2006

Crop Statistics & Annual Report

County of San Diego

Department of Agriculture, Weights & Measures

Dedication

The 2006 Crop Statistics and Annual Report is dedicated to Paul Davy, esteemed colleague and friend. Paul worked with the Department of Agriculture, Weights and Measures for 21 years starting in September 1985. He worked his way from an Insect Trapper to a Supervising Inspector until his untimely passing on June 8, 2006. Paul was a visionary, always working on becoming more and challenging each of us to do the same. He had varied interests and attended to each with great passion and dedication. His leadership in agriculture and water quality was much appreciated and greatly missed. It is with a mixture of pride and sadness that we dedicate this year's Annual Crop Statistics and Annual Report to Paul Davy.

The 2006 Crop Statistics and Annual Report was produced by Deputy Agricultural Commissioner/Sealer Dawn Nielsen and Agricultural Inspector Marcia Milam with assistance from Senior Agricultural Inspectors Vince Acosta, Lynn Parker and Florence McCutcheon.

The front cover is Grading Oranges at La Vida Ranch in Spring Valley, March 1, 1897. Reproduced with permission from the San Diego Historical Society.

ROBERT G. ATKINS

AGRICULTURAL COMMISSIONER/ SEALER OF WEIGHTS AND MEASURES

County of San Diego

DEPARTMENT OF AGRICULTURE WEIGHTS AND MEASURES
5555 Overland Avenue, Suite 3101, San Diego, CA 92123-1256
http://www.sdcawm.org

AGRICULTURE
(858) 694-2739
FAX (858) 565-7046

WEIGHTS & MEASURES

(858) 694-2778
FAX (858) 505-6484

A.G. Kawamura, Secretary
California Department of Food and Agriculture
and
The Honorable Board of Supervisors of the County of San Diego
Supervisor Ron Roberts, Chairman 4th District
Supervisor Greg Cox, Vice Chairman 1st District
Supervisor Dianne Jacob, 2nd District
Supervisor Pam Slater-Price, 3rd District
Supervisor Bill Horn, 5th District

I respectfully submit the San Diego County 2006 report of acreage, yield, and value of agricultural production. This report also contains the annual report of the many, diverse programs within the Department of Agriculture, Weights and Measures that support the County's focus on kids, the environment, and safe and livable communities.

The total reported value for all agricultural commodities produced in San Diego County for 2006 is $1,461,665,261. Although agriculture in San Diego County continues to thrive, this is a slightly lower value (-4.6%) compared to last year's value. All reported figures represent Freight on Board (F.O.B.) values for products. These are not net values and do not reflect cost of production. Total values do not add precisely due to rounding. The gross values of farm products do not reflect the total value to the economy. It is estimated that for every dollar value of an agricultural product, a multiplying factor (3.5) may be applied, yielding an estimated economic impact of $5.1 billion to San Diego County.

San Diego County's unique topography creates a wide variety of microclimates resulting in nearly 30 different types of vegetation communities. This diversity allows San Diego farmers to grow over 200 different agricultural commodities - from strawberries along the coast, apples in the mountain areas, and to palm trees in the desert. The success of San Diego County's diverse agricultural industry is reflected in the 47 commercial crops with a value of over $1 million.

I would like to express my thanks to the many farmers, ranchers, and nurserymen and women who provide information vital to this report. In addition, I would like to thank industry groups for their support in the compilation of statistics. Finally, I would like to express my appreciation to the dedicated Agriculture, Weights and Measures staff (listed on inside back cover) who continually strive to provide our customers with superior service.

Sincerely,

Robert G. Atkins
Agricultural Commissioner/
Sealer of Weights and Measures

2006 Agricultural Crop Highlights

Total Value	$1,461,665,261
Estimated Economic Impact	$5,115,828,414
Change in Value from 2005	$69,875,975
Percent of Change	-4.6%
Total Acreage	315,296
Change in Acreage from 2005	42,120
Percent of Change	+15.4%
#1 Crop	Indoor Flowering & Foliage Plants
Crop with the Highest Value Per Acre	Indoor Flowering & Foliage Plants
Dollar Value Per Acre	$623,121
Crop with the Lowest Value Per Acre	Oat Grain
Dollar Value Per Acre	$15.15

Overview of Changes

Indoor Flowering and Foliage Plants remains the number one crop in San Diego County with slight increase in value (0.2%) to $311,560,400. This crop has been the top commodity in San Diego County for over two decades. The past several years' rapid growth in the acreage and value of Ornamental Trees and Shrubs slowed, showing a slight decrease in acreage (-4.4%) and a slight increase in value (0.2%) to $288,020,450. Overall acreage for nursery crops and cut flowers decreased in 2006 (-3.4%) while the total value remained essentially the same (0.0%).

The value of Fruit and Nut Crops declined (-32%) in 2006 negating the gains made in 2005 (29%). Avocados remain the largest fruit crop, although the value decreased significantly (-45%). This decrease is attributed to a drop in price and improved data gathering. Citrus decreased in both acreage (-9%) and value (-10%). Navel Oranges significantly contributed to this decrease due to a drop in production.

The value of Vegetables and Vine Fruits grew (26%) this past year, while the acreage decreased slightly (-3.8%). The biggest gains were in tomatoes showing both an increase production and price. Mushrooms also showed significant gains with an increase in value (43%). Some of this increase is due to production shifting towards more exotic varieties of mushrooms.

The overall value of Livestock and Poultry decreased (-14%) with losses in all categories as livestock and poultry facilities continue to either close or migrate out of San Diego County. The number of head of cattle continues to decrease (-10%) following a trend since 2003. Correspondingly, milk production decreased (-19%). The overall value of Livestock and Poultry Products increased (4%) due to the rise in value of ratite products such as emu oil.

What Makes Agriculture in San Diego County Unique?

- San Diego County is the most southwestern county in the United States with a geographic area of 4,200 square miles, approximately the size of Connecticut, and a population of 2.9 million.

- The U.S. Weather Bureau describes the San Diego climate as the most nearly perfect in America, characterized as Mediterranean, with warm winters and cool summers.

- San Diego County's varied topography creates a wide fluctuation of microclimates resulting in nearly 30 different types of vegetation communities. This diversity allows for San Diego to grow over 200 different agricultural commodities - from strawberries along the coast, to apples in the mountain areas, to palm trees in the desert.

- San Diego County has the sixth highest urban population among counties in the United States, and the 12th largest agricultural economy.

- Agriculture in San Diego County covers 315,000 acres and ranks 5th as a component of San Diego County's economy.

- San Diego County has 6,565 farms, the second highest number of farms of all counties in the United States.

- 63% of San Diego County farms are 1-9 acres, 37% are greater than 10 acres. Median size farm in San Diego is 5 acres.

- In San Diego 92% of the farms are family owned. 77% of the farmers live on their land. Native Americans hold 22% of the farmland in San Diego County.

- The high cost of water (more than $600/acre foot) and land make farming in San Diego County expensive and encourages growers to raise products with a high dollar value per acre.

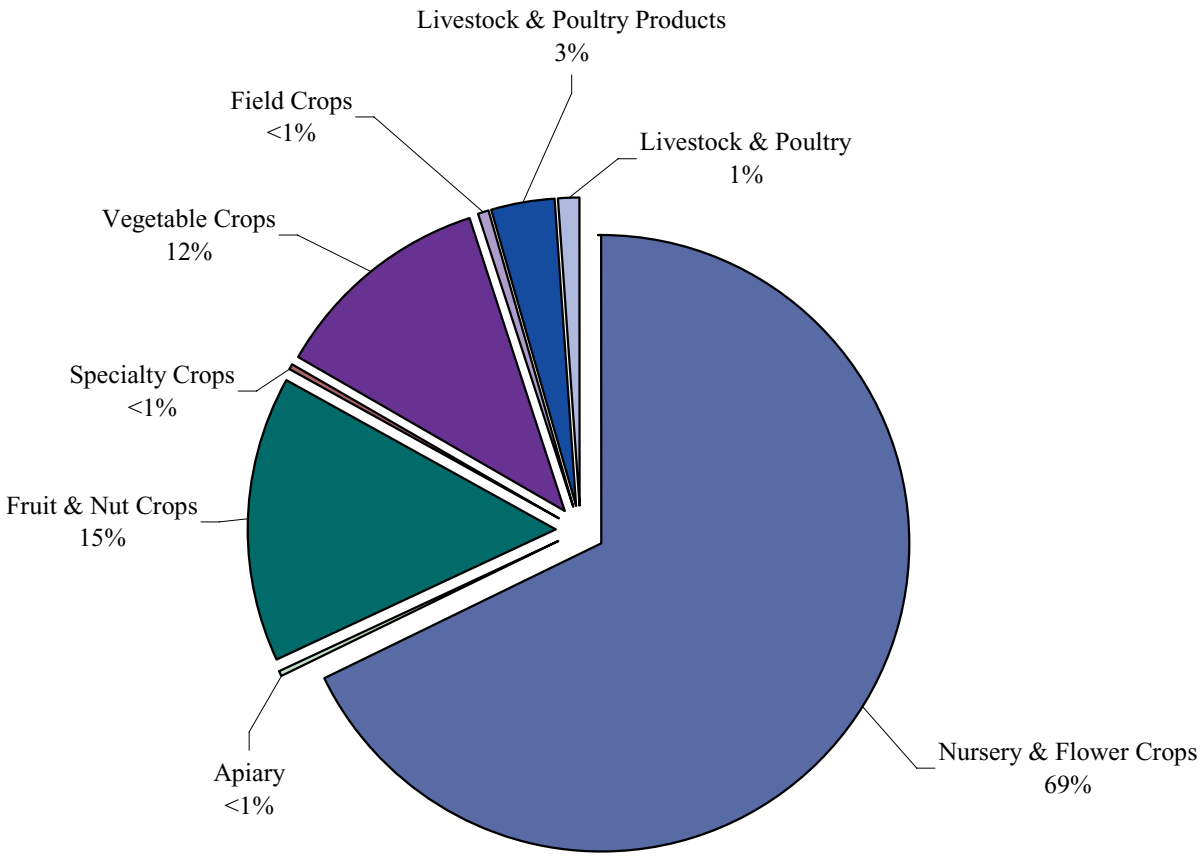
- San Diego County ranks number one in both California and the nation in the production value of nursery, floriculture, and avocados.

- Statewide, San Diego County is in the top five in the production of chickens, fresh market tomatoes, eggs, mushrooms, tangerines, grapefruit, and honey.

Summary of Major Crops

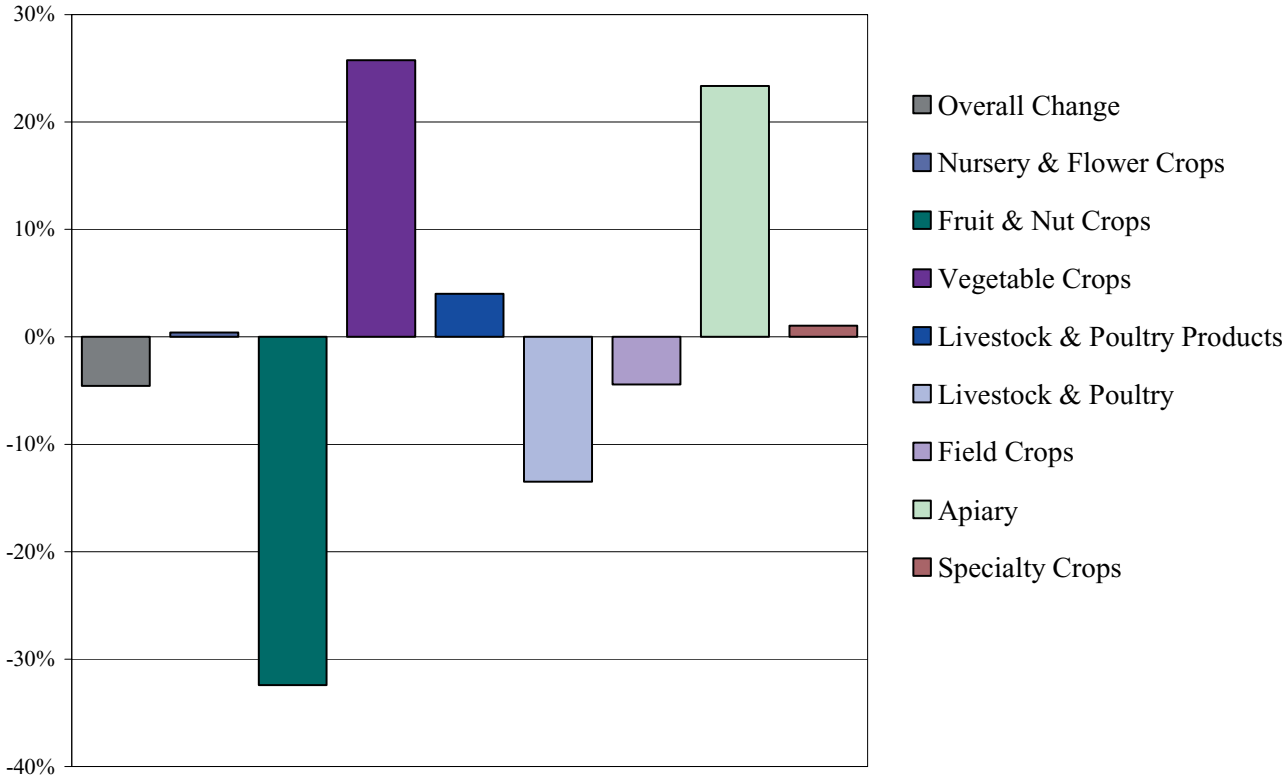
	2006		2005	
	Acres	Value	Acres	Value
Nursery & Flower Crops	9,872	$991,254,764	10,221	$990,900,400
Fruit & Nut Crops	44,028	$220,325,305	42,815	$325,988,273
Vegetable Crops	6,777	$173,506,449	7,044	$137,990,797
Livestock & Poultry Products		$49,543,392		$47,631,604
Livestock & Poultry		$16,087,533		$18,596,610
Field Crops	254,619	$5,882,609	213,096	$6,154,802
Apiary		$4,100,209		$3,323,750
Specialty Crops		$965,000		$955,000
Totals	**315,296**	**$1,461,665,261**	273,176	$1,531,541,236

2006 Major Crop Categories



Summary of Major Crops

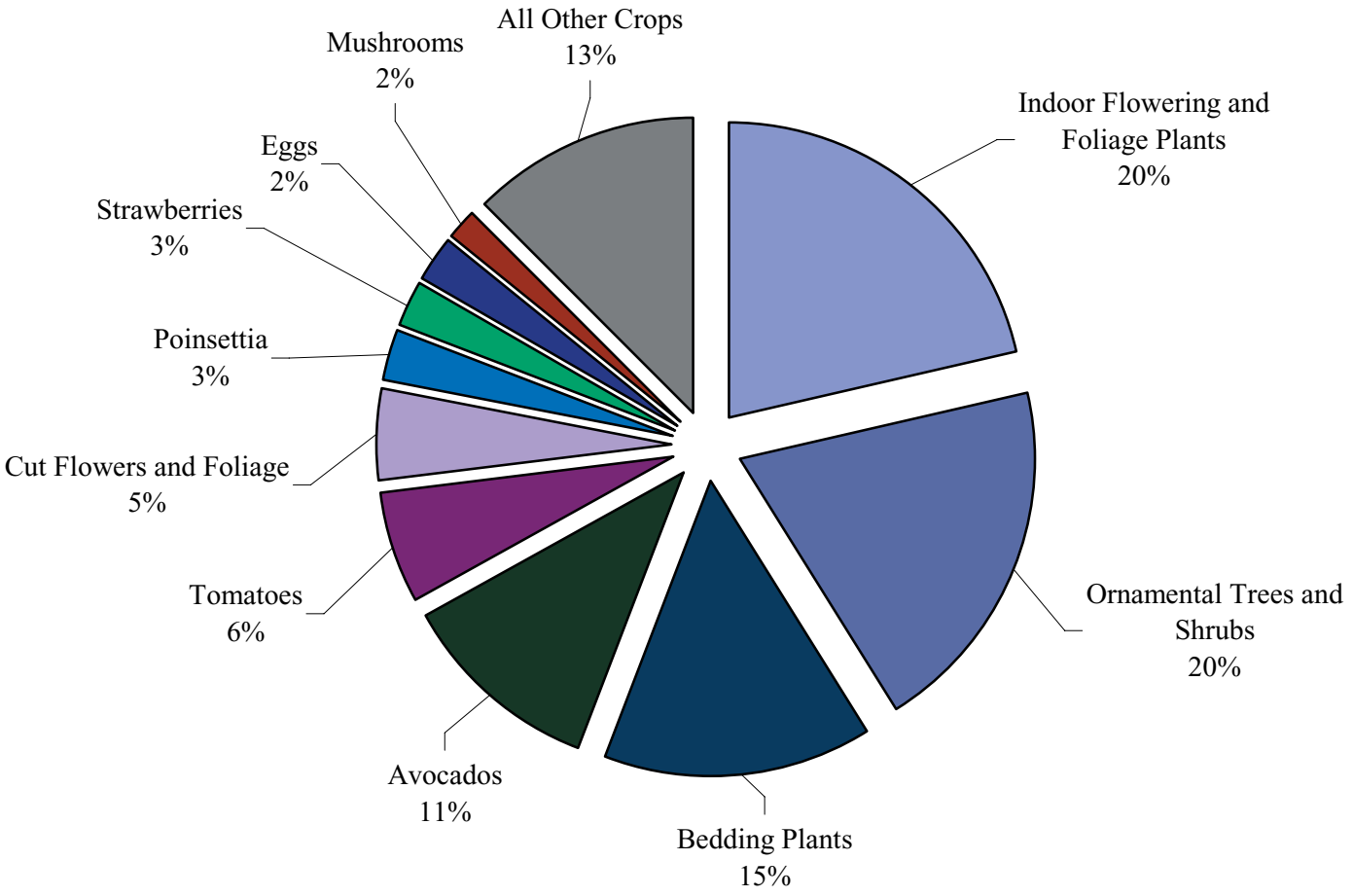
Percent Change in Major Crops



Ten Year Comparison 2006 & 1996

	2006		1996	
	Acres	**Value**	**Acres**	**Value**
Nursery & Flower Crops	9,872	$991,254,764	8,116	$692,105,636
Fruit & Nut Crops	44,028	$220,325,305	43,847	$215,414,632
Vegetable Crops	6,777	$173,506,449	12,036	$99,448,058
Livestock & Poultry Products		$49,543,392		$86,940,032
Livestock & Poultry		$16,087,533		$13,239,030
Field Crops	254,619	$5,882,609	105,556	$5,318,473
Apiary		$4,100,209		$1,138,164
Specialty Crops		$965,000		$582,560
TOTALS	**315,296**	**$1,461,665,261**	**169,555**	**$1,114,186,585**

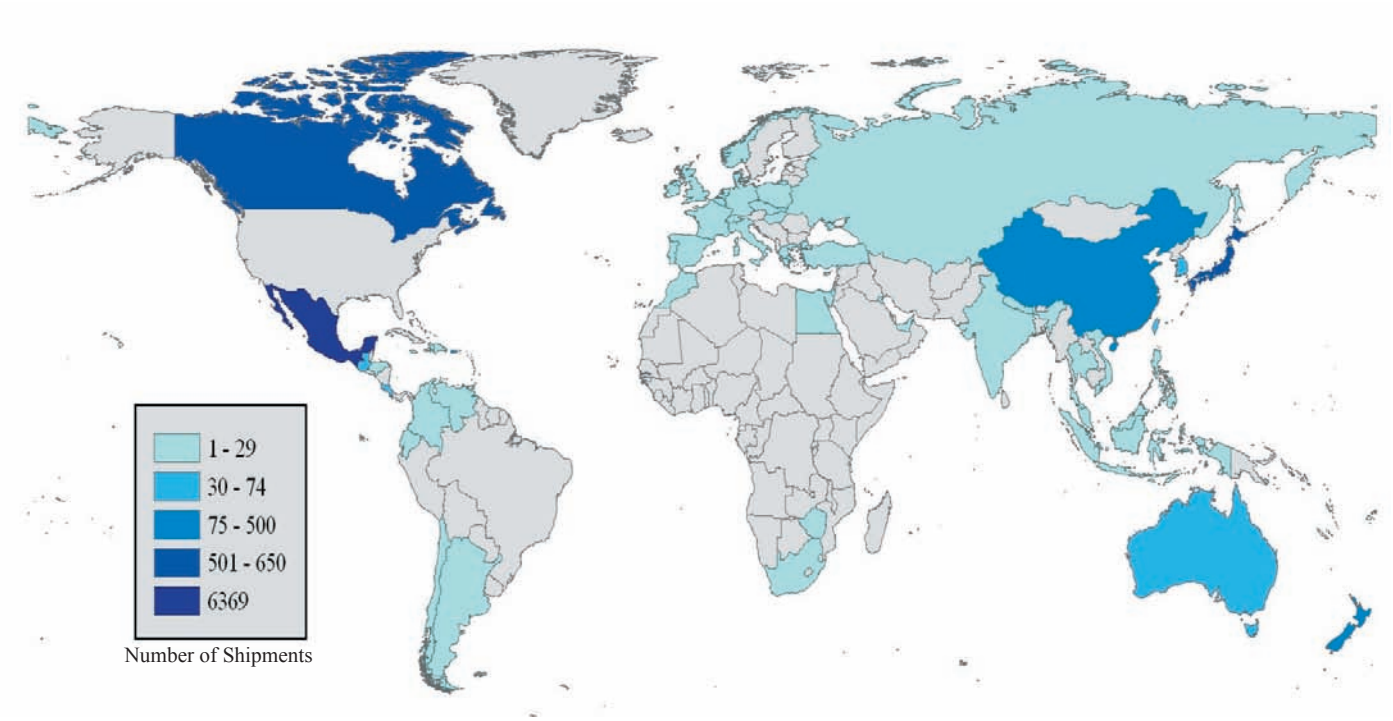
Top Ten Crops



10 Year Comparison - 2006 & 1996

	2006	1996
Indoor Flowering and Foliage Plants	$311,560,400	$289,448,520
Ornamental Trees and Shrubs	$288,020,450	$116,232,545
Bedding Plants	$216,042,250	$126,339,313
Avocados	$137,305,800	$112,860,416
Tomatoes	$88,378,386	$27,107,326
Cut Flowers and Foliage	$73,279,195	Category Not Reported Separately in 1996
Poinsettia	$39,092,884	$10,999,585
Strawberries	$36,800,756	$10,990,514
Eggs	$36,396,428	$65,641,919
Mushrooms	$23,609,334	$11,147,745

Our Trading Partners



67 Countries - 8255 Shipments

Argentina	5	Guatemala	30	Northern Mariana Islands	10
Australia	34	Haiti	1	Norway	1
Bahamas	15	Honduras	5	Philippines	1
Barbados	1	Hungary	4	Poland	1
Belgium	3	India	7	Portugal	3
Bermuda	38	Indonesia	4	Puerto Rico	95
Canada	520	Ireland	1	South Korea	41
Chile	7	Israel	13	Russian Federation	1
China	77	Italy	13	Singapore	4
Colombia	3	Jamaica	11	South Africa	7
Costa Rica	43	Japan	603	Spain	4
Cyprus	2	Kuwait	1	Switzerland	3
Czech Republic	1	Luxembourg	1	Taiwan	38
Denmark	3	Macao	1	Thailand	9
Dominica	1	Malta	2	Trinidad and Tobago	5
Dominican Republic	13	Malaysia	1	Turkey	1
Ecuador	2	Martinique	1	United Arab Emirates	1
France	2	Mexico	6369	United Kingdom	11
Egypt	1	Morocco	1	Venezuela	2
French Polynesia	1	Nepal	3	Vietnam	10
Germany	16	Netherlands	13	Virgin Islands	1
Greece	2	New Zealand	121	Zimbabwe	1
Guam	9				

Nursery & Flower Crops

2005 & 2006

Nursery Crops

	Year	Acres	Total
Bedding Plants, Color	2006	885	$216,042,250
	2005	910	$215,366,320
Bulbs, Corms, Rhizomes, Roots, Tubers	2006	128	$2,368,990
	2005	135	$2,503,100
Cactus And Succulents	2006	205	$19,721,615
	2005	205	$19,347,200
Citrus, Avocado, & Subtropical Fruit Trees	2006	186	$8,355,120
	2005	195	$9,100,300
Cut Christmas Trees	2006	100	$1,226,300
	2005	100	$1,118,400
Herbaceous Perennials	2006	300	$20,962,560
	2005	315	$19,869,200
Indoor Flowering & Foliage Plants	2006	500	$311,560,400
	2005	515	$311,050,300
Ornamental Trees And Shrubs	2006	3,490	$288,020,450
	2005	3,650	$287,586,060
Poinsettia	2006	142	$39,092,884
	2005	140	$38,127,200
Turf	2006	567	$10,625,000
	2005	567	$10,400,000
Total Nursery Products	**2006**	**6,503**	**$917,975,569**
	2005	6,732	$914,468,080

Nursery & Flower Crops

2005 & 2006

Cut Flower Crops

	Year	Acres	Total
Carnations	2006	18	$740,700
	2005	18	$739,800
Leptospermum	2006	310	$1,554,650
	2005	330	$1,757,580
Proteas	2006	475	$3,233,010
	2005	500	$3,149,640
Roses	2006	16	$2,097,460
	2005	16	$2,212,300
Wax Flowers	2006	670	$6,239,800
	2005	690	$4,657,500
Other Cut Flowers	2006	1,200	$49,257,000
	2005	1,415	$55,390,200
Foliage	2006	680	$10,156,575
	2005	520	$8,525,300
Total Flower Products	**2006**	**3,369**	**$73,279,195**
	2005	3,489	$76,432,320
Total Nursery & Flower Products	**2006**	**9,872**	**$991,254,764**
	2005	10,221	$990,900,400

Fruit & Nut Crops

2005 & 2006

	Year	Acres Harvested	Tons / Acre	Tons Total Production	US $ / Ton	Total
Apples	2006	434	1.7	738	489	$360,784
	2005	435	1.5	653	438	$285,795
Total Avocados	2006	26,012		121,150		$137,305,800
	2005	26,326		114,047		$251,452,135
Hass	2006	24,149	4.7	113,500	1,164	$132,114,000
	2005	24,341	4.5	109,535	2,260	$247,547,970
Lamb-Hass*	2006	998	4.3	4,250	892	$3,791,000
Fuerte*	2005	375	0.9	326	804	$262,345
Other	2006	865	3.9	3,400	412	$1,400,800
	2005	1,610	2.6	4,186	870	$3,641,820
Berries, Misc.	2006	121	9.8	1,186	4,200	$4,980,360
	2005	112	6.6	739	3,745	$2,768,304
Total Citrus	2006	12,526		169,857		$34,501,544
	2005	13,803		201,481		$38,364,492
Total Grapefruit	2006	1,819	16.8	30,559		$3,748,407
	2005	2,405	17.2	41,366		$4,639,245
Fresh Market	2006	1,819	12.9	23,465	141	$3,308,579
	2005	2,405	13.0	31,265	129	$4,033,185
By Product	2006		3.9	7,094	62	$439,828
	2005		4.2	10,101	60	$606,060
Kumquats	2006	196	2.5	490	1,533	$751,170
	2005	226	2.3	520	1,292	$671,582
Total Lemons	2006	3,207	15.6	50,193		$10,577,360
	2005	3,400	16.7	56,780		$11,520,900
Fresh Market	2006	3,207	10.1	32,391	265	$8,583,536
	2005	3,400	10.7	36,380	255	$9,276,900
By Product	2006		5.6	17,802	112	$1,993,824
	2005		6.0	20,400	110	$2,244,000
Total Limes	2006	304	9.1	2,766		$597,956
	2005	425	9.5	4,016		$604,353
Fresh Market	2006	304	5.8	1,763	305	$537,776
	2005	425	5.7	2,423	210	$508,725
By Product	2006		3.3	1,003	60	$60,180
	2005		3.8	1,594	60	$95,628

*Starting in 2006, Lamb-Hass avocados are reported separately due to increasing acreage. Fuerte avocados are now included in "Other" due to declining acreage.

Fruit & Nut Crops

2005 & 2006

	Year	Acres Harvested	Tons / Acre	Tons Total Production	US $ / Ton	Total
Total Oranges, Navel	2006	1,073	9.7	10,409		$2,620,882
	2005	1,134	15.0	16,976		$4,182,595
Fresh Market	2006	1,073	6.6	7,082	317	$2,244,931
	2005	1,134	10.5	11,873	305	$3,621,265
By Product	2006		3.1	3,327	113	$375,951
	2005		4.5	5,103	110	$561,330
Total Oranges, Valencia	2006	5,237	11.9	62,320		$13,453,864
	2005	5,515	12.9	71,144		$14,251,863
Fresh Market	2006	5,237	7.2	37,706	285	$10,746,324
	2005	5,515	7.7	42,466	262	$11,125,961
By Product	2006		4.7	24,614	110	$2,707,540
	2005		5.2	28,678	109	$3,125,902
Total Tangerine, Tangelo	2006	690	16.3	11,237		$2,751,905
	2005	698	15.3	10,679		$2,493,954
Fresh Market	2006	690	12.0	8,280	302	$2,500,560
	2005	698	10.1	7,050	310	$2,185,438
By Product	2006		4.3	2,957	85	$251,345
	2005		5.2	3,630	85	$308,516
Grapes, Wine	2006	309	2.1	649	798	$517,822
	2005	268	2.3	616	634	$390,798
Macadamia Nuts	2006	128	1.5	192	1,783	$342,336
	2005	130	1.3	169	1,740	$294,060
Misc. Fruits & Nuts*	2006	566				$4,250,471
	2005	586				$3,710,200
Persimmons	2006	383	5.9	2,260	560	$1,265,432
	2005	401	6.8	2,735	480	$1,312,704
Total Strawberries	2006	874	29.5	25,783		$36,800,756
	2005	754	34.8	26,239		$27,409,785
Fresh Market	2006	874	18.4	16,082	2,000	$32,163,200
	2005	754	20.1	15,155	1,459	$22,111,729
Processing	2006		11.1	9,702	478	$4,637,556
	2005		14.7	11,084	478	$5,298,056
Total Fruit & Nut Crops	2006	41,353				$220,325,305
	2005	42,815				$325,988,273

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

Vegetable Crops

2005 & 2006

	Year	Acres Harvested	Tons / Acre	Tons Total Production	US $ / Ton	Total
Beans, Snap	2006	524	5.8	3,039	1,372	$4,169,782
	2005	541	5.7	3,084	1,310	$4,039,647
Bunch Vegetables*	2006	465				$3,385,600
	2005	495				$3,776,700
Corn, Sweet	2006	256	7.5	1,920	505	$969,600
	2005	240	7.8	1,872	630	$1,179,360
Cucumbers	2006	386	17.0	6,562	650	$4,265,300
	2005	491	16.8	8,229	814	$6,698,569
Herbs	2006	466	18.3	8,528	2,578	$21,984,668
	2005	396	18.1	7,168	2,527	$18,112,525
Lettuce	2006	433	12.9	5,586	575	$3,211,778
	2005	349	12.7	4,432	510	$2,260,473
Melons	2006	108	4.7	508	324	$164,462
	2005	172	4.6	783	329	$257,475
Mushrooms	2006	22	262.0	5,764	4,096	$23,609,344
	2005	16	262.0	4,192	3,939	$16,512,288
Oriental Vegetables**	2006	94	5.2	489	956	$467,293
	2005	130	5.4	702	960	$673,920
Peppers	2006	248	17.9	4,439	630	$2,796,696
	2005	217	18.0	3,906	693	$2,706,858
Potatoes	2006	523	20.1	10,512	146	$1,534,796
	2005	520	19.8	10,296	147	$1,513,512
Squash	2006	215	10.3	2,215	472	$1,045,244
	2005	432	10.7	4,614	573	$2,643,707
Tomatoes	2006	2,318	42.6	98,747	895	$88,378,386
	2005	2,317	33.2	76,971	776	$59,729,263
Misc. Vegetables***	2006	719				$17,523,500
	2005	728				$17,886,500
Total Vegetables	**2006**	**6,777**				**$173,506,449**
	2005	7,044				$137,990,797

* Collards, Green Onions, Mustard & Turnip Greens, Parsley, Radishes and Spinach.
** Bamboo Shoots, Bok Choy, Chinese Greens, Daikon, Gai Choy, Gai Lon and Snap Peas.
*** Cauliflower, Celery, Chayote, Pumpkin, Sweet Potato, Tomatillo, Winter Squash and Others.

Field, Specialty Crops & Apiary

2005 & 2006

	Year	Acres Harvested	Tons / Acre	Tons Total Production	US $ / Ton	Total
Barley, Grain	2006	1,800	0.9	1,620	138.00	$223,560
	2005	1,580	0.6	948	151.00	$143,148
Greenchop	2006	101	20.8	2,101	27.16	$57,058
	2005	57	21.5	1,226	27.14	$33,260
Hay, Oat	2006	2,000	1.1	2,200	68.00	$149,600
	2005	1,500	0.9	1,320	64.00	$84,480
Oat, Grain	2006	395	0.2	59	101.00	$5,984
	2005	451	0.03	14	121.00	$1,634
Pasture, Irrigated	2006	2,198			1,862.00	$4,092,676
	2005	2,481			1,862.00	$4,619,622
Range*	2006	248,072			5.37	$1,332,147
	2005	207,000			6.10	$1,262,700
Silage	2006	53	15.0	795	27.15	$21,584
	2005	27	13.6	367	27.12	$9,958
Total Field Crops	**2006**	**254,619**				**$5,882,609**
	2005	213,096				$6,154,802
Honey	2006					$2,372,297
	2005					$2,115,200
Bees Wax	2006					$58,937
	2005					$65,250
Bees And Queens	2006					$179,450
	2005					$183,200
Pollen	2006					$90,400
	2005					$89,900
Pollination	2006					$1,399,125
	2005					$870,200
Total Apiary	**2006**					**$4,100,209**
	2005					$3,323,750
Timber	2006					$190,000
	2005					$235,000
Firewood	2006					$775,000
	2005					$720,000
Total Timber Products	**2006**					**$965,000**
	2005					$955,000

*Rangeland was previously underreported - this value represents current 2006 acreage.

Livestock & Poultry

2005 & 2006

	Year	Number of Head	Total Weight CWT*	US $/CWT	Total
Cattle and Calves	2006	22,000	165,000	92.00	$15,180,000
	2005	24,000	180,000	94.00	$16,920,000
Hogs and Pigs	2006	1,230	3,075	47.90	$147,293
	2005	1,180	2,950	50.00	$147,500
Chickens, Misc. Meat	2006	774,703	27,889	15.00	$418,335
	2005	786,500	28,314	15.00	$424,710
Rabbits	2006	900	45	49.00	$2,205
	2005	1,000	50	49.00	$2,450
Ratite Total	2006				$293,500
	2005				$1,052,500
Chicks	2006	900		90.00	$81,000
	2005	3,000		80.00	$240,000
Meat	2006	50,000 lbs		4.25	$212,500
	2005	250,000 lbs		3.25	$812,500
Lamb, Sheep	2006	550	550	84.00	$46,200
	2005	500	500	98.90	$49,450
Total Livestock & Poultry	**2006**	**802,233**			**$16,087,533**
	2005	816,180			$18,596,610

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

Livestock & Poultry Products

2005 & 2006

	Year	Number	Total Weight CWT	US $/CWT	Total
Milk, Market	2006		849,014	11.70	$9,933,464
	2005		852,111	14.45	$12,313,004
Eggs, Chicken Market	2006		67,400,792	0.54	$36,396,428
	2005		68,427,200	0.50	$34,213,600
Ratite Products Total	2006				$3,213,500
	2005				$1,105,000
Hides	2006	100		135.00	$13,500
	2005	600		135.00	$81,000
Oil	2006	2500 gal		1280.00	$3,200,000
	2005	800 gal		1280.00	$1,024,000
Total Livestock & Poultry Products	**2006**				**$49,543,392**
	2005				$47,631,604

Celebrating 125 Years of Agriculture

Quasquicentennial Anniversary

Farmers Chas Stewart and Brownie Bullseye and Friends, Chula Vista - 1890

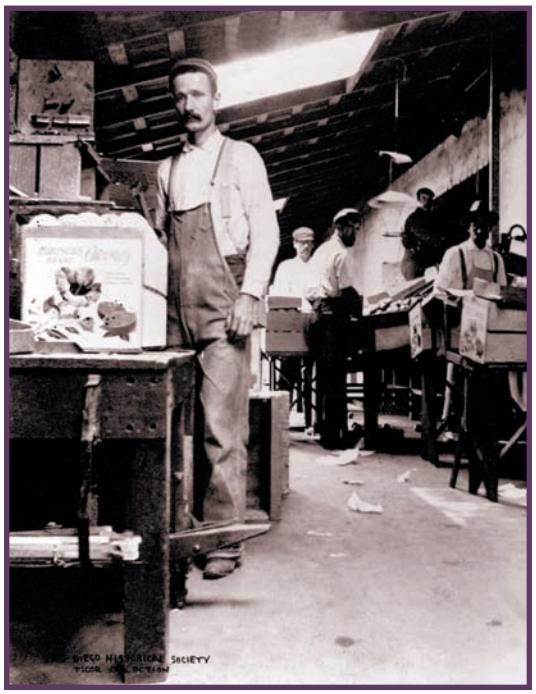
Dusting a Celery Field in Chula Vista - 1947

During 2006, the County of San Diego Department of Agriculture, Weights and Measures (AWM) celebrated its 125th anniversary. This department traces its roots back to 1881 when the County Agricultural Commissioner system was established by the State Legislature to "promote and protect" horticultural interests of the State. The Act provided specific procedures for abatement of scale insects, codling moth, red spider and other noxious insects which contaminated or injured fruit and nut trees, as well as for appointment of County inspectors and reporting of Commissioners' activities.

On October 20, 1881, the San Diego County Board of Supervisors established a three-member Board of Horticulture. Each board member covered a different area of a much larger County. In 1881, the areas that are now Riverside and Imperial Counties were part of San Diego County. Early records show a part time quarantine officer was appointed to inspect nursery stock on all incoming trains and steamers. The three member Board was consolidated in 1911 into a single office with a full-time administrator. In 1929, the office was changed to the "County Agricultural Commissioner." In 1972, this office merged with the Sealer of Weights and Measures. In 1993, the Office of the County Veterinarian joined the Department of Agriculture, Weights and Measures.

Many of the crops grown in the 1880's are the same as those grown today. Early Horticultural Department ledgers refer to Oranges, Lemons, Tomatoes, Nursery Crops and Cut Flowers, as well as Bees and Honey; all are still reported today. Crops grown then that are no longer reported in significant numbers today include olives, pomelos, peaches and pears. The earliest Crop Report reporting the value of San Diego County agriculture is from 1927 with a value of $10,145,140.

While many of the Agricultural Commissioner's duties remain the same now as they were 125 years ago, changes have occurred. Local agriculture is still a vital industry with more than 5,000 farms and 315,000 acres of farmland. Agriculture is ranked as the 5th largest industry in San Diego County. Today, increased population densities and the volume and speed of transporting people and commodities make it more difficult to control and prevent pest introductions. The job of protecting our environment is as critical today as 125 years ago, simply because every shipment into our County presents the possibility of a pest establishing itself.



Sweetwater Fruit Company in Bonita - 1899

Sustainable Agriculture

Sustainable agriculture promotes the economic viability of agriculture while preserving natural resources and environment. Pest prevention activities are essential to inhibiting the spread of exotic pests and ensuring a sustainable agricultural industry in California. Organic farming practices also aid in creating sustainable agriculture.

The Department of Agriculture, Weights and Measures administers programs for the detection, control and eradication of insect pests, plant diseases and invasive weeds, as well as for the enforcement of quarantines to exclude such pests.

Invasive Weed Control Activities

Weed	Rating	Removal Methods	Scope of Infestation
Spotted Knapweed *Centaurea maculosa*	A	Herbicides Hand Removal	1 Site, 10 Acres
Perrenial Pepperweed *Lepidium latifoium*	B	Herbicides Goats	27 Sites, 405 Acres
Yellow Starthistle *Centaurea solstitialis*	C	Herbicides Hand Removal	16 Sites, 20.5 Acres

Organic Farming

San Diego County is at the forefront of organic farming with 244 registered organic growers, more than any other county in the nation. In 2006, San Diego organic growers produced over 140 different crops, ranging from oranges, grapes, and avocadoes to unusual crops such as cherimoyas, loquats, and jujubes.

The National Organic Standards Board defines "organic agriculture" as "an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain and enhance ecological harmony." Research on organic farms, done over several decades, has revealed characteristics usually associated with sustainable farming, such as reduced soil erosion, lower fossil fuel consumption, less leaching of nitrate, greater carbon sequestration and, of course, little to no pesticide use.[1]

San Diego County's Top Ten Organically Produced Crops

Crop	Acreage
Oranges	1,275.5
Avocados	1,121.6
Lemons	481.5
Grapefruit	276.0
Tangelos/Tangerines	179.7
Berries	51.2
Persimmons	27.8
Carrots	13.1
Tomatoes	12.2
Strawberries	9.5

1 http://attra.ncat.org/attra-pub/organiccrop.html

Pest & Disease Interceptions

Name	Rating	# Finds
Pseudaulacaspis cockerelli Magnolia White Scale	A	212
Aulacaspis yasumatsui Cycad Aulacaspis Scale	A	15
Diaprepes abbreviatus Diaprepes Root Weevil	A	12
Bactrocera oleae Olive Fruit Fly	A	11
Bactrocera dorsalis Oriental Fruit Fly	A	7
Ceroplastes rubens Red Wax Scale	A	4
Pinnaspis strachani Lesser Snow Scale	A	3
Bactrocera correcta Guava Fruit Fly	A	2
Ceroplastes rusci Fig Wax Scale	A	2
Popillia japonica Japanese Beetle	A	2
Achatina fulica Giant African Snail	A	1
Aleurodicus dispersus Spiraling Whitefly	A	1
Ceroplastes cirripediformis Banacle Scale	A	1
Ceroplastes floridensis Florida Wax Scale	A	1
Dolichodorus heterocephalus Cobb's awl nematode	A	1
Parlatoria proteus Parlatoria Scale	A	1
Pomacea canaliculata Apple Snail	A	1
Solenopsis invicta Red Imported Fire Ant	A	1
Thyridopteryx ephemeraeformis Bagworm	A	1

Name	Rating	# Finds
Pseudacysta perseae Avocado Lace Bug	Q	40
Geococcus coffeae Soil Mealybug	Q	20
Disclisioprocta stellata Bougainvillea Looper	Q	6
Uromyces transversalis Gladiolus Rust	Q	6
Chrysophtharta m-fuscum Eucalyptus Leaf Beetle	Q	3
Zachrysia provisoria Cuban Snail	Q	3
Homoptera pseudoccoidae Mealybug	Q	2
Lepidoptera psychidae Bagworm	Q	2
Rhizoecus hibisci Root Mealybug	Q	2
Aleurocerus sp. Whitefly	Q	1
Gyponana sp. Leafhopper	Q	1
Heterogaster sp. Lygaeid Bug	Q	1
Homalodisca vitripennis Sharpshooter	Q	1
Pratylenchus sp. Lesion nematode	Q	1
Puccinia horiana Chrysanthemum White Rust	Q	1
Tanymecus lacaena Beetle	Q	1
Ants Various sp.	Q	4
Moths Various sp.	Q	3
Snails and Slugs Various sp.	Q	3
Thrips Various sp.	Q	3

Programs and Services Annual Report

The County of San Diego, Department of Agriculture, Weights and Measures provides regulatory enforcement of state and federal laws found in the California Food and Agricultural Code, the Business and Professions Code, the Labor Code, the California Code of Regulations and the County of San Diego Code of Regulatory Ordinances. In addition to enforcement responsibilities, staff provides extensive cutomer service, education and outreach to the local community. Following are highlights of the 2006 year.

Plant Health and Pest Prevention - This program encompasses five services areas, aimed at preventing new pests from entering the County.

Agricultural Import/Export Services ensures San Diego's outgoing agricultural products meet the plant cleanliness requirements of the importing country, state, or county, and that incoming shipments are free of damaging pests.

Nursery/Seed Services performs annual inspections of nurseries throughout San Diego County and ensures proper licensing, as part of the efforts to assist the horticultural industry with early detection of pests and disease.

Pierce's Disease Control Program protects California's second largest crop, grapes, from the Glassy-winged Sharp Shooter, the insect responsible for transmitting Pierce's Disease.

Sudden Oak Death Program works in a cooperative effort with state and federal officials to detect Phytophthora ramorum, a federal pest that causes death in oaks and over 200 other plants.

High Risk Program inspects shipments of produce and plants coming into California from other countries and states. Shipments are considered high risk when they originate in areas infested with actionable pests. Highlights for these programs include:

- 8,298 agricultural shipments destined to 67 different countries were certified.
- 9,405 shipments of agricultural commodities were certified for shipment to 21 different states.
- 8773 acres of nursery stock inspected at 923 production facilities.
- 1,377 outgoing plant shipments certified as free of Glassy-winged sharpshooter.
- 17 ethnic and specialty markets inspected in a "blitz", with efforts coordinated between county, state and federal officials.

Pest Detection is a critical component of the pest prevention network, providing the second line of defense against the introduction and spread of invasive insect pests. By placing and servicing insect traps throughout the county, targeted invasive pests are detected before they become established. Highlights for 2006:

- Invasive target pest finds: 7 Oriental Fruit Flies, 2 Guava Fruit Flies, and 2 Japanese Beetles.
- Insect Detection Specialists conducted 217,600 trap inspections.

Entomology and Plant Pathology / Nematology services are critical for rapid insect and plant disease identification and minimizing new pest infestations. Highlights for 2006:

- Sponsored Invasive Pest Detection Survey/Seminar training for local public agencies with frequently visited parks.
- 5089 insect samples were identified, 638 of the samples were submitted by homeowners.
- Co-sponsored Insect fairs at Quail Botanical Gardens and Polinsky Children's Center with over 5,000 in attendance.

Environmental Services prepares crop statistics, documents agricultural losses, and provides agricultural information regarding land use projects involving agricultural lands. Special projects include community outreach and media relations.

Pesticide Regulation is responsible for the implementation of state and federal pesticide laws and regulations. Inspections, investigations, and permitting ensure pesticides are used in an appropriate and responsible manner that protects the environment, the public and the employees of businesses that handle pesticides. Highlights for 2006:

- The number of days between violation occurence and mailing a notice of proposed penalty was reduced from 180 to 60 days.
- Six free Fieldworker Training sessions were provided in Spanish at various locations throughout the county to help growers ensure worker safety.
- The Structural Fumigation Committee was formalized and held quarterly meetings in 2006, increasing communications with structural pest control operators.
- Completed 85 illness investigations and complaints of pesticide misuse and conducted over 1300 pesticide inspections.

Agricultural Water Quality carries out the requirements of the County's Stormwater Permit, issued by the San Diego Regional Water Quality Control Board (RWQCB) and provides hazardous materials information for first responders and citizens. Education, outreach, inspections and investigations are aimed at reducing contaminants in local waterways . Inspections focus on "high priority commercial facilities," including nurseries, greenhouses, agricultural and structural pest control businesses, and equestrian facilities. Highlights for 2006:

- Provided technical advice for the Nutrient Reduction Management Plan and the Best Management Practice project in the Santa Margarita Watershed.
- Presented a manure management seminar at the Harris Ranch to over 200 horse breeders.
- Compliance with AWQ regulations by commercial agricultural businesses increased 11% compared to last year.

Standards Enforcement conducts consumer protection regulatory work by checking Weights and Measures devices, Price Verification of Scanners, Certified Farmers' Markets, Organic Farming, and Fruit, Vegetable and Shell Egg Quality. Highlights for 2006:

- Over 30,000 weighing and measuring devices (scales, gas pumps, utility sub-meters, taximeters, etc.) inspected to provide assurance of accuracy to both purchasers and sellers in transactions based upon weight, measure, or count. 90% of commercial scales and meters inspected were in compliance.
- 26 active farmers' markets in San Diego County and 158 local growers certified.
- 317 growers registered as organic in San Diego County, the largest community of organic growers in the country.
- Division staff inspected 162 wholesale and production egg facilities for quality.
- 406 consumer complaints about commercial meters, petroleum and price overcharges investigated.

Integrated Pest Control performs eradication and control efforts of invasive weeds such as Spotted knapweed, tamarisk, and perennial peppercress. Other activities include rodent bait production and weed control on roadsides, airports, flood control channels, sewage treatment plants, and inactive landfills. Highlights for 2006:

- Performed 2,850 acres of weed control on County roads and airports for DPW and other agencies.
- Performed applications of structural pest control at 146 County-owned facilities.
- Manufactured 19,800 pounds of rodent bait.

Civil Actions serves as an advocate at hearings for violations found by inspectors in all programs.

Total Number of Cases Successfully Closed in 2006: 175

- Certified Farmer's Market Action: 6
- Standards Enforcement Action: 110
- Agricultural Civil Penalties: 24
- Structural Civil Penalties: 34
- Quarantine Civil Penalties: 1

Office of the County Veterinarian operates the only County-run animal disease diagnostic laboratoy in the State. The San Diego Animal Disease Diagnostic Laboratory (ADDL) examines specimens from domestic animals and wildlife for pathogens affecting animals and diseases transmissible to humans, including rabies, plague, West Nile virus, tuberculosis, psittacosis, heartworms, Salmonella, Newcastle disease, and E. coli. The lab continually monitors economically important diseases such as Exotic Newcastle disease, Avian Influenza, Salmonella and bovine spongiform encephalopathy (mad cow disease).

Highlights for 2006:

- 2598 necropsies and other tests were performed, comprising 1030 domestic dogs, 522 domestic cats, 289 birds (including poultry), 90 livestock, 399 lab animals/exotics, 10 fish/reptiles/amphibians, 188 wildlife animals, and 70 tick pools.
- The San Diego County ADDL tested more animals for rabies (882) than any other County in the US.

Contact Us

Email: sdcawm@sdcounty.ca.gov

Agricultural Water Quality	Stormwater; agricultural hazardous material inventory	(858) 694-8980
Entomology	Insect identification; apiary registration; pest surveys	(858)694-3076
Environmental Services	Crop statistics; land use issues; endangered species; public information	(858)694-2775
Integrated Pest Control	Invasive weed control; rodent bait production; Integrated Pest Management (IPM)	(858)694-4209
Plant Health and Pest Prevention	Licenses to sell nursery products, flowers & foliage; phytosanitary certificates; quarantine compliance certificates; incoming shipments; nursery inspections; Glassy-winged sharpshooter; Sudden Oak Death	(760)752-4700
	Inspection Request Line	(760)752-4713
Pest Detection	Exotic insect trapping/eradication	(858)694-4209 (800)300-TRAP
Pesticide Regulation	Voluntary compliance inspections; pest control business registration; operator identification numbers; pesticide use reporting; restricted materials permits; employee pesticide training requirements; pesticide complaints	(858)694-8980
Plant Pathology/Nematology	Plant disease diagnostic services; plant disease surveys	(858)694-2753
Standards Enforcement	Certified farmers' markets; certified producer certificates; organic handler/producer; egg producer/handler; scanner registration; commercial weighing & measuring devices; device serviceperson; weighmaster	(858)694-2778
Veterinarian	Animal necropsies and associated laboratory services; wildlife damage complaints	(858)694-2838

Department Personnel

Robert G. Atkins
Agricultural Commissioner, Sealer of Weights & Measures

Executive Office

Hilton, Renee	Assistant Director
Bradburn, Don	Deputy Director
Powell, Marci	Admin Sec IV

Budget / Accounting

Aragaki, Susie	Principal Admin Analyst
Allen, Veronica	Admin Analyst II
Belenzo, Armando	Account Clerk Spec
DaVee, Kathy	Temp Expert Professional
Espiritu, Erlinda	Office Support Spec
Foronas, Aida	Sr Accountant
Goff, Linda	Admin Trainee
Knaggs, Dawn	Pcpl Admin Analyst
Marshall, Marilyn	Office Support Spec

Personnel / Payroll

Chin, Shirley	Dept Personnel Officer
Rushton, Belinda	HR Assistant

Civil Actions

Lorang, Sally, Esq.	Civil Actions Investigator
Giove, Mike	Legal Assistant
Vent, Sean	Student Worker
Delgadillo, Claudia	Student Worker
Starkey, Anna	Student Worker

Environmental Issues

Nielsen, Dawn	Dep Comm & Sealer
Melvin, Karen	Sr ASI
Milam, Marcia	ASI

Office of the County Veterinarian

Dr. Nikos Gurfield	County Veterinarian

Animal Disease Diagnostic Laboratory

Affolter, Timothy	Vet Pathologist
Barbour, Daniel	Animal Care Attendant
Cordova, Erika	Student Worker
Creek, Jean	Sr Disease Research Sci
Cruz, Lorna	Disease Research Sci
Diaz, Evelyn	Sr Histology Tech
Golson, Daniel	Student Worker
Jaworski, Dalphne	Sr Disease Research Sci
Keon, Elyse	Office Support Spec
LaFranco, Lisa	Vet Pathologist
Shannon, Cynthia	Disease Research Sci
Wempren, Alexina	Histology Technician
Williams, Kimberley	Registered Vet Tech

Wildlife Services

Waardenberg, Erik
Cox, Terry

Entomology/Plant Pathology Labs

Kellum, David	Agricultural Scientist
Nolan, Patricia	Agricultural Scientist
Diosa, April	Student Worker
Goff, Melanie	Student Worker
Jones, George	Entomology/Apiary Spec
Waldrop, Bill	IDS II

Integrated Pest Control

Schaer, Candy	Dep Comm & Sealer
Williams, Richard	Supv ASI
Cadena, Paul	Pest Mgmt Tech II
Chavez, Ana	Account Clerk Spec
Daly, James	Pest Mgmt Tech II
Gardner, Bruce	Pest Mgmt Tech II
Graves, Walter	Env Mgmt Spec II
Martinez, Mark	Pest Mgmt Tech II
Winans, Bill	Sr ASI
Wood, Raymond	Pest Mgmt Tech I

Pest Detection

Dang, Nganha	Dep Comm & Sealer
Feeley, Linda	Sr IDS
Breuninger, Tim	Sr IDS
Gross, Charles	Sr IDS
Agnes Jr, Sulpicio	Sr IDS
Alfaro, Orlando	IDS II
Allingham, Guy	IDS II
Arne, Richard	IDS II
Barron, Bernadette	Student Worker
Blank, Linda	IDS II
Burkman, Brian	IDS II
Buttner, Mark	IDS II
Casillas, Manuel	IDS I
Fanelli, Joseph	IDS II
Fregoso, Jorge	IDS II
Hock, Kimberly	IDS II
Jama, Mohamed	IDS II
Jefferson, Sharrod	IDS II
Joseph, Roy	IDS II
Lehman, Martin	IDS II
Luetticke, Gregory	IDS II
Miller Jr, Robert	IDS II
Moss, Belinda	IDS II
Nelson, Michael	IDS I
Randall, Lawrence	IDS II
Rowin, Mary	IDS II
Sharon, Alan	IDS II
Thewlis, Joan	IDS II
Thomas, Aleyamma	Student Worker
Velardi, John	IDS II
Wagner, Valerie	IDS II

Pesticide Regulation

Leondis, Lisa	Dep Comm & Sealer
Hardy, Simone	Supv ASI
Redding, Stasi	Supv ASI
Amador, Abdel	ASI
Anzaldo Heredia, Veronica	Sr ASI
Bilog, Gemma	Sr Clerk
Carr, Colleen	Sr ASI
Estrella, Dinna	ASI
Ghebretnsea, Kahsai	ASI
Joseph, Sabumon	Intm Clerk
McCutcheon, Flo	Sr ASI
Moore, Megan	Sr ASI
Moreno, Lauren	ASI
Moss, Adrienne	ASI
Olsen, Ted	Sr ASI
Raymond, Suzanne	Intm Clerk
Syzonenko, Nancy	Sr ASI
Thomas, Thankamma	Intm Clerk

Ag Stormwater/Hazmat

Appel, Nancy	Supv ASI
Bacon, Warren	ASI
Fritz, David	Sr ASI
Silva, Nestor	ASI

IT/GIS

Acosta, Vince	Sr ASI
Preston, Tom	Student Worker

Plant Health & Pest Prevention

Neville, Cathy	Dep Comm & Sealer
Dobbins, Katherine	Supv ASI
Brandon, Delores	Supv ASI
Bixby, Clark	Supv ASI
Austin, Ashley	Student Worker
Betschart, Chris	Sr ASI
Cie, Damien	Student Worker
Desserich, Stephen	Sr ASI
Elder, Travis	ASI
Farhoomand, Manige	Sr ASI
Feeley, Michael	Sr ASI
Javed, Saiqa	ASI
Macgregor, Robert	ASI
Metcalf Jr, Ralph	Sr ASI
Nelson, Matthew	ASI
Olivares, Jorge	ASI
Partch, Jeremy	ASI
Robinson, Steven	IDS II
Rodriguez, Vicente	Sr ASI
Sixtus, Ann	Sr ASI
Springer, Kathryn	Sr ASI
Terhall, Gregory	Sr ASI
Thompson, Michelle	ASI
Westrick, Jeffery	ASI
Woods, Daneen	Sr Clerk
Worcester, Lindsay	Sr ASI
Wube, Muluneh	Sr ASI

Standards Enforcement

Byers, James	Dep Sealer
Davis, Cynthia	Supv ASI
Mares, Marco	Supv ASI
Avina, Tony	Sr ASI
Berniker, Lily	ASI
Bloomer, Thomas	Sr ASI
Braaten, Glenn	ASI
Bryant, Robert	ASI
Burton, Areleous	Intermediate Clerk
Connelly, Neil	Sr ASI
Dewall, Paula	Sr ASI
Gordon, Carolyn	Sr ASI
Goss, Nicole	ASI
Guidry, Lee	Sr ASI
Holbrook, Timothy	Sr ASI
Johnson, Michelle	Intermediate Clerk
Kebede, Atlaw	Sr ASI
Ong, Quang	ASI
Roma, Robert	ASI
Roughton, Mark	Sr Clerk
Shipley, Bradley	ASI
Silva, Annie	Sr ASI
Stevens, Mazen	ASI

Agriculture, Weights & Measures
5555 Overland Avenue, Suite 3101
San Diego, CA 92123-1256
www.sdcawm.org