1999 Crop Statistics & Annual Report

County of San Diego

Department of Agriculture, Weights & Measures













Total Value

Estimated Economic Impact

Change in Value from 1998 --Percent of Change

Total Acreage

Change in Acreage from 1998 --Percent of Change

#1 Crop --Value

Crop with Greatest Percent Change in Value --Percent of Change

Crop with Highest Value Per Acre --Dollar Value Per Acre

Crop with Lowest Value Per Acre (excluding range) --Dollar Value Per Acre

Rank of Agriculture as a Component of San Diego County's Economy

\$1,236,343,113

\$4,327,200,896

+\$57,895,880 4%

170,314

-1,953 Acres 1%

Indoor Flowering & Foliage Plants \$306,525,453

Chili Peppers 121%

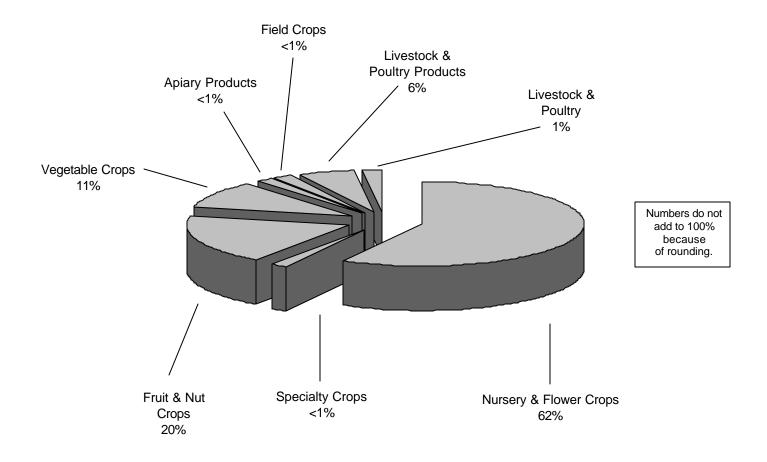
Indoor Flowering & Foliage Plants \$614,279

Oat, Grain \$101

4th*

*Source: Greater San Diego Chamber of Commerce.

				mmary 0 & 1998			
		·	1999			1998	<u> </u>
		Acres	Hectares	Value	Acres	Hectares	Value
Nursery Products	s & Flower Crops	8,629	3,492	\$767,766,905	8,337	3,375	\$722,186,252
Fruit & Nut Crops		44,907	18,175	\$245,602,494	44,855	18,160	\$225,669,472
Vegetable Crops		13,331	5,395	\$132,200,537	12,563	5,086	\$128,472,996
Field Crops		103,447	41,868	\$5,729,053	106,507	43,120	\$6,147,451
Apiary Products				\$1,259,718			\$1,157,229
Livestock & Poult	try			\$14,909,685			\$15,634,166
Livestock & Poult	try Products			\$68,371,153			\$75,696,569
Specialty Crops				\$503,568			\$556,588
		170,314	68,930	\$1,236,343,113	172,267	69,713	\$1,178,447,233



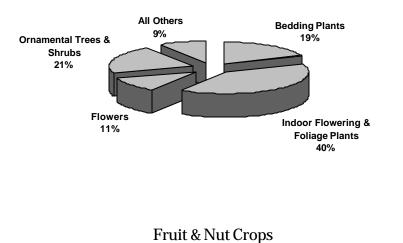
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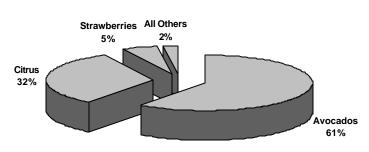




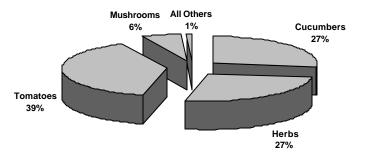
Percent of Values by Selected Commodity Groups

Nursery & Flower Crops





Vegetable Crops





Nursery & Flower Crops

1999 & 1998





CROP	Year	Acres	Hectares	TOTAL
NURSERY PRODUCTS				
BEDDING PLANTS, COLOR	1999	785	318	\$145,446,525
	1998	980	397	\$146,565,455
BULBS, CORMS, RHIZOMES,	1999	140	57	\$1,603,025
ROOTS, TUBERS	1998	140	57	\$1,598,985
CACTUS AND SUCCULENTS	1999	185	75	\$18,385,652
	1998	185	75	\$18,556,465
CITRUS, AVOCADO, AND	1999	192	78	\$6,898,542
SUBTOPICAL FRUIT TREES	1998	187	76	\$6,256,875
CUT CHRISTMAS TREES	1999	185	75	\$1,352,512
	1998	208	84	\$1,802,546
HERBACEOUS PERENNIALS	1999	150	61	\$8,965,689
	1998	150	61	\$8,959,879
INDOOR FLOWERING PLANTS & FOLIAGE	1999	499	202	\$306,525,453
	1998	495	200	\$295,878,756
ORNAMENTAL TREES	1999	2200	890	\$162,568,521
AND SHRUBS	1998	2200	890	\$129,986,578
POINSETTIA	1999	125	51	\$33,565,221
	1998	125	51	\$31,254,654
TURF*	1999	488		\$5,314,320
TOTAL NURSERY PRODUCTS	1999	4,949	2,003	\$690,625,460
	1998	4,670	1,890	\$640,860,193

*Previously included in the "Bedding Plants & Turf" category.



Nursery & Flower Crops

1999 & 1998



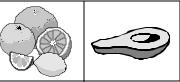


Сгор	Year	Acres	Hectares	TOTAL
FLOWER CROPS				
TOTAL CARNATIONS	1999	50	20	\$2,231,506
	1998	60	24	\$2,620,999
CARNATION, STANDARD	1999	15	6	\$845,854
	1998	25	10	\$1,168,541
CARNATION, MINI	1999	35	14	\$1,385,652
	1998	35	14	\$1,452,458
CUT FOLIAGE	1999	550	223	\$9,125,484
	1998	525	212	\$9,021,553
LEPTOSPERMUM	1999	380	154	\$2,535,254
	1998	380	154	\$2,405,465
PROTEAS	1999	475	192	\$3,758,458
	1998	475	192	\$3,602,440
ROSES	1999	45	18	\$6,587,452
	1998	47	19	\$7,254,684
WAX FLOWERS	1999	730	295	\$8,352,145
	1998	720	291	\$7,855,464
ALL OTHERS	1999	1,400	567	\$49,865,466
	1998	1,400	567	\$48,565,454
TOTAL FLOWER PRODUCTS	1999	3,680	1,489	\$82,455,765
	1998	3,667	1,484	\$81,326,059
TOTAL NURSERY &	1999	8,629	3,492	\$773,081,225
FLOWER CROPS	1998	8,337	3,375	\$722,186,252

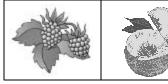


Fruit & Nut Crops

1999 & 1998



		Hai	vested		Production letric Tons/	Total	Production	US\$/	US\$/	
CROP	Ye		es Hectares	Acre	Hectare	Tons	Metric Tons	Ton	Metric Ton	TOTAL
TOTAL APPLES	1999 1998	505 505	204 204	2.22 2.36	4.98 5.29	1,121 1,192	1,016 1,079			\$405,394 \$467,125
FRESH	1999 1998	505 505	204 204	1.12 1.28	2.51 2.87	566 646	512 585	538 575	593 634	\$304,293 \$371,680
CIDER	1999 1998			1.1 1.08	2.47 2.42	556 545	504 494	182 175	201 193	\$101,101 \$95,445
TOTAL AVOCADOS	1999 1998	26,347 26,347	10,662 10,662			55,752 68,081	22,562 27,552			\$147,846,527 \$135,500,282
HASS	1999 1998	23,147 23,147	9,367 9,367	2.16 2.62	4.84 5.87	49,998 60,645	45,336 54,984	2,840 2,140	3,131 2,359	\$141,992,900 \$128,780,514
FUERTE	1999 1998	900 900	364 364	1.41 1.26	3.16 2.82	1,269 1,134	1,150 1,026	923 1,202	1,017 1,325	\$1,171,287 \$1,363,068
OTHER	1999 1998	2,300 2,300	931 931	1.95 2.74	4.37 6.14	4,485 6,302	4,068 5,716	1,044 850	1,151 937	\$4,682,340 \$5,356,700
TOTAL CITRUS	1999 1998	15,946 15,946	6,453 6,453			287,671 268,708	116,419 108,744			\$79,378,027 \$73,760,911
TOTAL GRAPEFRUIT	1999 1998	2,800 2,800	1,133 1,133	16.7 17.8	37.44 39.9	46,760 49,840	42,420 45,207			\$7,245,980 \$9,066,400
FRESH MARKET	1999 1998	2,800 2,800	1,133 1,133	12.75 14	28.58 31.38	35,700 39,200	32,381 35,554	185 215	204 237	\$6,604,500 \$8,428,000
BY PRODUCT	1999 1998			3.95 3.8	8.85 8.52	11,060 10,640	11,060 10,640	58 60	64 66	\$641,480 \$638,400
KUMQUATS	1999 1998	140 140	57 57	2.88 3.01	6.46 6.75	403 421	368 385	965 989	1,064 1,090	\$389,088 \$416,765
TOTAL LEMONS	1999 1998	3,211 3,211	1,299 1,299	19.6 19.37	43.94 43.42	62,936 62,197	57,078 56,403			\$23,778,152 \$22,464,500
FRESH MARKET	1999 1998	3,211 3,211	1,299 1,299	14.62 14.32	32.77 32.1	46,945 45,982	42,568 41,698	467 448	515 494	\$21,923,222 \$20,599,712
BY PRODUCTS	1999 1998			4.98 5.05	11.16 11.32	15,991 16,216	14,497 14,705	116 115	128 127	\$1,854,930 \$1,864,788
TOTAL LIMES	1999 1998	650 650	263 263	6.98 7.33	15.65 16.43	4,537 4,765	4,116 4,321			\$1,144,196 \$1,251,127
FRESH MARKET	1999 1998	650 650	263 263	3.89 4.22	8.72 9.46	2,529 2,743	2,293 2,488	385 392	424 432	\$973,473 \$1,075,256
BY PRODUCT	1999 1998			3.09 3.11	6.93 6.97	2,009 2,022	1,823 1,833	85 87	94 96	\$170,723 \$175,871



Fruit & Nut Crops

1999 & 1998





		Ha	rvested		oduction /letric Tons/	Total	Production	US\$/	US\$/	
CROP	Yea		es Hectares	Acre	Hectare	Tons	Metric Tons	Ton	Metric Ton	TOTAL
TOTAL ORANGES, NAVEL	1999 1998	1,455 1,455	589 589	15.34 13.86	34.39 31.07	22,320 20,166	20,256 18,300			\$5,343,042 \$5,438,011
FRESH MARKET	1999 1998	1,455 1,455	589 589	12.51 11.45	28.04 25.67	18,202 16,660	16,516 15,120	263 298	290 328	\$4,787,152 \$4,964,620
BY PRODUCT	1999 1998			2.83 2.41	6.34 5.4	4,118 3,507	3,734 3,181	135 135	149 149	\$555,890 \$473,391
TOTAL ORANGES, VALENCIA	1999 1998	6,790 6,790	2,748 2,748	19.84 17.08	44.47 38.29	134,714 115,973	122,204 105,221			\$33,818,749 \$27,008,583
FRESH MARKET	1999 1998	6,790 6,790	2,748 2,748	16.59 14.38	37.19 32.24	112,646 97,640	102,198 88,596	263 240	290 265	\$29,625,924 \$23,433,648
BY PRODUCT	1999 1998			3.25 2.7	7.29 6.05	22,068 18,333	20,033 16,625	190 195	209 215	\$4,192,825 \$3,574,935
TOTAL TANGERINE, TANGELO	1999 1998	900 900	364 364	17.78 17.05	39.86 38.22	16,002 15,345	14,509 13,912			\$7,658,820 \$8,115,525
FRESH MARKET	1999 1998	900 900	364 364	13.88 13.55	31.11 30.37	12,492 12,195	11,324 11,055	585 635	645 700	\$7,307,820 \$7,743,825
BY PRODUCT	1999 1998			3.9 3.5	8.74 7.85	3,510 3,150	3,181 2,857	100 118	110 130	\$351,000 \$371,700
GRAPES, WINE	1999 1998	189 187	77 76	2.03 2.58	4.55 5.78	384 483	346 439	420 490	368 540	\$161,154 \$236,425
MACADAMIA NUTS	1999 1998	185 185	75 75	1.21 1.05	2.71 2.35	224 194	203 176	2,280 2,565	,	\$510,492 \$498,380
MISC. FRUITS & NUTS*	1999 1998	850 785	344 318							\$3,856,854 \$2,101,025
PERSIMMONS	1999 1998	450 450	182 182	4.29 7.01	9.62 15.71	1,931 3,155	1,751 2,859	388 428	428 472	\$749,034 \$1,350,126
TOTAL STRAWBERRIES	1999 1998	435 450	176 182	25.15 26.56	56.38 59.54	10,940 11,952	9,923 10,836			\$12,695,012 \$10,755,198
FRESH MARKET	1999 1998	435 450	176 182	17.56 18.68	39.36 41.87	7,639 8,406	6,927 7,620	1,381 1,058		\$10,548,907 \$8,893,548
PROCESSING	1999 1998			7.59 7.88	17.01 17.66	3,302 3,546	2,994 3,214	650 525	716 579	\$2,146,105 \$1,861,650
TOTAL FRUIT & NUT CROPS	1999 1998	44,907 44,855	18,175 18,160							\$245,602,494 \$224,669,472

*Includes apricots, cherimoyas, raspberries, peaches, pears, guavas and walnuts.





Vegetable Crops

1999 & 1998



		Harve			oduction Metric Tons/		Production	US\$/	US\$/	
CROP	Year	Acres H	lectares	Acre	Hectare	Tons	Metric Tons	Ton	Metric Ton	TOTAL
BEANS, SNAP	1999	290	117	4.28	9.59	1,241	1,122	1,158	1,276	\$1,437,310
	1998	188	76	4.62	10.36	869	787	1,302	1,435	\$1,130,917
BUNCH VEGETABLE	S* 1999 1998	340 356	138 144							\$2,085,658 \$2,102,242
CABBAGE	1999	30	12	15.06	33.76	452	405	275	303	\$124,245
	1998	44	18	14.9	33.4	656	601	320	353	\$209,792
CORN, SWEET	1999	429	174	7.6	17.04	3,260	2,965	328	362	\$1,069,411
	1998	449	182	7.2	16.14	3,233	2,937	425	468	\$1,373,940
TOTAL CUCUMBERS	1999 1998	3,655 3,516	1479 1423			43,456 41,235	39,421 37,441			\$24,348,066 \$23,737,639
FIELD GROWN	1999	3,643	1474	11.81	26.47	43,024	39,017	551	607	\$23,706,114
	1998	3,507	1419	11.65	26.12	40,857	37,064	568	626	\$23,206,549
HOT HOUSE GRO	WN 1999	12	5	36	80.7	432	404	1,486	1,638	\$641,952
	1998	9	4	42	94.15	378	377	1,405	1,549	\$531,090
HERBS	1999	486	197	20.25	45.39	9,842	8,942	2,468	2,720	\$24,288,822
	1998	422	171	18.6	41.7	7,849	7,131	2,852	3,144	\$22,385,918
MUSHROOMS	1999	25	10	279	625.43	6,975	6,254	2,486	2,740	\$17,339,850
	1998	25	10	288	645.6	7,200	6,456	2,455	2,706	\$17,676,000
PEPPERS, BELL	1999	626	253	14.52	32.55	9,090	8,235	579	638	\$5,262,821
	1998	693	280	14.32	32.1	9,924	8,988	540	595	\$5,358,852
PEPPERS, CHILI	1999	85	34	15.03	33.69	1,278	1,145	773	852	\$987,585
	1998	38	15	15.03	33.69	571	505	780	860	\$445,458
POTATOES	1999	1,725	698	20.58	46.13	35,501	32,199	110	121	\$3,905,055
	1998	1,235	500	22.35	50.1	27,602	25,050	120	132	\$3,312,276
SQUASH	1999	497	201	11.95	26.79	5,939	5,385	418	461	\$2,482,586
	1998	561	227	11.86	26.59	6,654	6,036	427	471	\$2,841,045
TOTAL TOMATOES	1999 1998	4,420 4,386	1789 1775			80,643 78,303	73,168 71,029			\$35,803,562 \$35,313,316
TOMATOES, FRESH	H 1999	4,305	1742	18.25	40.91	78,566	71,265	438	483	\$34,412,039
	1998	4,258	1723	17.85	40.01	76,005	68,937	444	489	\$33,746,353
TOMATOES, CHERF	RY 1999	115	47	18.06	40.48	2,077	1,903	670	739	\$1,391,523
	1998	128	52	17.95	40.24	2,298	2,092	682	752	\$1,566,963
MISC. VEGETABLES*	* 1999 1998	723 650	293 263							\$13,065,566 \$12,585,601
TOTAL VEGETABLES	5 1999 1998	13,331 12,563	5,395 5,086							\$132,200,537 \$128,472,996

*Includes collards, Chinese cabbage, green onions, mustard & turnip greens, parsley, radishes and spinach. **Includes canteloupe, chayote, pumpkin, tomatillos, sweet potato, cauliflower, watermelon, leaf lettuce, celery & winter squash.





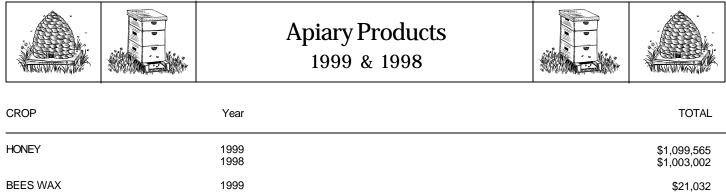
Field Crops

1999 & 1998





					duction	Total I	Production			
CROP	Year	Acres	Hectares	Acre	/letric Tons/ Hectare	Tons	Metric Tons	US\$/ Ton	US\$/ Metric Ton	TOTAL
BARLEY, GRAIN	1999	90	36	1.65	3.7	149	133	102.65	114.85	\$15,244
	1998	200	81	1.74	3.9	348	316	102.65	113.15	\$35,722
GREENCHOP	1999	125	51	23.02	51.6	2,878	2,632	22.85	25.19	\$65,751
	1998	125	51	22.95	51.45	2,869	2,624	22.06	24.32	\$63,286
HAY, OAT	1999	3,750	1,518	2.2	4.93	8,250	7,484	52.81	58.21	\$435,683
	1998	4,600	1,862	2.1	4.71	9,660	8,770	52.05	57.37	\$502,803
OAT, GRAIN	1999	200	81	0.98	2.2	196	178	102.65	115.01	\$20,119
	1998	300	121	0.78	1.75	234	212	102.65	113.15	\$24,020
PASTURE, IRRIGATED	1999	2,750	1,113					1,560.00	1,719.59	\$4,290,000
	1998	2,750	1,113					1,555.00	1,714.08	\$4,276,250
RANGE	1999	95,000	38,446					4.97	5.48	\$472,150
	1998	95,000	38,446					4.95	5.46	\$470,250
SILAGE	1999	32	13	14.5	32.5	464	423	22.60		\$10,486
	1998	32	13	15.8	35.42	506	460	22.50		\$11,376
WHEAT	1999	1,500	607	2.09	4.69	3,135	2,847	133.85	147.54	\$419,620
	1998	3,500	1,416	1.65	3.7	5,775	5,239	132.25	145.78	\$763,744
TOTAL FIELD CROPS	1999	103,447	41,868							\$5,729,053
	1998	106,507	,							\$6,147,451



	1998	\$19,565
BEES AND QUEENS	1999 1998	\$88,656 \$87,598
POLLEN	1999 1998	\$45,265 \$42,564
POLLINATION	1999 1998	\$5,200 \$4,500
TOTAL APIARY	1999 1998	\$1,259,718 \$1,157,229



Livestock & Poultry

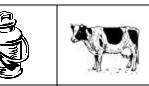
1999 & 1998



			Total	Weight	Pe	r Unit	
	Year	# Head	CWT	Metric Ton	CWT	Metric Ton	TOTAL
CATTLE AND CALVES	1999 1998	27,050 28,500	202,875 213,750	9,201 9,695	64.85 62	1,430 1,367	\$13,156,444 \$13,252,500
HOGS AND PIGS	1999 1998	1450 1500	3,625 3,750	164 170	35.1 35	774 772	\$127,238 \$131,250
CHICKENS, MISC. MEAT	1999 1998	1,989,888 2,002,005	71,636 72,072	3,249 3,269	13 13	286.6 286.6	\$931,268 \$936,936
RABBITS	1999 1998	15,000 20,000	750 1,000	34 45	63.3 62	1,396 1,367	\$47,475 \$62,000
RATITE TOTAL	1999 1998						\$1,524,000 \$1,200,000
CHICKS	1999 1998	3,800 4,000			86 75	/CHICK /CHICK	\$326,800 \$300,000
MEAT	1999 1998	365,000 300,000	LBS. LBS.		3.28 3	/LB /LB	\$1,197,200 \$900,000
LAMB,SHEEP	1999 1998	768 780	768 780	35 35	71 66	1,565 1,455	\$54,528 \$51,480
TOTAL LIVESTOCK AND POULTRY	1999 1998	2,034,156 2,052,785					\$14,909,685 \$15,633,266



Livestock & Poultry Products 1999 & 1998

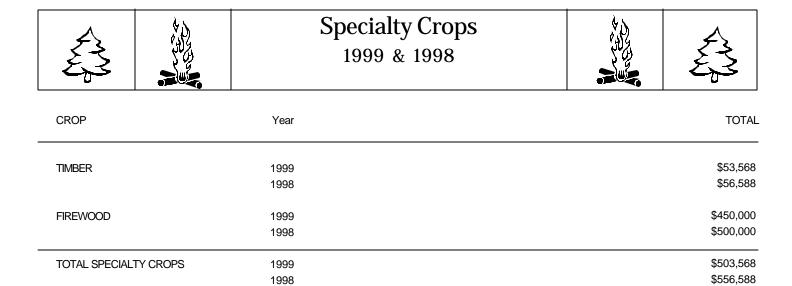


			Produ	uction	Pe	r Unit	
	Year		CWT	Metric Ton	\$/CWT	Metric Ton	TOTAL
MILK, MARKET	1999 1998		1,607,564 1,532,231	72,910 69,494	13.75 13.01	303 287	\$22,104,005 \$19,934,325
MILK, MANUFACTURING	1999 1998		631 2,565	29 116	12.23 11.76	270 259	\$7,717 \$30,164
EGGS, CHICKEN MARKET	1999 1998		97,598,789 98,985,856	doz doz	0.47 0.56	doz doz	\$45,871,431 \$55,432,079
RATITE PRODUCTS TOTAL	1999 1998						\$388,000 \$300,000
HIDES	1999 1998	1,000 400			135 125	/HIDE /HIDE	\$135,000 \$50,000
OIL	1999 1998	2,200 2,500	GAL GAL		115 100	/GAL /GAL	\$253,000 \$250,000
TOTAL LIVESTOCK AND	1999						\$68,371,153

TOTAL LIVESTOCK AND POULTRY PRODUCTS

1998

1999 San Diego County Crop Statistics & Annual Report, Page 12



	Crops Valued at \$10 Million or More	L'ÉS	A CONTRACTOR
Crop	1999		1998
Indoor Flowering & Foliage Plants Ornamental Trees & Shrubs Avocados Bedding Plants Cut Flowers (Flower Products) Eggs Tomatoes Valencia Oranges Poinsettia Cucumbers Herbs Lemons Milk, Market Cactus & Succulents Mushrooms Cattle & Calves Strawberries	306,525,453 162,568,521 147,846,527 145,446,525 82,455,765 45,871,431 35,803,562 33,818,749 33,565,221 24,348,066 24,288,822 23,778,152 22,104,005 18,385,652 17,339,850 13,156,444 12,695,012	\$1 \$1 \$1 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	95,878,756 29,986,578 35,500,282 46,565,455 81,326,059 55,432,079 35,313,316 27,008,583 31,254,654 23,737,639 22,385,918 22,464,500 19,934,325 18,556,465 17,676,000 13,252,500 10,755,198



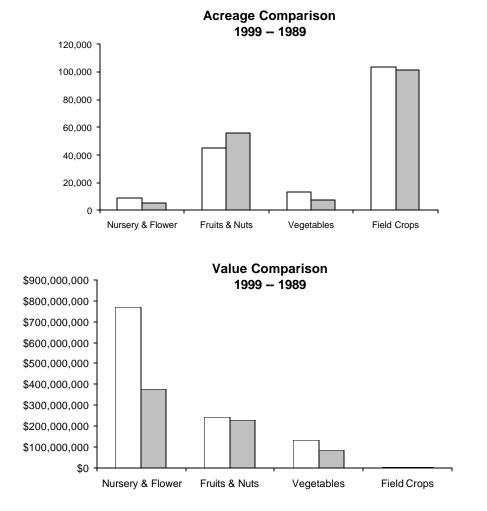
Ten Year Comparison

1999 & 1989



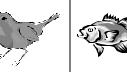
		1999			1989	
Crop	Acres	Hectares	Value	Acres	Hectares	Value
Nursery & Flower Crops	8,629	3,492	\$767,766,905	5,712	2715	\$375,081,737
Fruit & Nut Crops	44,907	18,175	\$245,602,494	55,941	23,044	\$230,116,369
Livestock & Poultry Products			\$68,371,153			\$80,301,313
Vegetable Crops	13,331	5,395	\$132,200,537	7,434	3,008	\$65,190,608
Livestock & Poultry			\$14,909,685			\$19,041,711
Field Crops	103,447	41,868	\$5,729,053	101,342	41,016	\$1,095,036
ApiaryProducts			\$1,259,718			\$607,450
Specialty Crops			\$503,568			**
TOTAL	172,262	69,713	\$1,236,343,113	170,429	69,783	\$772,269,157

**Not Reported in 1989.



1999 San Diego County Crop Statistics & Annual Report, Page 14





Farming and endangered species: never the twain shall meet, one might think, or at least not successfully. Luckily for all of us, that isn't the case. Farmers' desire to be good stewards of the land, regulations and even voluntary programs combine to ensure the continued survival of San Diego County's endangered species. With more than 170,000 acres of farmland, some of which can provide excellent habitat for a variety of species, it is important that farmers are involved in the effort to protect wildlife. How does a farmer make a living, provide the agricultural products we all depend on, and not harm flora and fauna? The next few pages detail some of the issues in endangered species preservation near agricultural operations, and what is being done to resolve them.

The Language of Conservation

When it comes to preservation of endangered species and their habitat in San Diego County, you may find people speaking a language you don't understand. What do all of those acronyms mean? What are the various programs, and how are they related? If you don't know the difference



between an MSCP, NCCP or an HCP, the following definitions should prove helpful.

MSCP, or Multiple Species Conservation Program. The MSCP is a local plan to con-

serve and protect multiple species habitat in San Diego County. It currently covers a 900-square mile area in southwestern San Diego County and includes unincorporated areas of the County as well as the City of San Diego and other incorporated cities. Other local conservation plans are in various stages of the planning process, including an extension of the MSCP for North County, and a separate plan for North County cities. A future effort for East County is planned but not yet begun.

NCCP, or Natural Communities Conservation Plan. In 1991, the NCCP act was passed in California, with the primary goal of protecting Southern California's dwindling coastal sage scrub. The MSCP qualifies as an NCCP by meeting certain conservation requirements.

HCP, or Habitat Conservation Plan. A federal conservation tool, an HCP is created under the Federal Endangered Species Act. In 1973 Congress unanimously passed the Federal Endangered Species Act (ESA). The act allows listing of plants, animals and invertebrates that are in danger in all or part of their ranges. The ESA makes it illegal to kill, harm or otherwise "take" a listed species. A 1982 amendment allows landowners to write habitat conservation plans that, when approved by the U.S. Fish and Wildlife Service, allow prop-



erty owners to "take" endangered species. Because the MSCP is approved as an HCP, local governments are allowed to issue incidental take permits. Incidental take permits are a form of trade where the overall outcome is beneficial to endangered species. In exchange for protection of habitat areas, landowners are allowed to "take" or harm a species in certain situations. Those takes are considered "incidental" and not detrimental to the overall survival of the species.

A local conservation plan, in this case the MSCP, can qualify for designation as a state plan (NCCP) and a federal plan (HCP). This coordinates and streamlines federal, state and local efforts in endangered species preservation.

Safe Harbor

Despite its name, a Safe Harbor program has nothing to do with boats or estuaries. In this case, the safe harbor is from regulations instead of stormy weather.

A Safe Harbor agreement is a voluntary agreement between a property owner and the Wildlife Agencies (California Department of Fish and Game, U.S. Fish and Wildlife Service). The property owner voluntarily agrees to certain management practices that are expected to enhance specified sensitive and endangered species and their habitats. In return, the Wildlife Agencies agree not to impose additional conditions on agricultural use of the land that is in conformance with the agreement, and to allow incidental take.

In San Diego County, a group of stakeholders that included farmers, environmental and conservation groups, and regulatory agencies helped develop a model Safe Harbor program for the County through a series of public meetings. Created with grant funds from the California Department of Fish and Game, the program has the following important elements:

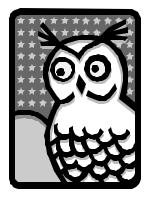
- The group recommended that a neutral third party facilitate the Safe Harbor process for growers. Many growers fear regulatory retaliation if Wildlife Agencies are invited onto their farms.
- Past attempts to create agricultural Safe Harbor programs did not include urban land. It is included in the San Diego program, since excluding it would rule out a significant portion of the County's farmland.

For more information on San Diego's Safe Harbor Program, or to request a copy of the plan, call (858) 694-2739.

Environmental Stewardship: A Farmer's Perspective

Eric Anderson is a local farmer whose family has been in agriculture for 44 years, growing seeds and nursery products. He has served as president of both the San Diego County Farm Bureau and the San Diego County Plant and Flower Association. Long active in agricultural issues related to endangered species, he provided the following insight into the subject.

In the United States 300 million acres of farmland



provide food and safe harbor for America's endangered species. This is not by accident; many farmers care deeply about the land they farm and work hard to be good environmental stewards, even though there are sometimes potential regulatory consequences of their continued stewardship.



San Diego County follows the national pattern with the local ranchers as well as the metro-farmers near the urban areas all contributing to

the continued existence of the endangered plants and animals. In some instances, species prefer farmland and are attracted to it. The Stephens Kangaroo rat thrives in the dry farmed locations, or areas that are not irrigated. In San Diego County that tends to be pasture land or areas used to grow crops like hay and oats. Gnat catchers, one of our endangered

birds, moves freely and often nests in intensely cultivated areas. Quino Checkerspot butterflies may fly from pasture to pasture, since some of the plants they prefer thrive in pasture land. Wild flowers such as Brodiaeas and Jewel flowers, as well as Bear grasses and Dudleyas are found throughout rangeland. Swainson's hawk and other raptors thrive on the rich foraging habitat provided



TidewaterGoby (Eucyclogobiusnewberryi)

This endangered fish is found in the still waters of coastal lagoons, marshes and creeks. Although they don't enter the ocean, they can survive in freshwater to nearly seawater. by farmers.

It can be extremely expensive to put together preserves and conservation areas. Farmers, however, are creating habitat areas since protection of their land and their livelihood go hand in hand. I believe the creation of positive, voluntary incentives rather than more regulations for farmers will result in plentiful production—in this case, of habitat for wildlife. As the largest group of private landholders in San Diego County, farmers are critical to the future survival of San Diego's endangered species.

PESTICIDES: PROTECTING ENDANGERED SPECIES

If you are a farmer who has ever requested a restricted materials permit in order to be allowed to apply certain pesticides, you know the rigorous evaluation process required.

Inspectors condition permits to ensure the safety of people both on and around the farm, and to prohibit pesticides from endangering the environment, including any nearby endangered species habitat. This is accomplished by ensuring compliance with the pesticide product labeling.

A new program helps farmers who want to take the level of protection of nearby species one step further, and to prepare for future regulatory restrictions. The United States Environmental Protection Agency, the California Department of Pesticide Regulation and local Agricultural Commissioners are working together to create a series of endangered species bulletins. Each bulletin



contains a map and list of sections where certain federally listed (threatened or endangered) species occur. It also contains a table of insecticide active ingredients that could

> Endangered Species Protection

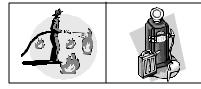
adversely affect these species, habitat descriptions and best management practices to implement in sensitive areas. Although growers are not legally required to follow the bulletins at this time, eventually USEPA expects to incorporate this type of information into its

DesertPupilish (Cyprinodonmacularius) (Cyprinodonmacularius) Thissmallfish occurs in irrigation ditches, isolated hot desert iton ditches, isolated hot desert and itches, isolated hot desert iton ditches, isolated hot desert poils. They are found most come pools. They are found most come pools. They are found most come in only in still, soft-bott one pools less than two feet deep.



Program. Under the Federal Endangered Species Act, the USEPA must ensure that the registration of pesticides will not result in harm to the species listed as endangered or threatened.

Several bulletins have been developed for use in San Diego County. To obtain copies, visit the California Department of Pesticide Regulation's website at www.cdpr.gov, or call the Department of Agriculture, Weights and Measures' pesticide regulation program at (858) 694-2784.





Department Overview

The Department of Agriculture, Weights and Measures is a diverse department offering a wide variety of services. Although we are a County department, we are also part of a statewide network of County Agricultural Commissioners that was created by the State legislature in 1881. Since 1972 the Department has included agriculture and weights & measures. We have two primary missions that we work to achieve each business day. We strive to:

- Enhance and promote the preservation of agriculture and the environment while maintaining the health and safety of all citizens; and
- Assure equity in the marketplace through education and the enforcement of laws and regulations.

Some of the duties of the Agricultural Commissioner remain the same as when the office was originally created, such as abatement of insect pests. However, the preservation, protection and regulation of the agricultural industry, as well as our consumer and standards protection functions, have changed dramatically during that time. Besides the traditional activities of the Commissioner/ Sealer, the office is now involved in endangered species conservation, agricultural land use issues, prescribed burning, habitat repair and certification of organic farms. As San Diego County grows and evolves, the Department of Agriculture, Weights and Measures strives to offer programs and services to meet the needs of our diverse community.

Organizational Structure

The Department of Agriculture, Weights and Measures has an administrative group that provides departmental oversight, as well as two divisions devoted to Regulatory Enforcement and Agricultural Services. We have 128 budgeted staff persons, but the actual number of people on staff at any given time varies according to the seasonal needs of our programs.

	Administration
Department Oversight	Computer Support
Budget	Personnel
Legislative Analysis	Customer Service

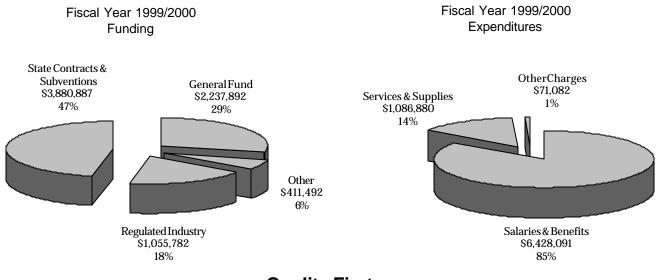
Agricultural Services

Entomology Environmental Services Pest Detection Pest Management Plant Pathology Watershed Resources Veterinarian Wildlife Services Regulatory Enforcement

Pesticide Regulation Plant Protection and Quarantine Standards Enforcement

Budget

The functions of the Department are funded by the regulated industry, county government and state government. Breakdowns of departmental budgeted expenditures and revenues are shown below.



Quality First: The Rewards of Good Fiscal Management

How do you reward employees for doing their part in ensuring that financial and customer service goals are met? You share the savings resulting from improved processes and efficiencies! A new program in the County, known as Quality First, was a success in its first year. Employees devised creative ways to conserve resources and helped implement programs, ensuring that customer service ratings would not be reduced. The result was a 6% savings, one-third of which went into reserves and two-thirds of which was shared among employees.

Who Are Our Customers?

Do you shop in local grocery stores? Do you make an occasional visit to your local farmers' market? Do you buy gas in San Diego County for your car? Then you are one of our customers! We serve a variety of people and organizations, from those who come into our office to request a service, to those who are silently served by our employees, never knowing we've made your shopping more equitable or your environment safer. We serve:

- The County's 5,925 farms and farmers.
- 6,500 businesses with 137,000 commercial weighing devices.
- More than 2,000 citizens with honey bee or white fly problems.
- An average of 659 citizens a month who visit our front counters.
- The County's 16,389 employees, many of whom work in facilities where we provide pest control.
- More than 2,000 school children, who heard presentations by our staff.
- More than 800 citizens who needed help with skunks, coyotes and other wildlife.

Agricultural Services Division Overview

The Agricultural Services Division provides support to the community, other regulatory agencies and the local agricultural industry. Many of the programs are small but highly technical, offering important services to our citizens. Staff compile agricultural statistics; maintain entomology, plant pathology/nematology and veterinary pathology laboratories; provide pest control in County facilities; and oversee the hazardous materials storage program.

Entomology--This essential program provides insect laboratory identification services to both home owners and industry. Staff conduct surveys of insects, such as Africanized Honey Bees and white flies, and work with the university and other professionals to tackle local pest problems. Without the lab, identification of harmful bugs, like fire ants and fruit flies, could take much longer and infestations could become more widespread.

Plant Pathology/Nematology--Both the nursery industry and backyard gardeners find the service of these professionals invaluable. This laboratory specializes in identifying diseases and nematodes (microscopic worms in the soil) that are harmful to plants. Staff also survey for problems in nurseries and other farms to prevent widespread infections of uncommon diseases or meet requirements for exportation outside the county.

Office of the County Veterinarian--Required by the County Charter, the County Veterinarian leads efforts to find and limit infectious diseases of animals that can affect both other animals and humans. Veterinarians and other specialists perform necropsies (autopsies of animals), conduct a wide variety of laboratory tests, and cooperate with public health officials when outbreaks of diseases like rabies occur. The Office also includes Wildlife Services, a cooperative program with the state and federal governments to control wildlife damage to people, other animals and property.

Pest Detection--The largest of this Division's programs, the Pest Detection program is composed of an army of "trappers," or insect detection specialists who are charged with checking traps and finding any exotic insects in them. Last year specialists visited traps more than 211,000 times, and found Mediterranean and Mexican fruit flies, an Oriental fruit fly and a Gypsy moth. Using this system of constant surveillance, trappers find potentially damaging insects earlier than if we waited for their damage to appear. Early detection also allows officials to quickly quarantine areas with infestations to prevent pests from spreading to other areas.

Watershed Resources and Pest Management--This year these two programs were combined for improved efficiency. Staff reseed landfills to prevent erosion and runoff, and work under contract with SDG&E to protect powerpoles and other equipment in wildfires. They are responsible for pest control in County-owned facilities and along County-maintained road rights-of-way, and respond to bee problems at County facilities. Staff also manufacture anti-coagulant bait for control of ground squirrels and other rodents. Several years ago the registration of sites storing hazardous agricultural materials was also added to this program.

Environmental Services--The focus of this program is on community outreach, media relations and non-regulatory agricultural and environmental programs. Staff lead Africanized Honey Bee outreach efforts, prepare crop statistics and act as liasion to the agricultural and environmental communities.

Regulatory Enforcement Division Overview

The Regulatory Enforcement Division is charged with ensuring that laws and regulations pertaining to pesticide use, standardization, quality control and shipment of plant materials are being followed. From making sure that scales in the marketplace are accurate and scanner prices correct, to preventing new pests from being introduced to California through illegal shipment of



produce or plants, to ensuring that workers wear protective equipment when applying pesticides, inspectors are busy protecting our economy, health and the environment.

Pesticide Regulation--California has one of the strongest programs of pesticide regulation in the country. Although pesticide laws are established at the state and federal levels, the local Agricultural Commissioner is responsible for their implementation. Staff in this program enforce pesticide laws and regulations in San Diego County. They assure that pesticides are used properly at farms and busi-

nesses and that employees, other people and the environment are protected from the harmful effects of pesticides. They also write permits for the use of certain pesticides that are considered to be more hazardous than others. Inspectors work with growers and their neighbors to mitigate problems that develop when agriculture and urban areas are in close proximity.

Plant Protection and Quarantine--The Plant Protection and Quarantine program is the first line of defense against the introduction of new pests. New pests have no natural predators here and might thrive in San Diego County's temperate climates, causing harm to humans, the environment and agriculture. This program inspects incoming packages at the airport, post offices, express carriers and truck terminals, ensuring that shipments "don't pack a pest." Plant Protection and Quarantine also oversees a progressive nursery, cut flower and cut foliage inspection program and enables export world wide. Because of the millions of dollars in damage that the introduction of exotic pests can cause, the program is of vital importance to the agricultural industry.

Standards Enforcement--The department's Standards Enforcement program is responsible for a myriad of programs affecting consumers, retailers, manufacturers, and agricultural producers on a daily basis. From jewelry scales to truck scales, electric meters to gas pumps, inspectors routinely test and inspect commercially-used weighing and measuring devices to ensure that the county's consumers receive items at the advertised price. Packaged products sold at wholesale and retail levels are inspected for content and labeling accuracy. We visit and "shop" retail stores throughout San Diego County to verify that posted and advertised prices are the same as those being charged at the



checkstand through scanner and price look-up systems. The Division's agricultural duties include regulating produce sold as organic and egg inspection. The fruit and vegetable standardization program makes certain that produce meets maturity and quality requirements. Farmers' markets are growing in number, size, and popularity throughout the county. Inspections are conducted at the markets and the growing locations of over 300 certified producers to verify that the products sold at farmers' markets are of their own production. Known as "direct marketing," these sales bring the farmer face-to-face with consumers who benefit from supplies of quality produce at reasonable prices.

Department Highlights

- The last year of the century was an exciting one in the Department of Agriculture, Weights and Measures. Many of the department's most successful projects required the coopera tion of staff from various programs, and help from other County departments, industry and the public.
- Staff cooperated with other agencies to detect and successfully control red imported fire ants from the County.
- Employees won various awards on behalf of the Department, includ ing a National Association of Counties Award for "The Buzz About Killer Bees," a video for children.
- Agriculture, Weights & Measures, the Air Pollution Control District and the County Department of Environmental Health reached an agreement to offer consolidated multi-agency inspections at gas stations. Gas station owners will be able to spend less time dealing weights.



stations. Gas station owners will be able to spend less time dealing with regulatory agen cies and more time conducting their business.

- *EX* Dow Chemical highlighted Agriculture, Weights and Measures' herbicide application tech niques in their publication, *Panorama--for Lawn Care and Landscape Professionals.*
- When avocado thrips, a devastating pest of avocados, were found in San Diego County groves, staff worked with the California Avocado Commission to provide training to growers and to issue needed permits for applying appropriate pesticides.
- 1999 saw the adoption of San Diego County's Consumer Confidence Protection Act. The first of its kind in California, the ordinance requires retailers using scanners to obtain a permit. The ordinance is intended to ensure that consumers are not paying prices higher than those advertised or posted.
- An infestation of Mexican fruit flies was discovered and the Fallbrook area placed under quarantine. The infestation was discovered and controlled early and eradication is sched uled for declaration in June, 2000.
- Staff updated the Department's fee schedule with input from growers and other businesses that would be affected by fee changes.
- Department staff, the nursery and flower industry, and the California Department of Food and Agriculture cooperated to eradicate chrysanthemum white rust from two nurseries in the county.
- The Department's labs processed a record number of samples, including 8,100 in the Plant Pathology lab.



- A new program to meet a protocol requested by the Chinese government was started that will allow citrus growers to ship their produce to China in the near future. Pest detection traps were placed in more than 11,000 acres of citrus groves in the County.
- The County Veterinarian was chosen to participate in a prestigious program by the Armed Forces Institute of Pathology to study new veterinary diseases.
- The Department helped prepare the "Consumer's Pocket Guide" in cooperation with Visa. The booklet contains helpful hints and consumer reference numbers for San Diego County and was printed at no cost to the County.

