2024 Crop Report

ALAMEDA COUNTY

Protecting Our Crops: Medfly Quarantine

2024 Alameda County Medfly Quarantine Area

DEPARTMENT OF AGRICULTURE WEIGHTS & MEASURES

ALAMEDA COUNTY
Community Development Agency

Alameda County Community Development Agency
Agriculture/Weights & Measures

CDA Deputy Director
Agricultural Commissioner/Sealer of Weights and Measures
Cathy Roache

CDA - Assistant Deputy Director
Assistant Agricultural Commissioner/Sealer of Weights and Measures
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Deputy Agricultural Commissioner/Sealers
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Clarice Walker

Cover Photos: Wild female Mediterranean fruit fly trapped by Alameda County Pest Detection. CDFA's map of the Medfly Quarantine area of Alameda County.

ALAMEDA COUNTY COMMUNITY DEVELOPMENT AGENCY
AGRICULTURE / WEIGHTS AND MEASURES DEPARTMENT

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October 9, 2025

Karen Ross, Secretary
California Department of Food and Agriculture
-and-
The Honorable Board of Supervisors
County of Alameda, California

In accordance with the provisions of Section 2279 of the California Food and Agricultural Code, it is my pleasure to present the 2024 Alameda County Crop Report. This publication is presented annually and reports statistical information on acreage, yield and gross value of all agricultural products produced in Alameda County.

The 2024 estimated total gross value of Alameda County's agricultural production was $54,120,000. This figure represents a 7% decrease from the 2023 estimated gross crop production value of $58,307,000. Crop trends which account for this decrease are discussed below.

Fruit and Nut crops remained the highest valued commodity group in Alameda County in 2024, with a total estimated gross production value of $24,439,000. However, this production value represents a significant 18% reduction value from the 2023 gross production value. This significant reduction in 2024 winegrape production was due primarily to reduced yields and harvested acreages, which have resulted from saturated wine markets in recent years and changes in consumer trends.

Livestock remained our second most valued commodity group in 2024 with an estimated value of $16,385,000, a net increase of 22% which is an accordance with trends in beef prices in recent seasons. Field Crops were our third highest valued commodity group in 2024 with an estimated value of $7,807,000 which is a 12% reduction from 2023. This reduction was due to changes in miscellaneous crop types planted and reductions in yields in certain crop types. Nursery production declined approximately 10% in 2024 due to reduced sales reported. Vegetable Crops increased in 2024 by 31% due to increased acreage and production reported in the county in 2024.

It is important to emphasize that the numbers in this report are gross values only and do not reflect costs related to production, harvesting, marketing or transportation. These production costs and other farm related services have a significant local economic benefit generally thought to be about three times gross production value.

Respectfully submitted,

CRoache

Cathy Roache,
Agricultural Commissioner / Sealer of Weights and Measures

MEDITERRANEAN FRUIT FLY QUARANTINE

On August 28, 2024, one female Mediterranean Fruit Fly (MedFly) was found in Fremont, Alameda County. This triggered an increase in the number of exotic fly traps deployed in the area around the find site. Within 24 hours, the number of traps increased to established guidelines. Traps were checked every day for one week following the original find. A total of 914 MultiLure traps, 323 McPhail traps and 150 Jackson traps were deployed. As this find was a mated female, this also triggered a quarantine. The original quarantine encompassed 71 square miles and was established in Fremont and the surrounding areas. As the number of flies found continued to increase, the quarantine was enlarged, eventually encompassing 213 square miles which included all of Fremont, Union City, Newark, and parts of Hayward, Sunol and Milpitas in Santa Clara County. Over the course of the quarantine, a total of 73 adult flies and 16 larvae were found.


Multi-Lure trap


McPhail trap

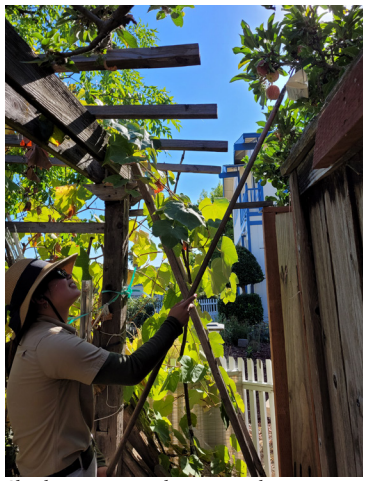

Jackson trap

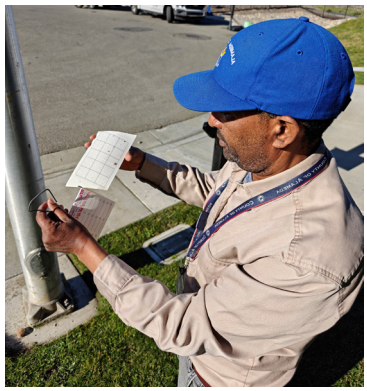
Most of the increased trapping, treatment, fruit removal and fruit cutting in the quarantine area was done by the California Department of Food and Agriculture (CDFA) with support from Alameda County's detection team. Chemical treatments were made with an organic insecticide on all host plants within 200 meters of a find site. All fruit was removed from all areas around a find site and transported to a certified landfill for deep burial. As the fruit was removed, it was also surveyed for any larvae. A total of 9,644.75 pounds of fruit was removed. Treatment, fruit removal and larvae survey continued until May 1, 2025. Trapping continued until July 31, 2025.

As part of the quarantine response, the release of sterile male Mediterranean Fruit Flies by CDFA was employed. This technique involves the raising of male flies, which are then irradiated to produce sterile males. These are then released by the millions from a specially designed plane over the quarantine areas. The theory behind this technique is that there are more sterile males than wild males, thus the females are more likely to mate with a sterile male and no viable offspring will result. Sterile males were found as far away as Oakland and in parts of Santa Clara County. The sterile release program continued until June 20, 2025.

All fruit and vegetables within the quarantine area were not allowed to be given away, sold, mailed or taken out of the quarantine area. All produce vendors, including grocery stores and certified producers selling within the quarantine area, were required to enter into compliance agreements and to safeguard their produce. A total of 220 compliance agreements were issued during the quarantine.

All control activities continued until July 31, 2025, at which time the quarantine was declared over and officially lifted. Alameda County thanks CDFA and all our residences within the quarantine area for their support during this time.


Sharlene Bungay placing a Jackson trap.

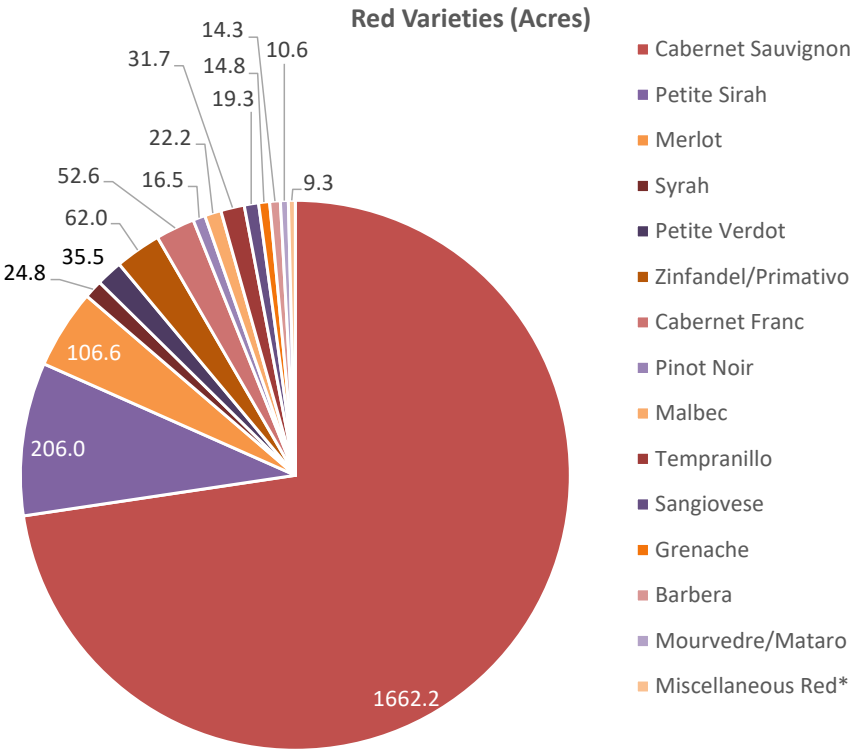

Amare Haileselassie checking a Jackson trap for Medfly.

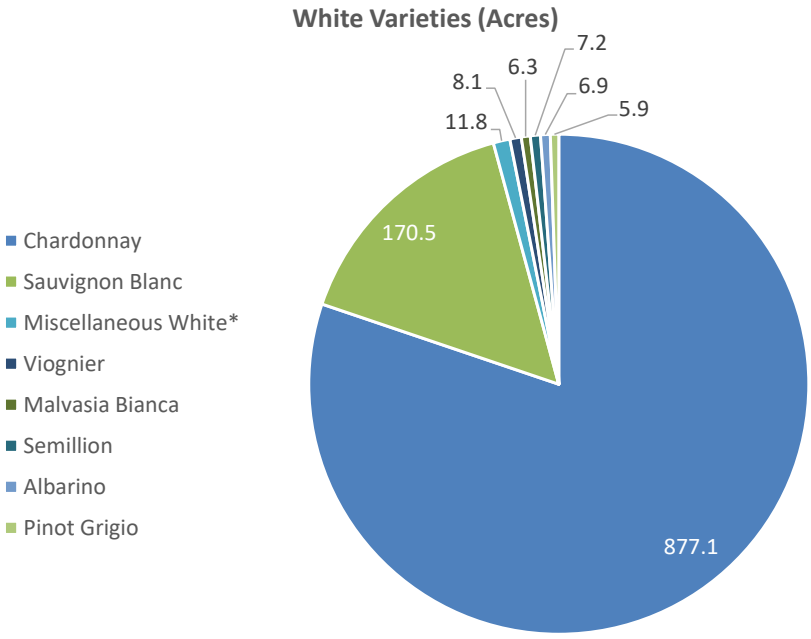

Laurie Casebier placing a McPhail trap.

2024 ALAMEDA COUNTY WINEGRAPE VARIETIES

A total of 34 grape varieties were reported. 20 red varieties were reported, 14 with over 5 planted acres and 6 miscellaneous red varieties with fewer than 5 planted acres. 14 white varieties were reported, 7 of those with over 5 planted acres and 7 miscellaneous white varieties with under 5 planted acres.

Red Variety	Acres	Est. Tons
Cabernet Sauvignon	1662.2	4649.8
Petite Sirah	206.0	810.7
Merlot	106.6	357.4
Syrah	24.8	102.0
Petite Verdot	35.5	159.4
Zinfandel/Primativo	62.0	189.5
Cabernet Franc	52.6	160.6
Pinot Noir	16.5	44.9
Malbec	22.2	91.3
Tempranillo	31.7	72.3
Sangiovese	19.3	63.8
Grenache	14.8	51.4
Barbera	14.3	53.4
Mourvedre/Mataro	10.6	33.1
Miscellaneous Red*	9.3	21.2





White Variety	Acres	Est. Tons
Chardonnay	877.1	3813.5
Sauvignon Blanc	170.5	720.2
Miscellaneous White*	11.8	47.9
Viognier	8.1	25.7
Malvasai Bianca	6.3	17.5
Semillion	7.2	65.0
Albarino	6.9	25.50
Pinot Grigio	5.9	14.55

*Miscellaneous varieties are varieties with fewer than 5 reported acres. Miscellaneous reds include: Counoise, Graciano, Souzao, Tinta Amarela, Tinta Cao, Touriga National. Miscellaneous whites include: Gruner Veltliner, Granache Blanc, Muscat Blanc (Canelli), Muscat Orange, Pinot Blanc, Rousanne, Verdehlo.

PRODUCTION AGRICULTURE

FIELD CROPS						
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	TOTAL PER UNIT	TOTAL
Range & Pasture	2024	187,800	-	-	$23.08/acre	$4,334,000
	2023	135,000	-	-	$25.00/acre	$3,375,000
Miscellaneous	2024	2,510	Includes hay, beans, corn, industrial hemp, hops, etc.			$3,473,000
	2023	2,750				$5,560,000
Total	2024	190,310				$7,807,000
	2023	138,000				$8,935,000

LIVESTOCK & POULTRY						
ITEM	YEAR	# OF HEAD	TOTAL WEIGHT	UNIT	PER UNIT	TOTAL
Cattle & Calves	2024	12,200	97,290	Cwt	$162.00	$15,774,000
	2023	13,200	102,600	Cwt	$124.00	$12,722,000
Misc. Livestock & Poultry Products	2024	Includes sheep, goats, pigs, bee pollination & apiary products.				$611,000
	2023					$664,000
Total	2024					$16,385,000
	2023					$13,386,000

FRUIT & NUT CROPS						
CROP	YEAR	BEARING ACREAGE	PER ACRE	TOTAL	TOTAL PER UNIT	TOTAL
Grapes, Wine Red	2024	2,288	3.0	6,861	$1,723/ton	$11,826,000
	2023	2,338	4.1	9,586	$1,684/ton	$16,143,000
Grapes, Wine White	2024	1,093	4.3	4,730	$1,369/ton	$6,473,000
	2023	913	5.4	4,930	$1,392/ton	$6,863,000
Miscellaneous Fruit & Nut	2024	1,951	Includes olives, walnuts, pistachios, pomegranates, almonds, avocados, etc.			$6,140,000
	2023	1,951				$7,001,000
Total	2024	5,332				$24,439,000
	2023	5,202				$30,007,000

Living In The Quarantine

During the quarantine, homeowners within the quarantine boundaries, who had any kind of fresh produce (citrus, fruits, vegetables) that they grew at home, were not allowed to move the produce from their own property. They could not sell and/or give it away.

All fruits and vegetables were to be discarded by being double bagged and thrown in a regular waste bin, not the green waste bin.

All mature fruits and vegetables and/or fruit that had fallen to the ground was removed, double bagged and disposed of in the regular waste bin.

Backyard peach tree within the quarantine.

PRODUCTION AGRICULTURE CONTINUED

VEGETABLE CROPS			
CROP	YEAR	HARVESTED ACREAGE	TOTAL
Miscellaneous Vegetables*	2024	152	$473,000
	2023	147	$361,000

*Includes broccoli, cabbage, corn, leaf lettuce, greens, pumpkins, tomatoes, squash, etc.

NURSERY PRODUCTS			
CROP	YEAR	HARVESTED ACREAGE	TOTAL
Ornamental Trees & Shrubs	2024	63	$4,125,000
	2023	58	$4,605,000
Misc. Nursery Products*	2024	65	$891,000
	2023	66	$1,013,000
Total	2024	128	$5,016,000
	2023	124	$5,618,000

*Includes bedding plants, cut flowers, indoor decoratives, vegetable starts, Christmas trees, etc.

Why do we care about the Mediterranean Fruit Fly?

The Mediterranean fruit fly (Ceratitis capitata), commonly known as the MedFly, is one of the most destructive and economically significant insect pests in global agriculture. This highly invasive species threatens fruit and vegetable production due to its remarkably broad host range of more than 250 species and its ability to produce three to ten generations per year, allowing populations to expand rapidly and cause extensive crop damage within a single growing season. Female MedFlies lay their eggs beneath the skin of ripening fruits, vegetables, or nuts, and once the larvae hatch, they feed on the soft interior tissues. This feeding destroys the pulp and structure of the host, creating entry points for fungal and bacterial rot that render produce deformed, discolored, and unmarketable, leading to severe economic losses for growers and exporters.

Once established in a new region, eradicating the MedFly is extremely difficult and costly. Its rapid reproduction, adaptability to varied environments, and temperature-dependent development complicate detection and control. In cooler climates, growth slows and emergence is delayed, allowing populations to persist unnoticed until warmer conditions return. Modern transportation and global trade further aid its spread across continents. Due to its resilience and mobility, the MedFly remains a major global threat to agricultural production, demanding strict quarantine protocols, early detection, and coordinated management strategies

Sterile male Medfly under ultraviolet light

Julio Reyes sorting Sterile medflies into a vial from a McPhail Trap during Medfly delimitation.

Star apple with fruit fly larvae

PROGRAM REPORTS

PEST EXCLUSION

Pest exclusion is the first line of defense to prevent non-native invasive pests and diseases detrimental to agriculture and the environment from entering the county. Incoming shipments of plant products and other high-risk articles are inspected daily at various shipping terminals to enforce quarantines intended to prevent the introduction of harmful pests.

TYPE OF SHIPMENT	SHIPMENTS INSPECTED	SHIPMENTS REJECTED	PESTS FOUND
Parcel Carrier	5000	459	148
Trucks	335	———	———
Household Goods	18	———	———
Nursery	1946	———	———
Airfreight	207	10	12

CANINE INSPECTION PROGRAM

TYPE OF SHIPMENT	SHIPMENTS REJECTED	ACTIONABLE PEST FINDS
Parcel Carrier	471	185

Parcel Facilities During Quarantine

The Quarantine boundaries included one of our county's largest parcel facilities. During the quarantine, we increased inspections at this facility to twice weekly. As the quarantine continued, our inspectors were looking for the pathways of invasive insects coming into the county.

Caribbean fruit fly larva found at UPS Fremont in a shipment of Wax Apples

Caribbean fruit fly larva found at UPS Fremont in a shipment of Sapodillas

Handler Sheila Stenger with agricultural detection dog Draco searching for unmarked packages with plant material

Agricultural detection dog Tank alerting on an unmarked package with plant material

PEST MANAGEMENT & ERADICATION

Regulatory noxious weed control work is conducted in partnership with regional land management and partner organizations. Other weeds of concern in this region include Hoary Cresses, Rush Skeletonweed, White Horsenettle, Golden Thistle, Puna Grass and other species of concern as they are found.

WEEDS COMMON NAME	SCIENTIFIC NAME	CONTROL METHOD
Artichoke Thistle	*Cynara cardunculus*	Chemical & Mechanical
Purple Starthistle	*Centaurea calcitrapa*	Chemical & Mechanical
Iberian Starthistle	*Centaurea iberica*	Chemical & Mechanical
Japanese Dodder	*Cuscuta japonica*	Chemical & Mechanical
Barb Goatgrass	*Aegilops triuncialis*	Chemical & Mechanical
Japanese Knotweed	*Fallopia japonica*	Chemical & Mechanical
Medusahead	*Taeniatherum caput-medusae*	Chemical & Mechanical
Stinkwort	*Dittrichia graveolens*	Chemical & Mechanical

PEST DETECTION		
Pest Detection is the second line of defense against invasive non-native pests from becoming established in areas so vast that it is impossible to control or eradicate an infestation. Insect traps are placed and monitored throughout the county to ensure early detection of exotic pests that are known to be detrimental to agriculture and the environment.		
TARGET PEST	**INSECT HOSTS**	**TRAP SERVICINGS**
Mediterranean Fruit Fly	Fruit Trees	99,675
Mexican Fruit Fly	Fruit Trees	
Melon Fruit Fly	Vegetable Gardens	
Oriental Fruit Fly	Fruit Trees	
Miscellaneous Fruit Flies	Fruit Trees and Vegetables	
Spongy Moth	Shade Trees	
Japanese Beetle	Turf/Roses	
European Pine Shoot Moth	Pine Trees	
Glassy-Winged Sharpshooter	Landscape/Nursery Plants	12,499
Asian Citrus Psyllid	Citrus/Nursery Plants	6,304
European Grapevine Moth	Vineyards	350
In 2024 exotic insect pest finds included (1) Melon Fruit Fly in Livermore, (1) Oriental Fruit Fly, in Oakland, (1) Spongy Moth, in Berkeley, and (73) Mediterranean Fruit Flies, in Fremont, Newark and Union City. The County Agriculture Department deployed a grand total of 7,066 traps to detect the presence of non-native insect pests and serviced the traps 118,828 times during the year. Additionally, Special survey for Spotted Lantern Fly was done at 28 sites.		

Sudden Oak Death			
Facilities Inspected		Businesses Under Compliance	
Compliance Inspections	85	Shipping Nurseries	9
Sudden Oak Death Positives	0	Green Waste Facilities	16

California Department of Food and Agriculture's "Don't pack a pest" truck

Trapping During The Quarantine

Most of the quarantine trapping was handled by the California Department of Food and Agriculture. Alameda County's Pest Detection Program supported the state by placing and servicing traps outside of the find sites within the quarantine. Alameda County continued the regular trapping outside of the find sites in Fremont, Newark and Union City. As sterile males were released, the trapped specimens were sent to the CDFA facility in Los Alamitos to make sure there were no wild flies in the traps.

SUSTAINABLE AGRICULTURE

ORGANIC FARMING		
CROP	REGISTERED PRODUCERS	ESTIMATED ACREAGE
Miscellaneous*	12	131

*Includes grapes, seedlings, micro greens, avocados, cut flowers, and vegetables

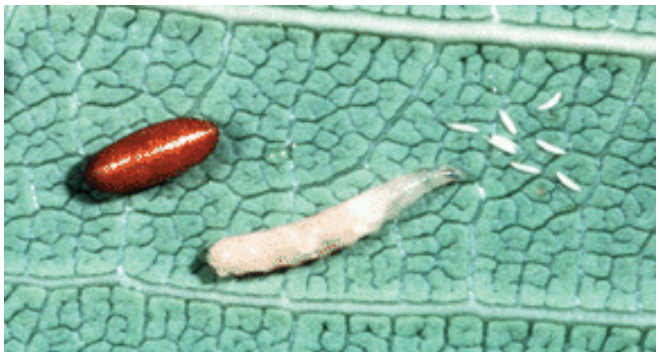
URBAN FARMING		
TYPE	NUMBER	ESTIMATED ACREAGE
Community Gardens	36	52
School Gardens	269	92
Certified Farmers Markets	36	1025 (vendors)
Certified Producers	27	85

COUNTY BIOLOGICAL CONTROL		
PEST	AGENTS	SCOPE OF PROGRAM
Yellow Star-Thistle *Centaurea solstitalis*	Bud Weevil *Bangasternus orientalis*	Found in most areas of the County
	Seed-head Gall Fly *Urophora sirunaseva*	
	Seed-head Fly *Chaetorellia spp.*	
	Hairy Weevil *Eustenopus villosus*	
	Rust Fungus *Puccinia jaceae var. solstitalis*	

Medfly Identification

The Mediterranean fruit fly is a short, squat fly about 1/4 inch in length. It has a blackish thorax marked with silver; a tan abdomen with darker stripes extending across the abdomen; and clear wings with two light brown bands across the wing, another along the distal front edge, and gray flecks scattered near the base. The immature stages are superficially similar to those of other invasive fruit flies. Eggs are white, very small, elongate, and somewhat banana-shaped. Larvae are white, legless, and somewhat carrot-shaped. The pupa is contained inside an elongate oval, shiny brown, hard puparium.

Female Medfly



Fruit fly pupa, larva, and eggs

Female Medfly

Tomatoes under mesh covering at Irvington Farmer's Market


Tomatoes, garlic, and peppers under mesh at Irvington Farmer's Market

Safeguarding Produce at Certified Farmers Markets

In response to quarantine regulation, all certified producers at certified farmers markets within the quarantine zone were required to take specific steps to safeguard their produce from contamination or exposure to Medfly. These protocols were critical to maintaining the safety and quality of fresh produce sold at Certified Farmers Markets. Certified Producers had two options for safeguarding: fully enclose their booth with screen mesh or placing mesh screens over each display table. In the latter setup, customers could lift the screen to select their produce preserving the familiar market experience while protecting the produce.

In addition to physical safeguards, all certified producers were required to enter into compliance agreements with either the California Department of Food and Agriculture or the Alameda County Agricultural Commissioner. These agreements outlined proper handling, transport, and display procedures to ensure ongoing compliance with quarantine rules.

A total of 171 fruit seller compliance agreements were issued during the quarantine period, reflecting a coordinated effort by the state and county agencies to protect California's agriculture and uphold high food safety standards.


Eggplant, zucchini and tomatoes under mesh at Irvington Farmer's Market


Tomatoes under plastic at Irvington Farmer's Market

Mission

To enrich the lives of Alameda County residents through visionary policies and accessible, responsive, and effective services

Vision

Alameda County is recognized as one of the best counties in which to live, work and do business.

Values

Integrity, honesty and respect fostering mutual trust.

Transparency and accountability achieved through open communications and involvement of diverse community voices.

Fiscal stewardship reflecting the responsible management of resources.

Customer service built on commitment, accessibility and responsiveness.

Excellence in performance based on strong leadership, teamwork and a willingness to take risks.

Diversity recognizing the unique qualities of every individual and his or her perspective.

Environmental stewardship to preserve, protect and restore our natural resources.

Social responsibility promoting self-sufficiency, economic independence and an interdependent system of care and support.

Compassion ensuring all people are treated with respect, dignity and fairness.

COMPARISON SUMMARY					
ITEM	**2024**	**2023**	**2022**	**2021**	**2020**
Field Crops	$7,807,000	$8,935,000	$7,929,000	$8,609,000	$4,986,000
Vegetable Crops	$473,000	$361,000	$345,000	$317,600	$316,400
Fruit & Nut Crops	$24,439,000	$30,007,000	$28,722,000	$28,482,000	$21,624,000
Nursery products	$5,016,000	$5,618,000	$5,859,000	$5,768,000	$4,583,000
Livestock & Poultry	$16,385,000	$13,386,000	$11,463,000	$12,062,000	$12,703,000
Total	**$54,120,000**	**$58,307,000**	**$54,318,000**	**$55,239,000**	**$43,895,000**

GENERAL ALAMEDA COUNTY INFORMATION

County Seat.....Oakland
County Population, 2024.....1,649,060
Land Area (Square Miles).....739
Water Area (Square Miles).....82
Persons per Square Mile, 2024.....2,280

Total Assessed Property (Local Roll 2023-2024)

$414 Billion

Major Roads

Interstate 80, Interstate 580, Interstate 680, Interstate 880, Highway 238, Highway 84, Highway 92, Highway 13

Elevation

Sea level to 3,817 ft. at Rose Peak in the southern part of the County.

Average Climate

Mild winters and cool summers near the Bay. The eastern portion of the County is moderately warmer; high temperatures in the Livermore Amador Valley average 90°F in July.

14 Incorporated Cities

Alameda • Albany • Berkeley • Dublin • Emeryville • Fremont • Hayward • Livermore • Newark • Oakland • Piedmont • Pleasanton • San Leandro • Union City

6 Unincorporated Areas

Ashland • Castro Valley • Cherryland • Fairview • San Lorenzo • Sunol

Total Harvested Crop Acreage (2024)

208,122