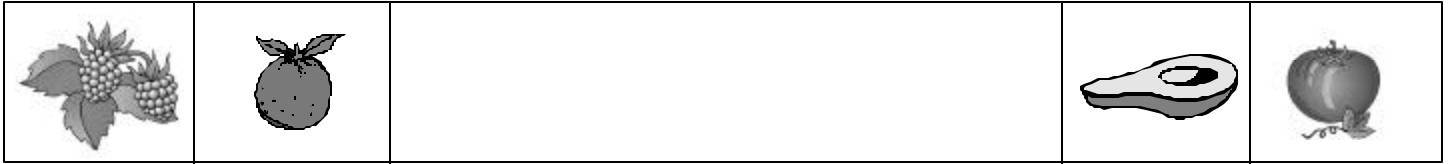


**1999**  
**Crop Statistics &**  
**Annual Report**

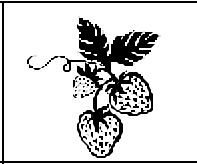
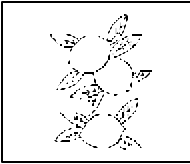
**County of San Diego**  
**Department of Agriculture, Weights & Measures**



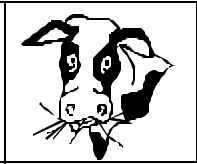
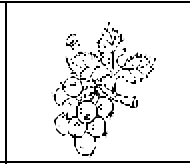


Total Value	\$1,236,343,113
Estimated Economic Impact	\$4,327,200,896
Change in Value from 1998	+ \$57,895,880
--Percent of Change	4%
Total Acreage	170,314
Change in Acreage from 1998	-1,953 Acres
--Percent of Change	1%
#1 Crop	Indoor Flowering & Foliage Plants
--Value	\$306,525,453
Crop with Greatest Percent Change in Value	Chili Peppers
--Percent of Change	121%
Crop with Highest Value Per Acre	Indoor Flowering & Foliage Plants
--Dollar Value Per Acre	\$614,279
Crop with Lowest Value Per Acre <i>(excluding range)</i>	Oat, Grain
--Dollar Value Per Acre	\$101
Rank of Agriculture as a Component of San Diego County's Economy	4th*

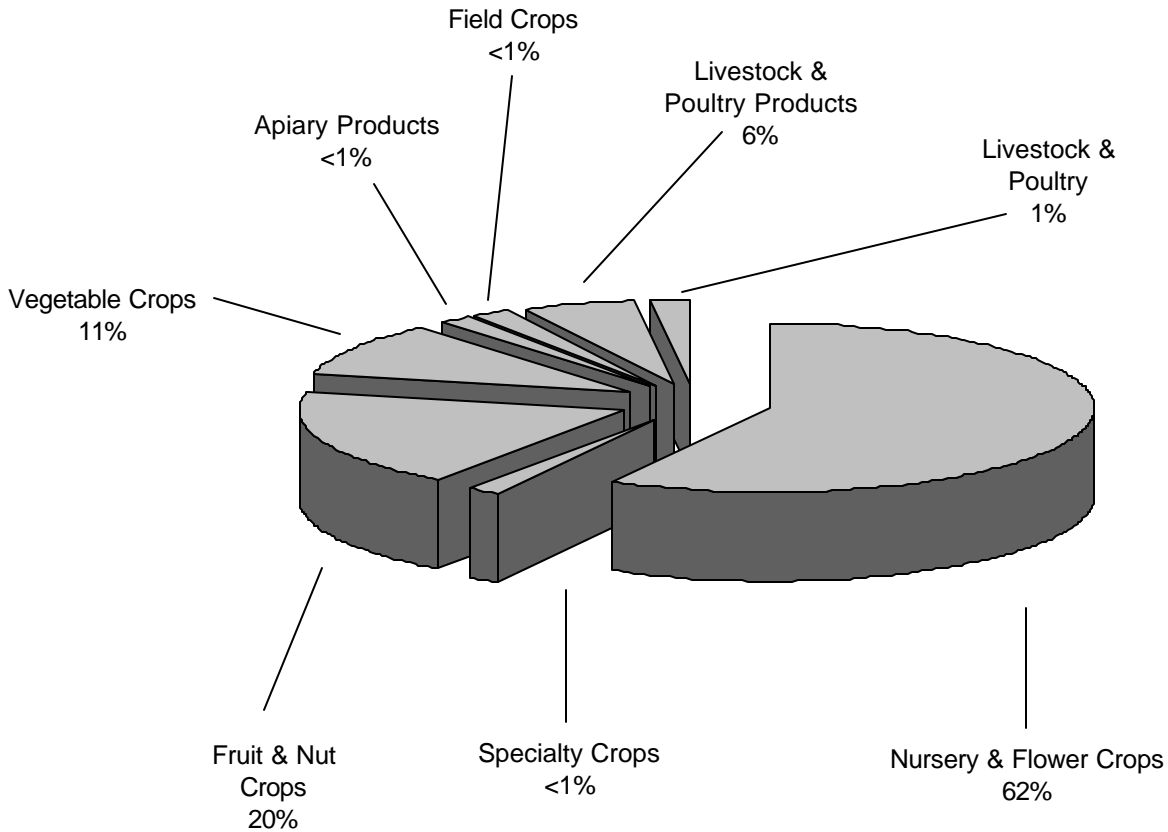
\*Source: Greater San Diego Chamber of Commerce.



# Summary 1999 & 1998



	1999			1998		
	Acres	Hectares	Value	Acres	Hectares	Value
Nursery Products & 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 & Poultry			\$14,909,685			\$15,634,166
Livestock & Poultry Products			\$68,371,153			\$75,696,569
Specialty Crops			\$503,568			\$556,588
<b>TOTAL</b>	<b>170,314</b>	<b>68,930</b>	<b>\$1,236,343,113</b>	<b>172,267</b>	<b>69,713</b>	<b>\$1,178,447,233</b>



Numbers do not add to 100% because of rounding.

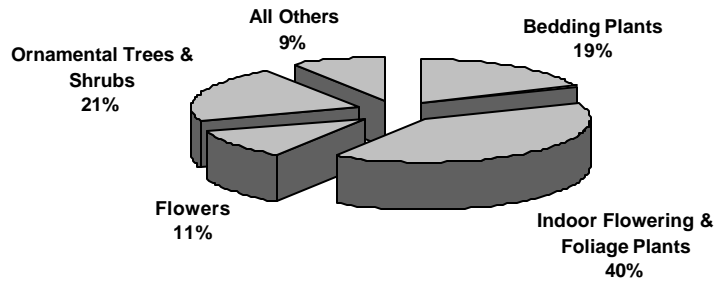


# Summary 1999 & 1998

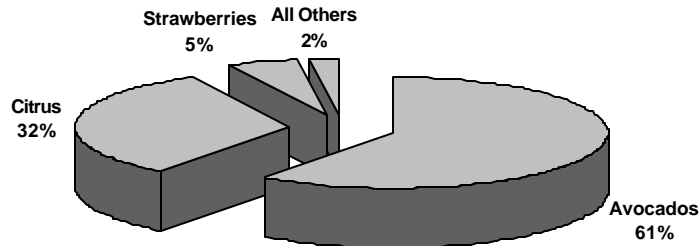


## Percent of Values by Selected Commodity Groups

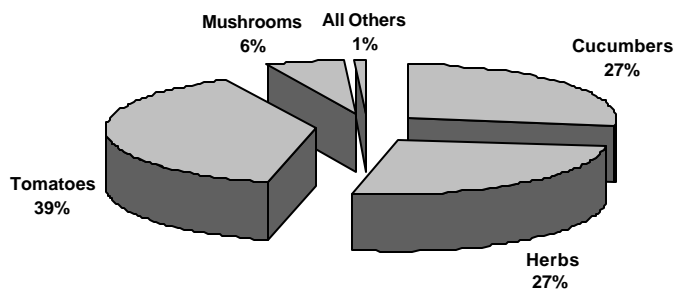
### Nursery & Flower Crops



### Fruit & Nut Crops



### Vegetable Crops





# Nursery & Flower Crops 1999 & 1998

CROP	Year	Acres	Hectares	TOTAL
<b>NURSERY PRODUCTS</b>				
BEDDING PLANTS, COLOR	1999	785	318	\$145,446,525
	1998	980	397	\$146,565,455
BULBS, CORMS, RHIZOMES, ROOTS, TUBERS	1999	140	57	\$1,603,025
	1998	140	57	\$1,598,985
CACTUS AND SUCCULENTS	1999	185	75	\$18,385,652
	1998	185	75	\$18,556,465
CITRUS, AVOCADO, AND SUBTROPICAL FRUIT TREES	1999	192	78	\$6,898,542
	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 AND SHRUBS	1999	2200	890	\$162,568,521
	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.

		<h2 style="margin: 0;">Nursery &amp; Flower Crops</h2> <h3 style="margin: 0;">1999 &amp; 1998</h3>		
---	---	--	---	---

Crop	Year	Acres	Hectares	TOTAL
<b>FLOWER CROPS</b>				
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
<hr/>				
TOTAL FLOWER PRODUCTS	1999	3,680	1,489	\$82,455,765
	1998	3,667	1,484	\$81,326,059
<hr/>				
TOTAL NURSERY & FLOWER CROPS	1999	8,629	3,492	\$773,081,225
	1998	8,337	3,375	\$722,186,252

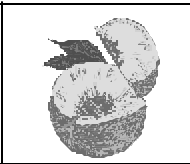


# Fruit & Nut Crops

## 1999 & 1998

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





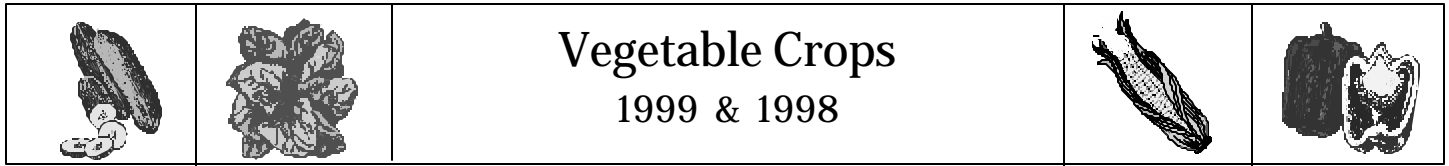
# Fruit & Nut Crops

## 1999 & 1998



CROP	Year	Harvested		Production		Total Production		US\$/ Ton	US\$/ Metric Ton	TOTAL
		Acres	Hectares	Tons/ Acre	Metric Tons/ Hectare	Tons	Metric Tons			
TOTAL ORANGES, NAVEL	1999	1,455	589	15.34	34.39	22,320	20,256			\$5,343,042
	1998	1,455	589	13.86	31.07	20,166	18,300			\$5,438,011
FRESH MARKET	1999	1,455	589	12.51	28.04	18,202	16,516	263	290	\$4,787,152
	1998	1,455	589	11.45	25.67	16,660	15,120	298	328	\$4,964,620
BY PRODUCT	1999			2.83	6.34	4,118	3,734	135	149	\$555,890
	1998			2.41	5.4	3,507	3,181	135	149	\$473,391
TOTAL ORANGES, VALENCIA	1999	6,790	2,748	19.84	44.47	134,714	122,204			\$33,818,749
	1998	6,790	2,748	17.08	38.29	115,973	105,221			\$27,008,583
FRESH MARKET	1999	6,790	2,748	16.59	37.19	112,646	102,198	263	290	\$29,625,924
	1998	6,790	2,748	14.38	32.24	97,640	88,596	240	265	\$23,433,648
BY PRODUCT	1999			3.25	7.29	22,068	20,033	190	209	\$4,192,825
	1998			2.7	6.05	18,333	16,625	195	215	\$3,574,935
TOTAL TANGERINE, TANGELO	1999	900	364	17.78	39.86	16,002	14,509			\$7,658,820
	1998	900	364	17.05	38.22	15,345	13,912			\$8,115,525
FRESH MARKET	1999	900	364	13.88	31.11	12,492	11,324	585	645	\$7,307,820
	1998	900	364	13.55	30.37	12,195	11,055	635	700	\$7,743,825
BY PRODUCT	1999			3.9	8.74	3,510	3,181	100	110	\$351,000
	1998			3.5	7.85	3,150	2,857	118	130	\$371,700
GRAPES, WINE	1999	189	77	2.03	4.55	384	346	420	368	\$161,154
	1998	187	76	2.58	5.78	483	439	490	540	\$236,425
MACADAMIA NUTS	1999	185	75	1.21	2.71	224	203	2,280	2,513	\$510,492
	1998	185	75	1.05	2.35	194	176	2,565	2,827	\$498,380
MISC. FRUITS & NUTS*	1999	850	344							\$3,856,854
	1998	785	318							\$2,101,025
PERSIMMONS	1999	450	182	4.29	9.62	1,931	1,751	388	428	\$749,034
	1998	450	182	7.01	15.71	3,155	2,859	428	472	\$1,350,126
TOTAL STRAWBERRIES	1999	435	176	25.15	56.38	10,940	9,923			\$12,695,012
	1998	450	182	26.56	59.54	11,952	10,836			\$10,755,198
FRESH MARKET	1999	435	176	17.56	39.36	7,639	6,927	1,381	1,522	\$10,548,907
	1998	450	182	18.68	41.87	8,406	7,620	1,058	1,166	\$8,893,548
PROCESSING	1999			7.59	17.01	3,302	2,994	650	716	\$2,146,105
	1998			7.88	17.66	3,546	3,214	525	579	\$1,861,650
TOTAL FRUIT & NUT CROPS	1999	44,907	18,175							\$245,602,494
	1998	44,855	18,160							\$224,669,472

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







# Vegetable Crops 1999 & 1998





CROP	Year	Harvested		Production		Total Production		US\$/ Ton	US\$/ Metric Ton	TOTAL
		Acres	Hectares	Tons/ Acre	Metric Tons/ Hectare	Tons	Metric Tons			
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 VEGETABLES*	1999	340	138							\$2,085,658
	1998	356	144							\$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	3,655	1479			43,456	39,421			\$24,348,066
	1998	3,516	1423			41,235	37,441			\$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 GROWN	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	4,420	1789			80,643	73,168			\$35,803,562
	1998	4,386	1775			78,303	71,029			\$35,313,316
TOMATOES, FRESH	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, CHERRY	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	723	293							\$13,065,566
	1998	650	263							\$12,585,601
TOTAL VEGETABLES	1999	13,331	5,395							\$132,200,537
	1998	12,563	5,086							\$128,472,996

\*Includes collards, Chinese cabbage, green onions, mustard & turnip greens, parsley, radishes and spinach.

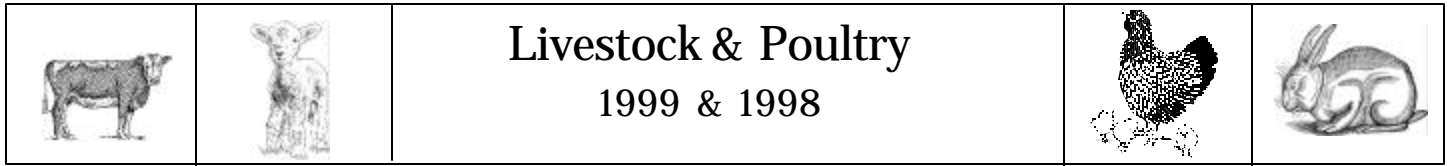
\*\*Includes canteloupe, chayote, pumpkin, tomatillos, sweet potato, cauliflower, watermelon, leaf lettuce, celery & winter squash.

		<h2 style="margin: 0;">Field Crops</h2> <h3 style="margin: 0;">1999 &amp; 1998</h3>		
---	---	---	---	---

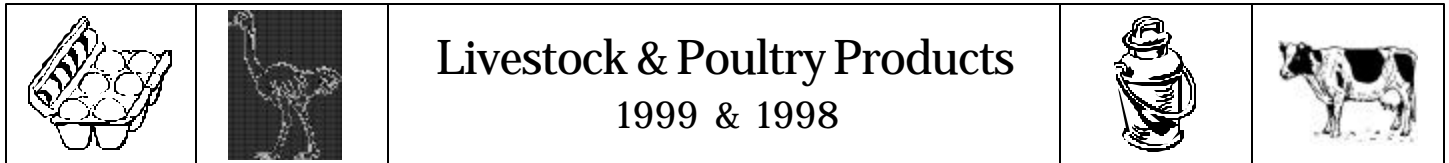
CROP	Year	Acres	Hectares	Production		Total Production		US\$/Ton	US\$/Metric Ton	TOTAL
				Tons/Acre	Metric Tons/Hectare	Tons	Metric Tons			
BARLEY, GRAIN	1999	90	36	1.65	3.7	149	133	102.65	114.85	\$15,244
	1998	200	81	1.74	3.9	348	316	102.65	113.15	\$35,722
GREENCHOP	1999	125	51	23.02	51.6	2,878	2,632	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	43,120							\$6,147,451

		<h2 style="margin: 0;">Apiary Products</h2> <h3 style="margin: 0;">1999 &amp; 1998</h3>		
---	---	---	---	---





CROP	Year	TOTAL
HONEY	1999	\$1,099,565
	1998	\$1,003,002
BEES WAX	1999	\$21,032
	1998	\$19,565
BEES AND QUEENS	1999	\$88,656
	1998	\$87,598
POLLEN	1999	\$45,265
	1998	\$42,564
POLLINATION	1999	\$5,200
	1998	\$4,500
TOTAL APIARY	1999	\$1,259,718
	1998	\$1,157,229



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





	Year	Production		Per Unit		TOTAL
		CWT	Metric Ton	\$/CWT	Metric Ton	
MILK, MARKET	1999	1,607,564	72,910	13.75	303	\$22,104,005
	1998	1,532,231	69,494	13.01	287	\$19,934,325
MILK, MANUFACTURING	1999	631	29	12.23	270	\$7,717
	1998	2,565	116	11.76	259	\$30,164
EGGS, CHICKEN MARKET	1999	97,598,789	doz	0.47	doz	\$45,871,431
	1998	98,985,856	doz	0.56	doz	\$55,432,079
RATITE PRODUCTS TOTAL	1999					\$388,000
	1998					\$300,000
HIDES	1999	1,000		135	/HIDE	\$135,000
	1998	400		125	/HIDE	\$50,000
OIL	1999	2,200	GAL	115	/GAL	\$253,000
	1998	2,500	GAL	100	/GAL	\$250,000
TOTAL LIVESTOCK AND POULTRY PRODUCTS	1999					\$68,371,153
	1998					\$75,696,569

		<b>Specialty Crops</b> 1999 & 1998		
---	---	---------------------------------------	---	---

CROP	Year	TOTAL
TIMBER	1999	\$53,568
	1998	\$56,588
FIREWOOD	1999	\$450,000
	1998	\$500,000
TOTAL SPECIALTY CROPS	1999	\$503,568
	1998	\$556,588

		<b>Crops Valued at \$10 Million or More</b>		
---	---	---	---	---

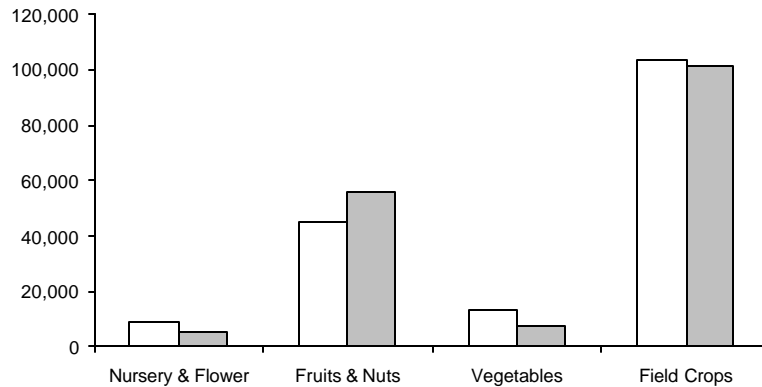
Crop	1999	1998
Indoor Flowering & Foliage Plants	\$306,525,453	\$295,878,756
Ornamental Trees & Shrubs	\$162,568,521	\$129,986,578
Avocados	\$147,846,527	\$135,500,282
Bedding Plants	\$145,446,525	\$146,565,455
Cut Flowers (Flower Products)	\$82,455,765	\$81,326,059
Eggs	\$45,871,431	\$55,432,079
Tomatoes	\$35,803,562	\$35,313,316
Valencia Oranges	\$33,818,749	\$27,008,583
Poinsettia	\$33,565,221	\$31,254,654
Cucumbers	\$24,348,066	\$23,737,639
Herbs	\$24,288,822	\$22,385,918
Lemons	\$23,778,152	\$22,464,500
Milk, Market	\$22,104,005	\$19,934,325
Cactus & Succulents	\$18,385,652	\$18,556,465
Mushrooms	\$17,339,850	\$17,676,000
Cattle & Calves	\$13,156,444	\$13,252,500
Strawberries	\$12,695,012	\$10,755,198

		<b>Ten Year Comparison</b> 1999 & 1989		
---	---	---	--	---

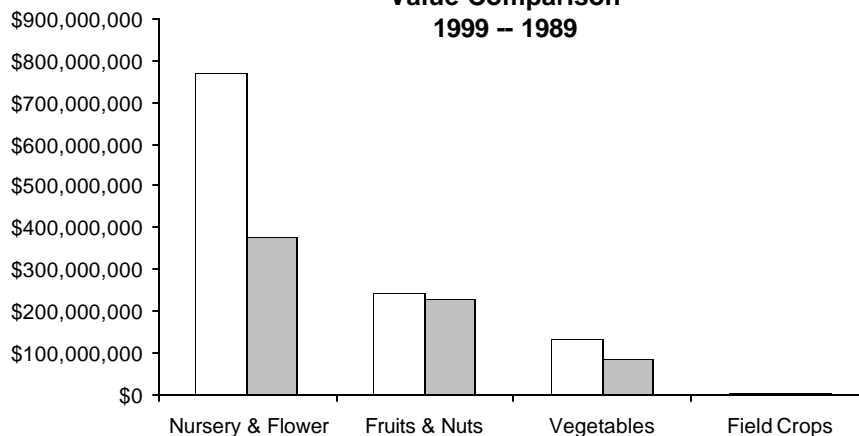
Crop	1999			1989		
	Acres	Hectares	Value	Acres	Hectares	Value
Nursery & Flower Crops	8,629	3,492	\$767,766,905	5,712	2715	\$375,081,737
Fruit & Nut Crops	44,907	18,175	\$245,602,494	55,941	23,044	\$230,116,369
Livestock & Poultry Products			\$68,371,153			\$80,301,313
Vegetable Crops	13,331	5,395	\$132,200,537	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
Apiary Products			\$1,259,718			\$607,450
Specialty Crops			\$503,568			**
<b>TOTAL</b>	<b>172,262</b>	<b>69,713</b>	<b>\$1,236,343,113</b>	<b>170,429</b>	<b>69,783</b>	<b>\$772,269,157</b>

\*\*Not Reported in 1989.

**Acres Comparison**  
1999 – 1989



**Value Comparison**  
1999 – 1989





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

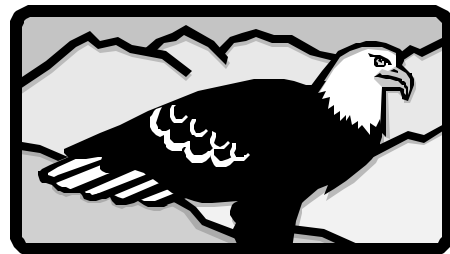


When it comes to preservation of endangered species and their habitat in San Diego County, you may find people speaking a language you don't understand. What do all of those acronyms mean? What are the various programs, and how are they related? If you don't know the difference

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

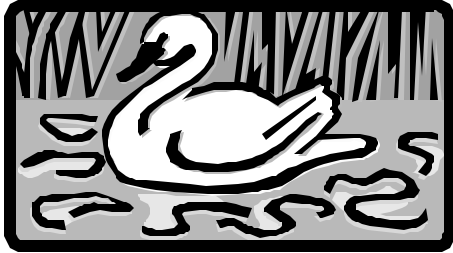


**MSCP, or Multiple Species Conservation Program.** The MSCP is a local plan to conserve and protect multiple species habitat in San Diego County. It currently covers a 900-square mile area in southwestern San Diego County and includes unincorporated areas of the County as well as the City of San Diego 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.

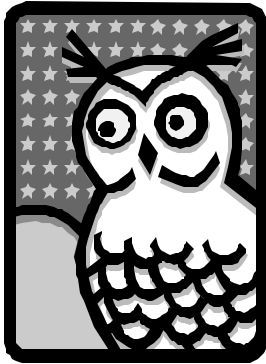


## Environmental Stewardship: A Farmer's Perspective

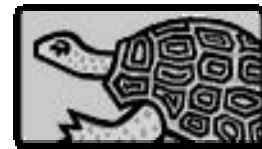
*Eric Anderson is a local farmer whose family has been in agriculture for 44 years, growing seeds and nursery products. He has served as president of both the San Diego County Farm Bureau and the San Diego County Plant and Flower Association. Long active in agricultural issues related to endangered species,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

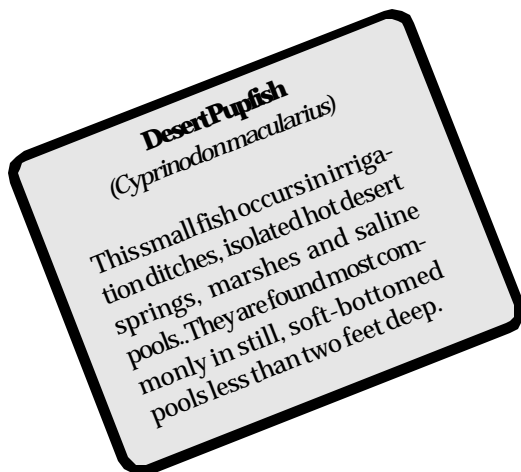
If you are a farmer who has ever requested a restricted materials permit in order to be allowed to apply certain pesticides, you know the rigorous evaluation process required. Inspectors condition permits to ensure the safety of people both on and around the farm, and to prohibit pesticides from endangering 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 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

Endangered  
Species  
Protection

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](http://www.cdpr.gov), or call the Department of Agriculture, Weights and Measures' pesticide regulation program at (858) 694-2784.





## Department Overview

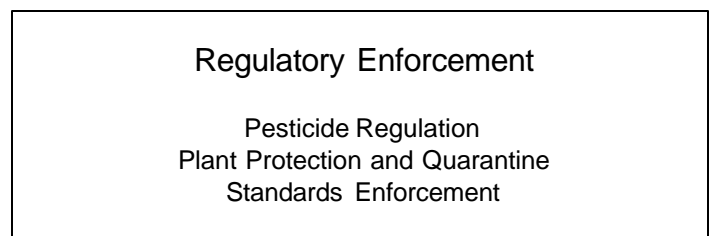
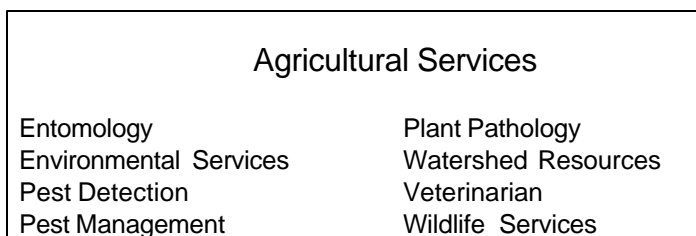
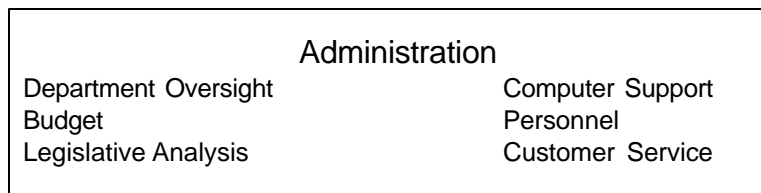
The Department of Agriculture, Weights and Measures is a diverse department offering a wide variety of services. Although we are a County department, we are also part of a statewide network of County Agricultural Commissioners that was created by the State legislature in 1881. Since 1972 the Department 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.

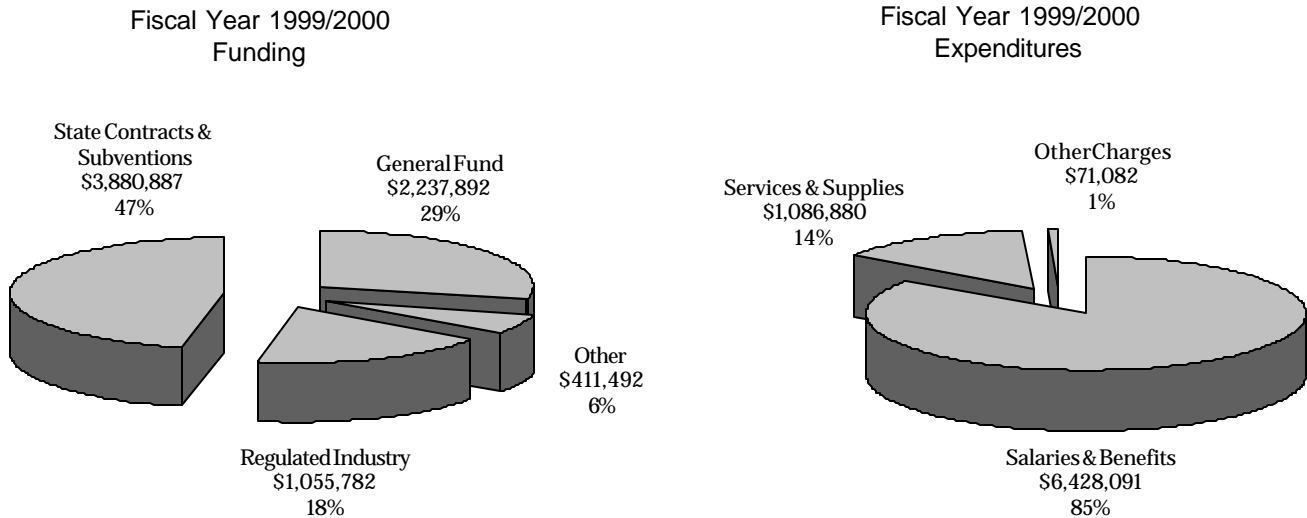
## Organizational Structure

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.



## 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 liaison 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 businesses 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 cooperation 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, including 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 with regulatory agencies and more time conducting their business.
- ✍ Dow Chemical highlighted Agriculture, Weights and Measures' herbicide application techniques 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 scheduled 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.

