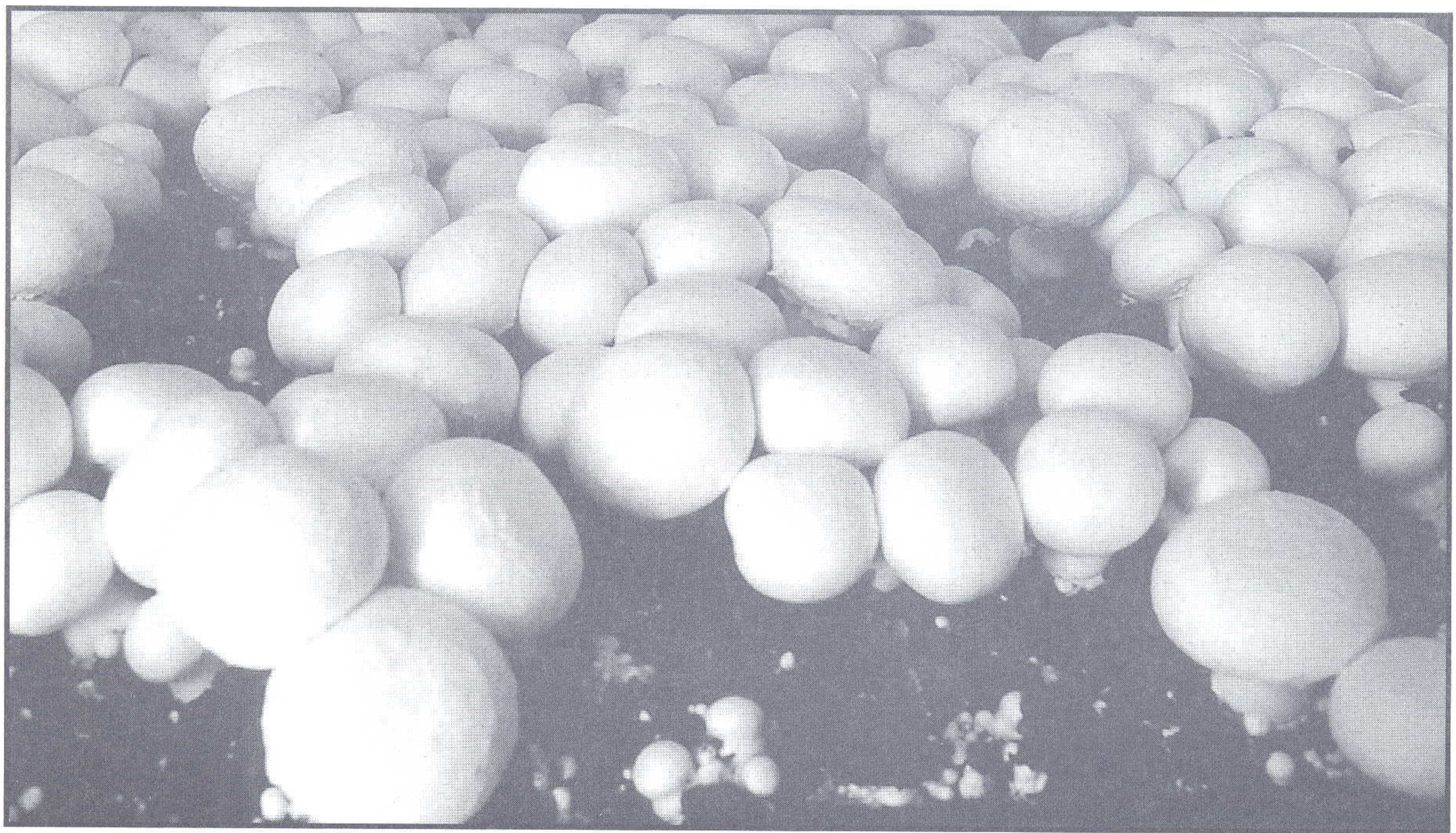


SAN MATEO COUNTY

1996 AGRICULTURAL CROP REPORT



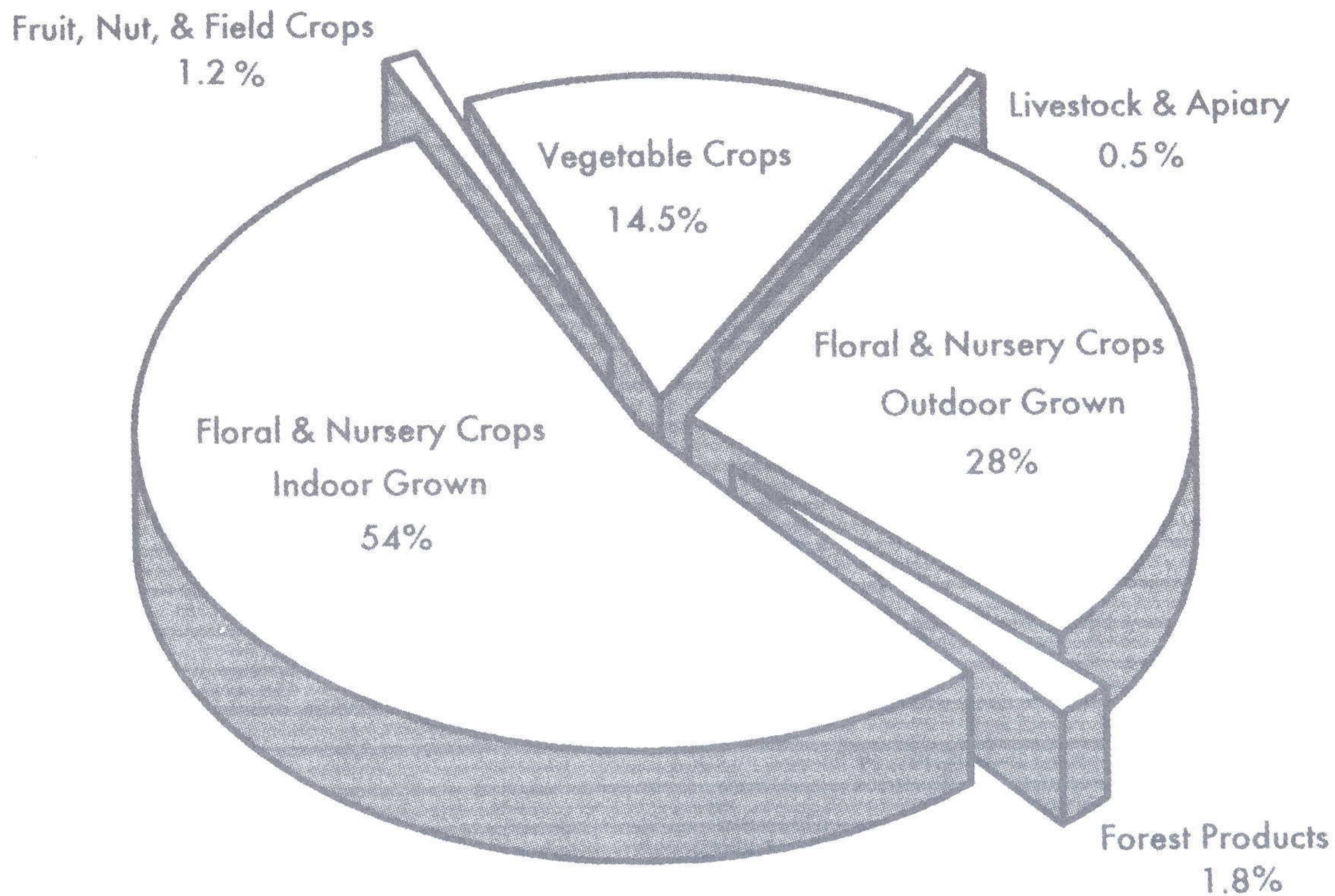
Campbell's[®]

Mushrooms

. . . *Forty Years at Pacific Farm*

SAN MATEO COUNTY 1996 CROP SUMMARY

TOTAL PRODUCTION VALUE \$206,510,000



On The Cover:

Our 1996 Crop Report recognizes forty years of production at the Campbell's Fresh, Inc. Pacific mushroom farm near Pescadero. Originally constructed in 1957, Pacific farm currently has 96 growing rooms which yield almost twenty million pounds of white button and Portabella mushrooms each year. The majority of the mushrooms are sold on the fresh market; however, some of the mushrooms are utilized by Campbell Soup Company as an ingredient in their many food products.

Mushrooms are the leading vegetable crop in San Mateo County. The six mushroom growing operations in the County produced a 1996 crop valued at \$18,276,000. A number of varieties are grown on the Coastside including white and brown button, Portabella, bear's-head, oyster and shiitake.

SAN MATEO COUNTY DEPARTMENT OF AGRICULTURE/WEIGHTS & MEASURES

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SAN MATEO COUNTY
DEPARTMENT OF AGRICULTURE/WEIGHTS AND MEASURES



Ann M. Veneman, Secretary
California Department of Food and Agriculture

and

San Mateo County Board of Supervisors

Mary Griffin, 1st District
Tom Huening, 2nd District
Richard S. Gordon, 3rd District
Ruben Barrales, 4th District
Michael D. Nevin, 5th District

I am pleased to submit the 1996 Agricultural Crop Report for San Mateo County in compliance with Section 2279 of the California Food and Agriculture Code. Also included is the Sustainable Agriculture Report in accordance with Section 2272 of the Code.

The production values in this report represent gross values and do not reflect the cost of production. The total gross value of San Mateo County agricultural production for 1996 was \$206,510,000. This represents a 5% increase over the total production value for 1995.

Although vegetables and field flower crops rebounded overall from the 1995 storm damage, late spring rains in 1996 took a toll on production levels for some crops such as artichokes. Our department again assisted coastside growers and the U.S.D.A. Farm Services Agency in documenting individual and regional crop losses for the federal disaster assistance program.

Significant increases in production value were evident for Brussels sprouts, snap beans and for a number of floral and nursery crops. Additionally, board feet and value of harvested timber more than doubled from 1995 values.

I wish to express my appreciation to all individuals, growers and agencies who contributed information for the preparation of this crop report. Special thanks goes to Ronald Pummer on my staff who helped compile the report.

Respectfully submitted,

Gail M. Raabe
Agricultural Commissioner
Sealer of Weights and Measures

FLORAL AND NURSERY CROPS INDOOR GROWN

Item	Year	Square Feet	Production	Unit	VALUE	
					Per Unit	Total
Cut Flowers						
Alstroemeria	1996	647,000	496,000	Bunch	\$ 1.75	\$ 868,000
	1995	539,200	619,100	Bunch	1.70	1,052,000
Carnations	1996	558,000	5,301,000	Bloom	.15	795,000
	1995	427,000	7,259,000	Bloom	.16	1,161,000
Roses	1996	544,000	10,680,000	Bloom	.25	2,670,000
	1995	540,000	10,900,000	Bloom	.25	2,725,000
Snapdragons	1996	2,240,000	3,580,000	Bunch	2.80	10,024,000
	1995	2,220,000	3,555,000	Bunch	2.80	9,954,000
Miscellaneous ¹	1996	729,000				2,715,000
Cut Flowers	1995	637,400				2,640,000
Potted Plants						
Flowering						
Chrysanthemums	1996	467,000	1,054,000	Pot	3.20	3,373,000
	1995	467,100	1,064,000	Pot	3.20	3,405,000
Lilies ²	1996	654,000	841,000	Pot	4.80	4,037,000
	1995	654,200	981,300	Pot	5.00	4,907,000
Orchids	1996	457,000	462,000	Pot	13.75	6,353,000
	1995	472,000	493,000	Pot	13.50	6,656,000
Poinsettias	1996	557,000	949,900	Pot	4.50	4,275,000
	1995	559,000	1,054,000	Pot	4.20	4,427,000
Miscellaneous ³	1996	6,765,000				49,573,000
	1995	6,198,000				46,711,000
Foliage ⁴	1996	2,497,000				25,487,000
	1995	2,020,700				24,740,000
Subtotal	1996	16,115,000				\$110,170,000
	1995	14,734,600				108,378,000
Propagated						
Bedding Plants (Ivy, Impatiens, Marigolds, etc.)	1996	496,000				1,651,000
	1995	496,000				1,651,000
Cuttings and Liners (Ferns, Hydrangea, Ivy, etc.)	1996	191,000				402,000
	1995	191,200				401,000
TOTAL	1996	16,802,000				\$112,223,000
	1995	15,421,800				110,430,000
Total Glass and Plastic Areas 6,070,000 Square Feet						

¹ Includes Chrysanthemum, Freesia, Gardenia, Lilies, Orchids, etc.
² Includes Calla Lilies, Easter Lilies, Hybrid Lilies, Oriental Lilies, etc.
³ Includes Azaleas, Cyclamen, Gardenias, Gerberas, Hydrangea, Primula, Roses, Tulips, etc.
⁴ Includes Dieffenbachia, Ficus, Ivy, Philodendron, Pothos, etc.

FLORAL AND NURSERY CROPS OUTDOOR GROWN

Item	Year	Acres	Production	Unit	VALUE	
					Per Unit	Total
Daisies	1996	201	2,252,000	Bunch	\$.80	\$ 1,802,000
	1995	225	2,137,000	Bunch	.75	1,603,000
Gypsophila	1996	47	211,000	Bunch	1.75	369,000
	1995	37	165,000	Bunch	2.00	330,000
Heather	1996	79	206,000	Bunch	2.00	412,000
	1995	77	163,600	Bunch	2.30	376,000
Iris	1996	57	1,145,000	Bunch	2.50	2,863,000
	1995	74	1,260,000	Bunch	2.40	3,024,000
Larkspur	1996	30	101,000	Bunch	2.80	283,000
	1995	29	139,000	Bunch	2.59	360,000
Stock	1996	67	296,000	Bunch	2.11	625,000
	1995	84	416,500	Bunch	2.00	833,000
Strawflowers ⁵	1996	77	250,000	Bunch	1.50	375,000
	1995	94	481,000	Bunch	1.50	722,000
Miscellaneous ⁶	1996	299				4,980,000
	Flower/Foliage 1995	270				2,219,000
Subtotal	1996	857				\$11,709,000
	1995	890				9,467,000
Ornamentals						
Herbaceous ⁷	1996	21				3,474,000
Perennials	1995	19				3,987,000
Christmas Trees	1996	290				395,000
	1995	252				330,000
Nursery Stock ⁸	1996	264				41,856,000
	1995	243				37,397,000
TOTAL	1996	1,432				\$57,434,000
	1995	1,404				51,181,000

⁵ Includes Fresh and Dried.

⁶ Includes Calla Lily, Delphinium, Eucalyptus, Pittosporum, Statice, Yarrow, etc.

⁷ Includes Cinerarias, Fuchsias, Impatiens, Primrose, etc.

⁸ Includes Heather, Mini Christmas trees, other trees and shrubs.

VEGETABLE CROPS

Crop	Year	Acres	PRODUCTION		Unit	VALUE	
			Per Acre	Total		Per Unit	Total
Artichokes ⁹	1996	575	1.89	1,087	Ton	\$1,200.00	\$ 1,304,000
	1995	740	1.20	888	Ton	870.00	773,000
Beans, Snap	1996	226	3.26	737	Ton	969.00	714,000
	1995	262	3.33	872	Ton	652.00	569,000
Brussels Sprouts ⁹	1996	839	8.09	6,788	Ton	472.00	3,204,000
	1995	876	6.62	5,799	Ton	476.00	2,760,000
Leeks	1996	168	8.23	1,383	Ton	575.00	795,000
	1995	*	*	*		*	*
Mushrooms	1996	17					18,276,000
	1995	17					18,179,000
Peas	1996	582	1.49	867	Ton	833.00	722,000
	1995	544	1.69	919	Ton	770.00	708,000
Pumpkins	1996	248	14.95	3,708	Ton	117.70	434,000
	1995	277	7.40	2,050	Ton	176.70	362,000
Miscellaneous Vegetables ¹⁰ Field and Indoor Grown	1996	365					4,280,000
	1995	533					6,486,000
TOTAL	1996	3,020					\$29,729,000
	1995	3,249					29,837,000

* Previously included in Miscellaneous Vegetables.

⁹ Includes Processed.

¹⁰ Bean Sprouts, Cabbage, Corn, Herbs, Leaf Lettuce, Potatoes, Spinach, Swiss Chard, etc.

FIELD CROPS

Crop	Year	Acres	PRODUCTION		Unit	VALUE	
			Per Acre	Total		Per Unit	Total
Beans, Dry Edible ¹¹	1996	200	1.50	300	Ton	\$ 676.00	\$ 203,000
	1995	200	1.00	200	Ton	676.00	135,000
Grain							
Barley	1996	300	.88	264	Ton	320.00	85,000
	1995	300	1.12	336	Ton	142.00	48,000
Oats	1996	1,200	.84	1,008	Ton	293.00	295,000
	1995	800	1.15	920	Ton	200.00	184,000
Hay							
Oats	1996	1,500	2.50	3,750	Ton	125.00	469,000
	1995	1,500	2.50	3,750	Ton	125.00	469,000
Volunteer	1996	300	1.80	540	Ton	60.00	32,000
	1995	300	1.80	540	Ton	82.00	44,000
Pasture							
Irrigated	1996	300				140.00	42,000
	1995	300				140.00	42,000
Other	1996	30,000				9.00	270,000
	1995	30,000				9.00	270,000
TOTAL	1996	33,800					\$ 1,396,000
	1995	33,400					1,192,000

¹¹ Includes Cranberry, Fava, etc.

FRUIT AND NUT CROPS

Item	Year	Acres	Total Value
Bushberries	1996	30	\$ 172,000
	1995	27	131,000
Strawberries	1996	31	267,000
	1995	28	350,000
Wine Grapes	1996	56	362,000
	1995	56	280,000
Miscellaneous ¹²	1996	57	124,000
	1995	24	268,000
TOTAL	1996	174	\$ 925,000
	1995	135	1,029,000

¹² Includes Apples, Kiwi, Pears, Walnuts, etc.

LIVESTOCK *

Item	Year	Number Head Sold	Total Value
Cattle and Calves	1996	2,200	\$ 955,000
	1995	2,200	955,000
Sheep and Lambs	1996	200	16,000
	1995	200	16,000
Hogs and Pigs	1996	200	24,000
	1995	200	24,000
TOTAL	1996		\$ 995,000
	1995		995,000

JANUARY 1 INVENTORY OF LIVESTOCK— 1996-1997 *

Item	January 1, 1996	January 1, 1997
Cattle and Calves	5,000	5,000
Sheep and Lambs	200	200
Hogs and Pigs	200	200

*Estimate only. Statewide livestock data unavailable from California Department of Food and Agriculture.

LIVESTOCK AND APIARY PRODUCTS

Item	Year	Production	Unit	VALUE	
				Per Unit	Total
Wool	1996	4,000	LB.	\$1.25	\$ 5,000
	1995	4,000	LB.	1.25	5,000
Honey	1996	45,000	LB.	2.50	113,000
	1995	40,000	LB.	2.00	80,000
Beeswax	1996	500	LB.	6.00	3,000
	1995	500	LB.	6.00	3,000
TOTAL	1996				\$121,000
	1995				88,000

FOREST PRODUCTS

TOTAL	1996	7,170,000 Board Feet	\$3,687,000
	1995	3,416,000 Board Feet	1,704,000

Department of Agriculture COASTSIDE RAIN STATIONS

	Half Moon Bay	Pescadero
1985/1986	33.76 inches	34.52 inches
1986/1987	19.58 inches	21.26 inches
1987/1988	14.34 inches	13.21 inches
1988/1989	13.79 inches	8.41 inches
1989/1990	11.87 inches	9.35 inches
1990/1991	13.43 inches	21.10 inches
1991/1992	25.31 inches	28.98 inches
1992/1993	33.17 inches	29.87 inches
1993/1994	17.93 inches	15.45 inches
1994/1995	37.48 inches	31.00 inches
1995/1996	30.69 inches	25.56 inches

RECAPITULATION

PRODUCTION VALUES

	1996	1995
FLOWER AND NURSERY CROPS.....	\$169,657,000	\$161,611,000
VEGETABLE CROPS.....	29,729,000	29,837,000
FOREST PRODUCTS.....	3,687,000	1,704,000
FIELD CROPS.....	1,396,000	1,192,000
LIVESTOCK.....	995,000	995,000
FRUIT AND NUT CROPS.....	925,000	1,029,000
LIVESTOCK AND APIARY PRODUCTS.....	121,000	88,000
TOTAL.....	\$206,510,000	\$196,456,000

MILLION DOLLAR CROPS

	1996	1995
Ornamental Nursery Stock.....	\$41,856,000	\$37,397,000
Potted Foliage Plants.....	25,487,000	24,740,000
Mushrooms.....	18,276,000	18,179,000
Snapdragons.....	10,024,000	9,954,000
Orchids (potted).....	6,353,000	6,656,000
Poinsettia (potted).....	4,275,000	4,427,000
Lilies (potted).....	4,037,000	4,907,000
Forest Products.....	3,678,000	1,704,000
Herbaceous Perennials.....	3,474,000	3,987,000
Chrysanthemum (potted).....	3,373,000	3,405,000
Brussels Sprouts.....	3,204,000	2,760,000
Iris.....	2,863,000	3,024,000
Roses.....	2,670,000	2,725,000
Daisies.....	1,802,000	1,603,000
Bedding Plants.....	1,651,000	1,651,000
Artichokes.....	1,304,000	773,000

SAN MATEO COUNTY 1996 SUSTAINABLE AGRICULTURE REPORT

Sustainable Agriculture is the implementation of agricultural programs and practices designed to promote the economic viability of agriculture, while minimizing the impact of agricultural practices on natural resources and the environment. This report includes information on San Mateo County's programs for the eradication, control or detection of pests, as well as the enforcement of quarantines to exclude such pests. Also included is information on biological control activities, integrated pest management, and organic farming activities employed by the agricultural industry.

— COUNTY PROGRAMS —

BIOLOGICAL CONTROL

Pest	Agent/Mechanism	Scope of Program
Yellow Star Thistle	<u>Bangasternus orientalis</u> , weevil	Monitored established populations of these two bio-control agents at 13 sites.
	<u>Eustenopus villosus</u> , weevil	
	<u>Urophora sirunaseva</u> , gall fly	Monitored established populations at 5 sites.
Ash Whitefly	The release and natural disbursement of <u>Encarsia partenopea</u> and <u>Clitostethus arcuatus</u> since 1991 has been highly successful in keeping the Ash Whitefly under control. These bio-control agents have now become established and no further releases are planned.	

PEST ERADICATION

Skeletonweed, Chondrilla juncea, was treated at two locations. This is an "A" rated pest.*

PEST DETECTION

Insect Trapping for Exotic Pests

3,490 insect traps were deployed for exotic pests, with 63,754 trap servicings during the year. This included traps for the following economically significant insects: Mediterranean Fruit Fly, Mexican and Oriental Fruit Fly, Melon Fly, Gypsy Moth, Japanese Beetle, Khapra Beetle, European Pine Shoot Moth and European Corn Borer.

PEST EXCLUSION

Inspection of incoming shipments of plant products and other high risk articles to prevent the introduction of pests and diseases harmful to California's agricultural industry.

Type of Shipment	Number Inspected	Number Rejected
Parcel Carriers	11,117	49
Truck	19,503*	6
Air	14,992*	127
Sea Containers	8*	0
Household Goods	385	0

* Revised method of reporting

Exotic Pests Intercepted

Pest	Rating	Pest	Rating
<u>Aleurocerus</u> sp., palm whitefly	Q	<u>Oxydema longula</u> , a weevil	Q
<u>Aleurodicus dispersus</u> , spiralling whitefly	Q	<u>Pheidole megacephala</u> , bigheaded ant	Q
<u>Bactrocera dorsalis</u> , oriental fruit fly	A	<u>Planococcus minor</u> , Pacific mealybug	Q
<u>Coccus viridis</u> , green scale	Q	<u>Pseudaulacaspis cockerelli</u> , magnolia white scale	A
<u>Dysmicoccus mackenziei</u> , a mealybug	Q	<u>Saissetia</u> sp., a scale	Q
<u>Eutheola humilis rugiceps</u> , sugarcane beetle	Q	<u>Saphonia rubofascia</u> , a leafhopper	Q
<u>Malacosama</u> sp., a caterpillar	Q	<u>Tapinoma melancocephalum</u> , blackheaded ant	Q
Margarodidae, a scale	Q	<u>Technomyrmex albipes</u> , an ant	Q
<u>Orchamoplatus mammaeferus</u> , croton whitefly	Q	<u>Xerotrichia conspurcata</u> , a snail	Q

*Pest rating designation of "A" or "Q" requires that quarantined plant products be destroyed, treated under departmental supervision, or shipped out of state.

— AGRICULTURAL INDUSTRY —

ALTERNATIVE PEST CONTROL METHODS

Pest	Agent/Mechanism	Crop
Algae	<u>Lemna</u> sp., duckweed <u>Azolla</u> sp., mosquito fern	Irrigation ponds
Aphid	Lacewing Ladybird beetle <u>Orius</u> sp., parasitic wasp	Greenhouse Ornamentals Apples, Vegetables Vegetables
Caterpillars	<u>Bacillus thuringiensis</u> , bacteria	Greenhouse Ornamentals, Vegetables
Fungi	<u>Trichoderma</u> sp., repressive fungi	Greenhouse Ornamentals
Fungus Gnat	<u>Steinernema feltiae</u> , predatory nematode <u>Bacillus thuringiensis</u> , bacteria Insect growth regulators	Greenhouse Ornamentals Greenhouse & Field Ornamentals Greenhouse Ornamentals
Mites	<u>Phytoseiulus persimilis</u> , predatory mite	Strawberries, Vegetables
Plume Moth	Nematodes, pheromone traps	Artichokes
Thrips	<u>Orius</u> sp., parasitic wasp	Greenhouse Ornamentals, Vegetables
Weeds	Weed mats/ground cover cloth, Compost	Outdoor Ornamentals, Strawberries, Vegetables, Grapes
Whitefly	<u>Encarsia</u> sp., parasitic wasp Insect growth regulators	Greenhouse Ornamentals, Greenhouse Vegetables

Other control measures include the use of insect traps to detect pests and decrease insect populations. The traps are also used for monitoring the number of adult insects to accurately determine the timing of treatments in integrated pest management (IPM) programs. Insect traps are used widely in the agricultural industry for the control of whiteflies, aphids, thrips and fungus gnats.

Crop rotation, mechanical removal of weeds, mulch, increased spacing of plants in greenhouses and allowing fields to lie fallow are also utilized to control pests and diseases. Growers are increasingly using less toxic, or non-toxic materials such as insect growth regulators, insecticidal soaps, botanicals and refined oils in the production of ornamentals and vegetables.

ORGANIC FARMING

Number of Farms	Estimated Acres	Crops
12	97	Apples, artichokes, beans, berries, beets, carrots, chard, corn, cucumbers, eggplant, garlic, herbs, flowers, kale, leeks, lettuce, mushrooms, onions, peas, peppers, potatoes, pumpkins, spinach, sprouts, squash and tomatoes.

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Department of Agriculture/Weights & Measures

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