



Annual Crop Report



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E. Hesselgrave, M. Lopez, F. Lopez, J. Petersen, S. Clafford, The Duck Bar Ranch

Commissioner's Letter

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

Karen Ross, Secretary

ORANGE COUNTY BOARD OF SUPERVISORS

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It is my pleasure to present the 2022 Orange County Crop Report as prepared pursuant to Sections 2272 and 2279 of the California Food and Agricultural Code. It is important to note that the values represented in this report reflect the gross value of agricultural commodities grown in Orange County and not the costs associated with production, labor, harvesting, and preparation for market.

This report reflects a production value of \$86,378,000 representing a decrease of 8.9% from 2021. Inclement wind events caused damage to tree fruit crops, and drought conditions provided poor grazing opportunities for our livestock producers. With rising inflation forcing customers to cut back on discretionary spending, many of our nursery stock growers reported much slower sales after the late summer months. Despite these setbacks, Orange County's nursery industry continues to contribute to 49% of our total agricultural income.

This report is produced each year with the outstanding partnership and cooperation of the nursery industry, ranchers, farmers, and Future Farmers of America education programs that represent the agricultural industry in Orange County. My appreciation goes to all of the producers, growers, and individuals in the agribusiness sector for their assistance in providing the data to make this report possible. I also extend my sincere thanks to the exceptional staff here at the County of Orange who help in the compilation and preparation of this report.

Respectfully submitted,



Jose Arriaga

**Agricultural Commissioner
Sealer of Weights & Measures**

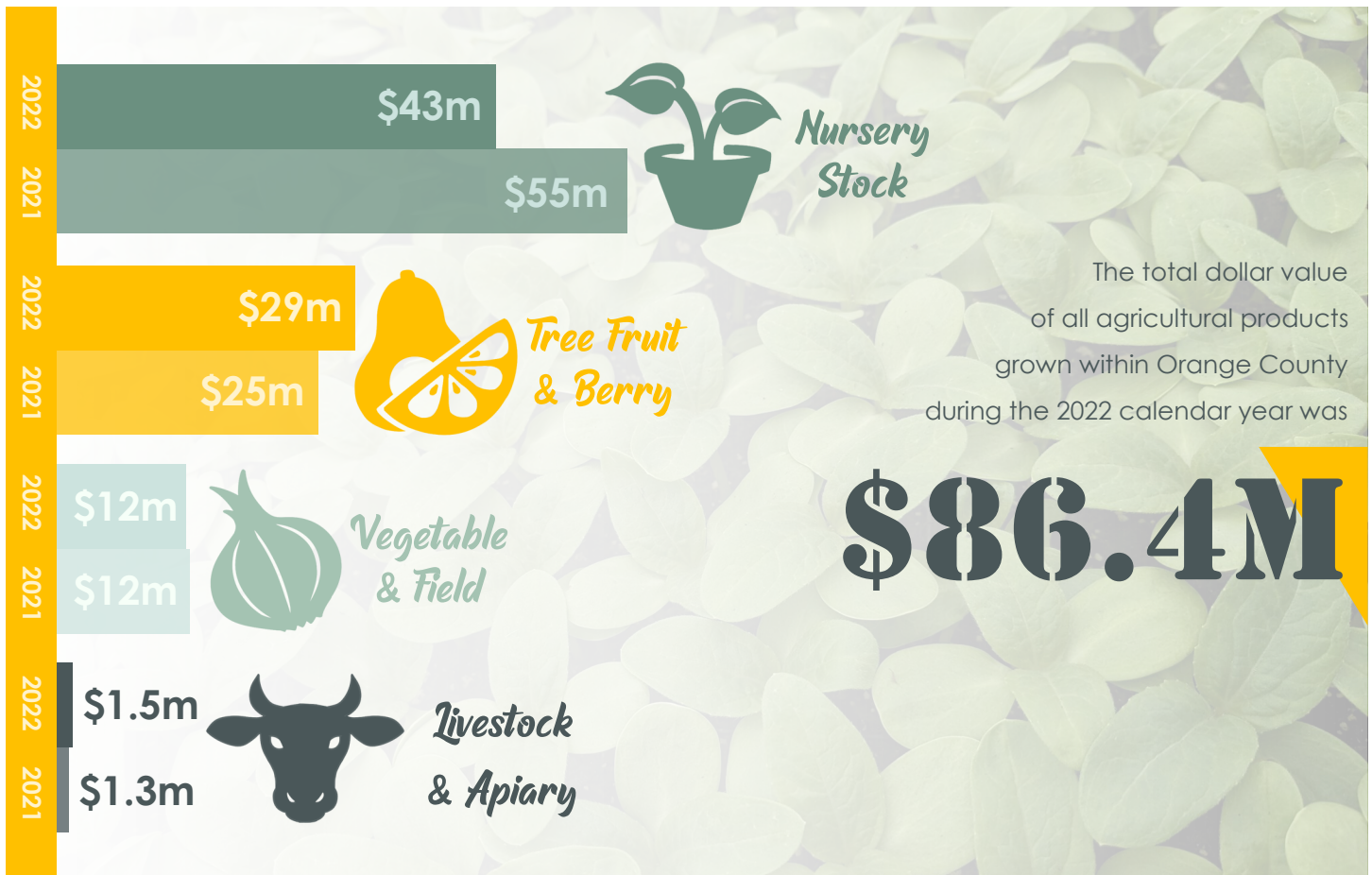
ORANGE COUNTY AGRICULTURAL COMMISSIONER'S OFFICE

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Total Production Values

In 2022, Orange County ranked as the 3rd most populous county in California with 3,151,184 residents, constituting over 8% of the state's population. Such a large population demands space for work, housing, and recreation. With urban development continuing to encroach on historical production land, Orange County agribusinesses have adapted by pursuing quality over quantity. Growers have shifted their inventories to pursue high value commodities and have diversified their consumer base by aggressively expanding into online sales, social media, and direct marketing strategies. The total dollar value of agricultural products grown within Orange County during 2022 was \$86,378,000, which represents a 8.9% decrease when compared to the previous year's value.

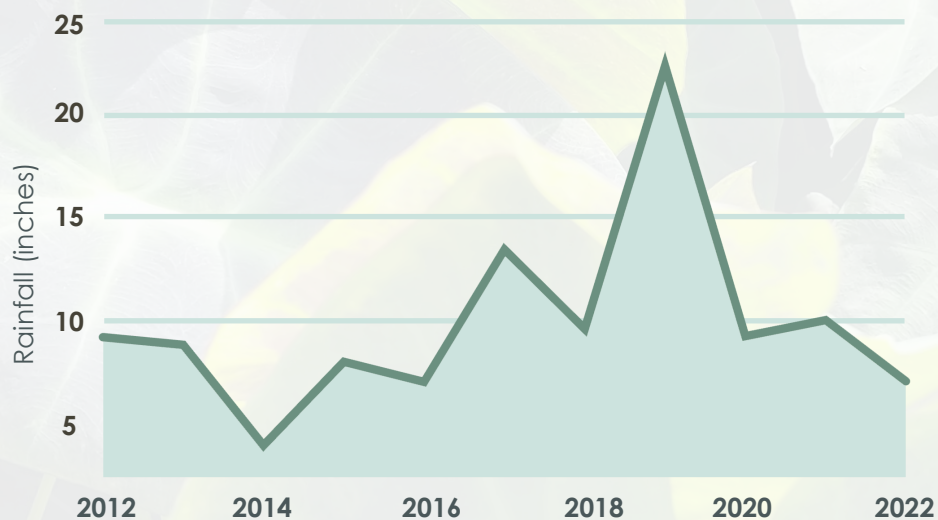


Annual Highlights

TOTAL ACREAGE	18,803
SINGLE CROP WITH HIGHEST TOTAL VALUE	Strawberries
CROP UTILIZING GREATEST ACREAGE	Avocados
CROP WITH LARGEST HARVEST (IN TONS)	Bell Peppers
LARGEST INCREASE FROM PREVIOUS YEAR	Sweet Corn

Rainfall Trends

The Santa Ana rain gauge dates back to 1908 and is one of the oldest rain observation stations in Orange County. From January through December 2022, a total of 6.9 inches were recorded. This was a 30% decrease compared to the total **9.95** inches recorded the previous year, and 2022 was considered by the California Department of Water Resources to be an extremely dry year in terms of average temperature and precipitation. The rainfall data for this report was provided by Orange County Watersheds of OC Public Works.



The background of the page is a photograph of an organic farm. In the foreground, there are rows of green and red leafy vegetables, likely lettuce, growing in a field. In the background, there are rows of grapevines and other trees under a clear blue sky. A white text box with a yellow and orange decorative element on the left side is overlaid on the image.

Organic Farming

The 1990 Farm Bill enacted the Organic Foods and Production Act which defined the term “organic” and authorized the United States Department of Food and Agriculture to create the National Organic Program (NOP), which developed and implemented regulatory standards for certification, production, labeling, and marketing of organic food, feed, and fiber.

California is the only state in the nation with its own standards for registering, certifying, and regulating organic commodities. In 2004, the California Department of Food and Agriculture (CDFA) developed the State Organic Program (SOP), modeled after and authorized by the National Organic Program. This provided the opportunity for CDFA to assume regulatory enforcement responsibility over organic production and handling operations within California.

The Orange County Agricultural Commissioner's Office continues to work with our SOP partners to register, inspect, and enforce regulations on our local organic operations. In 2022, **13** producers and **32** handlers, packers, and processors were registered in Orange County.

Tree Fruit and Berry

	YEAR	ACRES	TONS	VALUE
CITRUS, AVOCADOS & STRAWBERRIES ¹	2022	1,623	13,293	\$29,090,000
	2021	1,772	12,644	\$25,271,000
MISCELLANEOUS FRUIT & BERRY CROPS ²	2022	11	26	\$134,000
	2021	4	20	\$97,000
TOTAL FRUIT & BERRY VALUE	2022	1,634	13,319	\$29,224,000
	2021	1,776	12,664	\$25,368,000

¹Includes: avocados, oranges, lemons, and strawberries

²Includes: bushberries, grapes, and miscellaneous orchard crops

Vegetable and Field

	YEAR	ACRES	TONS	VALUE
BRASSICA ³	2022	16	68	\$177,000
	2021	17	42	\$113,000
CURCUBITS ⁴	2022	60	128	\$428,000
	2021	80	283	\$554,000
ROOT VEGETABLES ⁵	2022	9	16	\$77,000
	2021	9	19	\$79,000
ALLIUMS ⁶	2022	10	16	\$52,000
	2021	10	13	\$46,000
MISCELLANEOUS VEGETABLES ⁷	2022	16,605	8,172	\$11,914,000
	2021	16,649	8,016	\$12,022,000
TOTAL VEGETABLE VALUE	2022	16,700	8,400	\$12,648,000
	2021	16,765	8,373	\$12,814,000

³Includes: broccoli, cabbage, cauliflower, and kale

⁴Includes: cucumbers, squash, pumpkins, melons, and watermelons

⁵Includes: turnips, radishes, carrots, and beets

⁶Includes: onions, green onions, leeks, and garlic

⁷Includes: field crops and pasture rental

Nursery Stock

	YEAR	ACRES	VALUE
ORNAMENTAL TREES & SHRUBS	2022	391	\$33,312,000
	2021	378	\$42,683,000
CACTI & SUCCULENTS	2022	20	\$3,116,000
	2021	20	\$1,920,000
LINERS, POTTED PLANTS, CUT FLOWERS & CUT TREES ¹	2022	49	\$1,878,000
	2021	45	\$1,429,000
PALMS	2022	9	\$4,683,000
	2021	11	\$9,250,000
TOTAL NURSERY VALUE	2022	469	\$42,989,000
	2021	454	\$55,282,000

¹Includes: Christmas trees

Livestock and Apiary

	YEAR	VALUE
TOTAL LIVESTOCK & APIARY VALUE ^{2,3}	2022	\$1,517,000
	2021	\$1,309,000

²Includes: cattle, swine, goats, sheep, rabbits, chickens, turkeys, eggs, and dairy

³Includes: honey, beeswax, pollen, sale of bees and queens, and pollination rental



Honeybee Protections

BeeWhere is an online resource that brings beekeepers and pesticide applicators together to safeguard the livelihood of bees and their important role in agriculture and in our communities across California.

A team led by the California Association of Pest Control Advisors (CAPCA) and the California Agricultural Commissioners and Sealers Association (CACASA) developed this resource that marries existing pesticide permitting programs with dynamic, real-time GIS mapping tools to facilitate communication between apiary owners, pest control advisers, growers, and pesticide applicators to better protect our commercial and hobbyist bee industries.

In 2022, the Orange County Agricultural Commissioner's office assisted **61** beekeepers with registering on BeeWhere to receive notifications of pesticide usage near their hives based on a one-mile proximity of a pesticide application site. The County of Orange encourages all beekeepers to register with the BeeWhere program to assist in the protection of their bee colonies.





Consumer Protection

Certified Farmers' Market and Organics programs serve to protect consumers and prevent fraud throughout the state. Orange County Inspectors certify our diverse range of producers, from backyard growers to large scale farms, by visiting each growing site annually and documenting the variety and quantity of crops being grown, expected yield, and estimating the expected harvest season.

Our Inspectors conduct unannounced regulatory inspections at Certified Farmers' Markets to verify that produce being offered for sale matches the commodities documented on each grower's certificate. These inspections ensure that consumers are truly receiving locally grown produce and that their purchases are directly benefiting and supporting local farmers.

Orange County also conducts inspections under the State Organic Program, where our Inspectors review organic certification and state registration documents, investigate organic complaints, and conduct random residue sampling of produce being advertised as organic. Our inspection oversight gives Orange County consumers confidence that the organic products are authentic and grown according to State organic standards.

Certified Farmers' Markets are becoming increasingly popular in Orange County, and in 2022 our office issued a total of **41** Certified Producers Certificates to local growers and registered **39** Certified Farmers' Markets.

Market Schedule

For
market
updates,
scan here!



Tuesday

IRVINE REGIONAL PARK
Irvine Park Rd
9am - 1pm

PLACENTIA
Placentia
Town Center
4pm - 8pm

SEAL BEACH VILLAGE
Westminster &
Seal Beach
9am - 1pm

**HUNTINGTON BEACH
SURF CITY NIGHTS**
Main & Olive
Huntington Beach
5pm - 9pm

Wednesday

FULLERTON
340 West
Commonwealth
8:30am - 12:30pm

TUSTIN
3rd & El Camino
9am - 1pm

LAKE FOREST
Lake Forest
Sports Park
4pm - 8pm

KAISER IRVINE
Alton &
Sand Canyon
9am - 1pm

Thursday

**ANAHEIM
DOWNTOWN**
205 Center St
Promenade
11am - 4pm

BREA
135 South
State College
3pm - 7pm

COSTA MESA
Orange County
Fairgrounds
9am - 1pm

**FULLERTON
DOWNTOWN**
Pomona & Wilshire
4pm - 8:30pm

**NORTH
LAGUNA HILLS**
24411 Ridge Route
3pm - 7pm
3rd Thursday Monthly

ROSSMOOR
3001 Blume Dr
Rush Park
3pm - 7pm

Friday

FARMAKIS FARMS
29932 Camino
Capistrano
9am - 1pm

KAISER ANAHEIM
3400 East La Palma
9am - 2pm

LAGUNA HILLS
Laguna Hills Mall
Parking Lot
9am - 1pm

MILE SQUARE PARK
Freedom Hall
Mile Square Park
9am - 1pm

Saturday

ALISO VIEJO
26701 Aliso Creek
8am - 12pm

BUENA PARK
La Palma & Stanton
9am - 2pm

CORONA DEL MAR
Marguerite &
Pacific Coast Hwy
9am - 1pm

CYPRESS
Katella & Lexington
10am - 2pm

DANA POINT
Golden Lantern &
Pacific Coast Hwy
9am - 1pm

**FARMERS MARKET
ON THE RANCH**
2 Tierno Street
9am - 1pm
1st Saturday Monthly

IRVINE
Mariners Church
8am - 12pm

LAGUNA BEACH
Forest & 3rd Street
near City Hall
8am - 12pm

**LOS ALAMITOS
SUNSET**
10932 Pine Street
5pm - 9pm

MISSION VIEJO
Marguerite Pkwy
& Village Center
10am - 2pm

**ORANGE
HOMEGROWN**
Palm & Cypress
9am - 1pm

SOCO
Sunflower & Hyland
9am - 2pm

TUSTIN DISTRICT
Barranca Pkwy
& Tustin Ranch
9am - 1pm

Sunday

**LOCAL HARVEST
GARDEN GROVE**
Main & Garden
Grove
9am - 2pm

LADERA RANCH
Founders Park
28275 Avendale
9am - 1pm

LAGUNA NIGUEL
27241 La Paz
8am - 12pm

NEWPORT BEACH
McFadden Square
The Newport Pier
9am - 1pm

**NORTH
LAGUNA HILLS**
24411 Ridge Route
3pm - 7pm

IRVINE GREAT PARK
Sand Canyon &
Marine Way
10am - 2pm

SAN CLEMENTE
Avenida Del Mar
& Seville
9am - 1pm

TIANGUIS
325 East 4th Street
5pm - 9pm

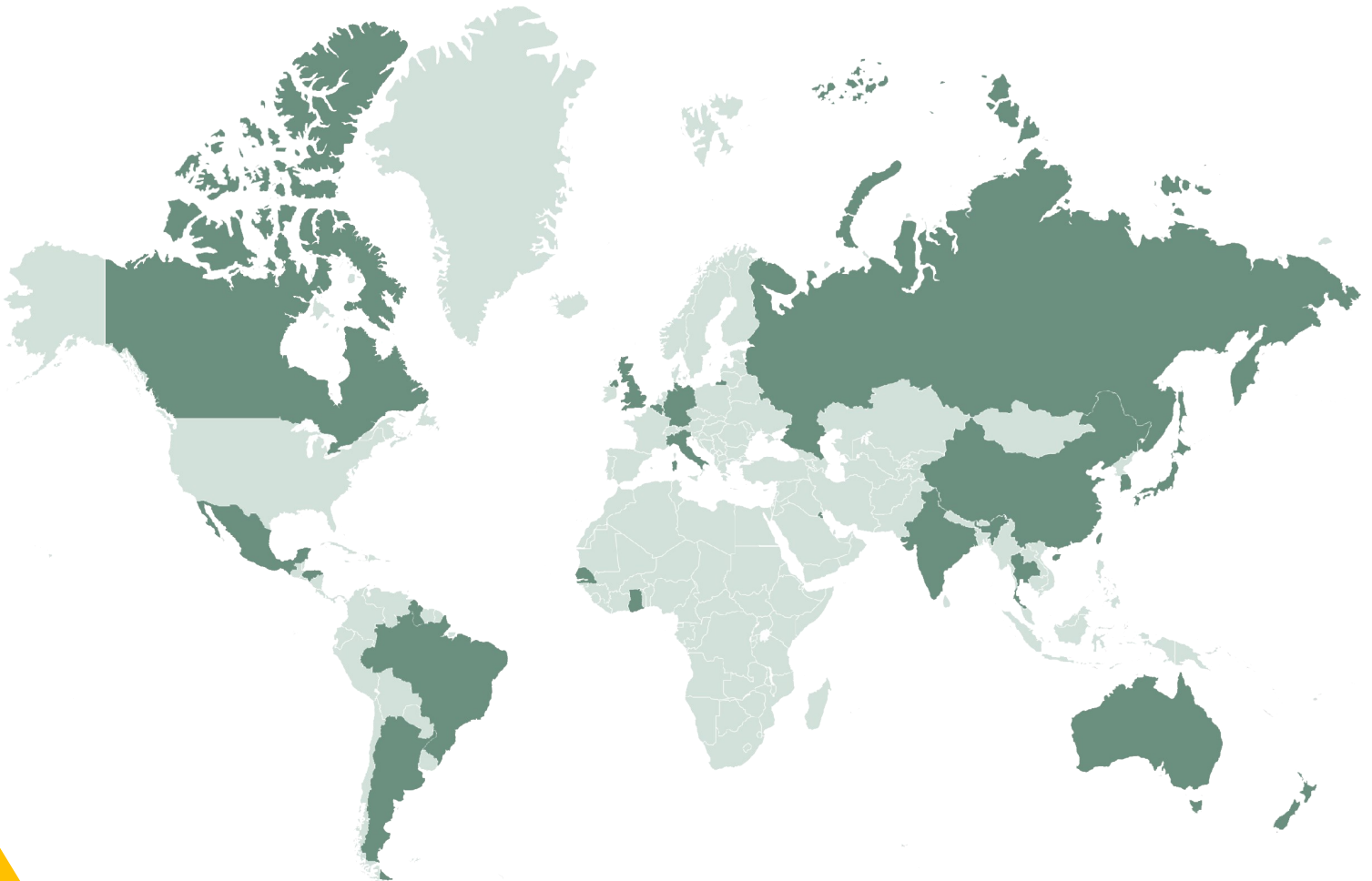
Trading Partners

SHIPMENTS

TOP IMPORT

NORTH AMERICA	40	Lumber
SOUTH AMERICA	7	Plant Products
EUROPE	11	Plant Products
AFRICA	3	Plant Products
ASIA	416	Nursery Stock
OCEANIA	18	Plant Products

Argentina 1	Australia 15	Belgium 1	Brazil 3	Canada 10	Cayman Islands 1	China 15	Germany 2	Ghana 2
Guyana 3	Honduras 7	Hong Kong 25	India 7	Italy 3	Japan 300	Republic of Korea 18	Kuwait 1	Macao 3
Mexico 22	New Zealand 3	Russia 2	Senegal 1	Singapore 12	Spain 1	Taiwan 25	Thailand 10	United Kingdom 2



The background of the entire page is a close-up photograph of green ferns. The fronds are densely packed and have a delicate, feathery texture. The lighting is soft, highlighting the vibrant green color of the leaves.

International Exports

Foreign markets are an important destination for many Orange County agricultural products, but such markets have diverse entry requirements to exclude harmful pests and diseases. Regulated agricultural commodities such as plants, bulbs, seeds, fruits, vegetables, lumber, and grain require a Phytosanitary Certificate issued by a United States Department of Agriculture (USDA) accredited Authorized Certifying Official.

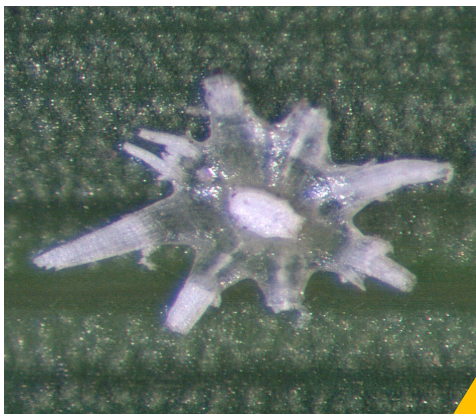
Orange County Agricultural Commissioner's Inspectors who are USDA-accredited evaluate each country and agricultural commodity's unique import requirements, review any required documentation such as laboratory test results and import permits, and conduct inspections to assure that each shipment is free from injurious pests and plant diseases to protect California's strong international trade standing.

In 2022, the Orange County Agricultural Commissioner's Office issued a total of **495** Federal Phytosanitary Certificates for shipments destined for our international trading partners, with the majority of our shipments destined for countries in Asia.

Pest Exclusion and Interceptions

Orange County Inspectors work with the California Department of Food and Agriculture (CDFA) and Federal regulatory agencies to inspect all possible methods of agricultural commodity entry and intercept exotic pests that can threaten our urban landscapes and local agriculture. Our Inspectors monitored shipments at major mail/package carrier facilities and conducted inspections on incoming air and sea freight, truck shipments, and at destination nurseries, retailers, and residences to detect and prevent the establishment of injurious pests and plant diseases.

Our Inspectors inspected a total of **45,316** shipments originating from high pest-risk areas and issued a total of **181** Notices of Rejection for shipments that did not meet California's stringent entry requirements. Pests intercepted during these inspections were submitted to CDFA's pest diagnostic laboratory for identification and rating. A total of **48** A-rated pests and **106** Q-rated pests were submitted. Notable finds are listed below.



SCIENTIFIC NAME	COMMON NAME	RATING
<i>Dysmicoccus grassii</i>	Alazon mealybug	A
<i>Ceroplastes rusci</i>	Fix wax scale	A
<i>Dysmicoccus neobrevipes</i>	Gray pineapple mealybug	A
<i>Pinnaspis strachani</i>	Lesser snow scale	A
<i>Coccus viridis</i>	Green scale	A
<i>Ischnaspis longirostris</i>	Black thread scale	A
<i>Pesudaulacaspis cockerelli</i>	Magnolia white scale	A
<i>Maconellicoccus hirsutus</i>	Pink hibiscus mealybug	A
<i>Ochetellus glaber</i>	Ant	A
<i>Milviscutulus mangiferae</i>	Mango shield scale	A
<i>Ferrisia virgata</i>	Striped mealybug	A
<i>Ceroplastes floridensis</i>	Florida wax scale	A
<i>Planococcus minor</i>	Pacific mealybug	A
<i>Fiorinia theae</i>	Tea scale	A
<i>Aspidiotus destructor</i>	Coconut scale	A
<i>Darna pallivitta</i>	Limacocid moth	A
<i>Pseudaulacaspis pentagona</i>	White peach scale	A
<i>Ceroplastes stellifer</i>	Stellate scale	A
<i>Parmarion martensi</i>	Semi-slug	A
<i>Pinnaspis buxi</i>	Boxwood scale	A
<i>Selenaspidus articulatus</i>	Rufous scale	A
<i>Delottococcus confuses</i>	Mealybug	Q
<i>Pheidole sp.</i>	Ant	Q
<i>Nipaecoccus sp.</i>	Mealybug	Q
<i>Diaspididae sp.</i>	Whitefly	Q
<i>Nipaecoccus sp.</i>	Mealybug	Q
<i>Nylanderia sp.</i>	Ant	Q
<i>Technomyrmex sp.</i>	Ant	Q
<i>Scirtothrips dorsalis</i>	Chili thrips	B
<i>Hemiberlesia ithacae</i>	Hemlock scale	B
<i>Bradybaena similaris</i>	Asian trampsnail	B

Scan here for the California Department of Agriculture's Pest Rating Definitions





Oriental Fruit Fly Control

In September 2022, eight adult Oriental fruit flies (*Bactrocera dorsalis*), referred to as OFF, were detected in and around the city of Fountain Valley, triggering the California Department of Food and Agriculture (CDFA) to place a 100-square mile portion of Orange County under quarantine.

Female Oriental fruit flies lay their eggs inside fruit, where they then hatch into maggots that feed and tunnel through the flesh of the fruit rendering it unfit for consumption. Adult flies are strong fliers, able to fly up to 30 miles in search of food and suitable hosts to lay their eggs, so containment of this fast-spreading pest is critical to prevent further infestations.

The most common pathway for these flies to enter the state is through unintended introduction of infested fruits and vegetables brought or shipped illegally into California. OFF and other exotic fruit flies have the potential to cause great economic harm to Orange County's local agricultural industries and our natural environment, as these flies target a large variety of fruit and vegetable crops including but not limited to citrus, avocados, pome and stone fruits, berry crops, and popular vegetables such as tomatoes and peppers.

Orange County supported CDFA's eradication efforts by providing translation services and performing residential and commercial site visits to perform outreach on control methods such as foliar treatments and fruit-stripping to reduce potential egg-laying sites. Over 18-square miles of the infested area have been treated on a bi-weekly basis with a Male Attractant Treatment (MAT) and **888** properties have been provided with a foliar bait treatment. A total of **153** properties have had fruit stripped from trees, resulting in the removal and disposal of over **8,000** pounds of potentially infested fruit. These eradication efforts are necessary and Orange County will continue to support these quarantine activities with our State partner in order to facilitate the timely removal of this quarantine boundary and its associated restrictions.

The background image shows a person in an orange safety vest and a hard hat using a chainsaw to clear brush. They are standing next to a black metal fence. The ground is covered in dry, yellowish-brown brush and grass. In the background, there are green trees and a cloudy sky.

Fire Hazard Reduction

The Orange County Fire Hazard Reduction Weed Abatement Program is authorized by the California Health & Safety Code and aims to ensure public safety by mitigating the risk of wildland fire posed by overgrown weeds and vegetation throughout the unincorporated areas of Orange County.

Regular field inspections are conducted in these areas to identify hazardous vegetation, and other combustible material, on improved and unimproved properties which may pose an increased fire risk. Those parcels noted to have open spaces or hazardous weeds, vegetation, accumulated piles of rubbish, refuse, trash, litter, or other hazardous and/or flammable material on the property creating a fire hazard are added to the program's Fire Hazard Reduction Weed Abatement List. Properties with a history of public complaints or violations related to abatement of hazardous weeds or rubbish and properties ordered to abate weeds by the Board in previous years will be placed on the list. The owner of record for these properties will be identified by the current equalized tax assessment roll and mailed an abatement notice. The notice provides the owner of record a date by which the hazardous weeds and vegetation must be cleared. If the property is not cleared by that date, the Board of Supervisors may order it to be cleared by County-contracted crews.

In 2022, our Fire Hazard Reduction Weed Abatement program mailed the Annual Weed Abatement Notice to **4,886** parcel owners and the ground crew manually removed weeds and dried brush from **66** parcels of land. A total of **979,439** square feet (over **22** acres) of weeds were removed by either cutting or discing.

Integrated Pest Management

The Integrated Pest Management Unit's mission is to maintain public safety by servicing flood control facilities and roadways throughout the county. Vegetation and pest control activities are performed using integrated pest management (IPM) procedures which prioritize pesticide-free or reduced-risk pesticide use when possible. Recent strategies for IPM included the use of saturated steam for weed control for residential curbs and gutters and using self-resetting traps for rodents. The unit is monitored through the National Pollution Discharge Elimination System (NPDES) and the Pesticide Use Enforcement division and is in full compliance.

	FACILITIES	AMOUNT SERVICED
FLOOD CONTROL	Channels (miles)	380
	Dams	4
	Pump Stations	6
	Basins	22
ROADS	County Roads (acres)	314
CURBS AND GUTTERS	Arterial Roads (miles)	178
	Residential Roads (miles)	245

Noxious Weed Control

Our Integrated Pest Management Unit works with the California Department of Food and Agriculture's Noxious Weed Grant Program (NWGP) to identify and control invasive noxious weeds in Orange County. This grant program provides funding to protect local agriculture, residential landscapes, and natural areas from noxious weed invasions that can have a detrimental impact to native ecosystem biodiversity if left unchecked. The program also aims to decrease the costs of roadside, park, and waterway maintenance, reduce fire hazard and fire control costs, and maintain recreational and aesthetic value of public open spaces.

In 2022, **168** acres of county areas were treated to target dangerous invasive weeds such as Santa Maria feverfew (*Parthenium hysterophorus*), stinkwort (*Diurhachia graveolens*), and stinknet (*Oncosiphon piluliferum*).



Santa Maria Feverfew

Stinkwort

Stinknet

Photos courtesy of Ron Vanderhoff, CA Native Plant Society

Weights and Measures

The County of Orange's Weights and Measures (WAM) program strives to provide all of its residents, visitors, and businesses fair competition and a basis of value comparison in the marketplace by ensuring the accuracy of weighing and measuring instruments. Our Inspectors test and inspect all commercially-used weighing and measuring devices for accuracy. Weights and Measures Inspectors also investigate all consumer complaints and provide education and training to the public and regulated industries. Orange County's Inspectors are responsible for inspecting, testing, and certifying a total of **186,324** commercial measuring and weighing devices throughout all of Orange County, a **3.2** percent increase from 2021 and which puts us as the **3rd** highest device count in the state.

Our Weights and Measures program also enforces a local Point of Sale Ordinance which ensures that consumers are charged the lowest advertised price. In 2022, Orange County Inspectors registered **4,711** price verification locations and **22,585** check-out devices, placing our price verification program at **2nd** in the state.

COMMERCIAL DEVICES	REGISTERED	% CHANGE
RETAIL MOTOR FUEL METERS	20,350	+ 0.9 %
WATER SUBMETERS	90,957	+ 7.1 %
ELECTRIC SUBMETERS	30,277	- 1.8 %
VAPOR SUBMETERS	35,001	+ 0.7 %
LIQUID PROPANE GAS METERS	135	- 1.5 %
COMPRESSED NATURAL GAS METERS	52	- 3.7 %
ODOMETERS & TAXIMETERS	640	- 2.3 %
RETAIL WATER METERS	553	- 3.3 %
WHOLESALE & VEHICLE METERS	333	+ 11.4 %
COMPUTING/COUNTER SCALES	6,543	- 1.7 %
JEWELRY/PRESCRIPTION SCALES	207	+ 23.2 %
DORMANT & PORTABLE PLATFORM SCALES	896	- 5.9 %
VEHICLE SCALES	87	0 %
ALL OTHER DEVICES ¹	236	- 0.8 %

¹Includes: livestock scales, monorail & meatbeam scales, hanging scales, spring scales, hydrogen meters, and fabric/cordage/wire meters

Have you seen this seal?

This seal is placed on devices that our office has inspected and found to be in compliance. If you see this seal, you can be confident that the device is correct and that you are receiving the appropriate quantity for your purchase.



Electric Fueling Systems

By the end of 2022, California had a total of 1,099,131 electric vehicles, including plug-in hybrids, which is an increase of **32.7** percent from the previous year. By contrast, internal combustion engine vehicles in California totaled 28,189,749 at the end of 2022, representing a **3.1** percent decrease from the previous year. As the use of electric vehicles continue to grow, so does the demand for more electric vehicle fueling systems. Currently, there is a total of **3,366** public electric vehicle fueling systems (EVFS) throughout the County of Orange, representing **9** percent of the state's EVFS device counts. This makes Orange County the 3rd largest county with EVFS devices available to the public and is expected to grow alongside burgeoning EV sales.

The growth in electric vehicle sales and growing EVFS infrastructure began with Governor Newsom's signing of executive order N-79-20 in 2020 to phase out the sale of internal combustion passenger vehicles in California by 2035, prompting auto makers to pre-emptively scale up production of electric vehicles (EV) and charging infrastructure within California. Additionally, the State of California promulgated new regulations for the EVFS industry, requiring all new installations available to the public to meet Weights and Measures requirements that provide value comparison and ensures fair competition in the marketplace. These new regulations add an additional mandate to County Sealers to test, inspect, and seal EVFS devices.

As the **3rd** largest county with EVFS in California, the Orange County Agricultural Commissioner/Sealer of Weights and Measures Office is preparing to meet these new challenges. Registration of new EVFS devices, conducting routine inspections to meet new state mandates, and responding to public complaints against these new electric charging stations have begun. As electric vehicle sales and the EVFS infrastructure continue to grow, the Orange County Agricultural Commissioner/Sealer of Weights and Measures Office will be ready to provide essential services needed to protect consumers and business competition throughout the county.



The background of the page features a large, yellow and grey striped tent, likely for an outdoor event. In the foreground, there is a well-maintained garden with various plants, including tall green stalks, yellow flowers, and dark-leafed plants. A green hanging lantern is visible in the garden. The overall scene is outdoors with a clear sky.

Pesticide Use Enforcement

The Pesticide Use Enforcement (PUE) program of the Agricultural Commissioner's office is responsible for the local enforcement of pesticide use laws and regulations to protect the urban and agricultural environment as well as the public and industry by overseeing the legal and safe use of pesticides.

Orange County Inspectors work with the Department of Pesticide Regulation and the Department of Consumer Affairs Structural Pest Control Board to enforce appropriate pesticide use through active inspections, annual registrations of pest control businesses, monitoring of pesticide use reports, and pesticide illness investigations. Orange County Inspectors also investigate all cases of suspected misuse of pesticides in commercial settings, agricultural production, and injurious use of consumer products in home settings.

In 2022, Orange County Inspectors conducted **3,202** pesticide application inspections in agricultural and structural settings, including residential treatments and structure fumigations. **273** pest control business, pesticide dealer, and property operators records were audited for compliance with worker safety, training, and retention requirements. Our Inspectors also reviewed and issued **213** California Environmental Quality Act (CEQA) Environmental Impact Report (EIR) functionally-equivalent pesticide Restricted Material Permits and **128** Operator Identification Numbers, and completed **94** pesticide illness-related investigations. Orange County once again leads the state with a grand total of **3,618** pesticide inspections conducted in 2022.

Pest Detection and Prevention

Cotton seed bug (*Oxycarenus hyalinipennis*) is an A-rated pest that feeds on the seeds of cotton and okra and has the potential to cause detrimental impacts on California's cotton industry if introduced into the state. An infestation of Cotton seed bugs was found on landscape primrose trees (*Lagunaria patersonia*) in Irvine and triggered an intensive eradication effort conducted jointly between the Orange County Agricultural Commissioner's Office, the California Department of Food and Agriculture, and the City of Irvine.

Orange County Inspectors monitored the destruction and removal of **49** infested trees, ensuring that State-approved protocols were followed to cut down infested trees and remove all debris by hand to prevent the spread of any infested plant material such as leaves and seed pods. The eradication efforts were successful and ongoing surveillance has shown no further detections of Cotton seed bug in Orange County.



Pierce's Disease Control

The Glassy-winged sharpshooter (GWSS) is a leafhopper insect and a vector for *Xylella fastidiosa*, a bacterium that causes Pierce's Disease in grapevines. This disease has no known cure and is fatal to the vine, so restricting the movement of the Glassy-winged sharpshooter is the most effective way of keeping the spread of this disease under control. County Inspectors installed monitoring traps and inspected all host plant material leaving our county to ensure the safety of California's robust grape industry and to maintain open markets for our local plant nurseries.

In 2022, Orange County Inspectors serviced a total of **76** monitoring traps and certified **112** host material shipments destined for non-infested areas of California.

Citrus Greening Disease

The Asian Citrus Psyllid (ACP) is a small plant-feeding insect that vectors a bacterial pathogen *Candidatus Liberibacter* that causes a citrus disease known as Huánglóngbìng (HLB). This disease has no known cure and is fatal to infected trees. County inspectors conducted inspections on bulk citrus groves within the county to ensure compliance with quarantine regulations. Harvests were monitored by our Inspectors to ensure that quarantined plant material such as stems and leaves do not leave the quarantine zone and that all bulk citrus fruit shipments were safeguarded from pest risk.

In 2022, Orange County Inspectors inspected **35** orchards spanning over **495** acres.

Photo and article courtesy of Ian Walters, CDFA Program Director

Sterile Fruit Fly Release

The Mediterranean Fruit Fly Preventive Release Program (Medfly PRP), located in Los Alamitos in Orange County, is a joint program of the United States Department of Agriculture (USDA) and the California Department of Food and Agriculture (CDFA). The objective of the PRP is to prevent establishment of Medfly colonies in California utilizing a scientific process known as sterile insect technique (SIT). SIT is a biologically-based birth control method involving sustained aerial releases of large numbers of sterile males into a target area aiming to reduce the reproductive potential of wild introductions.

Matings between these sterile males and wild females result in the production of infertile eggs. This "birth-control" approach can be used to both prevent and eradicate Medfly populations and is one of the most environmentally friendly pest eradication practices. The PRP also maintains an operational infrastructure to be utilized as needed to respond to Medfly and Mexican fruit fly infestations both within and outside the established PRP area of **1,750** square miles.

Aircraft outfitted with specialized fly-release equipment operate year-round to release sterile medflies at the weekly rate of 62,500 or 125,000 flies per square mile within the coverage area, with the program's pilots flying approximately **1,100** flights annually to achieve this monumental task. The Medfly PRP has proven to be an effective tool in the battle to keep California free of Mediterranean fruit flies. In the seven years leading up to the establishment of the PRP, California averaged 7.5 infestations per year. Since preventive releases began, the number of infestations has dropped by over 90%, averaging less than one annually. For more information about this program and a map of the release area please scan here:



Celebrating Retirements!



Kathy Kilar

Kathy retired from the County after 33 years in the Pesticide Use Enforcement program and now spends quality time with her family.



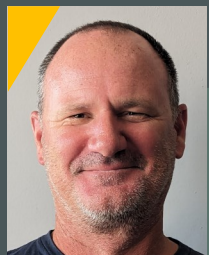
Mark Nestor

Mark retired from the County after 37 years in our High-Risk Pest Exclusion programs and now has plenty of time to enjoy traveling.



Denis Whitfil

Denis retired from the County after 35 years in the Weights and Measures program and now enjoys riding his road bike everywhere.



Gary Smith

Gary retired from the County after 33 years and now has plenty of time to enjoy catching the choicest waves throughout California.



Heriberto Zavala

"Eddie" retired from the County after spending 17 years with the GWSS program and now enjoys spending time in his garden.



John Hussey

John retired from the County after 31 years and now enjoys following all of his favorite sports, particularly NASCAR.

Department

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DEPUTY SEALER

Anthony Bong Lee

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Public Works

The Orange County Agricultural Commissioner/Sealer of Weights and Measures Office is a division of Orange County Public Works. For additional information about our office and a list of our services please visit us at:



ocerac.ocpublicworks.com



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