

**COUNTY OF SAN DIEGO**  
**CROP STATISTICS & ANNUAL REPORT**

2017



# Index

A large red daisy flower with two bees on its center, set against a dark wood-grain background.

County Agricultural Commissioner Letter

4

Overview of Changes

6

Highlights

8

Sustainable Agriculture

22

Programs and Services

26

Staff

36





# COUNTY AGRICULTURAL COMMISSIONER LETTER





# County of San Diego

**HA DANG**  
AGRICULTURAL COMMISSIONER/  
SEALER OF WEIGHTS & MEASURES

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**MEGAN MOORE**  
ASST. AGRICULTURAL COMMISSIONER/  
SEALER OF WEIGHTS & MEASURES

Karen Ross, Secretary,  
California Department of Food and Agriculture  
and  
The Honorable Board of Supervisors of the County of San Diego  
Supervisor Kristin Gaspar, Chair  
Supervisor Dianne Jacob, Vice Chair  
Supervisor Greg Cox  
Supervisor Ron Roberts  
Supervisor Bill Horn

I respectfully submit our 2017 report of acreage, yield and value of agricultural production for San Diego County. In 2017, the direct economic output from agricultural production in San Diego County totaled \$1,774,206,410. This equates to a 1.6% increase from 2016's total value of \$1,746,632,682. Economic output in the form of expenditures by agricultural companies and their employees accounted for \$1,224,202,423 in additional value, bringing the total impact of agriculture to the county economy to \$2,998,408,833. The overall acreage devoted to commercial agriculture went from 250,720 acres in 2016 to 243,029 acres in 2017, for a 3.1% decrease overall.

The 2017 Crop Statistics and Annual Report details crop information and highlights the many diverse programs within the Department of Agriculture, Weights and Measures to support the County's focus on healthy families, safe communities, and sustainable environments. Special thanks go to the many producers, industry groups, and public agencies who provided vital information for this report. I'd also like to extend much appreciation to my outstanding staff for continually providing our customers with superior service.

Regards,

Ha Dang  
Agricultural Commissioner/  
Sealer of Weights and Measures

\* A previous version of the Agriculture Commissioner Letter incorrectly stated the economic output in the form of expenditures was \$2,998,408,833 and total impact of agriculture to the county economy was \$4,772,615,243. The correct values are \$1,224,202,423 and \$2,998,408,833 respectively.



# OVERVIEW OF CHANGES





# 2017 Overview of Changes

**T**he overall value of commercial agriculture in San Diego County rose 1.6% from 2016 to 2017. This rise was driven in large part by a 16% increase in Vegetable and Vine Crop products grown in the county. There were small decreases in the value of Field Crops and Livestock and Poultry, while the Nursery and Cut Flower, Fruit and Nuts, Apiary products, and Livestock and Poultry products saw slight increases in value.

Ornamental Trees and Shrubs remain the top crop, bringing in a total of \$401,614,960, or 23% of the total value of agricultural production in San Diego County. Following close behind, Indoor Flowering and Foliage Plants were valued at \$378,744,760, equaling 21% of the County's overall agricultural production.

Nursery and Cut Flower Products value remained stable, totaling \$1,232,556,856, less than a 1% decline from the previous year.

Fruit and Nut crop values remained relatively stable as a whole. Its value equaled \$331,590,283 or a 1% increase from the previous year. An 18% increase in citrus value made up for a 10% decrease in avocado value.

Vegetable and Vine crop value increased to \$136,940,824, a 16% increase despite an 8% reduction in planted acres. The majority of the decrease in acres this year was due to potatoes, which comprised nearly 10% of the total planted acres of vegetables in 2016. The major driver of the increase in vegetable value in 2017 was a 72% increase in the value of Herbs and Spices grown in the county, due to increased acreage.

Apiary Products, valued at \$3,765,421, saw an overall increase of 4%.

Livestock and Poultry were valued at \$18,167,205, decreasing 12% primarily due to a decrease in the value of cattle and calves.

Livestock and Poultry Products value rose 27%, totaling \$46,227,998. This was attributed to an increase in value per unit of milk and eggs. This year experienced another slight decline in Chicken Egg production: part of a general trend of the production of Chicken Eggs decreasing from a high in 2013. As a result of Proposition 2 and CR 1315, egg production has become more expensive, causing some chicken ranches to either go out of business or downsize their flocks.

Field Crop production was valued at \$4,120,952, a decrease of 10.3%. Although the total value has decreased from a high in 2013, there can be significant fluctuations from year to year due to crop rotation.



# HIGHLIGHTS





## 2017 HIGHLIGHTS

Total Value of Production	\$1,774,206,410
Total Acreage	243,029
Commodity with Highest Reported Dollar Value	Ornamental Trees & Shrubs
Highest Dollar Value per Acre	Indoor Flowering & Foliage Plants
Lowest Dollar Value per Acre	Rangeland
Greatest % Increase in Total Dollar Value from 2016	Herbs/Spices
Greatest % Decrease in Total Dollar Value from 2016	Mushrooms
Commodity with the Greatest Amount of Planted Acreage	Avocados

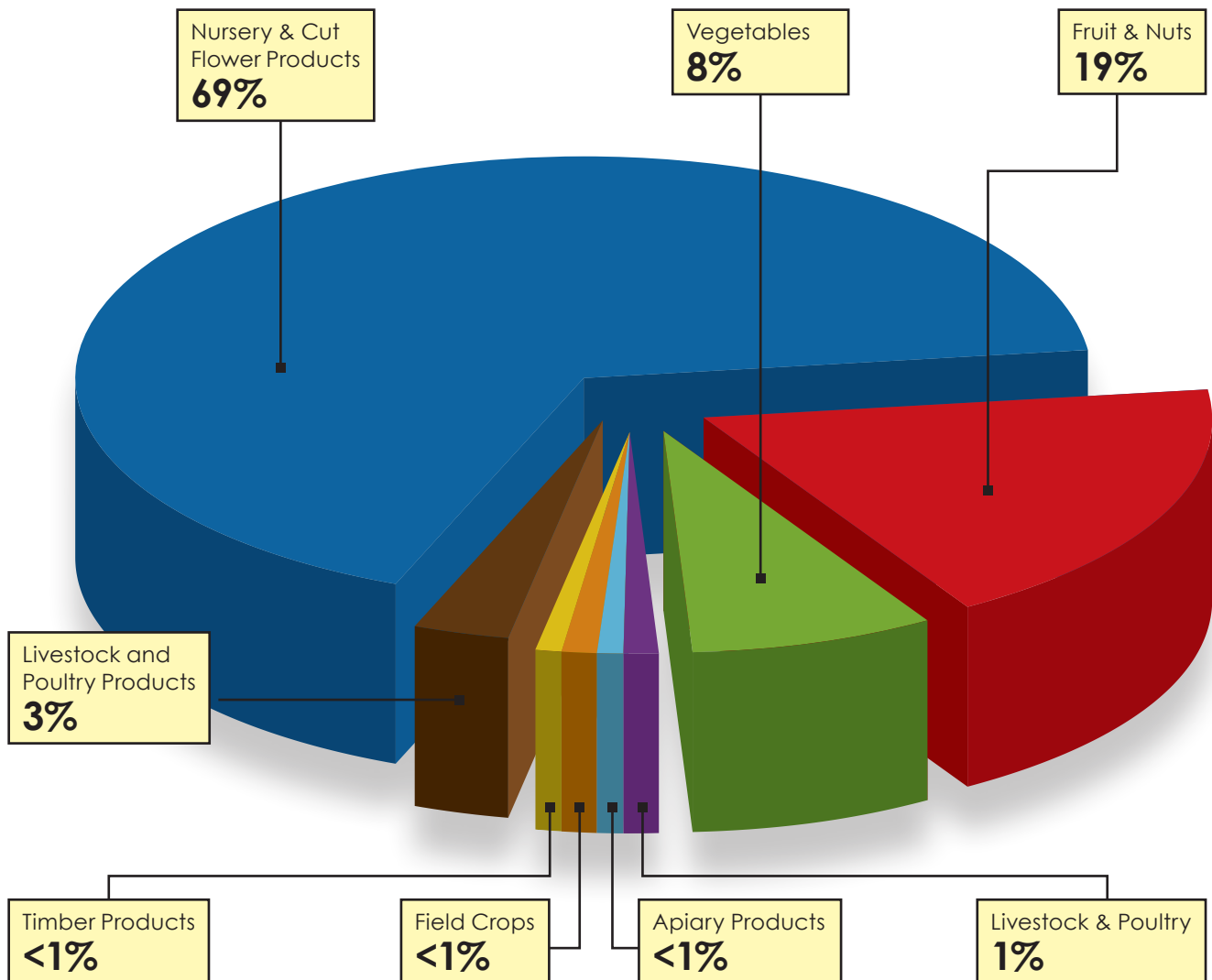
## SUMMARY OF MAJOR CROPS

CROP	YEAR	ACRES	TOTAL VALUE
Nursery & Cut Flower Products	2017	12,549	\$1,232,556,856
	2016	12,356	\$1,233,942,000
Fruit & Nuts	2017	30,710	\$331,590,283
	2016	33,174	\$328,401,815
Vegetables	2017	3,264	\$136,940,824
	2016	3,545	\$118,291,000
Field Crops	2017	196,506	\$4,120,952
	2016	201,645	\$4,593,000
Apiary Products	2017		\$3,765,421
	2016		\$3,632,000
Timber Products	2017		\$836,872
	2016		\$763,867

## SUMMARY OF MAJOR CROPS CONTINUED

Livestock & Poultry	2017		\$18,167,205
	2016		\$20,721,000
Livestock and Poultry Products	2017		\$46,227,998
	2016		\$36,288,000
Totals	2017	243,029	\$1,774,206,410
	2016	250,720	\$1,746,632,682

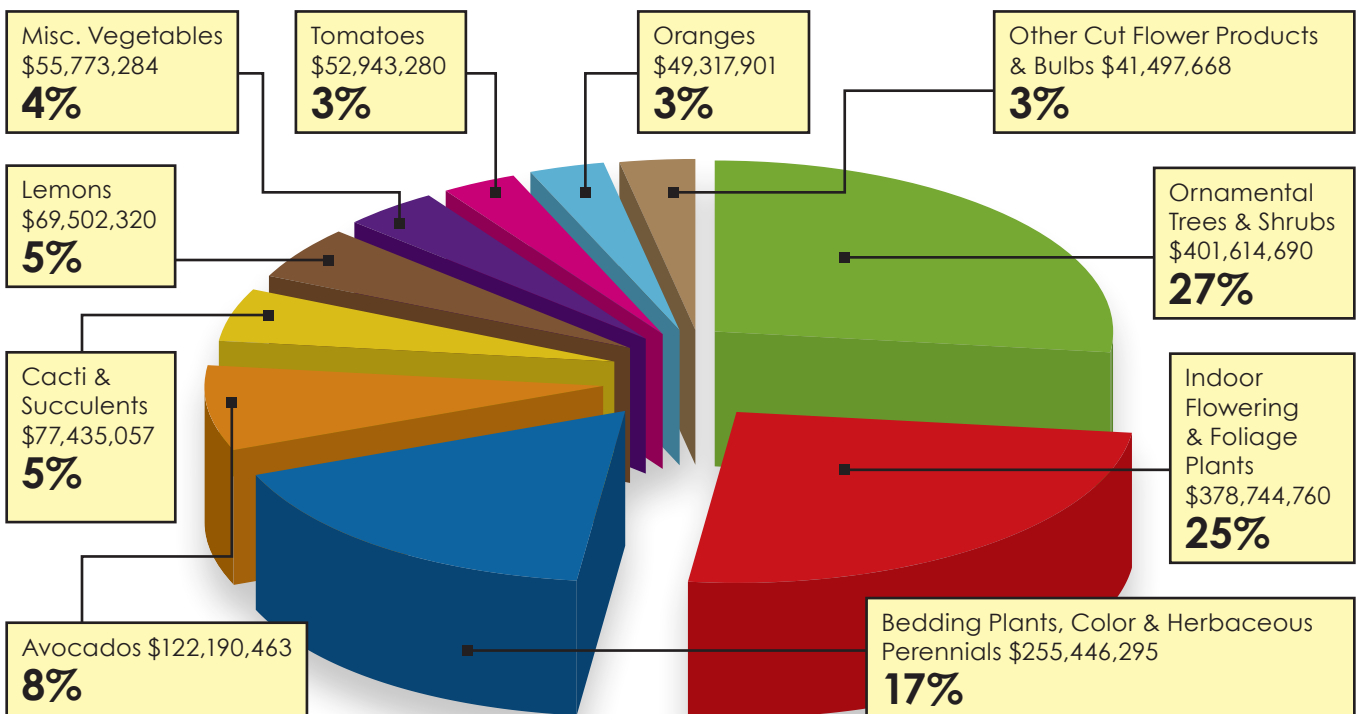
## MAJOR CROPS BY OVERALL PERCENTAGE



## TOP TEN CROPS

CROP	2017 VALUE
Ornamental Trees and Shrubs	\$401,614,960
Indoor Flowering & Foliage Plants	\$378,744,760
Bedding Plants, Color & Herbaceous Perennials	\$255,446,295
Avocados	\$122,190,463
Cacti & Succulents	\$77,435,057
Lemons	\$69,502,320
Misc. Vegetables	\$55,773,284
Tomatoes	\$52,943,280
Oranges	\$49,317,901
Other Cut Flower Products & Bulbs	\$41,497,668

### TOP 10 CROPS OVERALL



## NURSERY AND CUT FLOWER PRODUCTS

CROP	YEAR	ACRES	TOTAL VALUE
Bedding Plants, Color & Herbaceous Perennials	2017	1,274	\$255,446,295
	2016	1,182	\$239,070,000
Cacti & Succulents	2017	464	\$77,435,057
	2016	438	\$82,958,000
Citrus, Avocado, & Subtropical Fruit Trees	2017	267	\$27,026,942
	2016	267	\$20,790,000
Indoor Flowering & Foliage Plants (including Poinsettia)	2017	995	\$378,744,760
	2016	858	\$362,925,000
Ornamental Trees & Shrubs	2017	5,261	\$401,614,960
	2016	5,210	\$436,817,000
Turf and Cut Christmas Trees	2017	690	\$16,890,993
	2016	710	\$16,639,000
Total Nursery Products	2017	8,951	\$1,157,159,007
	2016	8,665	\$1,159,199,000



## NURSERY AND CUT FLOWER PRODUCTS

CROP	YEAR	ACRES	TOTAL VALUE
Leptospermum	2017	390	\$1,404,000
	2016	395	\$1,658,000
Proteas	2017	565	\$4,780,465
	2016	576	\$5,074,000
Wax Flowers	2017	740	\$6,642,980
	2016	751	\$7,150,000
Other Cut Flowers & Bulbs	2017	1,212	\$41,497,668
	2016	1,249	\$42,200,000
Foliage	2017	691	\$21,072,736
	2016	720	\$18,661,000
Total Flower Products	2017	3,598	\$75,397,849
	2016	3,691	\$74,743,000
Total Nursery & Cut Flower Products	2017	12,549	\$1,232,556,856
	2016	12,356	\$1,233,942,000



## FRUIT & NUT CROPS

	YEAR	ACRES	TONS/ACRE	TONS	US \$/TON	TOTAL VALUE
Apples	2017	244	1	244	\$1,980	\$483,120
	2016	214	1	210	\$2,200	\$462,000
Total Avocados	2017	15,003	2	34,507	\$3,541	\$122,190,463
	2016	17,741	3	57,962	\$2,350	\$136,225,815
Hass	2017	14,171	2	32,524	\$3,578	\$116,376,970
	2016	16,760	3	55,782		\$129,792,499
Lamb-Hass	2017	621	3	1,600	\$3,088	\$4,941,504
	2016	733	2	1,685		\$5,807,966
Other	2017	211	2	383	\$2,277	\$871,989
	2016	248	2	495		\$625,350
Berries, Misc.	2017	292	8	2,336	\$10,000	\$23,360,000
	2016	298	9	2,700	\$10,000	\$27,000,000
Total Citrus	2017	12,210	10	145,631	\$1,587	\$153,442,758
	2016	12,083	15	177,230	\$736	\$130,427,000
Grapefruit	2017	1,473	16	23,273	\$741	\$17,245,589
	2016	1,440	17	24,480	\$780	\$19,094,000
Kumquats	2017	69	2	138	\$3,604	\$497,352
	2016	79	2	150	\$3,000	\$450,000

## FRUIT & NUT CROPS

	YEAR	ACRES	TONS/ACRE	TONS	US \$/TON	TOTAL VALUE
Lemons	2017	3,312	15	49,680	\$1,399	\$69,502,320
	2016	3,400	16	55,760	\$1,020	\$56,875,000
Limes	2017	218	5	1,046	\$1,833	\$1,918,051
	2016	259	5	1,370	\$1,134	\$1,553,000
Oranges	2017	6,086	10	57,817	\$853	\$49,317,901
	2016	5,965	14	82,310	\$491	\$40,414,000
Tangerines & Tangelos	2017	1,052	13	13,676	\$1,094	\$14,961,544
	2016	940	14	13,160	\$915	\$12,041,000
Grapes, Wine	2017	1,210	2	2,783	\$1,385	\$3,854,455
	2016	930	3	2,515	\$1,195	\$3,005,000
Misc. Fruit & Nuts	2017	1,265			\$6,717	\$8,497,005
	2016	1,348			\$7,902	\$10,652,000
Persimmons	2017	196	4	686	\$2,387	\$1,637,482
	2016	270	5	1,270	\$1,379	\$1,751,000
Strawberries	2017	290	25	7,250	\$2,500	\$18,125,000
	2016	290	31	8,990	\$2,100	\$18,879,000
Total Fruit & Nuts	2017	30,710				\$331,590,283
	2016	33,174				\$328,401,815

## VEGETABLE AND VINE CROPS

CROP	YEAR	ACRES HARVESTED	TONS/ ACRE	TONS TOTAL PRODUCTION	US \$/ TON	TOTAL VALUE
Cucumbers	2017	99	10	1,023	\$1,159	\$1,185,286
	2016	97	10	970	\$828	\$803,000
Herbs/Spices	2017	135	10	1,350	\$5,567	\$7,515,450
	2016	73	10	730	\$6,000	\$4,380,000
Mushrooms	2017			2,984	\$3,795	\$11,324,280
	2016			3,320	\$4,813	\$16,000,000
Peppers	2017	169	16	2,704	\$1,214	\$3,282,656
	2016	165	19	3,140	\$1,180	\$3,700,000
Potatoes	2017	0	0	0	\$-	\$-
	2016	340	5	1,670	\$271	\$453,000
Squash	2017	411	9	3,576	\$1,375	\$4,916,588
	2016	400	10	4,000	\$1,050	\$4,200,000
Tomatoes	2017	1,136	15	17,040	\$3,107	\$52,943,280
	2016	1,125	15	16,880	\$2,550	\$43,030,000
Miscellaneous Vegetables	2017	1,314	17	21,812	\$2,557	\$55,773,284
	2016	1,345	14	18,290	\$2,500	\$45,725,000
Total Vegetables and Vine Crops	2017	3,264				\$136,940,824
	2016	3,545				\$118,291,000





## LIVESTOCK AND POULTRY

COMMODITY	YEAR	NUMBER OF HEAD	WEIGHT CWT	US \$/CWT	TOTAL VALUE
Cattle and Calves	2017	10,800	97,200	\$136	\$13,176,432
	2016	10,850	97,650	\$162	\$15,841,000
Hogs and Pigs	2017	1,302	3,255	\$51	\$166,656
	2016	1,220	3,050	\$52	\$159,000
Chickens	2017		63,280	\$74	\$4,711,829
	2016		65,000	\$71	\$4,605,000
Lambs and Sheep	2017	968	968	\$116	\$112,288
	2016	928	928	\$125	\$116,000
Total Livestock & Poultry	2017				\$18,167,205
	2016				\$20,721,000



## FOREST PRODUCTS

COMMODITY	YEAR	TOTAL VALUE
Timber	2017	\$12,394
	2016	\$13,867
Firewood	2017	\$824,478
	2016	\$750,000
Total Forest Products	2017	\$836,872
	2016	\$763,867

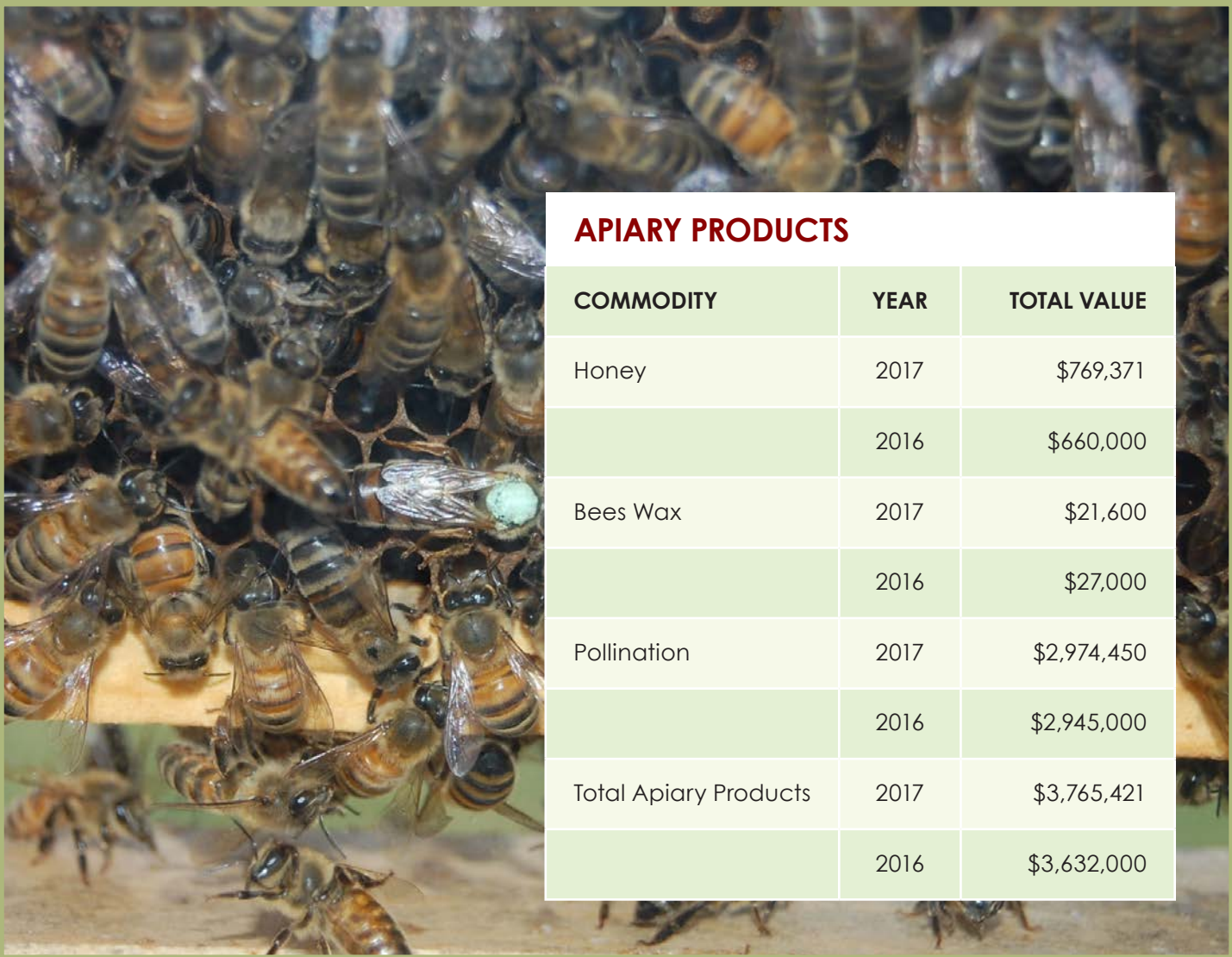


## FIELD CROPS

COMMODITY	YEAR	ACRES HARVESTED	TONS/ ACRE	TONS TOTAL PRODUCTION	US \$/ TON	TOTAL VALUE
Hay, Oat	2017	2,133	1.0	2,080	\$126	\$261,706
	2016	2,100	1.0	2,100	\$142	\$298,000
Pasture, Irrigated	2017	823				\$1,592,505
	2016	902				\$1,745,000
Range	2017	190,778				\$1,243,873
	2016	195,070				\$1,229,000
Misc. Field	2017	2,772				\$1,022,868
	2016	3,574				\$1,321,000
Total Field Crops	2017	196,506				\$4,120,952
	2016	201,645				\$4,593,000

## LIVESTOCK AND POULTRY PRODUCTS

COMMODITY	YEAR	NUMBER	WEIGHT CWT	US \$/UNIT	TOTAL VALUE
Milk, Market	2017		425,363	\$17	\$7,380,048
	2016		434,932	\$15	\$6,520,000
Eggs, Chicken Market	2017	26,427,177 dz		\$1	\$38,847,950
	2016	27,192,480 dz		\$1	\$29,768,000
Total Livestock and Poultry Products	2017				\$46,227,998
	2016				\$36,288,000

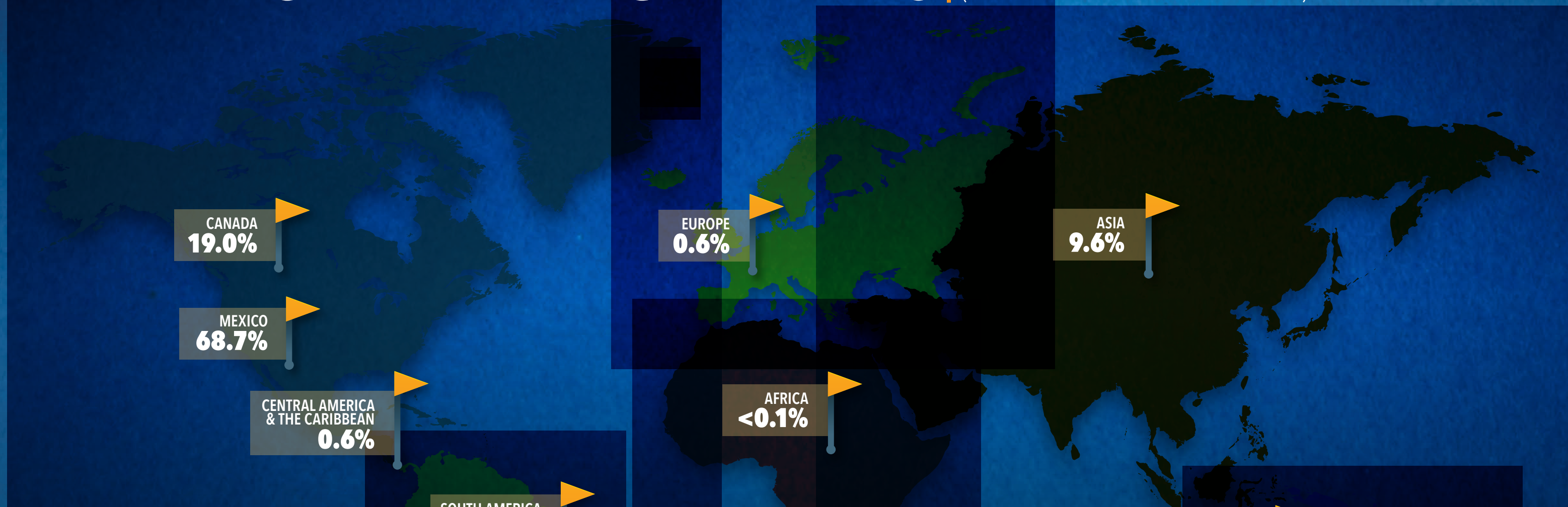


### APIARY PRODUCTS

COMMODITY	YEAR	TOTAL VALUE
Honey	2017	\$769,371
	2016	\$660,000
Bees Wax	2017	\$21,600
	2016	\$27,000
Pollination	2017	\$2,974,450
	2016	\$2,945,000
Total Apiary Products	2017	\$3,765,421
	2016	\$3,632,000

# INTERNATIONAL TRADING PARTNERS

IN 2017 WE CERTIFIED 8,395 SHIPMENTS OF PLANT MATERIAL (INCLUDING FRUITS AND VEGETABLES) GOING TO 45 COUNTRIES.



Japan	529
Korea, Republic of	130
Taiwan	53
China	24
Singapore	22
Hong Kong	19
Indonesia	10
Thailand	9
Israel	3
Macao	2
Malaysia	2
Vietnam	2
Mexico	5770
Canada	1595
Total	7365

South America	0.3%
Central America & the Caribbean	0.6%
Europe	0.6%
Africa	<0.1%
Oceania & Australia	1.1%
New Zealand	49
Australia	36
Micronesia, Federated States of	4
New Caledonia	1
Total	90

El Salvador	17
Guatemala	13
Nicaragua	10
Dominican Republic	5
Costa Rica	4
Honduras	3
Antigua and Barbuda	1
Jamaica	1
Total	54

Germany	25
Netherlands	10
United Kingdom	8
Portugal	3
Belgium	2
France	2
Sweden	2
Italy	1
Spain	1
Total	54

Chile	14
Peru	3
Ecuador	2
Argentina	1
Brazil	1
Paraguay	1
Total	22

South Africa	2
Egypt	1
Total	3



# SUSTAINABLE AGRICULTURE



# Sustainable Agriculture – 2017



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

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 prevent the spread of invasive pests.

Pest ratings are intended as aids to inform county agricultural commissioners and other interested persons as to a particular pest's environmental, agricultural and biological significance, as well as its importance to the general public, and the action recommended by the California Department of Food and Agriculture to deal with the pest.

➤ **“A”-rating:** Organism of known economic importance subject to state (or agricultural commissioner) enforced action.

➤ **“Q”-rating:** Organism requiring a temporary “A” rating pending determination of a permanent rating. The organism is suspected to be of economic importance but its status is uncertain because of incomplete identification, inadequate information, etc.

Our Entomology and Plant Pathology Labs provide rapid insect and plant disease identification allowing for a quick response to pests of known economic importance (A-rated) and those suspected of economic importance (Q-rated).

➤ 5 A-rated pests were identified by Plant Pathology lab, 300 A-rated pests identified by Entomology lab.

➤ 10 Q-rated pests were identified by Plant Pathology lab, 118 Q-rated pests identified by Entomology lab.

Pests that AWM frequently intercepts on imported horticultural products are A-rated armored scales, magnolia white scale *Pseudaulacaspis cockerelli*, lesser snow scale *Pinnaspis strachani* and Q-rated *Lepidosaphes chinensis* (Hemiptera: Diaspididae).

As sessile adults these insects measure 1 mm and have mobile stages that are barely visible to the naked eye, attach themselves mainly to the leaves of palms and *Dracaena* and easily go unnoticed.

In 2017, these species were intercepted and remedied in quarantine by AWM inspectors a total of 69 times after originating from Florida, Hawaii, Costa Rica, Puerto Rico, Thailand and China to prevent introduction into San Diego's horticultural industry and landscapes.

## HIGH-RISK PEST EXCLUSION

➤ 4,782 incoming plant shipments were inspected.

➤ 147 Notices of Rejection were issued.

➤ 151 pests were found (47 A-rated, 51 B-rated, and 53 Q-rated).

➤ 2 international border operations with Homeland Security, Customs and Border Protection and U.S. Department of Agriculture were conducted.

## DETECTOR DOG TEAMS

- Detector dogs alerted on 5,347 packages shipped through FedEx and UPS and Ontrac.
- 257 of those packages were not marked as containing plant material and 209 actually contained plant material; this is an 81% accuracy rate.
- 45 inspections were conducted at the USPS main shipping terminal in San Diego County resulting in alerts on 833 packages.
- Of the 833 packages alerted on, 427 Notices of Rejection were issued to shippers in violation of the Food and Agricultural Code.

## ORGANIC FARMING

San Diego County is at the forefront of organic farming with 391 registered organic producers. In 2017, organic growers in the county produced more than 150 unique crops and over 320 unique crop varieties. The majority of organic produce grown locally is sold to wholesalers who in turn sell it to markets across the United States. A portion

of the produce is sold directly to local restaurants and natural food stores. Organic growers also sell directly to the public through produce stands, Certified Farmers' Markets throughout the County of San Diego, and Community Supported Agriculture (CSA) programs. The USDA's National Organic Standards Board defines "organic agriculture" as an ecological production management system that promotes and enhances biodiversity, biological cycles, and soil biological activity. San Diego County has 9.6% of the total number of organic growers in the state.

## NOXIOUS / INVASIVE WEED CONTROL

The Integrated Pest Control Program (IPC) protects the County's agriculture, sensitive habitats, native wildlife, and endangered species by controlling noxious and invasive weeds in cooperation with other county departments and agencies. Additional funding secured by AWM enabled IPC to increase their early detection rapid response efforts on rated noxious and invasive weeds.

- Two A-rated, three B-rated, and three C-rated of noxious weeds as well as five species of invasive weeds were removed for a total of 639.93 acres.

WEED SPECIES	RATING	ACREAGE SURVEY/ TREATED
Voluteria, <i>Voluteria sp.</i>	A	81.7
Spotted knapweed, <i>Centaurea maculosa</i>	A	15.03
Bridal broom, <i>Retama monosperma</i>	B	15.5
Canary Island St. John's wort, <i>Hypericum canariense</i>	B	89.7
Carnation Spurge, <i>Euphorbia terracina</i>	B	17.9
Medusahead, <i>Elymus caput-medusae</i>	C	8
Yellow starthistle, <i>Centaurea solstitialis</i>	C	81.6

French Broom, <i>Genista monspessulana</i>	C	63.1
Algerian sea lavender, <i>Limonium ramosissimum</i>	Invasive	39
Eupatory, <i>Ageratina adenophora</i>	Invasive	10.3
European sea lavender, <i>Limonium duriusculum</i>	Invasive	85.2
Ward's weed, <i>Carrichtera annua</i>	Invasive	12
Rattle Box, <i>Sesbania punicea</i>	Invasive	120.9
Total Acreage		639.93

### WEED CONTROL PERFORMED ON COUNTY PROPERTY

IPC preserves road visibility and clearance; reduces fire danger along roadways and intersections; enhances drainage to prevent flooding; and keeps safety pull-over areas visible and easy to access. We perform weed control work along County roads and right-of-ways. We also control weeds along flood control conveyances to enhance the flow of water.

### STRUCTURAL PEST CONTROL

Integrated Pest Control implements Board of Supervisors Policy F-45, requiring the use of Integrated Pest Management protocols at all county facilities, which is an effective and environmentally sound

approach while performing pest control. We use current scientific information and control methods to manage and eradicate pests by the most economical means with the least possible hazard to people, property, and the environment. 225 county facilities were inspected and treated for various structural pests.



WEED CONTROL LOCATIONS	REMOVAL METHOD	ACREAGE SURVEYED/TREATED
Habitat Restoration at County Parks	Herbicides/Hand Removal	53.5
Roadside Right of Ways	Herbicides	4,371.55
Airports	Herbicides	646.32
Flood Control District	Herbicides	46.2
Sanitation District	Herbicides	59.24
Total Acreage		5,176.81





# PROGRAMS AND SERVICES





## Programs and Services – 2017 highlights

P

**Plant Health and Pest Prevention** is the first line of defense in keeping unwanted pests out of our county. Inspections of incoming and outgoing plant shipments and production nurseries look for pests harmful to agricultural production here or at the shipment destination.

- 4,782 incoming plant shipments inspected with 151 actionable pest finds.
- 209 unmarked parcels containing plant material intercepted by the Detector Dog Teams at terminal facilities.
- 470 nurseries, comprising 10,116 acres, inspected for pests and diseases.

**Pest Detection** is a critical component of our statewide pest prevention network. Our Pest Detection Program inspected 355,006 insect traps throughout the county to detect insect pests, such as exotic fruit flies, Gypsy moth, Glassy-winged sharp shooter, Japanese beetle, and Light Brown Apple moth which pose threats to California's agricultural and horticultural crops. There were several pests detected within the County, and the Pest Detection program assisted both state and federal agencies in conducting activities to promptly and effectively eradicate the pests. Through early detection, damage to crops, the environment and economy, and the subsequent use of pesticides was reduced.

**Pesticide Regulation** enforces state pesticide laws and regulations. Inspections, complaint and illness investigations, and evaluations of restricted material permits all serve to ensure pesticides are used in a safe and legal manner while protecting human and animal health, as well as the environment.

- Conducted 1,373 inspections.
- Conducted 77 hazardous materials inventory inspections.
- Completed 91 pesticide/antimicrobial investigations.
- Investigated 49 complaints.
- Issued 173 restricted materials permits.
- Conducted 24 outreach events involving over 1,500 people.
- 22 stakeholder meetings were held.
- Issued 13 Cease and Desist Orders.
- 43 enforcement actions were taken.

**Agricultural Standards** supports the sustainability of local agriculture, ensures integrity in the marketplace, and promotes healthy families by inspecting fruits, vegetables, eggs, and honey for compliance with laws, regulations, and food standards. Activities include inspecting Certified Farmers' Markets and Certified Producers, conducting citrus maturity testing, egg inspections, and pesticide testing of organic produce for pesticide residue.

- 50 active farmers' markets and 293 local growers certified in San Diego County.
- 204 fruit and vegetable standardization inspections conducted.
- 434 registered organic growers in San Diego County.
- 488,748 dozen eggs inspected during 1,216 inspections at 925 egg ranches, wholesale and retail locations.

**Agricultural Water Quality** performs inspections at nurseries, greenhouses, golf courses, cemeteries, and pest control businesses ensuring compliance with the County's Stormwater Permit, mandated by the San Diego Regional Water Quality Control Board. Inspections, education, and investigations are aimed at stopping the potential for discharging pollutants such as fertilizers, pesticides, and sediment into local waterways.

- 270 inspections completed.
- 31 complaints investigated.

**Entomology and Plant Pathology Labs** provide rapid insect and plant disease identification allowing a quick response in the fight against pests.

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➤ Entomology lab performed 27,802 determinations.

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➤ Plant pathology lab performed 1,912 determinations.

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**Integrated Pest Control** works under the Board of Supervisors' policy mandating the use of Integrated Pest Management (IPM), which is an effective and environmentally sound approach to performing pest control. IPM incorporates current scientific information and control methods to manage and eradicate weeds and pests by the most economical means with the least possible hazard to people, property and the environment. Integrated Pest Control's weed control work preserves road visibility and clearance; reduces fire danger along roadways and intersections; enhances drainage to prevent flooding; and keeps safety pull-over areas visible and easy to access.

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➤ 5,816.74 acres of weeds within the county were treated with herbicides or manually removed.

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➤ 225 County facilities treated for structural pests.

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**Civil Actions** advocates for the department on civil penalty actions in an effort to gain regulatory compliance.

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➤ 309 civil actions for weights & measures violations.

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➤ 21 civil actions for structural pesticide use violations.

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➤ 14 civil actions for agricultural standards violations.

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➤ 23 civil actions for agricultural pesticide use violations.

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➤ 1 civil action for quarantine violation.

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**Weights and Measures** ensures consumers get what they pay for and supports fair competition amongst businesses in the marketplace. The program performs inspections to verify accuracy of product weight, measure, and price.

These inspections include testing of commercial weighing and measuring devices, labeling and advertising requirements for petroleum products, price verification (scanners), quantity control for packages, and weighmaster compliance.

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➤ 52,912 commercial weighing and measuring devices inspected with 94.1% compliance rate.

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➤ 408 consumer complaints investigated regarding commercial meters, petroleum, and price overcharges.

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➤ 28,861 items scanned at 1,799 retail locations for price verification inspections.

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<b>PROGRAM</b>	<b>SERVICES</b>	<b>HOW TO REACH STAFF</b>
Agricultural Hazardous Materials Inventory	Inspections and registrations of agricultural hazardous materials; and California Environmental Reporting System help	<b>858-694-8980</b> <b>FAX: 858-467-9277</b>
Agricultural Standards	Certified farmers' markets and certified producer certificates; organic handler/producer; fruit and vegetable standardization; stormwater	<b>858-614-7786</b> <b>FAX: 858-467-9273</b>
Citrus Quarantine	Conduct inspections to identify quarantine-compliance	<b>858-614-7770</b> <b>FAX: 858-467-9697</b>
Detector Dog Teams	Parcel inspections	<b>858-614-7770</b> <b>FAX: 858-467-9697</b>
Entomology	Insect identification; pest surveys	<b>858-614-7738</b> <b>FAX: 858-467-9697</b>
Honey Bee Protection	Apiary registration, hive inspections, honey bee education and outreach	<b>858-614-7738</b> <b>FAX: 858-467-9697</b>
Integrated Pest Control	Invasive/Noxious Weed Control Information	<b>858-614-7750</b> <b>www.SDWMA.org</b> <b>FAX: 858-467-9280</b>
Pest Exclusion (Import/Export; Nursery; Light Brown Apple Moth; Pierce's Disease; Sudden Oak Death)	Inspect incoming and outgoing plant commodity shipments; phytosanitary and quarantine compliance certificates; nursery inspections; Gypsy moth inspections	<b>760-752-4700</b> <b>Inspection Request Line:</b> <b>760-752-4713</b> <b>FAX: 760-724-4098</b>
Pest Detection	Invasive insect trapping, such as exotic fruit flies, Gypsy moth, and Japanese beetle	<b>858-614-7770</b> <b>800-300-TRAP(8727)</b> <b>FAX: 858-467-9697</b>
Pesticide Regulation	Pest control business registration; operator identification numbers; pesticide use reporting; restricted materials permits; employee pesticide training requirements; pesticide complaints	<b>858-694-8980</b> <b>FAX: 858-467-9277</b>
Plant Pathology/Nematology	Plant disease diagnostic services; plant disease surveys	<b>858-614-7734</b> <b>FAX: 858-467-9697</b>
Weights & Measures	Scanner and commercial weighing & measuring devices registration; weighmaster; petroleum quality/labeling; package & labeling inspection	<b>858-694-2778</b> <b>FAX: 858-467-9278</b> <b>Meter Testing Lab Hours:</b> <b>8:00am-5:00pm M-F</b>

The 2017 Crop Statistics and Annual Report was produced by Administrative Analyst II, Jennifer Alipio, and Operations Research Analyst, Lisa Guo.

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 may not add precisely due to rounding. Gross value of farm products does not reflect the total value to the economy.



# SUPPORTING AGRICULTURAL TRADE AND SAN DIEGO COUNTY'S ECONOMY



**T**he San Diego County Department of Agriculture, Weights and Measures (AWM), works to protect industry's ability to import and export plants and other agricultural products. AWM facilitates both domestic and international trade and adheres to its mission by supporting a diverse agricultural community, a fair marketplace, and a balanced environment.

Residents of San Diego County benefit from a diverse agricultural community. Certified Farmers' Markets overflow with locally grown produce and community spirit. Cut flowers and ornamental plants brighten homes, yards, and stores. Avocados, tomatoes, strawberries, and dozens of other crops thrive in the region's Mediterranean climate creating beautiful crop-scapes. These contributions drive interstate and international agricultural trade, and contribute to the region's economy.



The county's agricultural community is not only rooted in the county's growers, but also in AWM's Direct Marketing Program. The program provides communities with direct access to locally grown, fresh agricultural products while promoting economic opportunities for farmers at Certified Farmers' Markets. San Diego county growers and AWM's Direct Marketing Program, working in tandem, cultivate an abundant, thriving, and diverse agricultural community for residents and visitors alike to enjoy.



Finally, AWM believes in striving toward a balanced environment so that future generations may also delight in the fruits of our labors. Some of the biggest threats to a balanced environment are actually quite small: new and unwanted bugs, snails, diseases, and other plant pests. Such pests and diseases can ruin swaths of vegetation and even wipe out entire species of flora. Proper and careful regulation of agricultural trade prevents the spread of such pests.



To ensure that the county's agricultural community is equitable for all, AWM safeguards measures which preserve a fair marketplace. The Organic Agriculture and Standardization Programs ensure food products are accurately represented as organic and meet quality and maturity standards. Over ninety-four percent (82 of 87) of organically labeled produce randomly selected and submitted for pesticide residue testing in 2017 were found to have no pesticide residue. Produce that does not meet the standards is not allowed to be sold unless corrected. AWM places high importance on preserving the integrity between grower and consumer.

The first line of defense against new and unwanted pests and diseases is import inspections. AWM performed over 4,500 inspections on shipments of imported plants and plant products for pests and diseases that can cause agricultural crop damage and do harm to the local growers' operations and the environment. Detector dog teams sniff out packages containing plant material at parcel facilities and the U.S. Postal Service. In 2017, AWM inspected about 600 packages containing plant material and found 63 pests. Such pests are destroyed so that they do not enter San Diego county.





San Diego county growers meet specific guidelines. These include pesticide treatments to prevent contamination with unwanted pests or diseases for each plant or plant product. Further, through the department's Export Certification service, inspectors issue shipping certificates for agricultural commodities such as seeds, plants, bulbs, timber, flowers, fruits, and vegetables. Inspectors verify the plant products are free from pests and diseases and they meet all plant quarantine requirements of their destinations.

In 2017, AWM issued approximately 8,400 certificates for shipments going to 45 foreign countries with 88% of shipments headed to our neighbors, Mexico and Canada. Local businesses also export certified agricultural commodities to domestic markets. In 2017, approximately 1,700 certificates were issued for shipments going to 25 states, with 69% of the shipments going to Texas, Arizona, Florida, and Oregon. AWM ensures that both domestic and international trade continues to promote a balanced environment for every party involved.

The last line of defense against the introduction of invasive pests is pest detection and trapping. The Pest Detection program places insect traps throughout the urban areas of the county to protect local agriculture and the environment and support agricultural trade as whole. In 2017, AWM conducted about 200,000 trap inspections looking for invasive fruit flies, gypsy moth and Japanese beetle and about 161,000 additional trap inspections for the glassy-winged sharpshooter. These trapping

Outreach, inspection activities, and compliance actions from AWM's Pesticide Regulation program help facilitate trade and promote environmental stability by ensuring the safe and legal use of pesticides. The proper use of pesticides continues to be an important tool for agricultural businesses to control unwanted pests or diseases.



AWM is also responsible for ensuring that counties, states and countries receiving plant shipments from

activities assure receiving counties, states, and countries that San Diego-grown products are free from invasive plant pests. This ultimately contributes to a healthier, more balanced environment for all.

AWM stays busy with inspections, many of which take place in nurseries. The nursery industry is the largest agricultural sector in San Diego county and is ranked number one in California and the United States. AWM annually inspects nearly 500 wholesale nurseries producing over 10,000 acres of nursery products. These inspections allow nurseries to use self-certification to ship directly to local and international consumers, which promotes and supports continued exporting.



Despite all this, not all pests are harmful. AWM's agricultural scientists in the Entomology and Plant Pathology Labs further expedite the processing of import and export shipments by quickly identifying and determining whether a pest is harmful and needs to be submitted to the State, or if it is of no concern and business can resume. Without AWM's scientists, all discovered pests must immediately be treated as

dangerous. Growers' stock must be placed on hold and cannot be sold until the issue is resolved, often lasting weeks or months. Knowledge truly is power, and with the department's team of scientists AWM aims to sustain an efficient marketplace and balanced environment for the current and future generations.

Agricultural trade is the thread woven into AWM's tapestry of San Diego county and the world. With this, AWM promotes a diverse agricultural community, a fair marketplace, and a balanced environment. The Department prides itself in its high-quality services to support San Diego county farmers and nursery growers' capacity to meet their business needs and the worldwide demand for San Diego-grown products.





# STAFF





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Agricultural Commissioner/Sealer of Weights & Measures

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Assistant Agricultural Commissioner/Sealer of Weights & Measures

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## ACKNOWLEDGEMENTS

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Appreciation goes to staff who no longer work at AWM. Their hard work and commitment continue to make a positive impact.

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### PHOTO CREDITS:

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AWM ASI's and IDS's







**DEPARTMENT  
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