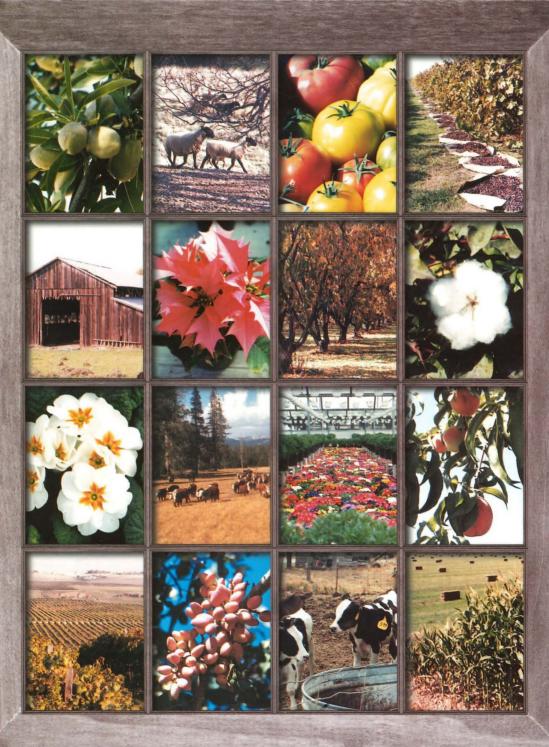
ADERAS NEV



Agricultural Crop Report

he 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.

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	10 April 2011	
Merced County	Northwest	
Mariposa County	North	Lake Tahoe
Mono County	East	Lake rance
Fresno County	South and West	
Statewide Ranking of County		
Population ^a	35	B. B. Berner
Total Acreage	24	
Total Agricultural Production ^b	14	
Commodity, by value ^c		
Figs	1	The second of th
Grapes, Raisin Variety	$\overset{1}{2}$	
Pistachios	2	e e prisit que

San Francisco

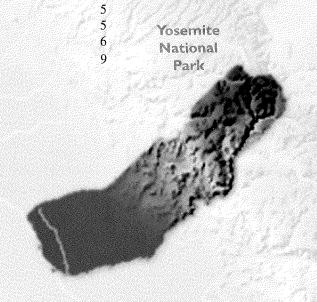
Olives Almonds

Milk

Grapes, Wine Variety

Grapes, Table Variety

US Bureau of Census, 2000 USDA Ag Census, 1997 County Agricultural Commissioner's Data, 2000



MADERANTY

MADERA COUNTY BOARD OF SUPERVISORS

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Agricultural Crop Report

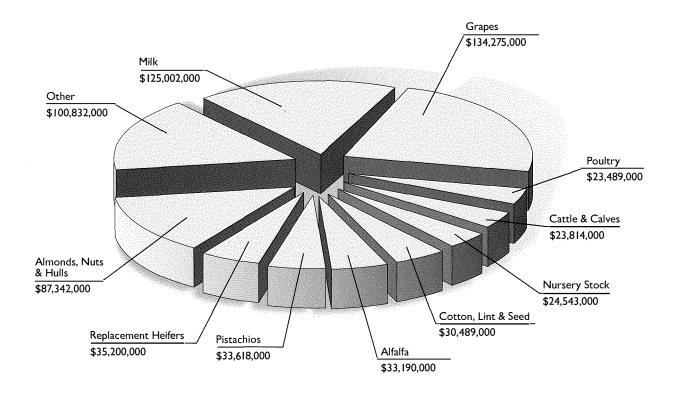


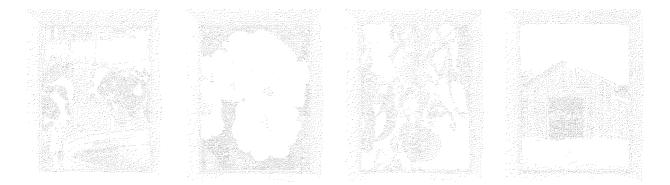
TEN LEADING CROPS

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	

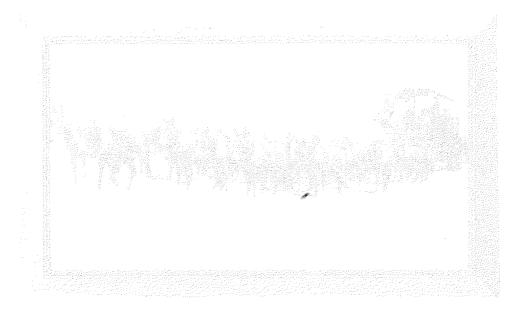
Diversity, which serves to strengthen the agricultural economy of Madera County, is evident in this listing of our Ten Leading Crops, which include fruit and nut crops, field crops, nursery stock, dairy and beef cattle. The wide range of commodities produced in our county is further underscored by that 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

			VALUE				
		Harvested	Per			Per	
Item	Year	Acreage	Acre	Total	Unit	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
, 5	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	2001	25.500	1 AE1C	5 0 1 45	n d	600	25 505 000
Lint	2001	25,500	1,471 ^c	78,147	Baled	.68e	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

PRODUCTION	VALUE

		Harvested	Per			Per	
Item	Year	Acreage	Acre	Total	Unit	Unit	Total
	Tear	Acteage	ricic	Total	Ont	Omt	10ta
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
S	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
Miscellaneousf	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

Alfalfa acreage yields both hay and silage Includes black-eyes, kidneys and limas



b/

c/

Pounds
Bale: 480 pounds
Per pound

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



FRUIT & NUT CROPS

			VALUE				
		Harvested	Per			Per	
Item	Year	Acreage	Acre	Total	Unit	Unit	Total
Almondsa	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	10,744,00
	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	54,870,00
	1999	32,780	1.87	61,299	Ton	1,228.00	75,275,00
Fresh	2001	2,480	7.00	17,360	Ton	690.00	11,978,00
	2000	2,520	7.85	19,782	Ton	893.00	17,665,00
	1999	2,660	6.91	18,381	Ton	986.00	18,123,00
Table Varieties	2001	2,580	7.08	18,266	Ton	700.00	12,786,00
	2000	2,640	7.27	19,193	Ton	960.00	18,425,000
	1999	2,590	7.68	19,891	Ton	1,067.00	21,224,00
Wine Varieties ^d							
Red	2001	24,780	8.26	204,683	Ton	188.00	38,480,00
Varieties	2000	24,030	9.60	230,688	Ton	237.00	54,673,00
	1999	21,690	7.78	168,748	Ton	328.00	55,349,00
White	2001	23,390	9.09	212,615	Ton	159.00	33,806,00
Varieties	2000	23,740	10.05	238,587	Ton	161.00	38,413,00
	1999	23,700	9.02	213,774	Ton	209.00	44,679,000
Total Grapes	2001	94,510					134,275,00
_	2000	96,210					194,790,000
	1999	92,230					228,567,00
Nectarines	2001	690	4.74	3,271	Ton	615.00	2,011,000
	2000	610	7.59	4,630	Ton	626.00	2,898,00
	1999	530	7.03	3,726	Ton	655.00	2,441,000



FRUIT & NUT CROPS

PRODUCTION

VALUE

		Harvested	Per			Per	
Item	Year	Acreage	Acre	Total	Unit	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		0.50					• 4 < = 000
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 ^j			5,000	Cord		455,000
TOTAL	2001	186,170					\$301,102,000
	2000	188,090		*			390,412,000
	1999	177,210					400,349,000

Meat basis

Reflects total production, including imperfect stock; price weighted accordingly

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

Reported previously under Prunes; dried weight Includes apricots, berries, cherries, kiwis, pears, pecans, persimmons, pomegranates, tangelos, tangerines, and strawberries

Revised



VEGETABLE CROPS

Item	Year	Harvested Acreage	N°	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

					Per	
Item	Year	Head	Liveweight	Unit	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	T.		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	Item Year Fie		House Sq. Ft.	Total Value
Nursery Stocka	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

		PRODUC	CTION	VALUE		
Item	Year	Production	Unit	Per Unit	Per Total	
— Item	Tear	Troduction	Ont	Omt	10ta	
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

		PRODUC	CTION	VALUE		
		N.		Per		
Item	Year	Total	Unit	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	$\mathbf{Cords}^{\mathrm{b}}$	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

Austria

Belgium

Canada

Canary Islands

Columbia

Costa Rica

Denmark

Dominican Republic Ecuador

Egypt

El Salvador

France

Germany

Greece

Guatemala

Hong Kong

India

Israel

Italy

Japan

Korea

Kuwait

Latvia

Malaysia

Mexico

Netherlands

New Zealand

Panama

People's Republic of China

Peru

Philippines

Poland

Romania

Russian Federation

Saudi Arabia

Singapore

Spain

Switzerland

Taiwan

Thailand

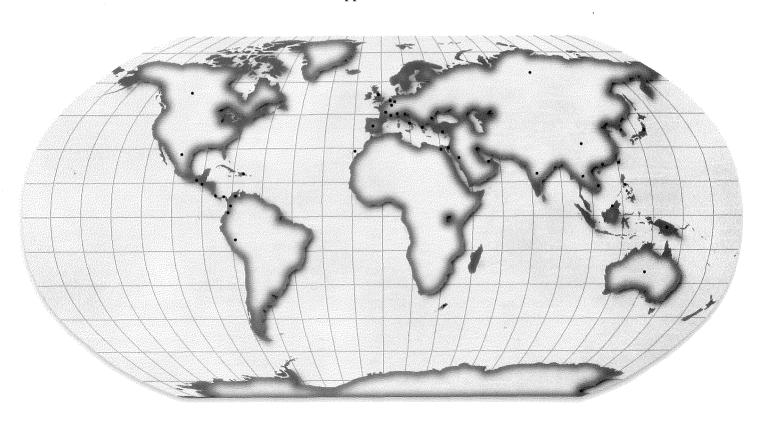
Turkey

United Arab Emirates

United Kingdom

Venezuela

Vietnam





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 (Rhagoletis pomonella)

Gypsy Moth (Lymantria dispar)

Japanese Beetle (Popillia japonica)

Khapra Beetle (Trogoderma granarium)

European Corn Borer (Ostrinia nubilalus)

European Pine Shoot Moth (Rhyacionia buoliana)

Caribbean Fruit Fly (Anastrepha suspense)
Mediterranean Fruit Fly (Ceratitis capitata)
Melon Fly (Dacus cucurbitae)
Mexican Fruit Fly (Anastrepha ludens)
Oriental Fruit Fly (Dacus dorsalis)

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 (Siphoninus phillyreae)	Parasitic wasp (Encarsia nr. inaron)	
Klamath Weed (Hypericum perforatum)	Leaf beetle (Chrysolina quadrigemina)	
Puncturevine (Tribulus terrestris)	Stem and seed weevils	
	(Microlarinus lypriformis and lareynii)	
Yellow Starthistle (Centaurea solstitialis)	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 **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	2001		133,800,000
Products	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

ur 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.

