

2003
Crop Statistics & Annual Report



County of San Diego
Department of Agriculture, Weights & Measures



County of San Diego

KATHLEEN A. THUNER

AGRICULTURAL COMMISSIONER
SEALER OF WEIGHTS
AND MEASURES

DEPARTMENT OF AGRICULTURE, WEIGHTS & MEASURES
5555 Overland Ave., Bldg. 3, San Diego, CA 92123-1292

AGRICULTURE
(619) 694-2739
FAX
(619) 565-7046
WEIGHTS & MEASURES
(619) 694-2778

A.G. Kawamura
Secretary

California Department of Food and Agriculture
and

The Honorable Board of Supervisors of the County of San Diego
Supervisor Dianne Jacob, Chairwoman, 2nd District
Supervisor Pam Slater-Price, Vice Chairwoman, 3rd District
Supervisor Greg Cox, 1st District
Supervisor Ron Roberts, 4th District
Supervisor Bill Horn, 5th District

I respectfully submit the report of acreage, yield and value of agricultural production in San Diego County in 2003. This report also contains the Department of Agriculture, Weights and Measures' 2003 Annual Report.

The total reported agricultural value for 2003 is **\$1,351,225,412**. This is the highest ever reported for San Diego County, reflecting a 4% increase from the prior year, and the 11th successive year of growth in value for the San Diego County agricultural industry.

Indoor flowering and foliage plants continue to be the number one crop, with a 2% increase in production, reaching a value of \$312,115,863. Since 1984, it has held the position as the number one agricultural commodity in San Diego County. The acreage also continues to grow as it has since 1984, with a 3% increase this past year. Overall nursery production acres increased 10%.

The value of livestock and poultry products significantly increased due to a 59% increase in the price of eggs. Timber products increased 714% primarily due to logging of drought-stressed trees on Palomar and Volcan Mountains. The value of fresh market navel oranges increased 51% even with acreage remaining the same. The largest percentage loss in value (-72%) this year was potatoes due to a 77% decrease in acreage.

There were a number of acreage increases in 2003; wine grape acreage increased 76% and fresh market strawberries increased 26%. Overall, agricultural acreages increased 17% in San Diego County. One contributing factor affecting the reported acreage increase was improved information obtained during the Mexican Fruit Fly quarantine.

The Mexican Fruit Fly Eradication Project in Valley Center continued until the pest was declared eradicated in September 2003, but only after agriculture suffered a \$4 million loss. Local farmers had just started to breathe a quick sigh of relief when the October winds fanned the Firestorms of 2003. Again, the Valley Center area suffered crop losses due to the fire. County-wide agricultural losses due to the firestorms were estimated at \$28.5 million.

All reported figures represent Freight on Board (F.O.B.) values for products, whether sold or used on the farm where grown. These are not net values and do not reflect cost of production. Total values do not add precisely due to rounding. Gross value of farm products does not reflect the total value to the economy. For every dollar of agricultural product value, a multiplying factor of 3.5 may be applied to estimate the **full economic impact of agriculture**, which calculates to **\$4,729,288,942** for 2003.

I would like to express my thanks to the many farmers, ranchers, and nurserymen and women who provide the information that is vital to this report. In addition, I would like to thank industry groups including the San Diego County Farm Bureau and the California Avocado Commission for their support in the compilation of statistics for agricultural production in San Diego County. Also, I would like to thank our guest writer, Janet Silva Kister, President of San Diego County Farm Bureau, for an industry perspective on the Mexican Fruit Fly Quarantine. And finally, I would like to thank members of this department that worked to compile statistics, write and edit this report, specifically Lynn Parker, Vince Acosta, Kathy DaVee, Stephen Durso and Dawn Nielsen.



KATHLEEN A. THUNER
Agricultural Commissioner/
Sealer of Weights and Measures

Highlights

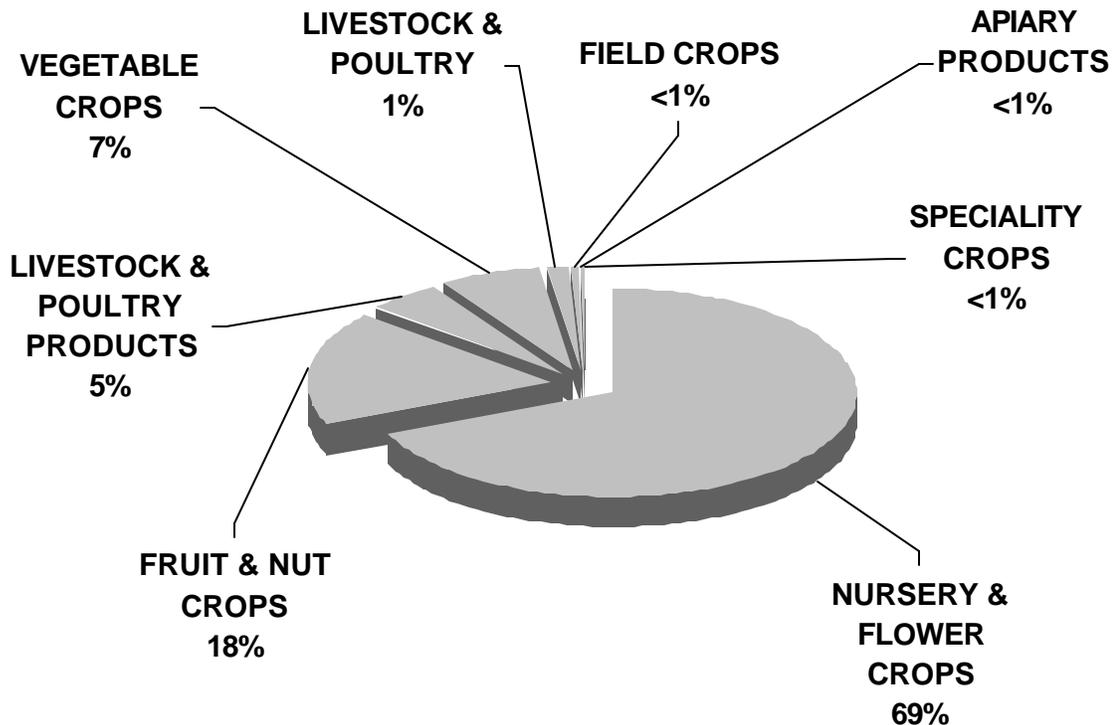
2003

Total Value	\$1,351,225,412
Estimated Economic Impact	\$4,729,288,942
Change in Value from 2002 Percent of Change	\$53,946,942 4.16%
Total Acreage	265,041
Change in Acreage from 2002 Percent of Change	38,376 16.93%
#1 Crop	Indoor Flowering & Foliage Plants
Crop with the Greatest Percent Increase in Value Percent of Change	Timber 714%
Crop with the Greatest Percent Decrease in Value Percent of Change	Potatoes -72%
Crop with the Highest Value Per Acre Dollar Value Per Acre	Indoor Flowering & Foliage Plants \$615,613
Crop with the Lowest Value Per Acre (excluding rangeland) Dollar Value Per Acre	Oat Grain \$4.46
Rank of Agriculture as a Component of San Diego County's Economy	5th <i>As reported by the Greater San Diego Chamber of Commerce</i>

Summary of Major Types of Crops 2003

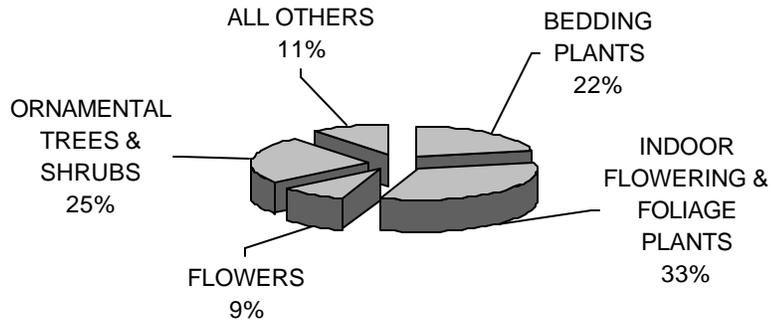
	2003			2002		
	ACRES	HECTARES	VALUE	ACRES	HECTARES	VALUE
Nursery & Flower Crops	9,531	3,857	\$927,059,200	8,934	3,616	\$879,125,930
Fruit & Nut Crops	43,374	17,553	\$236,858,163	43,791	17,722	\$233,663,640
Vegetable Crops	6,757	2,735	\$92,659,801	7,365	2,981	\$101,324,575
Livestock & Poultry Products			\$65,692,081			\$55,081,366
Livestock & Poultry			\$18,732,891			\$18,475,736
Field Crops	205,379	83,116	\$6,216,920	166,575	67,412	\$6,207,372
Apiary Products			\$3,326,399			\$2,947,141
Specialty Crops			\$679,957			\$452,710
TOTALS	265,041	107,261	\$1,351,225,412	226,665	91,731	\$1,297,278,470

2003 Summary All Crops

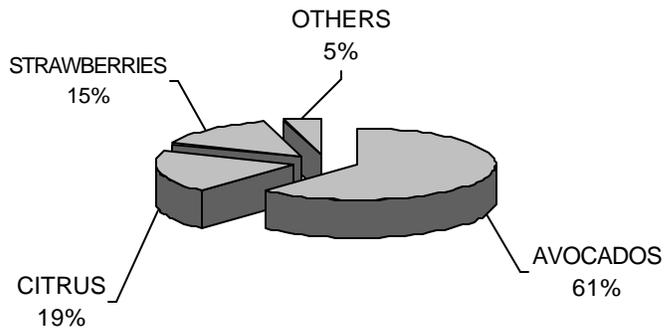


Summary of Major Types of Crops 2003

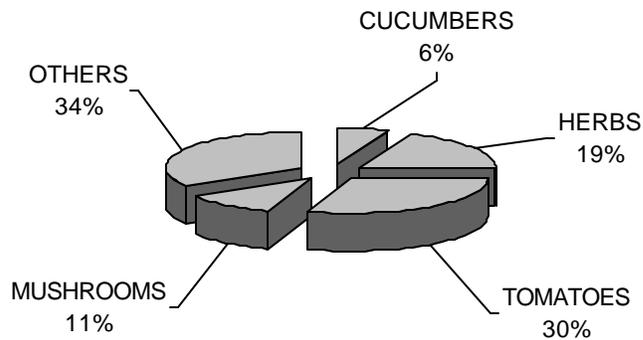
NURSERY AND FLOWER CROPS



FRUIT AND NUTS



VEGETABLE CROPS



Nursery & Flower Crops 2002 & 2003

Nursery Crops

	YEAR	ACRES	HECTARES	TOTAL
BEDDING PLANTS, COLOR	2003	905	366	\$201,254,658
	2002	836	338	\$176,542,542
BULBS, CORMS, RHIZOMES, ROOTS, TUBERS	2003	142	57	\$2,385,456
	2002	131	53	\$2,429,526
CACTUS AND SUCCULENTS	2003	210	85	\$21,557,887
	2002	218	88	\$22,427,959
CITRUS, AVOCADO, AND SUBTOPICAL FRUIT TREES	2003	185	75	\$8,058,872
	2002	190	77	\$8,018,956
CUT CHRISTMAS TREES	2003	145	59	\$1,562,100
	2002	168	68	\$1,645,347
HERBACEOUS PERENNIALS	2003	280	113	\$17,954,612
	2002	217	88	\$14,553,871
INDOOR FLOWERING AND FOLIAGE PLANTS	2003	507	205	\$312,115,863
	2002	493	200	\$305,442,053
ORNAMENTAL TREES AND SHRUBS	2003	2854	1155	\$229,565,221
	2002	2514	1017	\$211,924,808
POINSETTIA	2003	125	51	\$38,456,512
	2002	133	54	\$42,993,046
TURF	2003	571	231	\$10,400,000
	2002	480	194	\$6,713,827
TOTAL NURSERY PRODUCTS	2003	5924		\$843,311,181
	2002	5380		\$792,691,935

Nursery & Flower Crops 2002 & 2003

Flower Crops

	YEAR	ACRES	HECTARES	TOTAL
TOTAL CARNATIONS	2003	26	11	\$1,135,010
	2002	30	12	\$1,534,181
CARNATION, STANDARD	2003	6	2	\$479,554
	2002	8	3	\$585,965
CARNATION, MINI	2003	20	8	\$655,456
	2002	22	9	\$948,216
CUT FOLIAGE	2003	485	196	\$9,021,648
	2002	527	213	\$10,130,034
LEPTOSPERMUM	2003	375	152	\$2,102,164
	2002	389	157	\$2,458,421
PROTEAS	2003	447	181	\$3,025,465
	2002	469	190	\$3,785,544
ROSES	2003	16	6	\$2,954,565
	2002	18	7	\$3,516,234
WAX FLOWERS	2003	759	307	\$6,854,646
	2002	782	316	\$7,046,685
ALL OTHERS	2003	1,489	603	\$58,654,521
	2002	1,327	537	\$57,962,896
TOTAL FLOWER PRODUCTS	2003	3,607	1,460	83,748,019
	2002	3,554	1,438	86,433,995
TOTAL NURSERY AND FLOWER PRODUCTS	2003	9,531		\$927,059,200
	2002	8,934		\$879,125,930

Fruit & Nut Crops 2002 & 2003

	YEAR	HARVESTED		PRODUCTION		TOTAL PRODUCTION		\$ PER UNIT		TOTAL
		Acres	Hectares	Tons/ Acre	Metric Tons/ Hectare	Tons	Metric Tons	US\$/ Ton	\$/Metric Ton	
APPLES	2003	480	194	1.99	4.46	955	865	401	442	\$383,035
	2002	436	176	2.1	4.71	916	829	395	435	\$361,662
TOTAL AVOCADOS	2003	25,482	10,312			63,606	25,741			\$146,171,423
	2002	25,729	10,412			75,515	30,561			\$152,277,067
HASS	2003	23,125	9,359	2.58	5.78	59,663	54,095	2,394	2,639	\$142,832,025
	2002	23,096	9,347	3.07	6.88	70,905	64,307	2,094	2,308	\$148,474,442
FUERTE	2003	503	204	0.91	2.04	458	416	785	865	\$359,295
	2002	628	254	1.02	2.29	641	582	780	860	\$499,668
OTHER	2003	1,854	750	1.88	4.21	3,486	3,158	855	942	\$2,980,103
	2002	2,005	811	1.98	4.44	3,970	3,601	832	917	\$3,302,957
BERRIES, MISC	2003	157	64	6.51	14.59	1,022	934	3,621	3,991	\$3,701,024
	2002	160	65	6.89	15.45	1,102	1,004	3,873	4,269	\$4,269,595
TOTAL CITRUS	2003	14,758	5,972			205,894	83,324			\$45,471,414
	2002	15,309	6,195			203,921	82,526			\$42,699,792
TOTAL GRAPEFRUIT	2003	2,424	981	13.8	30.89	33,403	30,303			\$2,877,919
	2002	2,866	1,160	11.4	25.62	32,758	29,719			\$3,058,739
FRESH MARKET	2003	2,424	981	9.8	21.97	23,755	21,553	98	108	\$2,328,010
	2002	2,866	1,160	8.6	19.28	24,648	22,365	106	117	\$2,612,646
BY PRODUCT	2003			3.98	8.92	9,648	8,751	57	63	\$549,909
	2002			2.83	6.34	8,111	7,354	55	61	\$446,093
KUMQUATS	2003	227	92	2.5	5.6	568	515	1,486	1,638	\$843,305
	2002	129	52	2.69	6.03	347	314	1,683	1,855	\$584,001
TOTAL LEMONS	2003	3,636	1,471	17.4	39.01	63,266	57,384			\$19,556,391
	2002	3,196	1,293	18.1	40.55	57,816	52,431			\$17,572,967
FRESH MARKET	2003	3,636	1,471	11.8	26.43	42,868	38,879	401	442	\$17,190,228
	2002	3,196	1,293	12.5	28.11	40,078	36,346	392	432	\$15,710,498
BY PRODUCTS	2003			5.61	12.58	20,398	18,505	116	128	\$2,366,163
	2002			5.55	12.44	17,738	16,085	105	116	\$1,862,469
TOTAL LIMES	2003	495	200	8.68	19.46	4,297	3,892			\$1,077,654
	2002	558	226	7.89	17.69	4,403	3,998			\$1,169,006
FRESH MARKET	2003	495	200	4.84	10.85	2,396	2,170	403	444	\$965,507
	2002	558	226	4.92	11.03	2,745	2,493	392	432	\$1,076,197
BY PRODUCT	2003			3.84	8.61	1,901	1,722	59	65	\$112,147
	2002			2.97	6.66	1,657	1,505	56	94	\$92,809

Fruit & Nut Crops 2002 & 2003

	YEAR	HARVESTED		PRODUCTION		TOTAL PRODUCTION		\$ PER UNIT		TOTAL
		Acres	Hectares	Tons/ Acre	Metric Tons/ Hectare	Tons	Metric Tons	US\$ / Ton	\$/Metric Ton	
TOTAL ORANGES, NAVEL	2003	1,299	526	14.9	33.36	19,329	17,547			\$4,915,171
	2002	1,285	520	14	31.47	18,041	16,364			\$3,380,270
FRESH MARKET	2003	1,299	526	11	24.73	14,328	13,008	305	336	\$4,370,040
	2002	1,285	520	10.5	23.49	13,467	12,215	215	237	\$2,895,362
BY PRODUCT	2003			3.85	8.63	5,001	4,539	109	120	\$545,131
	2002			3.56	7.98	4,575	4,150	106	117	\$484,908
TOTAL ORANGES, VALENCIA	2003	5,985	2,422	12.6	28.29	75,531	68,518			\$12,709,821
	2002	6,430	2,602	12.4	27.68	79,411	72,023			\$12,845,533
FRESH MARKET	2003	5,985	2,422	7.63	17.1	45,666	41,416	209	230	\$9,544,110
	2002	6,430	2,602	7.01	15.71	45,074	40,877	205	226	\$9,240,232
BY PRODUCT	2003			4.99	11.19	29,865	27,102	106	117	\$3,165,711
	2002			5.34	11.97	34,336	31,146	105	116	\$3,605,301
TOTAL TANGERINE & TANGELO	2003	692	280	13.7	30.78	9,501	8,618			\$3,491,153
	2002	845	342	13.2	29.57	11,146	10,113			\$4,089,276
FRESH MARKET	2003	692	280	9.03	20.24	6,249	5,667	503	554	\$3,143,146
	2002	845	342	8.59	19.26	7,259	6,587	505	557	\$3,665,593
BY PRODUCT	2003			4.7	10.54	3,252	2,951	107	118	\$348,007
	2002			4.6	10.31	3,887	3,526	109	120	\$423,683
GRAPES,WINE	2003	304	123	2.08	4.66	632	573	380	419	\$240,274
	2002	173	70	1.38	3.09	239	216	259	285	\$61,823
MACADAMIA NUTS	2003	150	61	1.21	2.71	182	165	1,682	1,854	\$305,283
	2002	163	66	1.12	2.51	183	166	1,829	2,016	\$333,975
MISC. FRUITS & NUTS*	2003	685	277							\$4,689,510
	2002	633	256							\$4,356,521
PERSIMMONS	2003	478	193	5.9	13.23	2,820	2,553	523	577	\$1,474,965
	2002	490	198	6.3	14.12	3,087	2,796	489	539	\$1,509,543
TOTAL STRAWBERRIES	2003	880	356	36.5	81.8	32,111	29,121			\$34,421,235
	2002	698	282	34.5	77.34	24,081	21,810			\$27,793,662
FRESH MARKET	2003	880	356	21.3	47.73	18,735	16,992	1,456	1,605	\$27,278,451
	2002	698	282	24.3	54.47	16,961	15,361	1,370	1,510	\$23,237,118
PROCESSING	2003			15.2	34.07	13,376	12,129	534	589	\$7,142,784
	2002			10.2	22.87	7,120	6,449	640	705	\$4,556,544
TOTAL FRUIT NUT CROPS	2003	43,374								\$236,858,163
	2002	43,791								\$233,663,640

*Includes Apricots, Cherimoyas, Guavas, Peaches, Pears and Walnuts

Vegetable Crops 2002 & 2003

	YEAR	HARVESTED		PRODUCTION		TOTAL PRODUCTION		PER UNIT		TOTAL
		Acres	Hectares	Tons/ Acre	Metric Tons/ Hectare	Tons	Metric Tons	US\$ / Ton	\$/Metric Ton	
BEANS, SNAP	2003	424	172	5.36	12.02	2,273	2,067	1,196	1,318	\$2,718,030
	2002	377	153	5.29	11.86	1,994	1,815	1,281	1,412	\$2,554,698
BUNCH VEGETABLES	2003	403	163							\$3,125,451
	2002	379	153							\$3,021,554
CORN, SWEET	2003	399	161	7.58	16.99	3,024	2,735	490	540	\$1,481,956
	2002	445	180	7.98	17.89	3,551	3,220	486	536	\$1,725,835
TOTAL CUCUMBERS	2003	505	204			7,906	7,210			\$5,715,464
	2002	478	193			7,265	6,627			\$4,775,609
FIELD GROWN	2003	491	199	15.03	33.69	7,380	6,704	659	726	\$4,863,222
	2002	464	188	14.51	32.53	6,733	6,116	581	640	\$3,911,641
HOT HOUSE GROWN	2003	14	6	37.6	84.29	526	506	1,619	1,785	\$852,242
	2002	14	6	38	85.18	532	511	1,624	1,790	\$863,968
HERBS	2003	403	163	18.01	40.37	7,258	6,580	2,486	2,740	\$18,043,388
	2002	487	197	17.98	40.31	8,756	7,941	2,584	2,848	\$22,626,279
MUSHROOMS	2003	15	6	189	423.7	2,810	2,542	3,565	3,930	\$10,019,076
	2002	10	4	202	452.8	2,020	1,811	4,856	5,353	\$9,809,120
LETTUCE	2003	203	82	13.87	31.09	2,816	2,549	621	685	\$1,748,488
	2002	254	103	13.83	31	3,513	3,193	603	665	\$2,118,218
MELONS	2003	101	41	4.72	10.58	477	434	336	370	\$160,171
	2002	95	38	4.6	10.31	437	392	320	353	\$139,840
ORIENTAL VEGETABLES	2003	124	50	5.41	12.13	671	607	949	695	\$636,589
	2002	101	41	5.2	11.66	525	478	957	695	\$502,616
PEPPERS, BELL	2003	237	96	18.02	40.4	4,271	3,878	565	623	\$2,412,946
	2002	250	101	16.01	35.89	4,003	3,625	580	639	\$2,321,450
PEPPERS, CHILI	2003	11	4	12.5	28.02	138	112	559	1,087	\$76,863
	2002	8	3	13.6	30.49	109	91	548	604	\$59,622
POTATOES	2003	203	82	21.88	49.05	4,450	4,022	150	165	\$667,455
	2002	890	360	20.49	45.93	18,236	16,535	131	144	\$2,388,929
SQUASH	2003	295	119	10.61	23.78	3,130	2,830	453	499	\$1,417,890
	2002	301	122	11.99	26.88	3,609	3,279	438	483	\$1,580,742
TOTAL TOMATOES	2003	2,522	1021			51,896	47,095			\$27,481,381
	2002	2,356	953			55,890	50,679			\$31,071,677
TOMATOES, FRESH	2003	2,453	993	20.65	46.29	50,655	45,966	524	578	\$26,542,958
	2002	2,281	923	23.89	53.55	54,493	49,427	551	607	\$30,025,698
TOMATOES, CHERRY	2003	69	28	17.99	40.33	1,241	1,129	756	833	\$938,423
	2002	75	30	18.62	41.74	1,397	1,252	749	826	\$1,045,979
MISC. VEGETABLES	2003	709	287							\$16,954,653
	2002	680	275							\$16,587,422
TOTAL VEGETABLES	2003	6,757								\$92,659,801
	2002	6,661								\$101,283,611

Field Crops 2002 & 2003

	YEAR	HARVESTED		PRODUCTION		TOTAL PRODUCTION		\$ PER UNIT		TOTAL
		Acres	Hectares	Tons/ Acre	Metric Tons/ Hectare	Tons	Metric Tons	US\$/Ton	\$/Metric Ton	
BARLEY, GRAIN	2003	80	32	0.68	1.52	54	49	165.00	181.88	\$8,976
	2002	80	32	0.85	1.91	68	61	105.40	116.18	\$7,167
GREENCHOP	2003	80	32	21.03	47.14	1,682	1,508	26.01	28.67	\$43,759
	2002	65	26	20.85	46.74	1,355	1,215	25.98	28.64	\$35,211
HAY, OAT	2003	3,300	1,335	1.25	2.8	4,125	3,738	58.97	65.00	\$243,251
	2002	5,100	2,064	0.96	2.15	4,896	4,438	55.24	60.89	\$270,455
OAT, GRAIN	2003	400	162	0.04	0.09	16	15	111.51	122.92	\$1,784
	2002	500	202	0.03	0.07	15	14	105.65	116.46	\$1,585
PASTURE, IRRIGATED	2003	2,489	1,007					1,862.00	2,069.00	\$4,634,518
	2002	2,650	1,072					1,862.00	2,052.48	\$4,934,300
RANGE	2003	198,000	80,130					5.87	6.51	\$1,162,260
	2002	158,000	63,942					5.87	6.47	\$927,460
SILAGE	2003	30	12	13.05	29.25	392	351	26.84	29.59	\$10,508
	2002	30	12	12.65	28.36	380	340	25.65	28.27	\$9,734
WHEAT	2003	1,000	405	0.89	2	890	810	125.69	138.55	\$111,864
	2002	150	61	1.01	2.26	152	138	141.65	156.14	\$21,460
TOTAL FIELD CROPS	2003	205,379								\$6,216,920
	2002	166,575								\$6,207,372



Livestock & Poultry 2002 & 2003

	YEAR	# OF HEAD	TOTAL WEIGHT		\$ PER UNIT		TOTAL
			CWT*	Metric Tons	\$/ CWT	\$/ Metric Ton	
CATTLE AND CALVES	2003	26,000	195,000	8,844	85.4	1,882.7	\$16,653,000
	2002	31,000	232,500	10,545	69.9	1,540.4	\$16,244,775
HOGS AND PIGS	2003	1365	3,413	155	35.7	787.0	\$121,844
	2002	1325	3,313	150	34.2	754.0	\$113,305
CHICKENS, MISC. MEAT	2003	1,355,246	48,789	2,213	14.8	326.3	\$722,077
	2002	1,654,451	59,560	2,701	13.7	302.0	\$815,972
RABBITS	2003	2,000	100	5	51.4	1,133.2	\$5,140
	2002	5,025	251	11	58.6	1,292.3	\$14,714
RATITE TOTAL	2003						\$1,186,830
<i>Includes ostriches, emus, etc</i>	2002						\$1,248,800
CHICKS	2003	3,485			78.0	/CHICK	\$271,830
	2002	3,640			80.0	/CHICK	\$291,200
MEAT	2003	300,000	LBS.		3.1	/LB	\$915,000
	2002	304,000	LBS.		3.2	/LB	\$957,600
LAMB,SHEEP	2003	500	500	23	88.0	1,940.0	\$44,000
	2002	550	550	25	69.4	1,530.0	\$38,170
TOTAL LIVESTOCK AND POULTRY	2003	1,388,596					\$18,732,891
	2002	1,695,991					\$18,475,736

*CWT= A unit of weight measurement created by U.S. merchants in the late 1800s. A hundred weight is equal to exactly 100 pounds.

Livestock & Poultry Products 2002 & 2003

	YEAR	TOTAL WEIGHT		\$ / PER UNIT		TOTAL
		CWT	Metric Tons	\$/ CWT	\$/ Metric Ton	
MILK, MARKET	2003	1,127,819	51,152	11.90	263.0	\$13,454,881
	2002	1,214,090	55,065	11.50	253.8	\$13,974,176
MILK, MANUFACTURING	2003	0	0			\$0
	2002	0	0			\$0
EGGS, CHICKEN MARKET	2003	78,921,000	Dozens	0.65	/ Dozen	\$51,298,650
	2002	97,965,220	Dozens	0.41	/ Dozen	\$40,165,740
RATITE PRODUCTS TOTAL	2003					\$938,550
<i>Includes ostriches, emus, etc.</i>	2002					\$941,450
HIDES	2003	850		145.00	/ Hide	\$123,250
	2002	900		148.00	/ Hide	\$133,200
OIL	2003	3,100	Gallons	263.00	/ Gallon	\$815,300
	2002	3,050	Gallons	265.00	/ Gallon	\$808,250
TOTAL LIVESTOCK AND POULTRY PRODUCTS	2003					\$65,692,081
	2002					\$55,081,366

Specialty Crops 2002 & 2003

	YEAR	TOTAL
TIMBER	2003	\$167,303
	2002	\$20,565
FIREWOOD	2003	\$512,654
	2002	\$432,145
TOTAL TIMBER PRODUCTS	2003	\$679,957
	2002	\$452,710



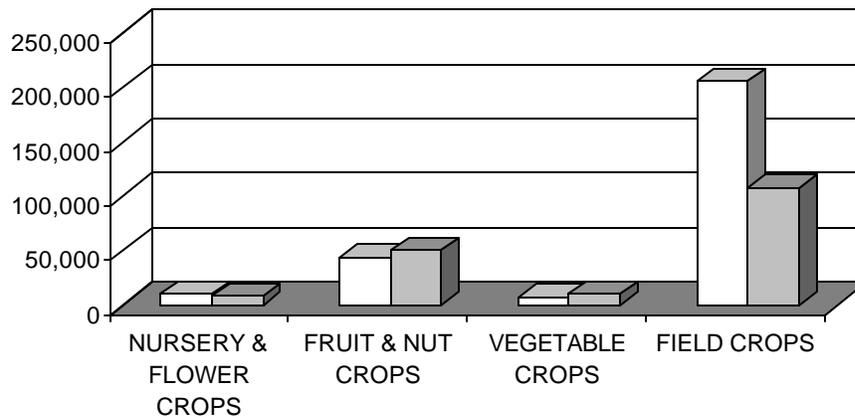
Apiary Products 2002 & 2003

	YEAR	TOTAL
HONEY	2003	\$2,165,580
	2002	\$2,012,125
BEES WAX	2002	\$40,321
	2002	\$39,565
BEES AND QUEENS	2003	\$187,645
	2002	\$83,465
POLLEN	2003	\$86,595
	2002	\$85,465
POLLINATION	2003	\$846,258
	2002	\$726,521
TOTAL APIARY	2003	\$3,326,399
	2002	\$2,947,141

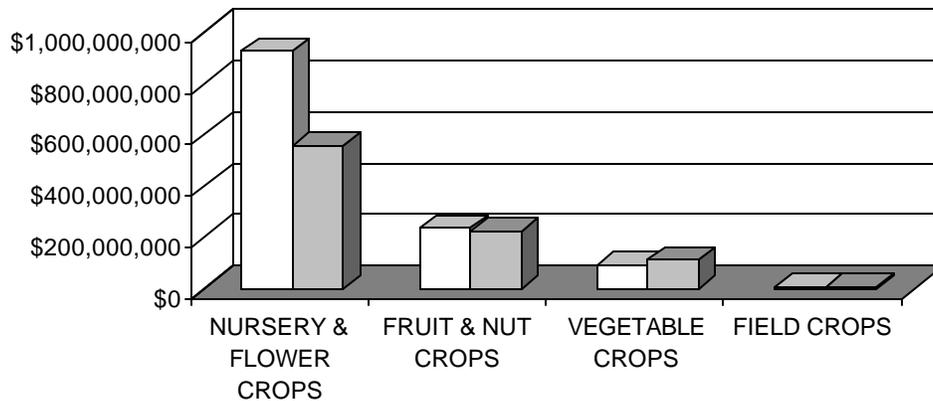
Ten Year Comparison 1993 & 2003

	2003			1993		
	ACRES	HECTARES	VALUE	ACRES	HECTARES	VALUE
Nursery & Flower Crops	9,531	3,857	\$927,059,200	7,827	3,168	\$556,920,442
Fruit & Nut Crops	43,374	17,553	\$236,858,163	49,982	20,227	\$222,293,635
Vegetable Crops	6,757	2,735	\$92,659,801	9,838	3,981	\$110,906,815
Livestock & Poultry Products			\$65,692,081			\$80,005,776
Livestock & Poultry			\$18,732,891			\$15,689,832
Field Crops	205,379	83,116	\$6,216,920	107,574	43,535	\$7,407,252
Apiary Products			\$3,326,399			\$1,429,819
Specialty Crops			\$679,957			\$933,887
TOTALS	265,041	107,261	\$1,351,225,412	175,221	70,911	\$995,587,458

ACREAGE COMPARISON



VALUE COMPARISON



Ten Year Comparison 1993 & 2003

Crops Valued at \$10 Million or More

	2003	1993
Indoor Flowering & Foliage Plants	\$312,115,863	\$217,362,431 *
Ornamental Trees and Shrubs	\$229,565,221	\$95,385,433
Bedding Plants	\$201,254,658	\$92,114,136
Avocados	\$146,171,423	\$76,874,354
Cut Flowers and Foliage	\$83,748,019	<i>Category not reported separately</i>
Eggs	\$51,298,650	\$62,338,641
Poinsettia	\$38,456,512	\$6,838,375
Strawberries	\$34,421,235	\$22,111,573
Tomatoes	\$27,481,381	\$37,553,759
Cactus and Succulents	\$21,557,887	\$15,618,400
Lemons	\$19,556,391	\$33,765,894
Herbs	\$18,043,388	\$15,931,312
Herbaceous Perennials	\$17,954,612	\$4,397,050
Cattle and Calves	\$16,653,000	\$14,700,000
Milk, Market	\$13,454,881	\$17,667,135
Valencia Oranges	\$12,709,821	\$48,211,045
Turf	\$10,400,000	<i>Category not reported separately</i>
Mushrooms	\$10,019,076	\$14,744,289

*Reported as Indoor Decoratives

- Ø San Diego County is 4,200 square miles, approximately the size of Connecticut, with a population of 2.9 million.
- Ø Agriculture in San Diego County covers 265,041 acres and ranks 5th as a component of San Diego County's economy.
- Ø San Diego County has 5,255 farms, the third highest number of farms when comparing all counties within the United States.
- Ø 63% of San Diego County farms are 1-9 acres, 37% are greater than 10 acres.
- Ø Median size farm in San Diego is 5 acres.
- Ø In San Diego County, 92% of the farms are family owned and 77% of the farmers live on their land.

QUARANTINES – THE PAINFUL WAY OF PROTECTING AGRICULTURE

By Janet Silva Kister

President, San Diego County Farm Bureau

As part of our chosen professions, farmers, ranchers, and nurserymen understand there are inherent risks in the production of crops and livestock. Weather, weak markets, and the cost of supplies can certainly surprise us, but we prepare to expect the unexpected. However, another variable has entered the picture with alarming regularity – new diseases and pests resulting in quarantines.



By its simplest definition a quarantine is a restriction on the movement of agricultural products to guard against the spread of a dangerous disease or insect pest. Those of us in the business shudder at the prospect of a quarantine, but we know it is the most effective tool in guarding against the potential for complete losses of orchards, flocks, herds, crops, and potted plants once a threat has materialized. Failure to take a stand against these invaders would likely result in infestations spreading across the state and country. Furthermore, a local infestation subject to quarantine restrictions allows farmers in uninfested parts of the county and state to continue shipping, as well as giving confidence to our international trading partners that our goods are pest free. In effect, the local farmers sacrifice their crops for the greater good of agriculture.

For much of 2003, the community of Valley Center was subjected to a Mexican Fruit Fly Quarantine. Mexican fruit flies (MFF) must be kept out of the United States because an established population could cripple the production of fresh fruit. The residents and growers of Valley Center became united in the fight against the fruit fly to help make certain that the local, state, and federal agricultural agencies were successful in stamping out the threat. While the fight proved to be a victory, it did come at a cost to both the growers and the community.

Avocado growers who had fruit knocked to the ground by high winds in January experienced the first losses. Because the quarantine was in effect, that fruit could not be taken to market and the losses were between \$2.5 and \$4 million. Then there were several fruit varieties that could not be harvested during the quarantine because there were no acceptable treatment processes available to insure the fruit was pest-free. Those losses amounted to \$2.1 million. Growers who were able to treat and harvest their crops spent \$1.4 million applying pesticides. While those costs amounted to great personal expense for the individual growers, the government agencies spent a whopping \$22.4 million combined to eradicate the infestation.



In addition to the alarming cost in dollars, the quarantine also meant that thousands of pounds of chemicals had to be applied in Valley Center to make certain that every single threatening fly was eliminated. But there was no choice. Allowing the MFF a foothold here would have meant the growers in Valley Center would have been forced out of business, likely followed by growers throughout the region, state, and perhaps even in other states.



If we are to avoid future quarantines and protect our thriving agriculture industry here in San Diego County, the public has a very important role to play. Dangerous insect pests and diseases don't arrive here on their own. Most likely they are carried into our county on fruits, vegetables, plants, and livestock. Those items are either smuggled across the border or brought in by travelers who are not aware of the threat of their actions. The admonitions at the international border, state border checkpoints, and airports not to carry agricultural products into

the state are real. A single insect or a trace of a disease can lead to widespread destruction of agricultural crops and livestock.

Quarantines are an important tool to protect agriculture. But successfully keeping new diseases and pests from arriving and never having to declare a quarantine is the best protection for the future of local agriculture.

For More Information on Quarantines:

<http://www.sdcawm.org>

<http://www.cdfa.ca.gov/phpps/>

<http://www.aphis.usda.gov/>

Crops Affected by Valley Center Quarantine

- Apple
- Apricot
- Avocado
- Citrus
- Grapefruit
- Guava
- Lemon
- Lime
- Oranges
- Peach
- Pear
- Persimmon
- Tangelo
- Tangerine
- Miscellaneous Subtropical Fruit
- Also Nurseries with host material



Insect Detection Specialist placing trap to detect fruit flies

Agriculture, Weights and Measures' Role in Firestorm 2003



Having already weathered a myriad of agricultural challenges during 2003, the farmers and residents of San Diego County awoke on the morning of October 26, 2003 to the news of not one, but three wildfires raging in the rural residential areas of the county. The northernmost of these fires, the Paradise Fire, had the greatest impact on agriculture, ultimately burning or destroying over 57,000 acres and 200 dwellings in the agriculturally rich areas of Valley Center, Pauma Valley, Rincon and San Pasqual.

Before they were over, these fires, collectively known as Firestorm 2003, would not only affect the lives of all in the county but would focus the eyes of the nation on San Diego County as well. Driven by Santa Ana wind conditions, these fires proved particularly difficult to bring under control for the 1,000 firefighters and 300 fire units on the front lines of the control efforts. After an incredible three-week effort by these courageous individuals all three fires were finally extinguished, but not before they burned nearly 400,000 acres and destroyed over 2,500 dwellings. Current estimated losses from these fires total over \$450 million with a collective \$43 million spent by County, State and federal agencies in combating the firestorm.

As part of the County's emergency response team, the Department of Agriculture, Weights and Measures (AWM) played a significant role in the efforts to abate, assess, and recover from the effects of this cataclysmic event. From the earliest moments of the fires, AWM's Watershed Management staff and volunteers were among the front line efforts to battle the firestorm. Through a commitment of over 100 staff hours during the first week of the firestorm, this team was able to fulfill its role of protecting power and telecommunications transmission lines as well as assisting other firefighting units in saving residential properties and belongings.

From the start of the fires, AWM personnel provided 24 hour expertise at the County's Emergency Operations Center. The County Veterinarian dispensed critical information on livestock disposal, and the on care and feeding of livestock. Pesticide Regulation staff provided information on pesticide storage and agricultural hazardous materials coordination. AWM GIS mapping staff updated fire history vegetation maps.

Even before the last embers were extinguished, six Fire Damage Assessment Teams were sent from AWM into the damaged areas to conduct in-field assessments of the agricultural losses from the three fires. Aided by GIS generated information, these teams surveyed the entire area for crop losses. Although the damage's long-term effects may not be apparent for several growing seasons, agricultural losses from the fires were estimated at approximately \$28 million.



Preparing Seed Mix for Erosion Control

In support of the County's efforts to provide rapid, responsive assistance to the residents displaced or affected by the fires, AWM established informational desks at each of the County's three Local Assistance Centers. At these centers, AWM personnel collected agricultural damage information, provided erosion control advice, disseminated informational brochures from other state and federal agricultural agencies and generally assisted homeowners with their needs and questions.



To address potential erosion control concerns during subsequent winter rains, AWM joined other County departments in providing free erosion control materials to affected homeowners. AWM's contribution consisted of packaging over 20 tons of a seed mixture designed for homeowner use that would rapidly germinate and stabilize fire-damaged landscaped areas around residences.

Even before Firestorm 2003, AWM Watershed Management worked with a task force of local, state, and federal experts along with interested citizens and environmental groups in addressing the critical fire problem in the county. Geographic Information Systems (GIS) analysis showed areas with major fire potential throughout the county. Task force recommendations included updating building codes, increasing public education, and prescribed burning.

Prior to the firestorm, AWM Watershed Management staff and volunteers participated in prescribed burns with local, state, and federal agencies including a 1200-acre burn in Cuyamaca Rancho State Park. This prescribed burn on the east mesa of Cuyamaca stopped the eastward progress of the Cedar Fire and was the only section of the Park undamaged by the fire.

Even now, after the fires, AWM continues to work toward mitigating the effects of this devastating firestorm and lessening the impacts of similar future events. With the realization that only one-third of the County's available fuel load burned during this firestorm, AWM has joined forces with other County and State agencies to develop strategies to lessen the severity of any future firestorm activities.

PARADISE FIRE

Crop	Acres Damaged or Destroyed	Value
Apples	1.2	\$14,746
Avocado	481.0	\$14,529,412
Citrus	2.2	\$53,605
Figs	0.3	\$7,500
Flowers	85.3	\$5,155,840
Vineyard	3.0	\$37,500
Grapefruit	0.3	\$9,768
Lemons	7.0	\$115,458
Nursery	2.5	\$210,745
Orange	45.0	\$702,048
Peach	0.3	\$4,424
Persimmon	4.8	\$44,362
Pomegranate	1.0	\$9,854
Pumpkin	15.0	\$30,270
Squash	2.0	\$10,503
Tangerine	1.0	\$14,518
Pasture	2,500.0	\$40,000
Irrigation Systems	650.0	\$975,000
Total Paradise Fire	3,801.9	\$21,965,553

CEDAR FIRE

Crop	Acres Damaged or Destroyed	Number Miles	Value
Apple	72.0		\$884,760
Avocado	26.0		\$785,374
Bamboo	20.0		\$480,000
Bee Hives		674	\$50,550
Exotic Birds			\$7,500
Cattle		43	\$22,533
Chicks		3000	\$3,000
Citrus	4.0		\$97,464
Fence		12	\$380,160
Grapefruit	22.0		\$536,030
Grapevines	1.0		\$12,500
Guava	15.0		\$360,000
Hens		60	\$720
Lemons	12.0		\$197,928
Macadamia	3.0		\$84,000
Misc fruit trees	9.0		\$83,179
Non Irrigated Pasture	4,000.0		\$64,000
Nursery	12.0		\$2,003,086
Oat Hay		1200 bales	\$8,400
Pears	30.0		\$38,650
Stone Fruit	1.0		\$12,288
Irrigation Systems	229.0		\$343,500
Total Cedar Fire	4,456.0		\$6,455,622
Total*	8,257.9		\$28,421,175

Farm Equipment, Barns, and Greenhouses destroyed were not counted in total.

*No reported commercial agriculture damage in the Mine Fire.

Programs and Services



Plant Protection and Quarantine-- The Plant Protection and Quarantine program is the first line of defense against the introduction of the new pests that commonly lack natural predators here and might thrive in a temperate climate, causing harm to the environment and agriculture. Staff inspect incoming packages at the airport, post offices, express carriers and truck terminals, ensuring that shipments “don’t pack a pest.” This program also oversees a progressive nursery, cut flower and foliage inspection program and enables export worldwide. Because of the millions of dollars in damage that the introduction of exotic pests can and do cause, this program is of vital importance to the agricultural industry.

Because of the millions of dollars in damage that the introduction of exotic pests can and do cause, this program is of vital importance to the agricultural industry.

Entomology-- In 2003, this lab identified 7,623 insects, of which 677 were submitted by homeowners. Many of the other samples were submitted by the Department’s own regulatory and detection staff. The laboratory is critical to the rapid identification of insects and effective treatments to minimize the duration and spread of new pest infestations. The Entomology Lab handled 877 bee calls on the Africanized Honey Bee (AHB) line and 51 calls on the Red Imported Fire Ant (RIFA) line. A total of 1,960 sharpshooters were submitted from traps of which 1401 were glassy-winged sharpshooters (GWSS). The decrease in GWSS can be attributed to the success of the GWSS Program: Nursery treatments, biological control efforts, and fewer traps deployed. The lab also provides identification services, free of charge, to public parks, commercial growers, schools, pest control businesses, and homeowners.



Plant Pathology/Nematology-- The work of this lab benefits the commercial grower, the nursery and landscape professional and the home gardener by identifying diseases and nematodes that cause damage to plants. Exotic parasitic nematodes were found on shipments of palms from Florida. To protect California’s plants, the infected plants were destroyed. Daylily rust caused by the fungus *Puccinia hemerocallidis* was found in numerous nurseries and the landscape throughout San Diego County and the state. It became so common that CDFA ruled this formerly exotic pest had become established and was no longer a pest subject to eradication measures. Chrysanthemum white rust, *Puccinia horiana*, was found and eradicated from a nursery. Downy mildew of foxglove caused by *Peronospora digitalidis* was found in 2 locations and the infected plants were destroyed. This was the first record of this new disease in the county.



Pierce’s Disease Control-- This program has 140 compliance agreements with local nurseries to allow shipping to the Glassy-winged Sharpshooter (GWSS) free areas of California. Requirements vary depending on the infestation level of GWSS, and range from self-inspection, to inspection by County staff and applications of pesticide prior to shipment. Staff inspected and certified 2,441 San Diego plant shipments as free of this insect pest.

Programs and Services

Pest Detection-- As the second line of defense in the County's Pest Prevention System, Pest Detection aims for the early detection of agricultural pests before they become established in the local environment through the systematic deployment and inspection of a variety of surveillance traps throughout the urban and suburban areas of San Diego County. During 2003, Pest Detection staff drove over 388,000 miles while conducting over 291,000 inspections of 12,000 deployed traps and found Guava, Oriental, and Mexican fruit flies. In addition, Pest Detection personnel were instrumental in providing support and expertise in the federal, state and county efforts to eradicate a Mexican fruit fly infestation in the agricultural production areas of northern San Diego County.



Environmental Services-- The focus of this program is on community outreach, media relations and non-regulatory agricultural and environmental programs. Staff prepares crop statistics in addition to documenting losses associated with agricultural disasters such as the firestorms of 2003 and the wind storm earlier in the year. Development of scannable forms, GIS applications and AWM's web site rests within this program.

Watershed Resources/Integrated Pest Control -- This program provides pest control in County-owned facilities, manufactures rodent bait for control of disease bearing rodents, and responds to Africanized Honey Bee problems at County facilities. Using computer-controlled spraying



equipment, the program controls weeds along county-maintained road rights of way, flood control channels, and along airport runways. This program continued its work with the countywide Weed Management Area for the control of invasive and noxious weeds, such as Perennial Pepperweed and Yellow Star Thistle and continues ongoing habitat enhancement weed control projects for other County departments. The watershed management program provides prescribed burn services to County departments and other government agencies, as requested. Staff continued the innovative erosion control program on inactive solid waste sites, using specially developed drought tolerant plants that grow well even in low rainfall years. This allows the County to comply with new stormwater goals with minimal additional expense.

Agricultural Water Quality --In 2003, the Agricultural Water Quality Program initiated a field inspection program at commercial facilities including greenhouses, nurseries, cemeteries, golf courses and pest control businesses. These inspections follow two years of intensive public outreach by the department to educate facility operators and their employees on the importance of implementing stormwater and irrigation runoff Best Management Practices to minimize the discharge of contaminants into local receiving waters. The program has received broad support and cooperation from the agricultural sector which has demonstrated leadership by example and responsible stewardship in the timely implementation of BMPs.



Programs and Services



Pesticide Regulation-- Staff in this program are responsible for the enforcement of California Food and Agricultural Code and California Code of Regulations sections pertaining to pesticide use. The program is under oversight of the California Department of Pesticide Regulation, within the California Environmental Protection Agency. The program administers the local enforcement of pesticide regulations, responds to public complaints, observes pesticide applications and reviews records for all commercial users of pesticides within the County. In 2003, the program conducted 905 application inspections, 239 structural inspections, 125 complaint/illness investigations

and issued 1277 restricted materials permits. In addition, the program conducted outreach activities and conducted 31 training sessions attended by 747 individuals. The program also continued the development of the Farm Worker Health Initiative (an alliance of community clinics, workers' rights organizations and grower representatives) with the goal of improving pesticide illness reporting. In 2003, the discussion of health issues between clinical practitioners and enforcement staff led to a successful collaboration on the outreach efforts of the Mobile Clinic in San Diego County with over 25 new agricultural sites being referred to the Mobile Clinic.

Office of the County Veterinarian -- The County Veterinarian operates the only veterinary necropsy laboratory in the county. The San Diego Animal Disease Diagnostic Laboratory examines specimens from domestic animals and wildlife for pathogens affecting animals and diseases transmissible to humans, including rabies, plague, tuberculosis, psittacosis, heartworms, Salmonella, Newcastle disease, and E.coli. The laboratory also provides support for a variety of agencies including the County's Public Health Laboratory, Animal Services, Environmental Health, Medical Examiner, Parks and Recreation, and the Humane Society, the California Department of Fish and Game, as well as private citizens and veterinarians. AWM



staff provides expert testimony for law enforcement agencies on animal cruelty and poisoning cases, and may eliminate the suspicion of criminal acts by establishing true cause of death. The lab also provides samples to the National Veterinary Services Laboratory for surveillance of economically important diseases such as Exotic Newcastle Disease, Avian Influenza, Salmonella, bovine spongiform encephalopathy (mad cow disease) and scrapie (spongiform encephalopathy of sheep).

In 2003, 3087 animal samples were submitted for tests including necropsies, rabies tests, bacterial cultures, viral cultures and serology. Two veterinary pathologists performed a total of 826 necropsies, comprised of 267 dogs, 200 cats, 241 birds, 40 hoof stock, 45 lab animal/exotics, 18 fish/reptiles/amphibians, and 15 wildlife. The brains of 927 animals were examined for rabies. Six rabid bats were found in San Diego County from a total of 48 bats examined. No rabies was found in terrestrial land mammals in the county. Over 250 birds were tested for Exotic Newcastle Disease. Avian Influenza (H6N2 strain) was isolated from one poultry ranch. Pigeon Paramyxovirus was isolated in pigeons. Francisella tularensis, the causative agent of tularemia, was isolated from one wild rabbit in the county. A surveillance of 210 ticks in the area for tularemia by PCR (polymerase chain reaction) revealed an infection rate of 8.1%. 37 PCR tests for Yersinia pestis (bubonic plague), Lyme disease (Borrelia burgdorferi) and Cat Scratch disease (Bartonella henselae) were all negative.

Programs and Services

Standards Enforcement-- This Division conducts regulatory work in Weights and Measures, Organic Production, Shell Egg Quality, Fruit and Vegetable Standardization, and Direct Marketing. During 2003, staff inspected 39,621 weighing and measuring devices (scales, gas pumps, utility submeters, taximeters, etc.) to provide assurance of accuracy to both purchasers and sellers in transactions based upon weight, measure, or count. Over 3,500 devices were found to be incorrect and repairs were required before being permitted back into commercial use. 968 random sample packages of assorted commodities were tested to verify labeled contents, and, as a result, 120,926 packages were removed from sale due to underfilled condition. The scanner price verification program was expanded to include new postings of consumer information at retail locations, and shoppers now see reminders to verify the accuracy of prices on receipts, as well as notification regarding stores that have passed inspections and those that have been fined for overcharging. 8,238 items were tested for price accuracy from stores throughout the county, and more than 253 overcharges were discovered. Division staff inspected 406,906 dozen eggs for quality and wholesomeness, removing 38,539 dozen eggs from distribution due to various defects. With San Diego County being home to the largest community of organic growers in the country, 344 growers were registered as organic. The popularity of Direct Marketing (sales of agricultural products through Certified Farmers' Markets) produced a record high of 27 active markets within San Diego County with nearly 200 local growers certified by the department to participate. Other 2003 year highlights included the filing of several civil suits. One against a major propane producer found to be underfilling propane cylinders resulted in a settlement of \$30,000 in penalties and \$49,000 in cy pres restitution to enhance the department's consumer protection efforts. Another suit filed against a packer of mineral fertilizers found to be underfilling bags of fertilizer resulted in a settlement exceeding \$2 million in penalties, restitution, and investigative costs, as well as injunction requirements to prevent future violations. Lastly, a suit against a major retailer found to be overcharging consumers through its scanner system resulted in a settlement of \$1.85 million in penalties, investigative costs, and court-ordered improvements to its internal price accuracy system.



Information Technology -- AWM is continually testing and implementing cost-saving measures by making better use of technology. 2003 saw the inauguration of several new processes. Field inspection reports by pesticide enforcement staff are now scanned into databases. This reduces staff hours in entering information, as well as reducing errors. The Weights and Measures division is testing the use of laptops in the field and electronic forms. The County Veterinarian is transferring old film slides, documenting specific animal conditions found in the county, to an electronic format using an automatic slide reader. Additionally, GIS mapping capabilities are expanding with more site details enabling better evaluation tools for pesticide usage, agricultural water runoff and fire prediction.

Civil Actions Investigations -- AWM views the role as safeguarding the citizens of San Diego County very seriously. Through the process of inspections and investigations of complaints, some violations meet the standard for a civil penalty. In 2003, 60 Agricultural Civil Penalties, 67 Structural (Pest Control) Civil Penalties, 6 Certified Farmers Market or Producers (CMA), and 85 Standards (SEA) cases were prosecuted.

Support-- This program includes all support functions, including fiscal, personnel, payroll, facilities and fleet management. Staff also coordinates Countywide efforts within the department, such as Strategic Planning, Quality First and staff development.

Department Personnel

KATHLEEN A. THUNER

Agricultural Commissioner, Sealer of Weights & Measures
Judi Dunlap: Administrative Secretary IV

CIVIL PENALTIES

Lorang, Sally, Esq.: Civil Actions Investigator
Giove, Mike: Legal Assistant I

OFFICE OF THE COUNTY VETERINARIAN

Dr. KERRY MAHONEY: County Veterinarian
Dr. Gurfield, Nikos: Vet Pathologist

ANIMAL DISEASE DIAGNOSTIC LABORATORY

Elyse Keon: Office Support Specialist. Lucas, Kris: Sr Lab Scientist
Moss, Adrienne: Lab Scientist. Pereira, Laurie: Reg Vet Tech
Dysterheft, Kimberley: Attendant. Shannon, Cynthia: Lab Scientist
Wempren, Alexina: Histology Tech. Greger, Heidi: Student Worker
Ortega, Sarah: Student Worker

WILDLIFE SERVICES

Rojeles, Al Cox, Terry

ENTOMOLOGY LAB

Dr. Kellum, David: Sr Economic Entomologist
Jones, George: Entomology/Apiary Spec.

PLANT PATHOLOGY/NEMATOLOGY LAB

Nolan, Pat: Supv. Plant Pathologist/Nematologist
Lehrter, Shannon: IDS I

AGRICULTURE & STANDARDS

KURT FLOREN: Deputy Director
Marci Powell: Administrative Secretary II

PEST DETECTION

Durso, Stephe: Deputy Ag Comm/Sealer
Herrmanns, Michele: Office Support Spec.
Agnes Jr., Sulpicio: Sr IDS Breuninger, Tim: Sr IDS
Feeley, Linda: Sr IDS Gross, Charles: Sr IDS

Insect Detection Specialists

Alfaro, Orlando: IDS II Allingham, Guy: IDS II
Bacon, Warren: IDS II Blank, Linda: IDS II
Bryant, Robert: IDS II Buttner, Mark: IDS II
DuMolt, Lisa: IDS II Esquibel-Johnson, Pat: IDS I
Estrella, Dinna: IDS I Fregoso, Jorge: IDS II
Garrison, David: IDS I Ghebretntsea, Kahsai: IDS II
Hock, Kim: IDS II Jefferson, Sharrod: IDS I
Joseph, Roy: IDS I King, Al: IDS II
Lee, Mark: IDS I Mann, Jay: IDS II
Matea, John: IDS II Miller, Bob: IDS II
Moss, Belinda: IDS II Penn, Celeste: IDS II
Perry, Skyler: IDS I Randall, Larry: IDS II
Roma, Robert: IDS II Rowin, Mary: IDS II
Sharon, Alan: IDS II Stevens, Mazen: IDS II
Thewlis, Joan: IDS II Velardi, John: IDS II
Waldrop, Bill: IDS I Wise, Sue: IDS II

INTEGRATED PEST CONTROL

Winans, Bill: Sr ASI Graves, Walter: Env Mgt Spec II
Hobgood, Ron: Sup Pest Mgt Tech
Cadena, Paul: Pest Mgt Tech Daly, James: Pest Mgt Tech II
Gardner, Bruce: Pest Mgt Tech Martinez, Mark: Pest Mgt Tech I

PESTICIDE REGULATION

Hardy, Simone: Deputy Ag Comm/Sealer
Blocker, John: Supv ASI Carr, Colleen: Sr ASI
Connelly, Neil: Supv ASI McCutcheon, Flo: Sr ASI
Bilog, Gemma: Sr Clerk Moore, Megan: Sr ASI
Thomas, Tina: ICT Moreno, Lauren: ASI
Lewis, Derek: Imaging Tech Olsen, Ted: Sr ASI
Joseph, Sabumon: Imaging Tech Springer, Kathryn: Sr ASI
Amaçor, Abdel: ASI Syzonenko, Nancy: Sr ASI
Anzaldo-Heredia, Veronica: ASI Walsh, Rick: Sr ASI
Avina, Tony: ASI

PEST EXCLUSION

Neville, Cathy: Deputy Ag Comm/Sealer
Matsumoto, Ted: Supv ASI Farhoomand, Manige: Sr ASI
Brandon, Delores: Supv ASI Feeley, Mike: ASI
Woods, Daneen: ICT MacGregor, Robert: ASI
Lonnie Nopens: ICT Metcalf, Howard: Temp Sr ASI
Appel, Nancy: Sr ASI Olivares, Jorge: ASI
Bixby, Clark: Sr ASI Persky, Rick: ASI
Betschart, Chris: Sr ASI Rodriguez, Vicente: Sr ASI
Desserich, Steve: Sr ASI Terhall, Greg: ASI
Dobbins, Katie: Sr ASI Worcester, Lindsay: Sr ASI

PIERCE'S DISEASE CONTROL

Davis, Cindy: Supv ASI
Burkman, Brian: IDS II Elder, Travis: IDS
Ong, Quang: ASI Robinson, Steve: IDS II
Sixtus, Ann: Sr ASI Wube, Muluneh: ASI
Zumello, Joey: IDS II

STANDARDS ENFORCEMENT

Lawson, Jennifer: Sr Clerk Burton, Ris: ICT
Shimamoto, Rika: ICT

AGRICULTURAL STANDARDS

Redding, Stasi: Supv ASI
Dearie, Rich, Produce Insp Gordon, Lynn: Sr ASI
DeWall, Paula: Produce Insp Holbrook, Tim: ASI
Guidry, Lee: Sr ASI Mangold, Cathymay: Produce Insp

MEASUREMENT STANDARDS

Williams, Rick: Supv ASI
Bloomer, Tom: Sr ASI Braaten, Glenn: ASI
Byers, James: Sr ASI Duran, Jose-Concepcion: ASI
Gionfriddo, John: ASI Kebede, Atlaw: Sr ASI
Mares, Marco: Sr ASI Shipley, Brad: ASI
Silva, Annie: ASI

SPECIAL PROGRAMS & SUPPORT

KATHY DAVEE: Deputy Director

BUDGET / ACCOUNTING

Knaggs, Dawn: Principal Admin Analyst
Rigonan, Yoly: Admin Analyst II Goff, Linda: Supv Clerk
Belenzo, Armando: Acc Clerk Spec. Marshall, Marilyn: Office Sup Spec.
Tully, Leah: Office Support Spec.

PERSONNEL / PAYROLL

Robles, Cristina: Dept. Personnel Officer II
Acbang, Deborah: Personnel Aide

INFO TECHNOLOGY

Schaer, Candy: Deputy Ag Comm/Sealer

ENVIRONMENTAL ISSUES/GIS

Nielsen, Dawn: Deputy Ag Comm/Sealer
Parker, Lynn: Sr ASI Acosta, Vincent: ASI

AG STORMWATER/HAZMAT

Davy, Paul: Supv ASI
Fritz, David: Sr ASI Silva, Nestor: ASI

WATERSHED

Eisele, Bob: Watershed Mgr.