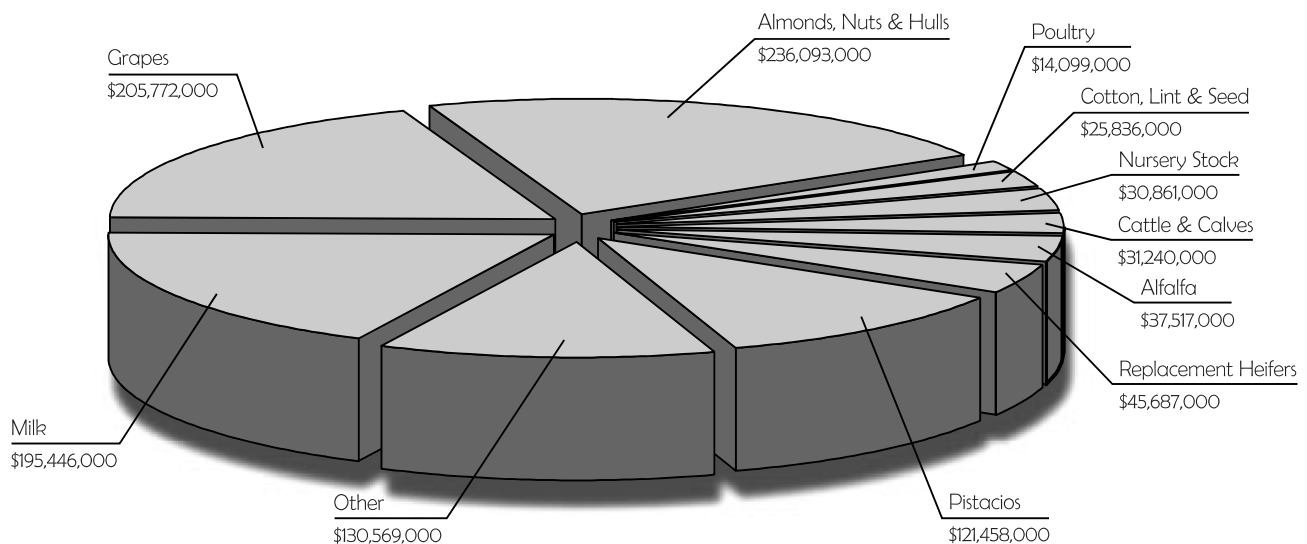


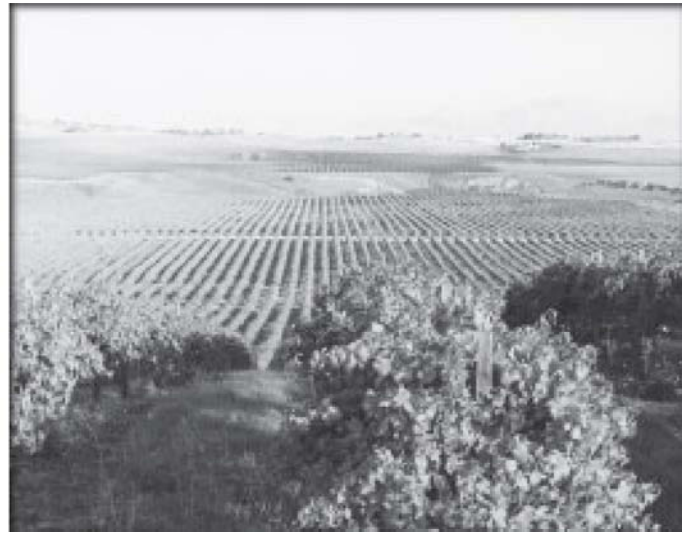
Ten Leading Crops

MADERA COUNTY 2004

Commodity	2004 Rank	2004 Dollar Value	2003 Rank
Almonds, Nuts & Hulls	1	\$236,093,000	1
Grapes	2	\$205,772,000	2
Milk	3	\$195,446,000	3
Pistachios	4	\$121,458,000	5
Replacement Heifers	5	\$45,687,000	4
Alfalfa	6	\$37,517,000	6
Cattle and Calves	7	\$31,240,000	7
Nursery Stock	8	\$30,861,000	10
Cotton, Lint & Seed	9	\$25,836,000	9
Poultry	10	\$14,099,000	8

Diversity, which serves to strengthen the agricultural economy of Madera County, is evident in this listing of our Ten Leading Crops, which include fruit and nut crops, field crops, nursery stock, dairy and beef cattle. The wide range of commodities produced in our county is further underscored by that segment of the chart entitled "Other," which includes such diverse products as kiwifruit, frogs, sweet basil, wool, cutting flowers, eggplant, firewood, and beeswax.





MADERA COUNTY

AGRICULTURAL PRODUCTION & VALUE

The information in the following tables is compiled and made available in order to provide an annual record of agricultural production within the county. Yield, production, and pricing information is gathered from both growers and processors. Acreages shown are not intended to reflect planted acreage, but rather the total acreage harvested during the current growing season. Weighted averages of yields and unit values are then prepared for the individual commodities, allowing determination of countywide totals for production and value. Values represent the gross value of the commodities produced; no attempt is made to reflect the cost of production and marketing, or net income to the producer.

ONE
BILLION
DOLLARS



Field Crops

		PRODUCTION				VALUE	
Item	Year	Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Alfalfa							
Hay	2004	41,500	7.47	310,005	Ton	\$115.00	\$35,651,000
	2003	40,100	7.19	288,319	Ton	102.00	29,409,000
	2002	40,700	7.42	301,994	Ton	102.00	30,803,000
Silage ^a	2004			58,300	Ton	32.00	1,866,000
	2003			61,400	Ton	32.00	1,965,000
	2002			63,700	Ton	29.00	1,847,000
Total	2004	41,500					37,517,000
	2003	40,100					31,374,000
	2002	40,700					32,650,000
Beans, Dry^b							
	2004	700	1.58	1,106	Ton	562.00	622,000
	2003	980	1.42	1,392	Ton	526.00	732,000
	2002	460	1.35	621	Ton	616.00	383,000
Corn							
Grain	2004	2,700	5.09	13,743	Ton	132.00	1,814,000
	2003	2,900	4.17	12,093	Ton	112.00	1,354,000
	2002	2,700	5.13	13,851	Ton	136.00	1,884,000
Silage	2004	18,600	24.86	462,396	Ton	22.00	10,173,000
	2003	18,800	23.89	449,132	Ton	21.00	9,432,000
	2002	18,700	25.48	476,476	Ton	20.00	9,530,000
Total	2004	21,300					11,987,000
	2003	21,700					10,786,000
	2002	21,400					11,414,000
Cotton							
Lint	2004	19,600	1,469 ^c	59,984	Bale ^d	.75 ^e	21,594,000
	2003	18,700	1,295	50,451	Bale	.75	18,162,000
	2002	17,300	1,438	51,828	Bale	.68	16,917,000
Seed	2004			24,100	Ton	176.00	4,242,000
	2003			20,163	Ton	179.00	3,609,000
	2002			20,735	Ton	154.00	3,193,000
Oat							
Hay	2004	3,900	3.16	12,324	Ton	92.00	1,134,000
	2003	4,600	2.81	12,926	Ton	79.00	1,021,000
	2002	5,900	2.99	17,641	Ton	80.00	1,411,000
Pasture							
Irrigated	2004	5,000			Acre	130.00	650,000
	2003	5,000			Acre	130.00	650,000
	2002	4,900			Acre	125.00	613,000
Rangeland							
	2004	353,000			Acre	11.00	3,883,000
	2003	353,000			Acre	10.00	3,530,000
	2002	353,000			Acre	9.00	3,177,000



Field Crops

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Wheat							
Grain	2004	4,200	2.65	11,130	Ton	\$128.00	\$1,425,000
	2003	4,500	1.79	8,055	Ton	125.00	1,007,000
	2002	5,900	2.85	16,815	Ton	113.00	1,900,000
Silage	2004	16,800	11.90	199,920	Ton	17.00	3,399,000
	2003	15,100	12.99	196,149	Ton	18.00	3,531,000
	2002	17,800	13.48	239,944	Ton	17.00	4,079,000
Total	2004	21,000					4,824,000
	2003	19,600					4,538,000
	2002	23,700					5,979,000
Winter Forage							
	2004	5,200	10.42	54,184	Ton	17.00	921,000
	2003	3,200	11.51	36,832	Ton	15.00	552,000
	2002	2,800	14.94	41,832	Ton	15.00	627,000
Miscellaneous^f							
	2004	4,000					4,274,000
	2003	2,700					3,420,000
	2002	3,800					4,340,000
TOTAL							
	2004	475,200					\$91,648,000
	2003	469,600					78,374,000
	2002	474,000					81,070,000

a/ Alfalfa acreage yields both hay and silage

b/ Includes black-eyes, kidneys and limas

c/ Pounds

d/ Bale: 480 pounds

e/ Per pound

f/ Includes barley, sorghum, Sudan grass, seed crops, sugar beets, field stubble and straw



Vegetable Crops

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Tomatoes							
Fresh	2004	400	15.90	6,360	Ton	\$522.00	\$3,320,000
	2003	400	13.06	5,224	Ton	564.00	2,946,000
	2002	500	18.26	9,130	Ton	510.00	4,656,000
Processed	2004	2,900	39.40	114,260	Ton	49.00	5,599,000
	2003	1,700	34.10	57,970	Ton	50.00	2,899,000
	2002	1,700	41.49	70,533	Ton	49.00	3,456,000
Miscellaneous^a							
	2004	1,200					15,425,000
	2003	1,500					12,472,000
	2002	1,500					17,651,000

a/ Includes artichokes, all cabbage, carrots, cucumbers, eggplant, garlic, herbs, melons, onions, all peppers, potatoes, all squash, and miscellaneous truck crops



Fruit & Nut Crops

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Almonds ^a	2004	56,600	0.95	53,770 ^b	Ton	\$4,235.00	\$227,716,000
	2003	55,200	0.94	51,888	Ton	2,987.00	154,989,000
	2002	52,900	1.04	55,016	Ton	2,093.00	115,148,000
Almond Hulls	2004			102,163	Ton	82.00	8,377,000
	2003			98,587	Ton	78.00	7,690,000
	2002			104,530	Ton	77.00	8,049,000
Apples	2004	1,290	9.46	12,203	Ton	294.00	3,588,000
	2003	1,420	15.20	21,584	Ton	221.00	4,770,000
	2002	1,670	8.90	14,863	Ton	236.00	3,508,000
Figs	2004	7,600	1.67	12,692	Ton	980.00	12,438,000
	2003	8,200	1.72	14,104	Ton	957.00	13,498,000
	2002	8,330	1.89	15,744	Ton	985.00	15,508,000
Grapes							
Raisin Varieties							
Crushed	2004	20,100	10.02	201,402	Ton	198.00	39,878,000
	2003	12,400	9.14	113,336	Ton	93.00	10,540,000
	2002	16,300	11.23	183,049	Ton	76.00	13,912,000
Dried	2004	15,100	2.22	33,522	Ton	1170.00	39,221,000
	2003	20,700	2.12	43,884	Ton	595.00	26,111,000
	2002	19,300	2.77	53,461	Ton	433.00	23,149,000
Fresh	2004	1,260	9.38	11,819	Ton	1,206.00	14,253,000
	2003	1,980	9.12	18,058	Ton	1,033.00	18,654,000
	2002	2,380	9.68	23,038	Ton	997.00	22,969,000
Table Varieties	2004	2,060	7.20	14,832	Ton	1,236.00	18,332,000
	2003	1,960	6.57	12,877	Ton	1,204.00	15,504,000
	2002	2,370	8.11	19,221	Ton	1,006.00	19,336,000
Wine Varieties ^c							
Red Varieties	2004	24,700	9.07	224,029	Ton	248.00	55,559,000
	2003	27,500*	8.72	239,800	Ton	178.00	42,684,000
	2002	27,300	10.23	279,279	Ton	161.00	44,964,000
White Varieties	2004	21,400	8.74	187,036	Ton	206.00	38,529,000
	2003	22,700*	10.70	242,890	Ton	143.00	34,733,000
	2002	24,000	9.55	229,200	Ton	134.00	30,713,000
Total Grapes	2004	84,620					205,772,000
	2003	87,240*					148,226,000*
	2002	91,650					155,043,000
Nectarines	2004	530	10.90	5,777	Ton	534.00	3,085,000
	2003	590	8.73	5,151	Ton	609.00	3,137,000
	2002	450	7.66	3,447	Ton	530.00	1,827,000



Fruit & Nut Crops

Item	Year	PRODUCTION				VALUE	
		Harvested Acreage	Per Acre	Total	Unit	Per Unit	Total
Olives	2004	1,240	3.29	4,080	Ton	\$637.00	\$2,599,000
	2003	1,490	6.14	9,149	Ton	420.00	3,842,000
	2002	1,820	5.63	10,247	Ton	625.00	6,404,000
Oranges	2004	3,550	14.31	50,801	Ton	189.00	9,601,000
	2003	3,710	14.36	53,276	Ton	124.00	6,606,000
	2002	3,910	10.42	40,742	Ton	208.00	8,474,000
Peaches							
	Cling						
Cling	2004	510	13.91	7,094	Ton	246.00	1,745,000
	2003	560	16.74	9,374	Ton	222.00	2,081,000
	2002	990	17.08	16,909	Ton	211.00	3,568,000
Freestone	2004	960	13.73	13,181	Ton	338.00	4,455,000
	2003	1,010	12.01	12,130	Ton	278.00	3,372,000
	2002	940	14.50	13,630	Ton	490.00	6,679,000
Pistachios	2004	23,800	1.79	42,602 ^b	Ton	2,851.00	121,458,000
	2003	22,900	0.55	12,595	Ton	2,532.00	31,891,000
	2002	21,500	1.87	40,205	Ton	2,333.00	93,798,000
Plums	2004	600	10.39	6,234	Ton	645.00	4,021,000
	2003	810	7.78	6,302	Ton	434.00	2,735,000
	2002	970	8.48	8,226	Ton	535.00	4,401,000
Plums, Dried	2004	1,230	1.61	1,980	Ton	1,266.00	2,507,000
	2003	1,560	2.77	4,321	Ton	729.00	3,150,000
	2002	1,810	3.60	6,516	Ton	793.00	5,167,000
Walnuts	2004	1,310	1.38	1,808	Ton	1,407.00	2,544,000
	2003	1,030	1.53	1,576	Ton	1,065.00	1,678,000
	2002	940	1.25	1,175	Ton	1,126.00	1,323,000
Miscellaneous							
	Fruits & Nuts ^d						
Fruits & Nuts ^d	2004	1,560					8,108,000
	2003	1,480					6,193,000
	2002	1,180					4,203,000
Orchard Firewood	2004			6,400	Cord		672,000
	2003			6,000	Cord		810,000
	2002			6,600	Cord		759,000
TOTAL	2004	185,400					\$618,686,000
	2003	187,200*					394,668,000*
	2002	189,000					433,859,000

a/ Meat basis

b/ Reflects total production, including imperfect stock; price weighted accordingly

c/ Includes table grapes crushed

d/ Includes apricots, berries, cherries, kiwis, pears, pecans, persimmons, pomegranates, tangelos, tangerines, strawberries, and almond shells

* Revised



Forest Products

PRODUCTION				VALUE
Item	Year	Production	Unit	Total Value
Timber	2004	2,500	MBF ^a	\$485,000
	2003	3,189	MBF	538,000
	2002	5,905	MBF	1,125,000
Firewood	2004	2,450	Cords ^b	228,000
	2003	1,360	Cords	141,000
	2002	3,000	Cords	300,000
TOTAL	2004			\$713,000
	2003			679,000
	2002			1,425,000

a/ Million Board Feet

b/ Cord: 128 cubic feet



Nursery Products

PRODUCTION				VALUE
Item	Year	Field Acres	House Sq. Ft.	Total Value
Nursery Stock ^a	2004	720	592,000	\$30,861,000
	2003	475	570,000	20,660,000
	2002	300	555,000	18,271,000

a/ Includes grapevines, fruit trees, nut trees and ornamentals



Apiary Products

PRODUCTION				VALUE	
Item	Year	Total	Unit	Per Unit	Total
Apiary Products					
Beeswax	2004	10,000	Pound	\$1.05	\$11,000
	2003	12,400	Pound	0.93	12,000
	2002	11,900	Pound	1.00	12,000
Honey	2004	527,000	Pound	0.82	432,000
	2003	659,000	Pound	1.31	863,000
	2002	815,000	Pound	1.24	1,011,000
Pollination	2004	130,000	Colony	54.50	7,085,000
	2003	151,000	Colony	51.40	7,761,000
	2002	146,000	Colony	45.90	6,701,000
TOTAL	2004				\$7,528,000
	2003				8,636,000
	2002				7,724,000



Livestock and Poultry

PRODUCTION

VALUE

Item	Year	Head	Liveweight	Unit	Per Unit	Total
Cattle and Calves ^a	2004	60,700	440,000	CWT ^b	\$71.00	\$31,240,000
	2003	61,700	449,000	CWT	65.00	29,185,000
	2002	57,800	425,000	CWT	57.00	24,225,000
Replacement Heifers ^c	2004	29,100			1,570.00	45,687,000
	2003	28,500			1,650.00	47,025,000
	2002	25,000			1,750.00	43,750,000
Poultry	2004					14,099,000
	2003					22,125,000
	2002					23,801,000
TOTAL	2004					\$91,026,000
	2003					98,335,000
	2002					91,776,000

a/ Range and dairy cattle sold for beef

b/ Hundredweight: 100 pounds

c/ Milk cows



Livestock and Poultry Products

PRODUCTION

VALUE

Item	Year	Production	Unit	Per Unit	Total
Milk Market ^a	2004	13,224,182	CWT	\$14.51	\$191,935,000
	2003	11,541,302	CWT	11.00	126,954,000
	2002	10,073,081	CWT	10.73	108,120,000
Milk Manufacturing ^a	2004	230,966	CWT	15.20	3,511,000
	2003	170,804	CWT	11.82	2,019,000
	2002	65,472	CWT	11.04	723,000
Other Products ^b	2004				14,326,000
	2003				12,108,000
	2002				10,779,000
TOTAL	2004				\$209,772,000
	2003				141,081,000
	2002				119,622,000

a/ Madera County has 57 dairies, with 53,400 lactating cows


b/ Includes aquaculture, beneficial insect production, ducks, market eggs, hogs, manure, sheep, lambs and wool


County Commodities



- Malaysia 
- Mauritius 
- Mexico 
- Morocco 
- Netherlands 
- New Caledonia 
- New Zealand 
- Norway 
- Pakistan 
- People's Republic of China 
- Peru 
- Philippines 
- Poland 
- Portugal 
- Republic of Korea 
- Russian Federation 
- Saudi Arabia 
- Singapore 
- Slovakia 
- South Africa 

- Spain 
- Sweden 
- Switzerland 
- Taiwan 
- Thailand 
- Tunisia 
- Ukraine 
- United Arab Emirates 
- United Kingdom 
- Venezuela 
- Vietnam 

 **NURSERY STOCK:**
 CORMS • GRAPE CUTTINGS
 GRAPE ROOTINGS • ORNAMENTALS

 **FIELD CROPS:**
 CORN • ONIONS • POTATOES



Sustainable Agriculture Report - 2004

PEST PREVENTION

Pest prevention programs are mandated by the California Food and Agricultural Code to prevent the introduction and spread of pests in California. Pest prevention involves three strata: pest exclusion, pest detection, and integrated pest control.

The **Pest Exclusion Program** prevents the introduction of injurious pests that are not of common occurrence in the county.

Twenty-nine nursery locations were inspected to ensure pest cleanliness. In addition, nearly 890 shipments of plant material, received by nurseries, were inspected for potentially injurious pests prior to retail sale.

Over 5,240 beehives, transported into the county for pollination, were inspected for Red Imported Fire Ants (*Solenopsis invicta*). Our department worked in conjunction with the California Department of Food and Agriculture to survey 12,800 acres of orchards within Madera County for the presence of Red Imported Fire Ants. In November, an infestation was discovered in Chowchilla. Delimitation revealed that the infestation involved



780 acres. The California Department of Food and Agriculture initiated pesticide bait treatments on the infested acreage. In addition, pesticide bait applications continue on 520 acres already under treatment. Eradication is a multi-year process and, once achieved, is followed up with continuing surveillance of the area.

Countries receiving agricultural commodities require certification that the commodities are free from potentially injurious pests. Over 2,580 phytosanitary inspections were performed on Madera County commodities destined for export.

The **Pest Detection Program** utilizes insect traps and surveys for the detection of foreign pests which may have eluded exclusion efforts.

The trapping program in Madera County targeted multiple pests, including the following:

Apple Maggot (*Rhagoletis pomonella*)

Caribbean Fruit Fly (*Anastrepha suspense*)

Gypsy Moth (*Lymantria dispar*)

Mediterranean Fruit Fly (*Ceratitis capitata*)

Japanese Beetle (*Popillia japonica*)

Melon Fly (*Dacus cucurbitae*)

Khapra Beetle (*Trogoderma granarium*)

Mexican Fruit Fly (*Anastrepha ludens*)

European Corn Borer (*Ostrinia nubilalis*)

Oriental Fruit Fly (*Dacus dorsalis*)

European Pine Shoot Moth (*Rhyacionia buoliana*)

Over 1,100 traps were placed in the county, with 12,700 trap servicings performed during the 2004 season.

The **Integrated Pest Control Program** strives to eradicate infestations of new pests before they become widespread. Pink Bollworm (*Pectinophora gossypiella*), a non-established and economically significant pest of cotton, is controlled by post-season plowdown of cotton plants. In Madera County, plowdown of 19,600 acres was verified, ensuring the destruction of habitat supportive of this pest.

PEST MANAGEMENT



Glassy Winged Sharpshooter Photo courtesy USDA ARS Photo Unit, USDA ARS

The **Glassy-winged Sharpshooter Program** serves to detect and control the vector of Pierce's Disease, a potentially catastrophic disease of vineyards. This program involved the placement of 550 traps, with 12,100 subsequent trap servicings. In addition, incoming shipments of host material and susceptible county plantings were inspected.

On August 17, 2004, routine servicing of traps revealed ten Glassy-winged Sharpshooters at a Madera County nursery. Nursery plants were treated with pesticides to eradicate the infestation. Subsequent visual surveys and delimitation trapping of surrounding properties revealed no additional Glassy-winged Sharpshooters.

The **Vertebrate Pest Management Program** provides expertise and materials, to growers and homeowners, for the control of certain depredating vertebrate pests.

ORGANIC FARMING

Forty-three organic farms, totaling 5,400 acres, were registered in Madera County in 2004. Utilizing organic principles defined in the California Organic Products Act of 2003, these farms produce a wide array of commodities:

almonds, apples, artichokes, arugula, basil, green beans, beets, broccoli, brussels sprouts, cabbage, cantaloupe, cardoon, carrots, celery, chard, cherries, chicory, cilantro, collards, sweet corn, cotton, cucumbers, eggplant, fennel, figs, edible flowers, garlic, gourds, grapes (table, raisin, wine), honeydew melons, kale, kohlrabi, leeks, lettuce, nectarines, okra, onions, parsley, parsnips, peaches, peas, peppers, plums, dried plums, potatoes, radish, spinach, squash, Sudan grass, tomatillos, tomatoes, turnips, watermelons

The total value of organic production in Madera County during 2004 was \$6,805,000.



Agricultural Crop Report Summary

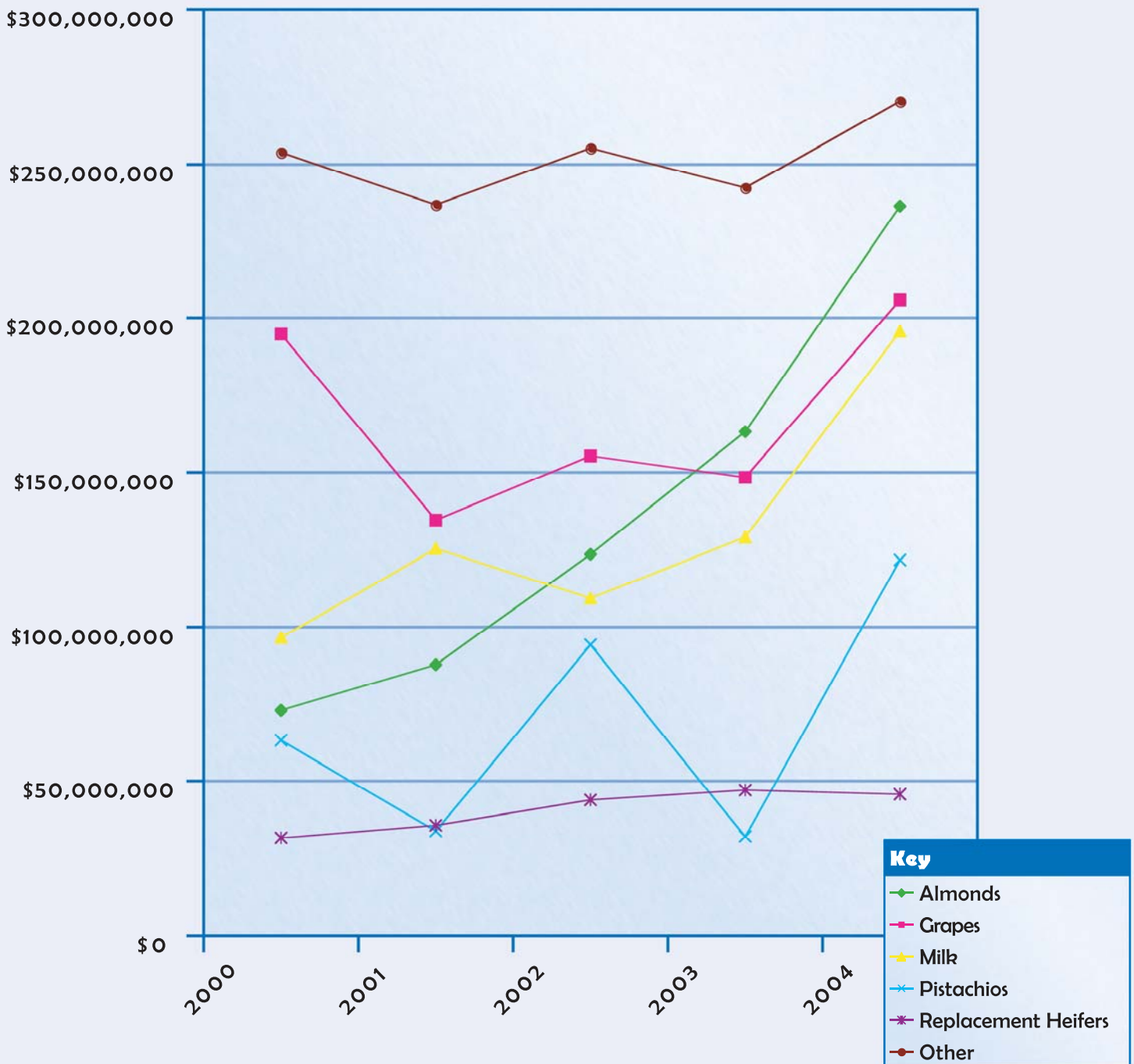
MADERA COUNTY 2004

Item	Year	Harvested Acentage	Total Value
Apiary	2004		\$7,528,000
	2003		8,636,000
	2002		7,724,000
Field Crops	2004	475,200	91,648,000
	2003	469,600	78,374,000
	2002	474,000	81,070,000
Fruit and Nut Crops	2004	185,400	618,686,000
	2003	187,200*	394,668,000*
	2002	189,000	433,859,000
Livestock and Poultry	2004		91,026,000
	2003		98,335,000
	2002		91,776,000
Livestock and Poultry Products	2004		209,772,000
	2003		141,081,000
	2002		119,622,000
Nursery Products	2004	720	30,861,000
	2003	475	20,660,000
	2002	300	18,271,000
Forest Products	2004		713,000
	2003		679,000
	2002		1,425,000
Vegetable Crops	2004	4,500	24,344,000
	2003	3,600	18,317,000
	2002	3,700	25,763,000
TOTAL	2004		\$1,074,578,000
	2003		760,750,000*
	2002		779,510,000

* Revised

ONE BILLION DOLLARS

IS THIS LEVEL OF AGRICULTURAL PRODUCTION SUSTAINABLE?



YES!

Almond acreage continues to increase. The rebound in grape values is expected to continue. Milk production increases as dairy herds grow. Mirroring this increase, numbers of replacement heifers are also rising. Pistachios are an alternate-bearing crop, but continuing increases are evident in even-numbered years, as pistachio acreage continues to rise. Finally, the combined value of all other crops is both stable and on the rise, underscoring the viability of the industry of agriculture in Madera County.

Madera County
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