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California Department of Food and Agriculture

Agricultural Commissioners' Crop Reports

Contra Costa County

2015-2017

CONTRA COSTA COUNTY

2015 CROP REPORT







Table of Contents

Mission Statement

The Contra Costa County Department of Agriculture, under the direction of the California Department of Food and Agriculture, Department of Pesticide Regulations and Division of Measurement Standards, is responsible for conducting regulatory and service activities pertaining to the agricultural industry and the consumers of our county. The primary goal of this office is to promote and protect agriculture while safeguarding the public and the environment. Our work as county Weights and Measures officials in the community ensures a safe place to live and a fair marketplace for trade.

Agricultural Commissioner
Chad Godoy

Assistant Agricultural Commissioner
Matt Slattengren

Deputy Agricultural Commisioners and Sealers
Gene Mangini
Steve Reymann
Larry Yost
Dean Gottlieb

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Pest Detection and Pest Management Staff
Simone Ackermann, Danilo Angcla, Lyndsay Bloxsom, Amanda Crosby, Nancy Dennis, Herb Gilmore, David Hallinan, Sonia Hayden, Edward Lujan, John Luzar, Rick Mata, Kerry Motts, Eldren Prieto, Daniel Sinz, Lindsay Skidmore, Shannon Smith, Greg Spurlock, Oscar Zaldua

Pest Quarantine Detector Canines
Conan, handled by Cecilie Siegel
Cairo, handled by Mariah deNijs

Cover photos: Young, unpruned, untrained dormant vines; first leaves emerging during the early season on established vine; old grapevine that has been sulfured to prevent fungal diseases in the spring (top row, left to right). Trained grapevines about a month into growing season; young grapes emerging; mature grapes ready to be harvested (middle row, left to right). Grapevines nestled into a valley (bottom row). Photos were taken in Oakley, Knightsen, Brentwood and Martinez.

Agricultural Commissioner and Sealer's Letter

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Contra Costa County

Chad Godoy
Agricultural Commissioner
Director of Weights and Measures

Karen Ross, Secretary
California Department of Food and Agriculture and
The Honorable Board of Supervisors of Contra Costa County

I am pleased to submit the 2015 Annual Crop and Livestock Report for Contra Costa County in accordance with the provisions of Section 2272 and 2279 of the California Food and Agricultural Code. This report also includes information on additional topics including how agriculture in Contra Costa County benefits the local economy, the importance of conserving agricultural land, and the value of bees and pollination.

The total gross value of agricultural crops and products in 2015 was $128,507,000, which is an increase of $8,678,000 or 7.24% from 2014. In general, demand and prices have remained strong for agricultural crops in Contra Costa County.

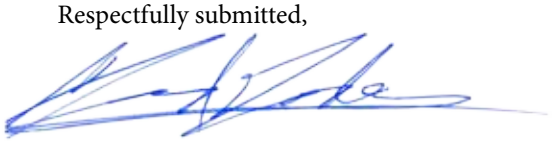
Crop values vary from year to year due to factors such as production, weather and market conditions. Some notable changes include a 27% increase in vegetable and seed crop values, and a moderate decrease in fruit and nut crops values due to poor market conditions and reduced yields with several commodities. Tomato market and production conditions continue to favor the trend toward increased acreage. Cherry yield remains below average due to unfavorable weather conditions that greatly reduced fruit set.

Several crop categories exceeded one million dollars in value. These categories in decreasing order include cattle and calves, tomatoes, sweet corn, miscellaneous vegetables, grapes, rangeland, field corn, alfalfa, walnuts, miscellaneous field crops, cherries, peaches, pasture, apricots, and wheat.

It should be emphasized that the values stated in this report are gross receipts and do not include the cost of production, transportation, or marketing of the products. The economic benefit of agricultural production is generally thought to be about three times the gross production value.

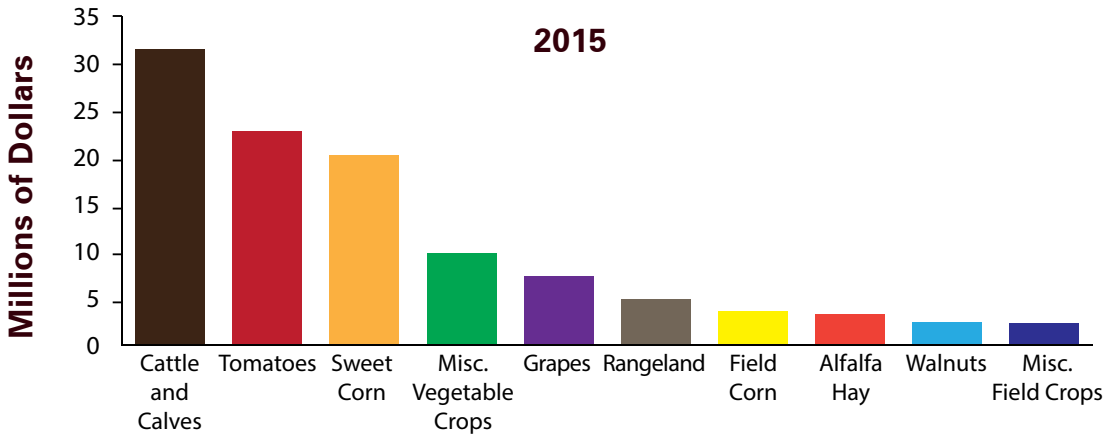
We wish to thank the individuals, industries and organizations who supplied us with vital information to complete this report. Their cooperation is truly appreciated. I also would like to thank Karen Adler, Ralph Fonseca and all of my staff for their diligent work in producing our annual report.

Respectfully submitted,



Chad Godoy

Leading Crops



Quantifying the Economic Contributions that Agriculture Provides to the Local Economy

According to the 2015 Economic Contributions of Contra Costa County Agriculture Report, agriculture in the county:

- provides 2,277 jobs in Contra Costa County economy, including 1,735 direct employees and 542 additional jobs made possible from expenditures by agricultural companies and their employees
- contributes a total of $225.0 million to the local economy, including $154.2 million in direct economic output and $70.8 million in additional economic output in the form of expenditures from agricultural companies and their employees

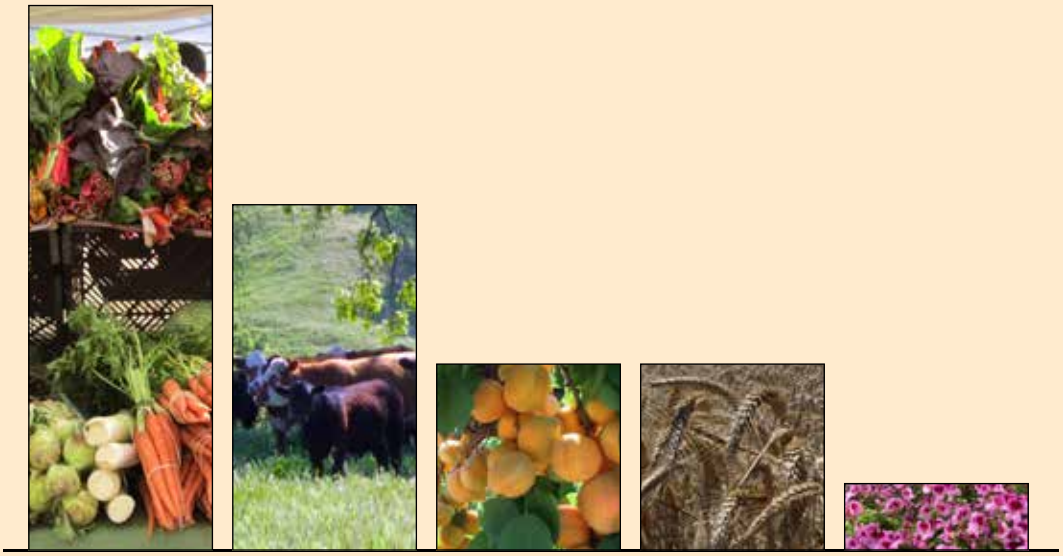
Residents and visitors alike know and value the rural character of Contra Costa County. Farmers' markets overflow with fresh produce and community spirit. Sweet corn, tomatoes, grapes, and dozens of other crops grow in fertile soils and a moderate climate. Clearly, agriculture plays a key role in sustaining a healthy local economy. What's not so clear, is the true size of this role. How much money does agriculture contribute to the local economy? How many jobs does agriculture support? In other words, just how important is agriculture as a driver of the county's economic health?

In order to address these questions, the Department of Agriculture commissioned a study in the autumn of 2015 with consultants Dr. Jeff Langholz and Dr. Fernando DePaolis of Ag Impact Associates that assessed the multitude of economic contributions that agriculture provides to Contra Costa's local economy. The report focuses not only on direct economic effects such as farm production and employment, but also on multiplier effects, which include contributions to the economy such as local purchases of agricultural materials and supplies to be used by the industry and consumption spending in the community by employees.

The Contra Costa County Department of Agriculture/ Weights and Measures recognizes that understanding the economic benefits that agriculture provides can help policy makers to make choices that will benefit the agricultural industry. We are including highlights from this economic report in the 2015 Crop Report, as well as articles that explore how and why these trends are occurring. We also explore the finding that value-added processing by wineries contributes significantly to the total value that agriculture adds to the local economy by including information on the history of wine production in the county, the types of varietals that are being grown, and new developments in the local wine industry. In addition, there are articles on the value of pollination, the importance of farmers' markets, and the links between conserving agricultural land and maintaining a healthy agricultural economy.

Production Summary

2015 Gross Production Values by Percentage



Production values rose by 7% in 2015. Vegetable and seed crops led this trend with more than a 25% increase in value. The livestock and livestock products and nursery products categories both rose slightly, while fruit and nut crops value decreased by 17%. Field crop gross value remained essentially unchanged. Due to the decreasing price and acreage of certain fruit and nut crops, this category dropped in rank below field crops in 2015.

	Gross Value		Change in Gross Value	Total Cultivated Acreage		Change in Cultivated Acreage	Ranking	
Category	2015	2014		2015	2014		2015	2014
Vegetable & Seed Crops	$52,883,000	$41,710,000	+27%	9,051	7,567	+20%	1	1
Livestock & Livestock Products	$33,673,000	$32,767,000	+3%	-	-	-	2	2
Field Crops	$17,821,000	$17,753,000	0%	192,958	188,506	+2%	3	4
Fruit & Nut Crops	$17,724,000	$21,295,000	-17%	3,245	3,627	-11%	4	3
Nursery Products	$6,406,000	$6,304,000	+2%	43	41	+5%	5	5
Total	**$128,507,000**	**$119,829,000**	**+7%**	**205,297**	**199,741**	**+3%**	**-**	**-**

Vegetable and Seed Crops

Photo: Young sweet corn planted in Knightsen.

Contra Costa County sweet corn remained the leading vegetable crop due to continuing demand for this high quality product. Overall tomato production and value were higher in 2015 and overall vegetable total dollar value saw a moderate increase.

Crop	Year	Harvested Acreage	Production Per Acre	Tons Harvested	Value Per Ton	Total Dollar Value[1]
Sweet Corn	2015	3,629	10.63	38,600	$524.66	$20,252,000
	2014	3,263	10.45	34,100	$531.86	$18,136,000
Tomatoes Total[2]	2015	4,172	36.54	204,000	-	$22,767,000
	2014	3,105	35.61	150,130	-	$15,879,000
Fresh Tomatoes	2015	754	17.24	13,000	$568.00	$7,386,000
	2014	469	17.33	8,130	$500.00	$4,062,000
Processing Tomatoes	2015	3,418	55.84	191,000	$80.53	$15,381,000
	2014	2,636	53.89	142,000	$83.22	$11,817,000
Miscellaneous[3]	2015	1,250	-	-	-	$9,864,000
	2014	1,199	-	-	-	$7,695,000
Total	**2015**	**9,051**	**-**	**-**	**-**	**$52,883,000**
	2014	**7,567**	**-**	**-**	**-**	**$41,710,000**

1 Values represent rounded estimates based on data collected from producers, experts and literature
2 Includes both fresh market and processing tomatoes.
3 Includes asparagus, artichokes, fresh market beans, beets, cabbage, cardoon, carrots, cauliflower, cucumbers, eggplant, garlic, ginseng, lettuce, okra, onions, greens, herbs, peas, peppers, potatoes, pumpkins, radishes, and squash
4 Includes honey, wax, and pollination (opposite page)
5 Includes chickens, ducks, emus, goats, hogs, llamas, ostriches, pigs, rabbits, sheep, turkeys, milk, wool, and eggs (opposite page)

Livestock and Livestock Products

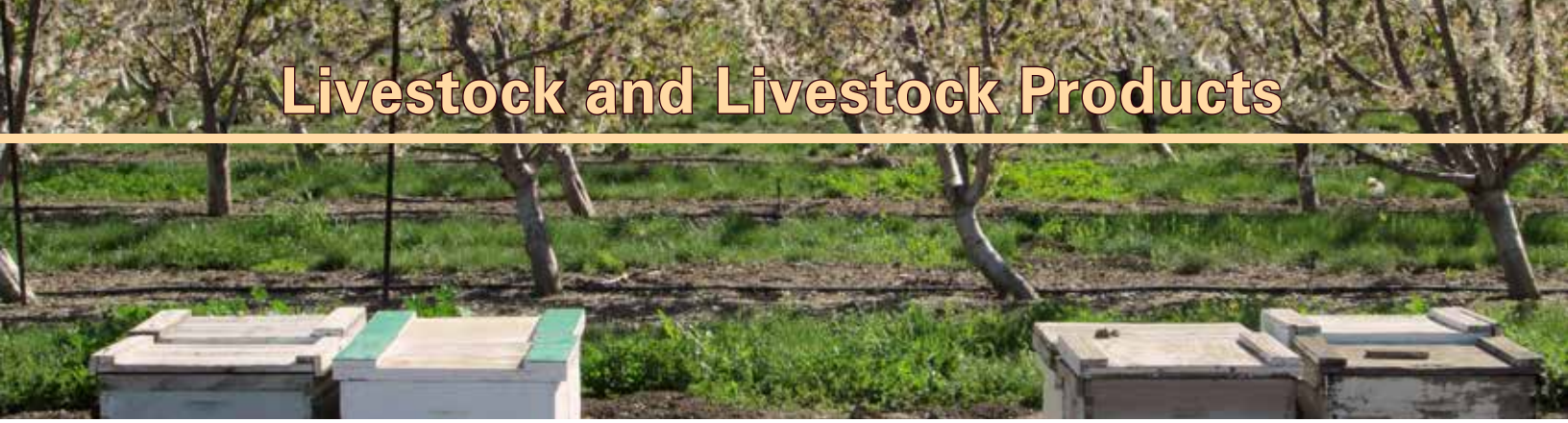


Photo: Beehives placed near flowering cherries to support cross-pollination for cherry production in Brentwood.

Due to market influences and continued drought conditions, the price for livestock was high again in 2015. Ranchers had to rely on high-priced hay to supplement the limited grass that naturally was available for forage. This forced ranchers to thin herds and to wean calves earlier at lighter weights.

Commodity	Year	Number of Head	Total Liveweight	Value Per CWT	Total Dollar Value[1]
Cattle & Calves	2015	20,506	182,060	173.00	$31,519,000
	2014	23,260	186,884	$163.04	$30,470,000
Apiary Products[4]	2015	-	-	-	$454,000
	2014	-	-	-	$597,000
Miscellaneous Livestock[5]	2015	-	-	-	$1,700,000
	2014	-	-	-	$1,700,000
Total	**2015**	**-**	**-**	**-**	**$33,673,000**
	2014	**-**	**-**	**-**	**$32,767,000**

Bees and Pollinator Services

The value of pollinator services, which are mainly provided by honey and native bees, is on the rise in California. This equates to higher profits for beekeepers, who rear bees on moveable bee hives that are placed around the state to pollinate crops like almonds, cherries, stone fruit, cucumbers, pears, and citrus. Bees also pollinate sunflowers, broccoli, carrots, lettuce and onions when grown for seed. However, apiarists are also contending with challenges that threaten the survival of their bees throughout the season. These include pests, diseases, competing Africanized honey bees, reduced foraging habitat, exposure to pesticides and Colony Collapse Disorder. All told, U.S. beekeepers have indicated that they lose an annual average of 30-35 percent of their colonies to a variety of pests and diseases, including Colony Collapse Disorder and varroa mites.

According to Contra Costa County beekeepers, it costs around 40 dollars for each hive provided during the bloom period. Beekeepers report that the price per hive for almonds may be three to five times higher due to the heightened demand for hives and limited amount of hives available during this peak period.

Did you know that honeybees[6]:

A bee pollinating a cherrry blossom.

- Pollinate a wide variety of crops as they gather pollen and nectar for their survival
- Contribute approximately $15 billion to the value of U.S. crop production
- Fly at about 10 to 15 miles per hour, visiting about 50 to 100 flowers in each pollination trip
- Cover up to 4 miles from their hive to find food and water, an area covering 50 square miles
- Produce one pound of honey by visiting 2 million flowers and flying 55,000 miles

6 Christine Souza, California Country Magazine, link at http://californiabountiful.com/features/article.aspx?arID=845

Field Crops

Photo: Winter wheat grown near Discovery Bay.

In 2015, field crop harvested acreage increased significantly, especially in field corn and wheat production. At the same time, prices were down for alfalfa, field corn, cereal hay, and wheat. These opposing trends resulted in no change in overall production values.

Crop	Year	Harvested Acreage	Production Per Acre	Total Harvested	Unit	Value Per Unit	Total Dollar Value[1]
Alfalfa hay	2015	2,947	5.13	15,100	Ton	$218.42	$3,298,000
	2014	3,387	5.13	17,400	Ton	$248.26	$4,320,000
Cereal hay	2015	2,420	2.64	6,390	Ton	$128.80	$823,000
	2014	3,166	2.69	8,520	Ton	$154.88	$1,320,000
Field corn	2015	6,176	3.87	23,900	Ton	$154.18	$3,685,000
	2014	2,658	4.20	11,200	Ton	$192.68	$2,158,000
Pasture	2015	5,450	-	-	Acre	$300	$1,635,000
	2014	5,450	-	-	Acre	$300	$1,635,000
Rangeland	2015	169,000	-	-	Acre	$29.10	$4,918,000
	2014	169,000	-	-	Acre	$25.20	$4,259,000
Wheat	2015	3,721	1.76	6,550	Ton	$164.54	$1,078,000
	2014	807	2.41	1,940	Ton	$232.54	$451,000
Miscellaneous[2]	2015	3,244	-	-	-	-	$2,384,000
	2014	4,038	-	-	-	-	$3,610,000
Total	**2015**	**192,958**	**-**	**-**	**-**	**-**	**$17,821,000**
	2014	**188,506**	**-**	**-**	**-**	**-**	**$17,753,000**

1 Values represent rounded estimates based on data collected from producers, experts and literature
2 Includes barley, forage hay, hay (wild), rye, safflower, silage, straw, sudan grass and sorghum

Fruit and Nut Crops

Photo: Early bloom of apples near Knightsen.

The value of fruit and nut crops dropped in 2015 due to unfavorable market and climate conditions that affected a few commodities. Cherry production remained low due to unfavorable weather conditions that greatly reduced yield. Grape, walnut and olive prices and acreage also declined, resulting in waning production values. All other fruit and nut crop values remained almost unchanged, with the exception of plums and pluots, which rose slightly due to increased production. Contra Costa grapes have also been broken down according to color for the first time, and results show that the majority of the county's grapes, or about 80%, are red, while the remaining are white and rosé varieties.

Crop	Year	Harvested Acreage	Production Per Acre	Tons Harvested	Value Per Ton	Total Dollar Value[1]
Apricots	2015	88	4.26	375	$3,634.81	1,363,000
	2014	66	4.85	320	$3,489.16	$1,117,000
Cherries	2015	479	1.03	493	$4,634.00	$2,285,000
	2014	494	0.99	489	$5,071.00	$2,480,000
Wine Grapes	2015	1,900	5.53	8,430	$823.97	$7,368,000
Red		1,496	3.63	5,430	$997.38	$5,416,000
White		404	7.43	3,000	$650.56	$1,952,000
	2014	2,190	4.64	10,200	$1,013.35	$10,336,000
Nectarines	2015	23	3.37	76	$6,581.00	$500,000
	2014	23	3.85	87	$5,631.56	$490,000
Olives	2015	131	2.22	291	$685.16	$199,000
	2014	183	1.77	324	$759.63	$246,000
Peaches	2015	110	3.39	373	$4,683.09	$1,747,000
	2014	101	4.10	414	$4,207.60	$1,742,000
Plums & Pluots	2015	32	4.21	133	$5,253.00	$699,000
	2014	27	4.27	113	$5,249.80	$593,000
Walnuts	2015	374	2.08	777	$3,145.00	$2,444,000
	2014	458	2.09	957	$3,522.00	$3,371,000
Miscellaneous[2]	2015	109	-	-	-	$1,119,000
	2014	87	-	-	-	$920,000
Total	**2015**	**3,245**	**-**	**-**	**-**	**$17,724,000**
	2014	**3,627**	**-**	**-**	**-**	**$21,295,000**

1 Values represent rounded estimates based on data collected from producers, experts and literature
2 Includes almonds, apples, apriums, asian pears, berries, citrus, figs, melons, pears, pecans, persimmons, pistachios, prunes, pomegranates, quinces and strawberries

Nursery Production

Photo: Vegetable starts and herbaceous perennials grown in a Richmond greenhouse.

In 2015, nursery production values increased slightly. While there was a decrease in the amount earned from indoor decoratives such as orchids and house plants, overall prices remained about the same and production of other types of nursery products more than made up for the deficit.

	Year	Greenhouse Production in Square Feet	Acres in Field Production	Total Dollar Value[1]
Indoor Decoratives	2015	72,000	-	$44,380
	2014	72,000	-	$55,800
Bedding Plants, Herbaceous Perennials, Vegetable Starts and Miscellaneous Products[2]	2015	39,725	40.0	$6,361,000
	2014	21,425	39.0	$5,831,000
Total	**2015**	**111,75**	**40.0**	**$6,406,000**
	2014	**93,425**	**39.0**	**$6,304,000**

1 Values represent rounded estimates based on data collected from producers, experts and literature
2 Includes Christmas trees, cactus, ground covers, propagative materials, ornamental trees and shrubs, fruit trees and cut flowers

Rare heirloom open-pollinated tomato varieties that are adapted to local conditions are sold every spring to the public by the Contra Costa Master Gardeners. They field test some of these varieties at their Walnut Creek demonstation garden, which is also open to the public.

Why Certified Farmers' Markets

Stimulate Local Economies

Growers selling locally create 13 full time jobs per $1 million in revenue earned. Those not selling locally create 3 full time jobs per million.

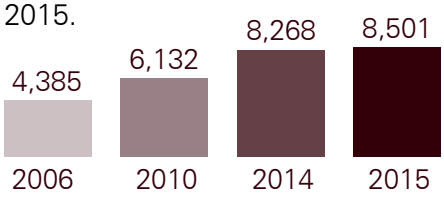
Each full-time equivalent (FTE) job created at farmers' markets supports approximately half (0.41 to 0.78) a FTE job in other sectors of the region's economy.

Preserve Farmland and Rural Livelihoods

The US loses an acre of farmland per minute to development.

25% of vendors derive their sole source of income from Farmers' markets.

180% increase in growers participating in Farmers' Markets from 2006-2015.



Number of markets in the USDA Farmers Market Directory

Increase Community Access to Fresh Food

$19.4 million in Supplemental Nutrition Assistance Program benefits were spent at farmers' markets in 2015. That's fresh food for low-income Americans and increased revenue for local farmers.

Proximity to farmers' markets is associated with better health as indicated by lower body mass index.

County Certified Farmers' Markets

Tuesday	Wednesday	Thursday	Friday	Saturday		Sunday
Concord Todos Santos Plaza	Richmond Main St.	Antioch Kaiser	Martinez Main St.	Brentwood	Pinole	Walnut Creek North Locust
El Cerrito	San Ramon Sherwood Sports Park	Concord Todos Santos Plaza	Richmond Barrett Ave.	Clayton	Pittsburg	Moraga
Martinez Contra Costa County Hospital		Martinez Court St.	Rossmoor	Crockett-Port Costa	Pleasant Hill	Alamo
Walnut Creek Kaiser		San Ramon Bishop Ranch		Danville	San Pablo	Kensington
				El Cerrito	San Ramon Bishop Ranch	Martinez Main St.
				Orinda	Walnut Creek Shadelands	

Organic Farming

Organic acreage rose in Contra Costa County in 2015 by 2,786 acres to a total of 4,235 acres. The majority of this land is certified organic rangeland and pasture. The number of registered organic farms in the county also increased from 17 to 18 farms.

Multiplier Effects of Contra Costa County Farm Production

The 2015 Economic Contributions of Contra Costa County Agriculture report quantifies the economic multipliers or "ripples" that farm production creates in the local economy. These ripples take two forms: indirect effects and induced effects. The first consists of business to business supplier purchases. For example, when a grower buys farm equipment, fertilizer, seed, insurance, banking services, and other inputs, the grower creates indirect effects. The second ripple type, induced effects, consist of consumption spending by agricultural business owners and employees, housing, healthcare and leisure activities. All of this spending creates ripples in the economy.

Figure 1 shows agriculture's direct, indirect, and induced economic effects within the county for major production categories. The numbers use IMPLAN[1] multipliers for each sector, which are rooted in U.S. Bureau of Economic Analysis production data and other sources. The numbers describe agricultural sector activities as well as "U-pick" and other types of local, direct economic output that the county's annual Crop Report is not designed to capture.

Figure 1: Economic Effects of Farm Production

Farm Production Sector[2]	Direct	Indirect	Induced	Total
	Output Effect ($ Millions)			
Support activities for agriculture	$27.6	$1.7	$10.2	$39.6
Vegetable and melon farming	$22.3	$2.4	$6.8	$31.6
Fruit farming	$18.3	$2.7	$6.9	$27.8
Animal production	$20.5	$3.7	$3.5	$27.7
Tree nut farming	$9.0	$1.1	$3.2	$13.3
Greenhouse, nursery, & floriculture production	$8.9	$1.0	$3.0	$12.9
All other crop farming	$7.2	$2.0	$2.5	$11.8
Grain farming	$5.8	$3.5	$0.9	$10.1
Total Economic Output:	**$119.7**	**$18.1**	**$37.0**	**$174.8**
Employment Effect (# Jobs)				
Total Employment:	**1,660**	**182**	**263**	**2,105**

Dollar values are in $ millions. Figures are for 2013 and come from IMPLAN®, Crop Reports, and U.S. Bureau of Economic Analysis.

Agricultural production created $174.8 million in total economic output within Contra Costa County, of which $55.1 million were multiplier effects. Indirect and induced spending supported an additional 446 jobs within the county, bringing agriculture-related production's total employment to 2,105.

1 IMPLAN® is a widely used economic modeling program (see www.implan.com). IMPLAN® uses econometric modeling to convert data from more than a dozen federal government sources into local values for every U.S. county and zip code and for each of more than 500 industry sectors. Except where otherwise noted, all figures are from the year 2013, the most recent IMPLAN® dataset available, inflation-adjusted to 2015.

2 Note that category names and production data in Figure 1 differ from the County's annual Crop Reports. They follow a standard classification system used nationwide called the North American Industrial Classification System (NAICS). Each NAICS category has an explicit definition. For example, "Support activities for agricultural production" refers to soil preparation, planting, cultivating, harvesting, labor contracting, post-harvest crop activities and various other farm management services.

Locally Sourced, Value-Added Food Processing

Photo: Fruit drying in Brentwood.

Farm production tells only part of the story. Contra Costa County agriculture also includes food processing that contributes to the local economy. The results of the locally sourced, value-added food processing analysis provide an estimate of the economic value of local food processing.

To avoid overstating the numbers, the report only included food manufacturers and sectors that fit two strict criteria: 1) they use mostly local agricultural inputs; and 2) they are unlikely to exist here without the presence of the associated agricultural sector. Using these precise measures, nearly all food processing within the county was excluded. For example, considerable manufacturing of bread, sugar, tortillas, dairy products, and other foods occurs in Contra Costa County. Most of the raw products, however, come from outside the county.

Raw product also moves in the opposite direction. For example, a significant portion of the county's tomato crop goes to canneries each year, all of them located outside the county. A similar phenomenon occurs with much of the beans, corn, and other vegetables. Even the cattle and calf production goes to external processors, either directly (e.g. Harris Ranch) or via the local auction.

Consultations with local experts highlighted anecdotal examples of small-scale, valued-added processing. For instance, a few growers process stone fruit, pears and apples into jams, jellies, pies, and pastries. This provides a value-added option for fruit that hasn't met fresh market standards. Many growers have invested in on-farm processing infrastructure such as freezers, refrigerators, kitchens, and packing areas for labeling and storage.

Growers pack nearly all of the county's sweet corn crop into forty-eight count boxes for direct sale to retail outlets. A small amount of corn is also lightly processed. A portion of Contra Costa olives are pressed and bottled in county, and the remainder are processed in nearby facilities in adjacent counties.

Wineries offer a significant exception. Figure 2 shows the economic effects of locally sourced, value-added food processing by wineries. Note that the numbers avoid double-counting by including only the dollar values and employment that wineries add to wine grapes by producing wine. Wineries produce significant multiplier effects despite the fact that most wine grapes leave the county for processing in Alameda, Napa, Sonoma, and other nearby counties. As with all food processing, documenting precise multiplier effects within the county would require significant further study.

Figure 2: Economic Effects of Locally Sourced, Value-added Food Processing[1]

Food Processing Sector	Direct	Indirect	Induced	Total
Economic Output by Wineries ($ Millions)	$34.5	$7.3	$8.3	$50.2
Employment Effect of Wineries (# Jobs)	75	37	59	171

Sources: IMPLAN® and U.S. Bureau of Economic Analysis data, with input by local industry experts.

Local food processing by wineries produced an estimated $34.5 million in direct output. Multiplier effects bring the total value to $50.2 million. The sector directly employed 75 workers. These workers and their employers spent enough money in the local economy to support an additional 96 jobs, bringing Contra Costa County's total food processing employment effect to 171.

1 The value-added processing results in this report do not represent a full assessment, but rather give the reader a basic overview of the topic. Calculating exact numbers requires collecting detailed financial information from individual producers, which is beyond the scope of this report.

Pest Detection

Pest detection activities ensure that new quarantine pests do not find a home in our county. Exotic invasive pests can trigger quarantines costing agriculture millions of dollars in lost revenue while necessitating large increases in pesticide use to control the pest. Contra Costa County pest detection specialists monitor insect traps throughout the county, using pheromone and other attractant lures to detect insects of quarantine significance. At the first sign of an invasive pest, steps are taken to eradicate it so that it does not become established.

Pest	Peak Number of Traps	Total Annual Trap Services	Pest	Peak Number of Traps	Total Annual Trap Services
Glassywinged Sharpshooter	962	6,279	Asian Citrus Psyllid	832	5,927
Japanese Beetle	593	584	Fruit flies (McPhail/Champ)	851	18,261
Mediterranean Fruit Fly	861	7,939	Gypsy Moth	623	1,330
Oriental Fruit Fly	858	9,758	Light Brown Apple Moth	12	207
Pine Shoot Moth and Nantucket Pine Tip Moth	5	14	Melon Fly	782	5,935
Oriental Fruit Moth	858	9,758	Brown Marmorated Stink Bug	1	12

Pest Exclusion

Post Office/UPS/FedEx Package Inspections	42,750
Truck Shipment Inspections from Within California	2,190
Truck Shipment Inspections from Other States	148
Household Goods Inspections for Gypsy Moth	101
Inspector Non-native Pest Interceptions	37
Canine Detection Non-native Pest Interceptions	98
Quarantine Pest, Certification and Markings Rejections	297

The mission of the pest exclusion program is to keep exotic agricultural and environmental pests out of the state of California and to prevent the establisment or limit the spread of newly discovered pests within the state. Non-native plant pests that become established in California can cause enormous market losses as a result of quarantines imposed by other states or countries that restrict or prohibit the ability of California growers to market and ship their agricultural commodities.

The Department of Agriculture works to exclude pests of regulatory significance from Contra Costa by regularly inspecting shipments at nurseries and service terminals operated by the United States Postal Service, UPS and FedEx. Two canine handlers and their detector dogs also intercept unmarked packages that may contain important pests.

Pest Management

Contra Costa County staff use integrated pest management methods including surveying, monitoring and chemical applications to control or eradicate certain exotic weed pests on public and private land. In 2015, the major weed species treated were artichoke thistle and purple star thistle. In addition, biologists surveyed areas for hoary cress, japanese dodder, japanese knotweed, oblong spurge, pampas grass, russian knapweed, red sesbania, woolly distaff thistle, white horse nettle, smooth distaff thistle, and kangaroo thorn and treated as needed. Where feasible, mechanical control methods were used.

The Importance of Preventing the Spread of Gypsy Moth

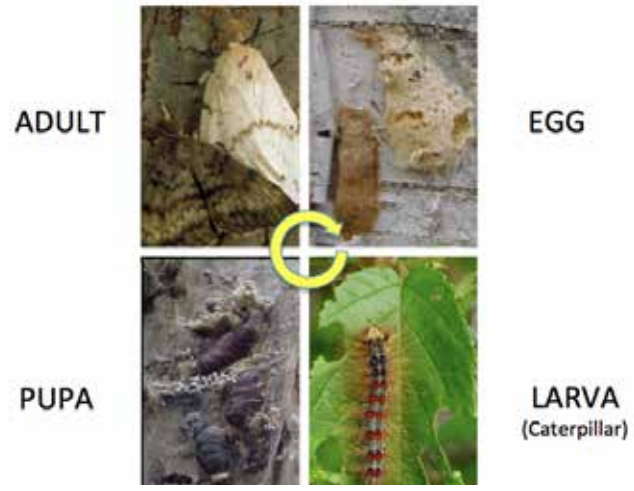
Gypsy moth, or Lymantria dispar, is an invasive pest of trees that presents a serious threat when introduced to new areas. Gypsy moth is native to Europe, where its numbers are kept relatively low by native predators. Populations negatively alter tree health by stripping trees of their leaves and inhibiting their ability to photosynthesize. Heavy infestations may eventually result in tree death and large-scale deforestation. This can cause economic losses related to cleanup, tree replacement and reduced property values, and negatively impacting tourism by reducing outdoor recreational opportunities. Gypsy moth caterpillars have a voracious appetite - one caterpillar can eat up to a square foot of leaves in a day. One female can lay up to 1,000 eggs in one egg mass, so their numbers can build up very quickly.

The lifcycle of gypsy moth makes it hard to combat. Females lay egg masses in late August on trees, but also on outdoor objects such as lawnmowers, barbeques, tires, and lumber. They hatch in late April or May, and can easily go unnoticed on these outdoor items for the eight to nine months that they are in this egg life stage. When outdoor articles are moved, the egg mass "hitchhikers" can come along for the ride and hatch in the new location, starting an infestation. For this reason, people moving from gypsy moth-infested areas are required to self-inspect their outdoor articles and record the inspection findings on a checklist. When a vehicle carrying items from an area known to be infested with gypsy moth enters California, personnel from an agricultural inspection station at the state border place the load under quarantine, which requires outdoor articles be inspected by a county agricultural biologist when the vehicle reaches its destination. Any life stages that are found are removed by the biologist during the inspection.

Because gypsy moth has the potential to cause such extensive devastation, agricultural and forestry officials constantly monitor non-infested areas for new introductions. This is mainly done by deploying traps baited with a pheromone to attract males. Reacting to a small number of gypsy moths before they become an established population makes eradicating this pest faster, cheaper, and more biologically feasible. Last summer, Contra Costa County Department of Agriculture staff found a gypsy moth adult in a trap placed near the Costco in Danville during routine monitoring. In response, many additional traps were placed in the area and checked frequently in order to determine the extent and scope of the infestation in a process called delimitation trapping.

Trees defoliated by gypsy moth larvae.

Due to the gypsy moth's destructive potential, we all need to be vigilant and do our part to help ensure that it does not spread to new areas. If you move or return from parts of the country where gypsy moth is present, be aware that gypsy moths may be trying to hitchhike with you. Inspect your outdoor belongings, including trailers and RV's, for signs of gypsy moth, and burn or discard firewood before you travel. If you see any signs of this pest such as egg masses, caterpillars with red and blue dots on their backs, or unusual defoliation of local trees, please report your sighting to your County Agricultural Commissioner's office.



The four lifestages of the gypsy moth.

Weights and Measures

The Contra Costa County Division of Weights & Measures promotes a fair and equitable marketplace by performing inspections of packages and commercial weighing and measuring devices for accuracy. This ensures that the sale of harvested crops, livestock, animal feed, vehicle fuel, and other commodities is based on an honest weight or measure.

Measuring Devices	Devices Registered	Devices Inspected[1]	Weighing Devices	Devices Registered	Devices Inspected[1]
Vehicle Fuel Station Meters	7599	5954	Light Capacity Retail Scales	2156	1927
Electric Submeters	7197	351	Heavy Capacity Retail Scales	328	316
Water Meters and Submeters	5580	1554	Vehicle/Railway Scales	103	103
Vapor/LPG Meters and Submeters	4336	270	Prescription/ Jewelers Scales	52	29
Taxi Meters	285	950	Livestock/Animal Scales	22	27
Other Measuring Devices	418	208	Other Weighing Devices	1	1

Advertisement & Transaction Verification	Locations Registered	Inspections Conducted	Quality Assurance	Registered	Audited
Petroleum Gas Stations	271	296	Weighmaster Locations	105	28
Price Verifying Scanner	1197	270	Service Agent Devices	-	2050

1 Includes reinspections

Contra Costa County Weights and Measures inspectors test a large variety of devices for accuracy. This includes periodic inspection of submeters used for the sale of electricity, water, and gas by mobile home parks, apartments, and condominiums. Meters which are found to be accurate and approved for that use will have any adjustable parts sealed. These meters will have a paper county seal visible to customers.

The photos shown are pictures of typical submeters tested by Weights and Measures inpectors that are used in mobile home parks. On the left, meters at a park are shown. Below from the left, inspectors test a vapor meter, an electric meter, and a water meter. On the right is a picture of the 2015 paper seal that is put onto each approved meter.

Measures to Conserve Agricultural Land

In Contra Costa County, agricultural land consists primarily of rangeland and prime irrigated farmland. Prime farmland is defined as class I and class II soils by the United States Department of Agriculture and are considered to have the best productivity potential. A small but significant acreage is devoted to wine grapes, nurseries, and diversified farms in urban and suburban areas.

Competition for land by urban developers, has led to a significant decrease in farmed acres in the county. Between 1984 and 2004, almost 20,000 acres of Contra Costa agricultural land, including 9,100 acres of prime farmland, were converted to urban uses.

In order to combat urban sprawl into agricultural land, local government in Contra Costa County has implemented a variety of measures to preserve prime farmland and encourage agricultural enterprise. These include:

Zoning and Land Planning

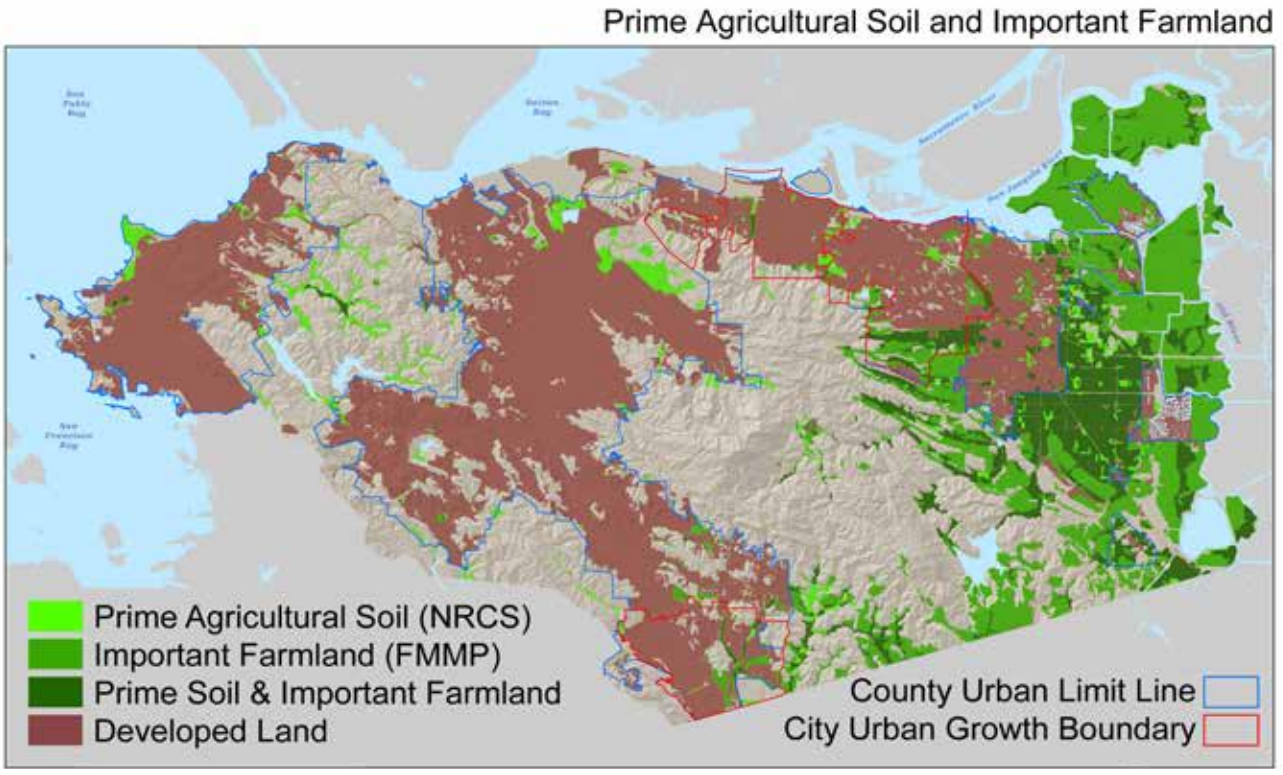
- Implementing an Urban Limit Line backed by voters in 1990. This restricts urban development to 35% of the land in the County and preserves the remaining 65% for agriculture, open space, wetlands, parks and other non-urban uses by directing development to existing urban areas and away from agricultural lands and open space.
- Creating the designation of a County Agricultural Core that is predominantly zoned to maintain economically viable agricultural parcels of a minimum of 40 acres. While some smaller parcels exist, the area of approximately 11,000 acres, which is located east of Brentwood and west of Discovery Bay, contains a concentrated agricultural zone with prime class I and class II soils. Zoning adjustments have been made since the creation of the Agricultural Core to allow wineries and olive oil mills through land use permits.

Easements and Agricultural Land Mitigation

- Facilitating the use of the Williamson Act to encourage agricultural land preservation. This is a California law that offers a tax incentive to property owners in exchange for a ten year agreement that the property will remain in agriculture or open space. At present, Contra Costa County has approximately 130 Agricultural Preserves and 42,000 acres enrolled under these Williamson Act contracts.

In addition, organizations and government entities in the county frequently use conservation easements to permanently protect agricultural land by purchasing the development rights from a landowner that requires the land be used for agriculture in perpetuity. The easements are funded with public or private dollars and held by a qualified Land Trust.

Contra Costa County also has a Right-to-Farm Ordinance that informs residents in or near agricultural areas about an individual's right to continue farming land adjacent to residential areas.



A Brief History of Wine in Contra Costa County

While there isn't an official record of the first grapes grown in Contra Costa County, there is evidence of vineyards in the Martinez area that were planted around 1830 by cattle ranchers with land grants from the Mexican government. These vineyards were small, and most likely produced wine for the landowners and their workers. When control of California passed to the United States in 1847, much of the land changed hands. The new settlers were more interested in farming than ranching and soon began to produce fruit, vegetable, and grain crops to sell.

By 1880, vineyards could be found from Lamorinda in the west to Oakley in the east. In the central Contra Costa town of Martinez, a number of wine producers found success in a region known as "Grape Hill". It was home to wineries such as the Mont Alhambra Vineyard Company, J. E. Colton Winery, Christian Brothers, and John Swett & Sons Winery. Major grape growers near Martinez included John Muir, Sturgis & Eddy, C.G. Merrill, and John Swett. Similarly in Oakley, grapes were among the most profitable crop. G. Continente became a major grape grower with one of the largest vineyards in the county and a packing shed by the railroad tracks in Oakley.

Throughout Contra Costa, access to the railroad proved to be a key catalyst to the success of the wine industry. For example, Martinez was on a main Santa Fe and Southern Pacific railroad line and was a stop on an important shipping route down the Sacramento River. Despite Oakley's notably sandy soil, once a railroad depot and post office had been established, the town soon became a great success. Due to the railroad, it was a natural location for packing sheds that handled grapes, celery, asparagus, potatoes, and other crops grown in the nearby area.

By 1900, vineyards producing both table grapes and wine grapes were planted throughout the county, especially near Martinez, Clayton, and Oakley. State Viticulture Reports listed Contra Costa County as having 300 acres of grapes in 1881, 3,141 acres in 1891, and 6,000 acres in 1897. By 1919, forty percent of the agricultural land in the county was devoted to grape production and there were a total of about fifty wineries.

Antique carved wine casks from a vineyard in Martinez that was started in 1920. The winery is still growing grapes and producing wine today.

Trouble arrived near the end of the 19th century when Grape Phylloxera, a type of aphid that feeds on grape roots, devastated Contra Costa County vineyards. The damage to vineyards in most of the county forced the majority of the growers to remove entire mature vineyards and replace them with resistant grafted vines. A notable exception was in Oakley, where vineyards survived due to its sandy soils.


Winehaven Building at Point Molate
Photo courtesy of Richmond Redevelopment Agency

After the 1906 earthquake left San Francisco in ruins, the California Wine Association moved to Point Molate and built Winehaven, once holder of the prestigious title of "world's largest winery." All of the California Wine Association's shipments to foreign, coastal and New York markets sailed from the Winehaven dock – the shipment capacity was 500,000 gallons a month.

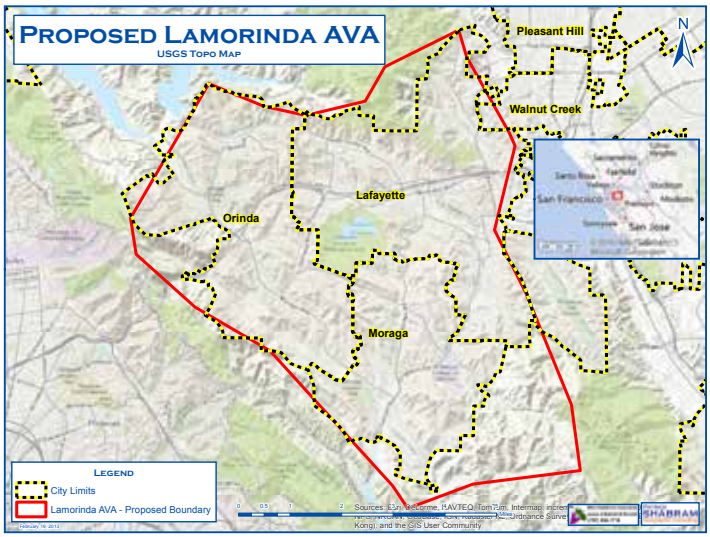
In 1920, the effect of Prohibition on the California wine industry was devastating. Some local grape growers removed their vineyards and others survived by selling grapes to home wine makers in the USA and Canada. Virtually all of Contra Costa County's wineries went out of business. Christian Brothers Winery was a notable exception. Operated by a Catholic lay religious order, it produced both sacramental and medicinal wine.

To put the effect of Prohibition in context, before it occurred, California had over 700 wineries. After Prohibition was repealed in 1933, it would take about fifty years to reach that number of wineries in California again.

Cities replaced farmland at an increased rate in Contra Costa County during the 1950's and 1960's. Between 1940 and 1970, more than half of the farmland was lost to development, with grape acreage declining more than 80% from 1940 levels. During the 1990's, the market for wine grapes increased and growers in east Contra Costa County began to plant more vineyards. Even though over 45% of the remaining farmland was lost to development between 1970 and 2011, grape acreage harvested for commercial production increased from 771 acres in 1990 to around 1,700 acres in 2015.

Recognizing the Terroir of Lamorinda with an Exclusive Label Designation

The suburban hillsides of Lafayette, Moraga and Orinda, or Lamorinda, are the site of a new viticultural land area designation. In 2013, vintners of the Lamorinda Winemakers Association filed a petition to create an American Viticultural Area (AVA) that recognizes the unique climate, soil, and cultural practices that are used to grow grapes in the area. The AVA, which encompasses approximately 29,369 acres and currently contains 46 commercially producing vineyards on 139 acres, enables wine with 85% or more grapes grown inside the area to be labeled with the Lamorinda AVA label. The Alcohol and Tobacco Tax and Trade Bureau solicited public feedback in 2015, and in early 2016, officially established the Lamorinda AVA.



The boundaries of the Lamorinda AVA.

American Viticultural Areas are defined grape-growing regions where the unique qualities of the landscape are recognized for their ability to grow quality grapes for use in wine making. In general, official designations originate from the historical practice of linking the geographical location where wine was produced with localized cultural influences and production practices that gave the wine its unique characteristics. AVAs relate to the concept of terroir, or the idea that wine originating from a specific region will have characteristics stemming from biological influences like the interactions between grape varieties, soil and climate, and cultural practices such as how the grapes are harvested, fermented and stored.

In the application for the AVA, the Lamorinda area was recognized for its unique grape growing characteristics. Due to the hilly terrain and typical development patterns, vineyards tend to be five acres or less in size, suburban, and located on slopes that contain varied microclimates. This allows grape growers to plant both warm and cool season varietals at different elevations on a slope in a relatively small area. The soil has a large clay content due to the dominant clay-rich parent material, which provides a relatively high water holding capacity. However, due to the sand that is also present and the steepness of the terrain, the ground has the necessary drainage to prevent disease. The area is also influenced by the cool marine air and fog that are characteristic of the Bay Area, but because of the high ridgelines located to the north and west, the area is also protected from direct exposure. This results in the warm days and cool nights that are ideal for growing grapes. These distinctive conditions support red grape varieties like Cabernet Sauvignon, Syrah, Petite Sirah, Sangiosvese, and Pinot Noir, which are the most common varieties, although white varieties are also grown.

A key reason given by the Lamorinda Winemakers Association for establishing the new AVA is the desire to market their wine to local enthusiasts. Lamorinda is part of the larger San Francisco Bay, Central Coast and Contra Costa AVAs, which means that Lamorinda vintners can choose which geographic designation best describes their wine. However, as the demand for local food has grown, residents are eager to support their community growers by buying the unique wines that embody the area's terroir. While the Lamorinda AVA is the smallest in the nation, wine makers will now have an easier time marketing their distinctive Contra Costa wines due to the success of establishing the designation. In turn, consumers will benefit from having ample opportunities to recognize and taste them.

Trellised grapes from a vineyard in the Lamorinda AVA.

Photo: produce being sold at a Certified Farmers' Market in Concord

Contra Costa County
2015 Annual Crop Report

Agriculture is an everchanging industry, and food is grown in a variety of ways by farmers and gardeners. Here in Contra Costa, the Department of Agriculture and Weights and Measures actively seeks to promote communication and cooperation between farmers and ranchers of every size and their community to support a viable agricultural industry in the present and future.

Photo: Garlic in foreground and blooming cherries in background in Brentwood

CONTRA COSTA COUNTY
AGRICULTURAL CROP REPORT 2016
& 2018 CALENDAR

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Contra Costa County

Department of Agriculture/Weights & Measures

2366-A Stanwell Circle ◆ Concord, CA 94520 ◆ (925) 646-5250

http://www.co.contra-costa.ca.us/1542/Agriculture-Weights-Measures

email: AgCommissioner@ag.cccounty.us

We are moving by the end of 2017!

Our new address and phone number will be:

2380 Bisso Lane ◆ Concord, CA 94520 ◆ (925) 608-6600

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Deputy Agricultural Commissioners and Sealers

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Pest Detection, Pest Management, and Glassy-Winged Sharpshooter Staff

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Pest Quarantine Detector Canines

Cairo DeNijs, Conan Siegel

Crop Report Photo Credits and our Special Thanks go to:

- Steve Verduzco for the front cover and December photographs. More of his work can be seen at www.facebook.com/ourtownbrentwoodca.
- Utopia Animal Rescue, Texas for providing the April photograph.

Background photo: Garlic harvest in Brentwood

Agricultural Commissioner and Sealer's Letter

Contra Costa County

Karen Ross, Secretary
California Department of Food and Agriculture and
The Honorable Board of Supervisors of Contra Costa County

I am pleased to submit the 2016 Agricultural Crop Report for Contra Costa County in accordance with the provisions of Section 2272 and 2279 of the California Food and Agricultural Code. This report includes information on additional topics, including Certified Farmers' Markets, the Mayor's Healthy Cook-Off Challenge, pest interceptions, and rainfall data.

The total gross value of agricultural crops in 2016 was $128,100,000, which is a decrease of $451,000 or 0.4% from 2015. In general, demand and prices have remained strong for agricultural crops in Contra Costa County.

Crop values vary from year to year due to factors such as production, weather, and market conditions. Some notable changes include an almost 45% increase in fruit and nut crop values due to more cultivated acreage, and a moderate decrease of $8,700,000 in livestock and livestock product values due to lower market prices. Vegetable and seed production conditions remained largely unchanged with a small increase in production values of $1,000,000.

Several crop categories exceeded one million dollars in value. These categories in decreasing order include cattle and calves, tomatoes, sweet corn, grapes, miscellaneous vegetables, field corn, miscellaneous field crops, cherries, rangeland, and peaches.

It should be emphasized that the values stated in this report are gross receipts and do not include the cost of production, transportation, or marketing of the products. The economic benefit of agricultural production is generally thought to be about three times the gross production value.

Of particular note is the format change of the annual report, which incorporates a 2018 calendar, as we are looking toward the next prosperous growing season.

I truly appreciate the agricultural producers and organizations that shared information and supported our efforts in completing this report. Special recognition goes to all of the staff who assisted in compiling this information to make this report possible.

Respectfully Submitted,

Humberto Izquierdo
Agricultural Commissioner
Sealer of Weights and Measures

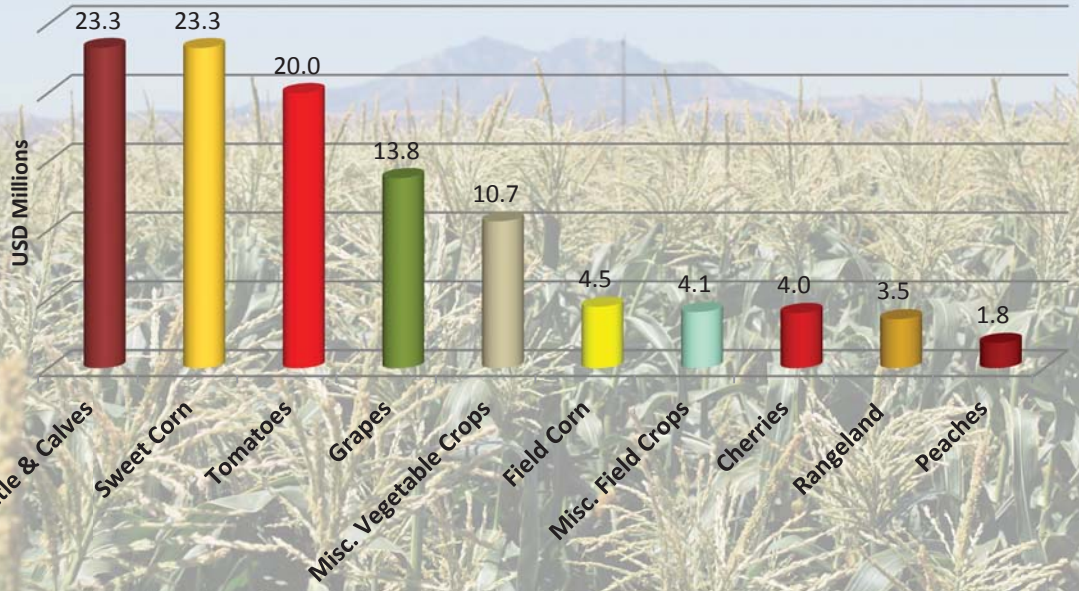
Mission Statement

The Contra Costa County Department of Agriculture, under the direction of the California Department of Food and Agriculture, Department of Pesticide Regulation, and Division of Measurement Standards, is responsible for conducting regulatory and service activities pertaining to the agricultural industry and the consumers of our County. The primary goal of this office is to promote and protect agriculture while safeguarding the public and the environment. Our work as County Weights and Measures officials in the community ensures a safe place to live and a fair marketplace for trade.





Leading Crops





October 2017

Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

10/9: Columbus Day
10/31: Halloween

November 2017

Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

11/5: End Daylight Saving Time
11/11:Veterans Day
11/23: Thanksgiving Day

December 2017

Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

12/6 + 12/9: Grower CE Classes
12/25: Christmas Day
12/31: New Year's Eve

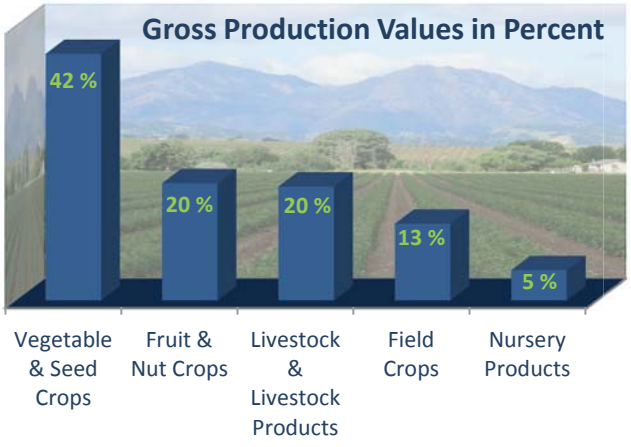
SUN	MON	TUE	WED	THU	FRI	SAT
31	1 New Year's Day	2	3	4	5	6
7	8	9	10	11	12	13
14	15 Martin Luther King Jr. Day	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	January 2018	

PRODUCTION SUMMARY

Overall total production values declined marginally in 2016. Values for fruit and nut crops increased sharply in both acreage and value, whereas livestock and livestock products experienced a strong downward trend.

Vegetable and seed crops are leading agricultural production by a wide margin, followed by fruit and nut crops in second, with livestock and livestock products in close pursuit.

Nursery production acreage has diminished by half, but gross value has remained steady.



	Gross Value		Change in Gross Value	Total Cultivated Acreage		Change in Acreage	Ranking	
Category	2016	2015	%	2016	2015	%	2016	2015
Vegetable & Seed Crops	$53,908,000	$52,883,000	+2	8,977	9,051	-1	1	1
Fruit & Nut Crops	$25,673,000	$17,724,000	+45	4,183	3,245	+29	2	4
Livestock & Livestock Products	$24,981,000	$33,673,000	-26	n/a	n/a	n/a	3	2
Field Crops	$16,845,000	$17,821,000	-5	197,405	192,958	+2	4	3
Nursery Products	$6,649,000	$6,405,000	+4	21	43	-51	5	5
Total	$128,056,000	128,507,000	-0.4	210,586	205,297	-2.5		

SUN	MON	TUE	WED	THU	FRI	SAT
February 2018		30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14 Valentine's Day	15	16	17
18	19 Presidents' Day	20	21	22	23	24
25	26	27	28	1	2	3

VEGETABLE AND SEED CROPS

Sweet corn remained the leading vegetable crop due to continuing demand for this Contra Costa County high quality product. Total value grew by 15% due to an increase in harvested acreage.

Total tomato value decreased by 12% due to less harvested acreage. Also noticeable was the lower total value for processing tomatoes, which was down 19%. This decrease was due to less harvested acreage and lower market prices.

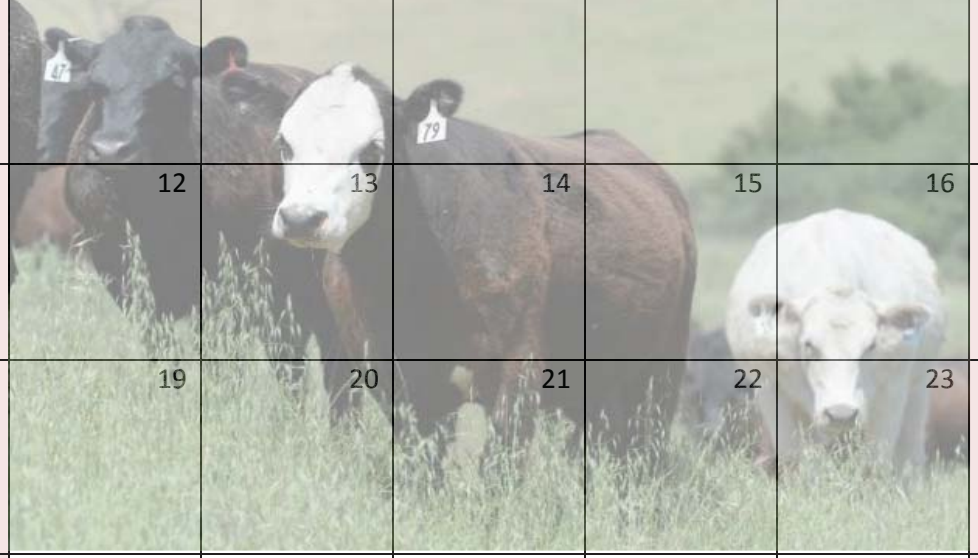
Crop	Year	Harvested Acreage	Production Per Acre	Tons Harvested	Value Per Ton	Total Value[1]
Sweet Corn	2016	4,026	11.00 tons	44,300	$525	$23,258,000
	2015	3,629	10.63 tons	38,600	$525	$20,252,000
Tomatoes[2]	2016	3,520	48.01 tons	169,000	various	$19,987,000
	2015	4,172	48.89 tons	204,000		$22,767,000
Misc.[3]	2016	1,431	various	various	various	$10,663,000
	2015	1,250				$9,864,000
Total	**2016**	**8,977**				**$53,908,000**
	2015	**9,051**				**$52,883,000**

[1] Values represent rounded estimates based on data collected from producers, experts and literature.

[2] Includes fresh and processing tomatoes.

[3] Includes asparagus, artichokes, beans, beets, broccoli, cabbage, cardoon, carrots, cauliflower, cucumbers, eggplant, garlic, ginseng, kohlrabi, lettuce, okra, onions, greens, herbs, melons, mushrooms, peas, peppers, potatoes, pumpkins, radishes, squash, and wheat grass.

SUN	MON	TUE	WED	THU	FRI	SAT
March 2018		27	28	1	2	3
4	5	6	7	8	9	10
11 Begin Daylight Saving Time	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30 Good Friday	31



LIVESTOCK & LIVESTOCK PRODUCTS

The gross value for cattle products decreased significantly in 2016 due to overall lower market prices. The relatively large price decline is presumably due to a combination of factors. One of the reasons was herd reductions during 2015/2016, which in turn oversupplied the market. Other reasons influencing prices were uncertainty factors with respect to trade agreements and federal programs that may no longer be available to farmers in the mid- to long-term.

Commodity	Year	Number of Head	Total Live Weight	Value Per CWT	Total Value[1]
Cattle & Calves	2016 2015	19,257 20,506	169,134 lbs 182,060 lbs	$138 $173	$23,267,000 $31,519,000
Apiary Products[2]	2016 2015	N/A	N/A	N/A	$414,000 $454,000
Misc. Livestock[3]	2016 2015	N/A	N/A	N/A	$1,300,000 $1,700,000
Total	**2016** **2015**	N/A	N/A	N/A	**$24,981,000** **$33,673,000**

[1] Values represent rounded estimates based on data collected from producers, experts and literature.

[2] Includes honey, wax and pollination.

[3] Includes chickens, ducks, emus, goats, hogs, llamas, ostriches, pigs, rabbits, sheep, turkeys, milk, wool and eggs.

Conan, Agriculture Detector Dog

SUN	MON	TUE	WED	THU	FRI	SAT
1 Easter Sunday	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	April 2018	

Cairo, Agriculture Detector Dog

PEST EXCLUSION & CANINE TEAMS

The goal of our pest exclusion program is to keep exotic pests out of our State and County. We meet this objective by regularly inspecting shipments at nurseries and service terminals, operated by the United States Postal Service, FedEx, UPS, and others.

Agricultural detector dogs play a pivotal role in this mission as they are trained to find agricultural commodities shipped in unmarked packages assisting our inspectors with their invaluable 'sniffing' skills.

In 2016, our two canine teams worked in several counties beyond Contra Costa County. Non-native pest interceptions occurred in Santa Clara, San Joaquin, and Yolo Counties.

Pest Exclusion Statistics	
Post Office / UPS / FedEx – Package Inspections	7,011
Truck Shipment Inspections from within California	2,142
Truck Shipment Inspections from other States	167
Household Goods Inspections for Gypsy Moth	83
Non-native Pest Interceptions	5
Canine Detection Non-native Pest Interceptions [1]	73
Quarantine Pest, Certification and Markings Rejections	94

[1] Interceptions in San Joaquin, Santa Clara, and Yolo Counties

PEST MANAGEMENT AND ERADICATION

In 2016, Department of Agriculture staff applied integrated pest management (IPM) methods, including surveying, monitoring, and chemical applications to control or eradicate noxious weed pests on public and private land. Major weed species treated were artichoke thistle and purple star thistle.


NEW HOLLAND

SUN	MON	TUE	WED	THU	FRI	SAT
May 2018		1	2	3	4	5
6	7	8	9	10	11	12
13 Mother's Day	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28 Memorial Day	29	30	31		

FIELD CROPS

In 2016, the total value of all field crops decreased in spite of slightly more harvested acreage. The lower prices were especially evident for alfalfa, cereal hay, and rangeland. The value for wheat was slightly higher than during the prior year.

The harvested acreage for miscellaneous field crops more than doubled in 2016 with a 71% increase in total value. Irrigated pasture prices remained steady.

Crop	Year	Harvested Acreage	Production Per Acre	Tons Harvested	Unit	Value Per Unit	Total Value [1]
Alfalfa Hay	2016	1,909	4.16	15,100	Ton	$155.70	$1,236,000
	2015	2,947	5.13	7,940		$218.42	$3,298,000
Cereal Hay	2016	2,917	4.54	13,200	Ton	$55.38	$823,000
	2015	2,420	2.64	6,390		$128.80	$731,000
Field Corn	2016	7,408	3.92	29,000	Ton	$153.55	$4,453,000
	2015	6,176	3.87	23,900		$154.18	$3,685,000
Irrigated Pasture	2016	5,450	n/a	n/a	Acre	$300.00	$1,635,000
	2015	5,450				$300.00	$1,635,000
Rangeland	2016	169,000	n/a	n/a	Acre	$21.00	$3,549,000
	2015	169,000				$29.00	$4,918,000
Wheat	2016	3,063	2.06	6,310	Ton	$183.68	$1,159,000
	2015	3,921	1.76	6,550		$164.54	$1,078,000
Misc.[2]	2016	7,658	various	various	var.	various	$4,082,000
	2015	3,244					$2,384,000
Total	**2016**	**197,405**					**$16,845,000**
	2015	**192,958**					**$17,821,000**

[1] Values represent rounded estimates based on data collected from producers, experts, and literature.
[2] Includes barley, forage hay, hay (wild), rye, safflower, silage, straw, Sudan grass, and sorghum.

SUN	MON	TUE	WED	THU	FRI	SAT
June 2018		29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17 Father's Day	18	19	20	21	22	23
24	25	26	27	28	29	30

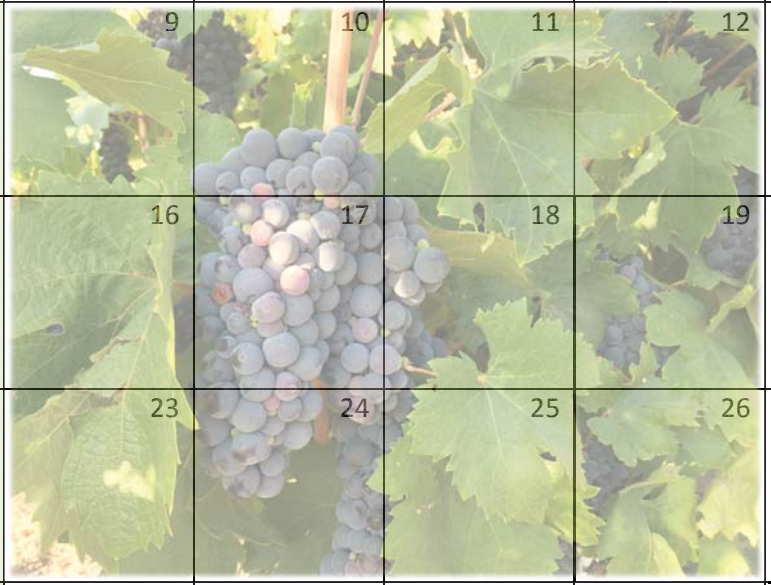
INTEGRATED PEST MANAGEMENT (IPM) ACHIEVEMENT AWARD

In 1987, increased efforts to prevent the establishment of cherry buckskin disease began in Contra Costa County. The disease can destroy entire cherry orchards if left unchecked. Transmitted by leafhoppers, the disease is difficult to detect because symptoms aren't obvious until harvest, which is the busiest time for growers.

Combined collaboration of Department of Agriculture staff, UC Farm Advisor / Master Gardeners, and growers to scout for disease symptoms, followed by immediate action to remove diseased trees has resulted in disease-free cherry trees during harvest in 2016. Through proactive outreach efforts the program has eliminated the need for continuing preventative sprays.

In 2016, the Department of Pesticide Regulation (DPR) honored the success of this program with an IPM Achievement Award to prevent the establishment of Cherry Buckskin disease. In 2013, Contra Costa County Department of Agriculture received an IPM award for adopting a comprehensive IPM plan for controlling exotic insects and suppressing noxious weeds and vertebrate pests, making this the second award received from DPR since the program's inception.

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4 Independence Day	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2		



July 2018

FRUIT AND NUT CROPS

Harvested acreage and tonnage of fruit and nut crops increased significantly in 2016. The value of grapes increased substantially, resulting in a nearly 47% higher total value. The cherry crop was unusually good this year with an almost 50% higher yield per harvested acre totaling a 43% increase in total value compared to the prior year.

Crop	Year	Harvested Acreage	Production Per Acre	Harvested Tons	Value Per Ton	Total Value [1]
Apricots	2016	101	5.15 tons	520	$2,063	$1,073,000
	2015	88	4.26 tons	375	$3,635	$1,363,000
Cherries	2016	580	1.48 tons	858	$4,660	$3,998,000
	2015	479	1.03 tons	493	$4,634	$2,285,000
Grapes	2016	2,499	5.05 tons	12,600	$1,096	$13,810,000
	2015	1,900	4.70 tons	8,930	$824	$7,368,000
Nectarines	2016	31	5.73 tons	176	$2,712	$483,000
	2015	23	3.37 tons	76	$6,581	$500,000
Olives	2016	158	2.13 tons	337	$876	$295,000
	2015	131	2.22 tons	291	$685	$199,000
Peaches	2016	125	5.88 tons	735	$2,491	$1,831,000
	2015	110	3.39 tons	373	$4,683	$1,747,000
Plums & Pluots	2016	38	5.46 tons	207	$3,234	$669,000
	2015	32	4.21 tons	133	$5,253	$699,000
Walnuts	2016	450	2.28 tons	1,030	$1,776	$1,829,000
	2015	374	2.08 tons	777	$3,145	$2,444,000
Misc. [2]	2016	201	various	various	various	$1,685,000
	2015	109				$1,119,000
Total	**2016**	**4,183**				**$25,673,000**
	2015	**3,245**				**$17,724,000**

[1] Values represent rounded estimates based on data collected from producers, experts, and literature.
[2] Includes almonds, apples, apriums, Asian pears, berries, citrus, figs, melons, pears, pecans, persimmons, pistachios, prunes, pomegranates, quinces and strawberries.

SUN	MON	TUE	WED	THU	FRI	SAT
August 2018		31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1

8th Annual Contra Costa County Mayor's Healthy Cook-Off Challenge

On August 11, 2016 six Contra Costa County mayors gathered at Todos Santos Plaza in Concord to help promote healthy cooking alternatives, using all fresh ingredients. The annual event allowed the participating mayors to cook Iron Chef-style, along with a chef from a local restaurant or catering business and a sous chef from the Mt. Diablo High School nutrition and hospitality program. The event was hosted by Wellness City Challenge, the City of Concord, and Pacific Coast Farmers' Market Association. The Department of Agriculture was instrumental in procuring a bounty of fresh ingredients from the following local farms, thereby promoting the diverse agricultural production of Contra Costa County: Dal Porto Beef, Dwelley Farms, Eden Plains Organic Farm, McCauley Olive Groves, and Shelly's Eggs in Brentwood; First Generation Farmers and Smith Family Farms in Knightsen; and Sunnyside Organic Farm in Richmond. The winner of the event was Pleasant Hill, with Danville taking second, and Antioch placing third.

Certified Farmers' Markets (CFM)

The Department of Agriculture inspects and certifies growers who plan to sell at a Certified Farmers' Market. Agricultural Biologists inspect both growing grounds and market booths to confirm that producers grow what they sell. In 2016, Contra Costa County Agricultural Department certified 23 farmers' markets, issued 51 Certified Producer's Certificates, and conducted 100 market inspections.

Currently operating Farmers' Markets in Contra Costa County:

CFM Name	Day
Alamo	Sun
Antioch Kaiser	Thu
Brentwood	Sat
Clayton	Sat
Concord	Tue + Thu
Danville	Sat
Diablo Valley Shadelands	Sat
El Cerrito	Tue + Sat
Kensington	Sun
Martinez	Sun
Moraga	Sun
Orinda	Sat
Pinole	Sat
Pittsburg	Sat
Pleasant Hill	Sat
Richmond	Fri
Rossmoor	Fri
San Ramon Bishop Ranch 2	Sat
San Ramon Bishop Ranch 3	Thu
Walnut Creek Kaiser	Tue
Walnut Creek	Sun

SUN	MON	TUE	WED	THU	FRI	SAT
September 2018		28	29	30	31	1
2	3 Labor Day	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

NURSERY PRODUCTION

In 2016, overall nursery production values significantly increased from the prior year.

The value for flowers and foliage decreased substantially due to closures of businesses that produced a variety of house plants and orchids.

Commodity	Year	Greenhouse Production	Field Production	Total Value[1]
Flowers & Foliage	2016 2015	26,000 sq.ft. 72,000 sq.ft.	n/a n/a	$20,000 $44,000
Nursery Products	2016 2015	39,725 sq.ft. 39,725 sq.ft.	21.0 acres 40.0 acres	$6,629,000 $6,361,000
Total	**2016** **2015**			**$6,649,000** **$6,406,000**

[1] Values represent rounded estimates based on data collected from producers, experts and literature.

SUN	MON	TUE	WED	THU	FRI	SAT
30	1	2	3	4	5	6
7	8 **Columbus Day**	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31 **Halloween**	1		

October 2018

Glassy-Winged Sharpshooter (GWSS) and Pierce's Disease

Since its introduction into California in the early 1990s, the Glassy-Winged Sharpshooter (GWSS) has become an agricultural pest that is threatening the multi-billion dollar viticulture industry of California. It is the main source of the spread of Pierce's disease in grapevines. GWSS infects plants with the bacterium *Xylella fastidiosa* while feeding on the sap of the xylem of a vine. Pierce's disease control is based entirely on preventing infection. Therefore, keeping GWSS populations in check is the primary goal. Research to develop disease resistant vines is currently underway.

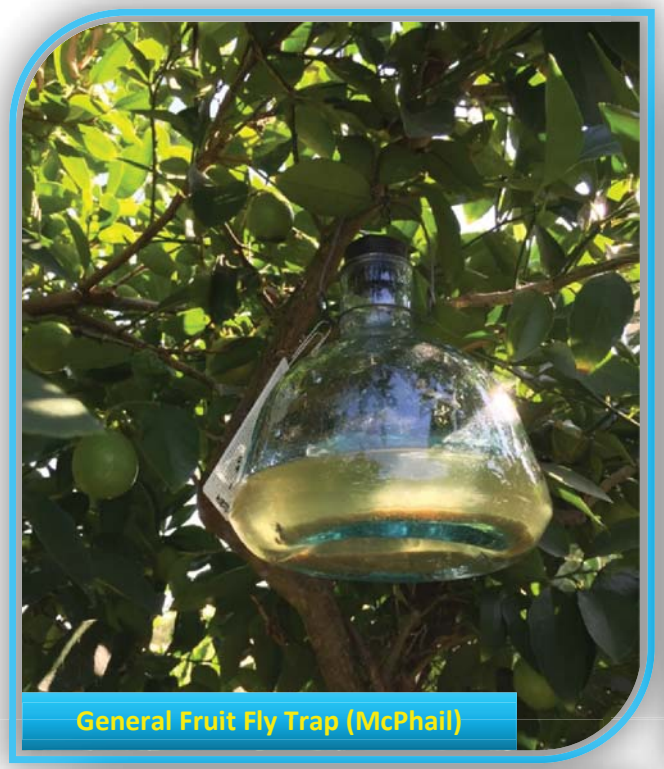
The Summer of the Glassy-Winged Sharpshooter

Homalodisca vitripennis

Agricultural inspectors are instrumental in the detection of adult Glassy-winged Sharpshooters (GWSS) and egg masses on nursery stock and plant shipments that originate from infested areas, which are located mainly in southern California.

During the summer of 2016, our inspectors found adult GWSS in four different nurseries between June 15 and September 22, in San Ramon, Pleasant Hill, Lafayette, and Brentwood.

Increased monitoring and highly focused treatments at the find sites ensured complete eradication of GWSS at these nurseries. These measures have created a system that allows for environmentally sound management of this insect pest.



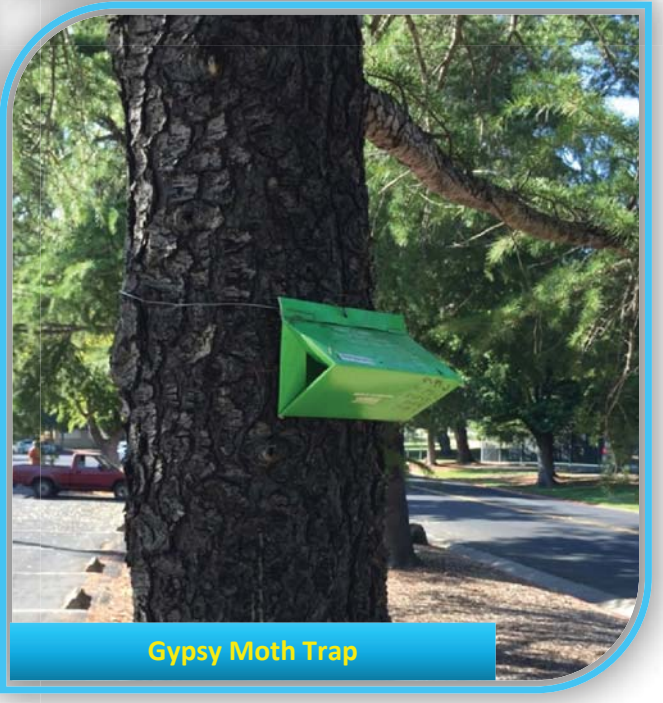
General Fruit Fly Trap (McPhail)

Mediterranean Fruit Fly Trap

Japanese Beetle Trap

Glassy-Winged Sharpshooter Trap

Oriental Fruit Fly Trap



Gypsy Moth Trap

SUN	MON	TUE	WED	THU	FRI	SAT
November 2018		30	31	1	2 Oriental Fruit Fly	3
4 End Daylight Saving Time	5	6	7	8	9	10
11 Veterans Day	12	13 Mexican Fruit Fly	14	15	16	17
18	19	20	21	22 Thanksgiving Day	23	24
25 Mediterranean Fruit Fly	26	27	28	29	30	1

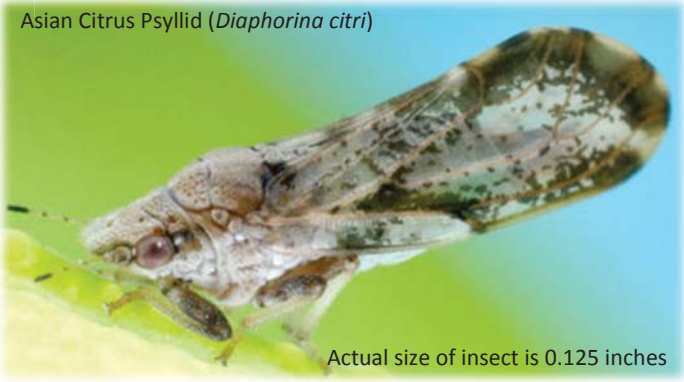
PEST DETECTION

The Department of Agriculture works to ensure that new and invasive pests do not find a way to establish themselves in our County. If left unchecked, unwanted pests can trigger quarantine measures costing our agricultural industry millions of dollars in lost revenue while necessitating large increases in pesticide use to control the pest. Contra Costa County pest detection staff monitors various insect traps throughout the County, using various lures and visual attractants to detect quarantine insects before they can spread.

In December 2016, the Asian Citrus Psyllid (ACP) - pictured below - was detected in two residential citrus trees within our County. ACP acts as a vector spreading a devastating disease of citrus trees called citrus greening or "Huanglongbing" (HLB). Diseased trees will eventually die off within a few years.

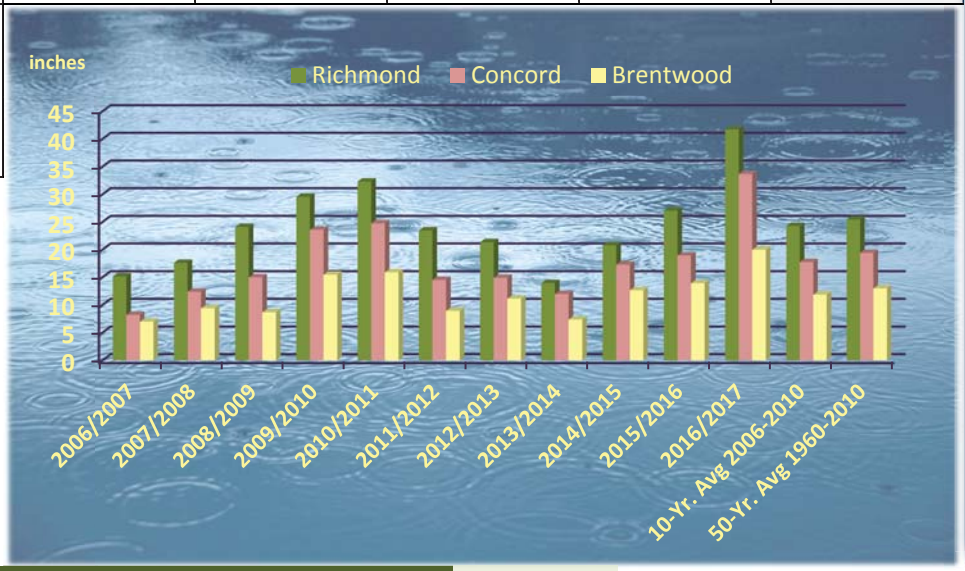
If an invasive pest is found in one of our many hundreds of monitored insect traps, immediate steps are taken to eradicate the pest by disrupting its lifecycle so that the locally detected insect population doesn't become a widespread infestation that is difficult to control.

Insect Pest	Total No. of Traps	Total Trap Servicings	Insect Pest	Total No. of Traps	Total Trap Servicings
Asian Citrus Psyllid	840	2,520	Japanese Beetle	672	4,032
General Fruit Fly	887	26,610	Mediterranean Fruit Fly	891	12,474
Glassy-Winged Sharpshooter	1,023	16,431	Melon Fly	891	6,683
Gypsy Moth	722	4,332	Oriental Fruit Fly	891	12,474




Steve Verduzco

SUN	MON	TUE	WED	THU	FRI	SAT
December 2018		27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25 Christmas Day	26	27	28	29
30	31					



AND THEN CAME THE RAIN

After four years of severely dry conditions, a wetter 2016 winter and spring helped California partially recover surface water storage and increased recharge to some aquifers. The USDA/Forest Service reported that approximately 102 million trees had died during California's drought years with 62 million in 2016 alone. Fortunately, with 2.61 inches of rain in October and another 3.14 inches by the end of December, the beginning of the end of a long dry period had arrived and 30% of California had emerged from the drought.

Statewide crop revenue losses due to drought conditions in 2016 were estimated $247 million. Drought-related idle land totaled almost 79,000 acres in California.

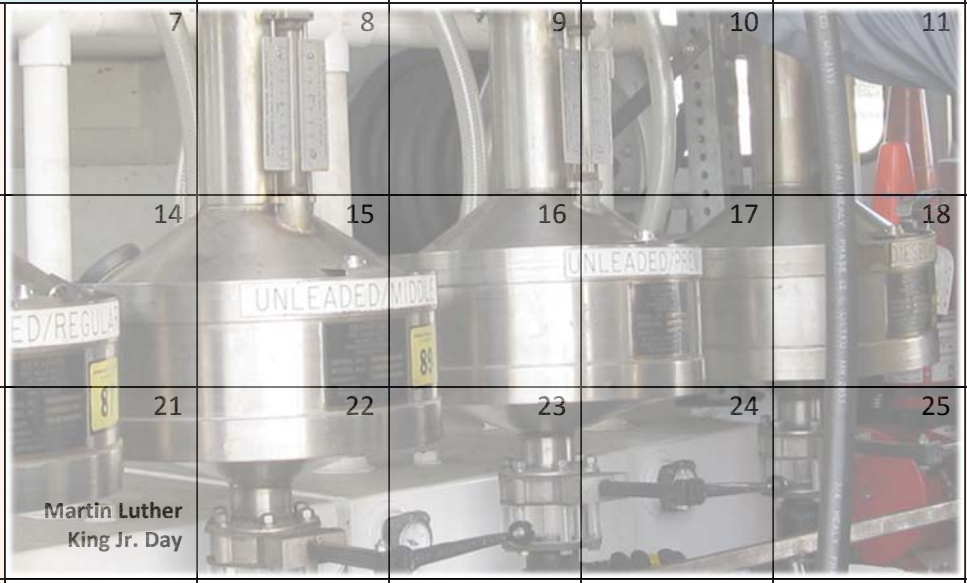
Rainfall Accumulations and Averages (in)

Season	Richmond	Concord	Brentwood
2006/2007	15.12	8.20	6.96
2007/2008	17.61	12.38	9.39
2008/2009	24.08	14.98	8.66
2009/2010	29.55	23.58	15.48
2010/2011	32.30	24.73	15.89
2011/2012	23.44	14.52	8.93
2012/2013	21.33	14.91	11.12
2013/2014	13.95	11.97	7.36
2014/2015	20.78	17.27	12.64
2015/2016	27.05	18.92	13.92
2016/2017	41.70	33.64	19.97
10-Yr. Avg. 2006-2016	24.26	17.74	11.85
50-Yr. Avg. 1960-2010	25.43	19.40	12.99

Source: California Department of Water Resources


Sweet Corn
5¢
SMITH'S SEED HOUSE
"SUNRISE"
Collection of
VEGETABLE
SEEDS
PUT UP BY
W.D. BURT CO. DALTON, N.Y.
Hats off to
AMERICAN
FARMERS
PEPPER
HUNGARIAN
SWEET
$1.50 LB
SPANISH
PEPPERS
$1.50 LB

SUN	MON	TUE	WED	THU	FRI	SAT
January 2019		1 New Year's Day	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21 Martin Luther King Jr. Day	22	23	24	25	26
27	28	29	30	31	1	2



The Contra Costa County Division of Weights and Measures promotes a fair and equitable marketplace by performing inspections of retail packages and commercial weighing and measuring devices. These efforts certify that the sales of harvested crop, livestock, animal feed, vehicle fuel and other commodities are based on a precise weight or measure.

Weights and Measures inspectors test a large variety of devices for accuracy. Scales that are tested for accuracy range from jeweler's scales used for tiny gemstones to scales that can weigh a fully loaded rail car. Before scales can be put into commercial use, they are inspected to ensure they are accurate and approved for use. After inspection, any adjustable parts that might affect the accuracy of the device are sealed by the inspector. After successfully passing inspection, a paper county seal that is visible to the consumer is applied to the weighing device. Regularly scheduled inspections are performed to ascertain continued accuracy.

Weights & Measures

Measuring Devices	Devices Inspected[1]
Vehicle Fuel Station Meters	6,210
Electric Submeters	227
Water Meters & Submeters	193
Vapor/LPG Meters & Submeters	181
Taxi Meters	546
Other Measuring Devices	235
Weighing Devices	
Light Capacity Retail Scales	2,646
Heavy Capacity Retail Scales	306
Vehicle/Railway Scales	106
Prescription/Jewelers Scales	40
Livestock/Animal Scales	26
Other Weighing Devices	1
Advertisement & Transaction Verification	**Inspections Conducted**
Petroleum Gas Stations	336
Retail Price Verification	406
Quality Assurance	**Audited**
Weighmaster Locations	31
Consumer Complaint Investigations	72

[1] Includes reinspections

Contra Costa County Crop Report 2016

Contra Costa County
Department of Agriculture/Weights & Measures

CONTRA COSTA COUNTY AGRICULTURAL CROP REPORT & 2019 CALENDAR

2017

Table of Contents

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Pest Quarantine Detector Canine
Conan Siegel

Contra Costa County
Department of Agriculture/Weights & Measures
2380 Bisso Lane, Concord, CA 94520 Tel. (925) 608-6600
http://www.co.contra-costa.ca.us/1542/Agriculture-Weights-Measures
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Agricultural Commissioner and Sealer's Letter

Contra Costa County

Karen Ross, Secretary
California Department of Food and Agriculture and
The Honorable Board of Supervisors of Contra Costa County

I am pleased to submit the 2017 Agricultural Crop Report for Contra Costa County in accordance with the provisions of Section 2272 and 2279 of the California Food and Agricultural Code.

The total gross value of agricultural crops in 2017 was $120,441,000 which is a decrease of $7,615,000 or 6% from 2016. In general, demand and prices have remained strong for agricultural crops in Contra Costa County.

Crop values vary from year to year due to factors such as production, weather, and market conditions. Some notable changes include an 31% increase in nursery product value and a significant decrease of 43% of field crop values. Livestock and livestock product values remained largely unchanged with a small increase in production values of almost $1,000,000. Approximately 2.5% or 4,861 acres of the total cultivated acreage was farmed organically on 15 farms.

Several crop categories exceeded one million dollars in value. These categories in decreasing order include cattle and calves, tomatoes, sweet corn, grapes, miscellaneous vegetables, cherries, rangeland, walnuts, irrigated pasture, field corn, peaches and alfalfa hay.

It should be emphasized that the values stated in this report are gross receipts and do not include the cost of production, transportation, or marketing of the products. The economic benefit of agricultural production is generally thought to be about three times the gross production value.

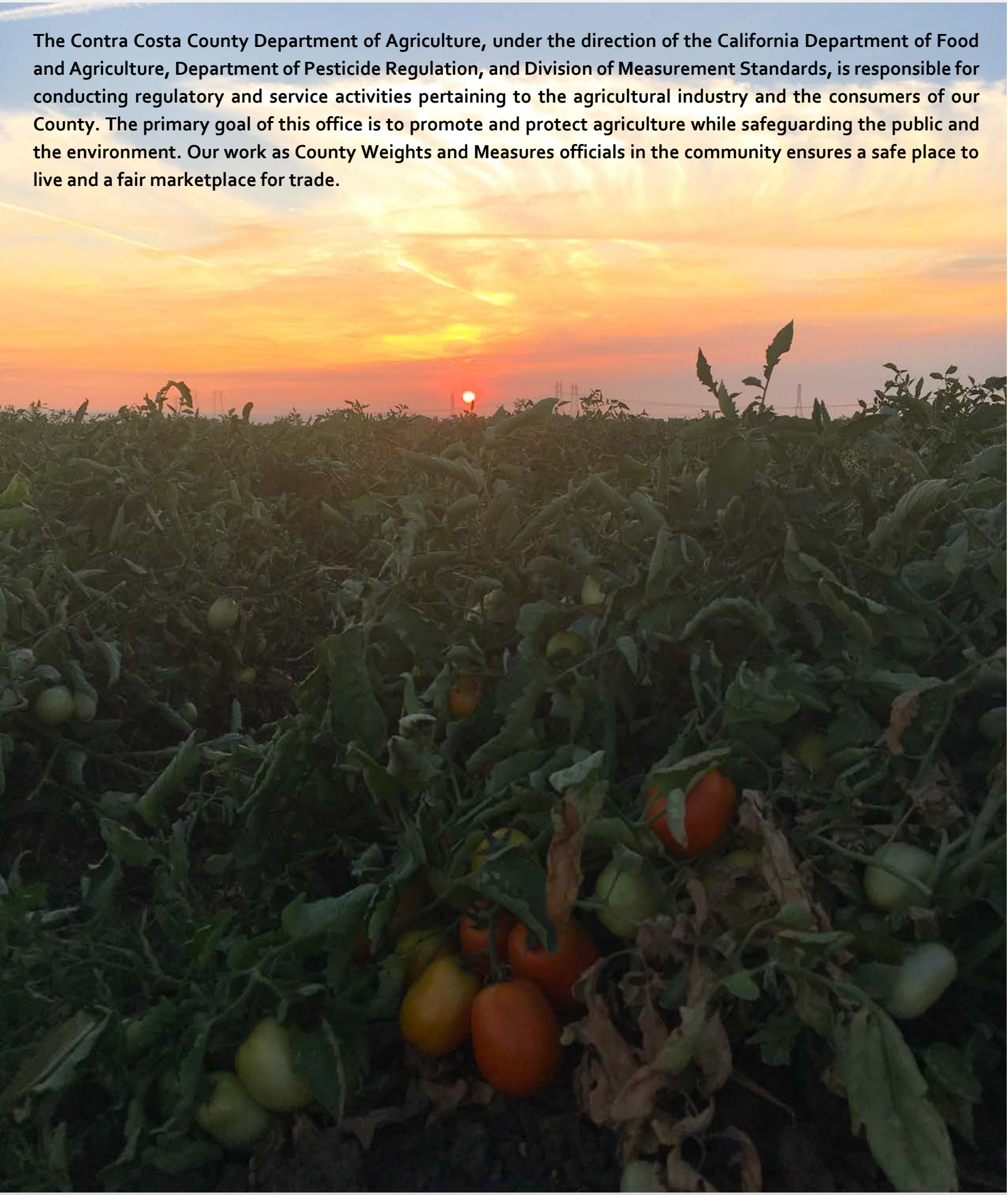
I truly appreciate the agricultural producers and organizations that shared information and supported our efforts in completing this report. Special recognition goes to all of the staff who assisted in compiling this information to make this report possible.

Respectfully Submitted,

Humberto Izquierdo
Agricultural Commissioner
Sealer of Weights and Measures

Mission Statement

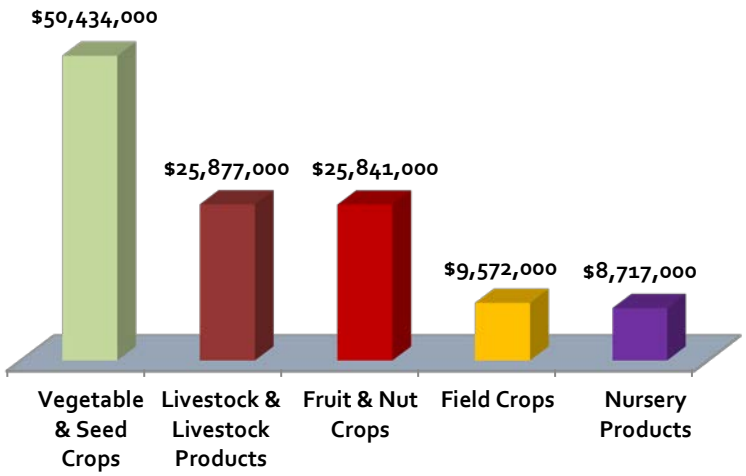
The Contra Costa County Department of Agriculture, under the direction of the California Department of Food and Agriculture, Department of Pesticide Regulation, and Division of Measurement Standards, is responsible for conducting regulatory and service activities pertaining to the agricultural industry and the consumers of our County. The primary goal of this office is to promote and protect agriculture while safeguarding the public and the environment. Our work as County Weights and Measures officials in the community ensures a safe place to live and a fair marketplace for trade.



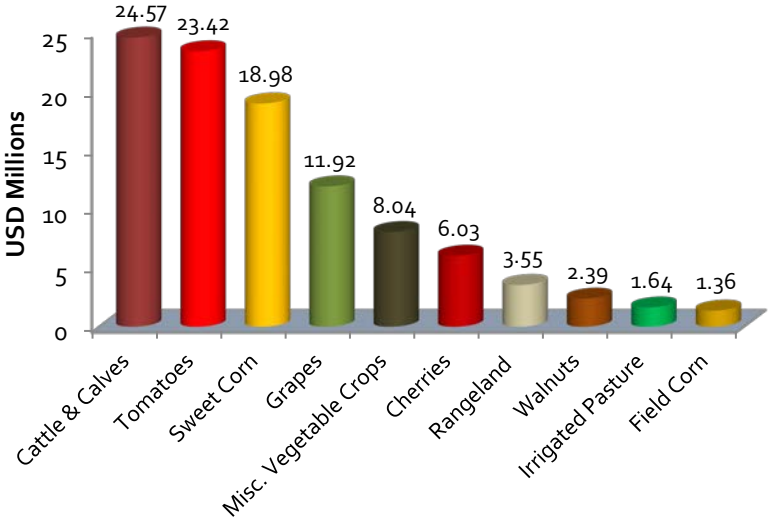
January 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 New Year's Day	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21 Martin Luther King Jr. Day	22	23	24	25	26
27	28	29	30	31		

Gross Production Values by Category



Leading Crops



February 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

Production Summary

	Gross Value		Change in Gross Value	Total Cultivated Acreage		Change in Acreage	Ranking	
Category	2017	2016	%	2017	2016	%	2017	2016
Vegetable & Seed Crops	$50,434,000	$53,908,000	-6	9,161	8,977	2	1	1
Livestock & Livestock Products	$25,877,000	$24,981,000	4	n/a	n/a	n/a	2	3
Fruit & Nut Crops	$25,841,000	$25,673,000	1	4,234	4,183	1	3	2
Field Crops	$9,572,000	$16,845,000	-43	185,993	197,405	-6	4	4
Nursery Products	$8,717,000	$6,649,000	31	23	21	10	5	5
Total	$120,441,000	128,056,000	-6	199,411	210,586			

March 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Vegetable & Seed Crops

Crop	Year	Harvested Acreage	Production Per Acre	Tons Harvested	Value Per Ton	Total Value[1]
Tomatoes[2]	2017 2016	4,512 3,520	46.39 tons 48.01 tons	209,300 169,000	various	$23,415,000 $19,987,000
Sweet Corn	2017 2016	3,500 4,026	10.70 tons 11.00 tons	37,500 44,300	$506 $525	$18,975,000 $23,258,000
Misc.[3]	2017 2016	1,149 1,431	various	various	various	$8,044,000 $10,663,000
Total	2017 2016	9,161 8,977				$50,434,000 $53,908,000

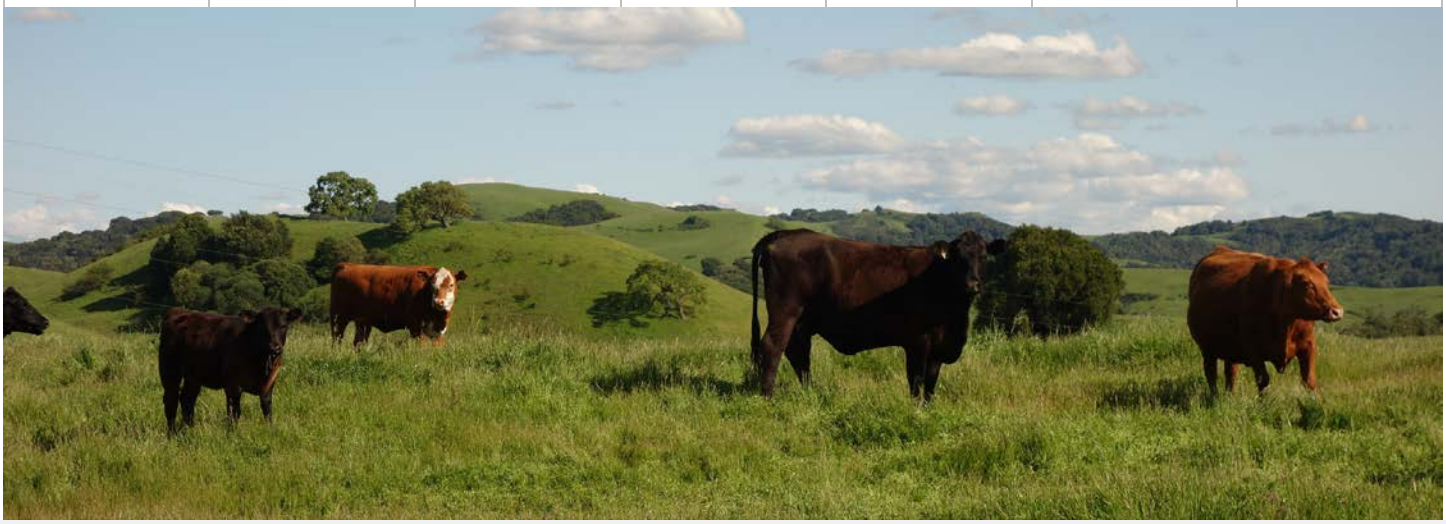
[1] Values represent rounded estimates based on data collected from producers, experts, and literature.

[2] Includes fresh and processing tomatoes.

[3] Includes asparagus, artichokes, beans, beets, broccoli, cabbage, cardoon, carrots, cauliflower, cucumbers, eggplant, garlic, ginseng, kohlrabi, lettuce, okra, onions, greens, herbs, melons, mushrooms, peas, peppers, potatoes, pumpkins, radishes, squash, and wheat grass.

April 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				



Livestock & Livestock Products

Commodity	Year	Number of Head	Total Live Weight	Value Per CWT	Total Value[1]
Cattle & Calves	2017 2016	22,289 19,257	185,053 lbs. 169,134 lbs	$133 $138	$24,572,000 $23,267,000
Apiary Products[2]	2017 2016	n/a	n/a	n/a	$424,000 $414,000
Misc. Livestock[3]	2017 2016	n/a	n/a	n/a	$881,000 $1,300,000
Total	2017 2016				$25,877,000 $24,981,000

[1] Values represent rounded estimates based on data collected from producers, experts and literature.

[2] Includes honey, wax and pollination.

[3] Includes chickens, ducks, emus, goats, hogs, llamas, ostriches, pigs, rabbits, sheep, turkeys, milk, wool and eggs.

May 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27 Memorial Day	28	29	30	31	

Asparagus in Contra Costa County

Asparagus has a long history in Contra Costa County. It was first planted in the 1850's in the San Joaquin Delta region of California, where it flourished in the peat soils. This relatively salt tolerant crop grows well when there is a high water table and soil rich in organic matter. The earliest county crop report of 1939 stated an asparagus cultivation area of 7,100 acres.

Harvesting and packing asparagus, which produces spears between February and May, are very labor intensive. Asparagus is capable of growing three to six inches on a warm day, and produces market-ready spears in a 24-hour period. During the prime growth season, workers must hand-harvest the asparagus every day for market.

The decline of the asparagus industry in California is closely tied to the high harvest and post-harvest labor requirements. About 75% of the cost of asparagus production is due to labor costs[1]. Rising wage requirements, combined with an overall shortage of farm workers, have made it difficult to hire workers able to harvest and pack the asparagus. At the same time, changing market forces have led to an influx of cheap imported asparagus. In the past, the US applied a 25% tariff on imported asparagus between February and June, which protected the California asparagus industry from cheaper asparagus grown in countries with lower labor costs. The loss of this protection, combined with rising labor costs, have resulted in an increase in imported asparagus from 10.8% of US consumption in 1980 to 91.2% in 2015[1].

Today, there is one asparagus grower left in Contra Costa County who sells solely at the Certified Farmers' Markets. While the total acreage in asparagus production has dwindled to less than fifty acres, those lucky enough to find the asparagus at their local Farmers' Market can still taste the fresh asparagus once common to the Delta region.

[1] Satran, J. (2015). Most of your asparagus comes from abroad these days. Here's why. *Huffington Post.* Retrieved from https://www.huffingtonpost.com/2015/04/10/asparagus-farms-california_n_7029836.html

[1] Burfield, T. (2017). The continuing decline of U.S. asparagus. *The Packer.* Retrieved from https://www.thepacker.com/article/continuing-decline-us-asparagus

June 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

U-Pick Farms

BRENTWOOD HARVEST TIME

http://harvest4you.com

5 Star Cherries – Enos Family	Cherries
Annie's Happy Farm	Apricots, Cherries, Peaches, etc.
Bacchini's Fruit Tree	Apricots, Cherries, Peaches, etc.
Berry Best Farm	Blackberries, Strawberries
Bloomfield Cherries	Cherries
Canciamilla Ranch	Nectarines, Peaches, Plums
Chan's Fruit Stand	Blackberries, Strawberries
Chavez U-Pick Cherries	Cherries
Cherry Time	Cherries
DC's Extraordinary Cherries	Cherries
De Jesus Ranch	Cherries
Farmer John's Cherry Farm	Cherries
Freitas Ranch Cherries	Cherries
G & S Farms	Cherries
Gursky Ranch County Store	Pomegranates, Walnuts
Heritage Family Farm	Blue + Black Berries, Cherries
Kelsey Cherry Pickin' Farm	Cherries
Laird Ranch	Cherries
Lopez Ranch	Cherries
Maggiore Cherry Ranch	Cherries
Maggiore Ranches	Cherries
Mangini Farms	Cherries
McKinney Farms	Nectarines, Peaches
Mike's U-Pick	Apricots, Cherries, Nectarines, Peaches
Moffatt Ranch	Nectarines, Peaches
Nunn Better Farms	Cherries
Orchard & Vine	Cherries
Papa's U-Pick Cherries	Cherries
Papini Family Orchards	Cherries
Pease Ranch	Blackberries, Cherries
Peterwolfe.com	Peaches
Pomeroy Farm	Apricots, Cherries, Nectarines, Peaches
Rancho Zaragoza	Apricots, Nectarines, Peaches, etc.
RC U-Pick Cherries	Cherries
Salvador Family Farm	Cherries
Seko Ranch Cherries	Cherries
Smith Family Farm	Aprictos, Nectarines, Peaches, Plums, etc
Stoney Family Farms	Cherries
The Farmer's Daughter	Apples, Aprictos, Nectarines, Peaches
The Stand at Knightsen	Apricots
Vornhagen Farms	Cherries
Wolfe Ranch Cherries	Cherries

July 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4 Independence Day	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Certified Farmers' Markets (CFM)

In 2017, Contra Costa County Agricultural Department certified 22 farmers' markets, issued 60 Contra Costa Certified Producer's Certificates, and conducted 99 market inspections.

Currently operating Farmers' Markets in Contra Costa County:

CFM Name / Location	Day	CFM Name / Location	Day
Alamo	Sun	Oakley	Sat
Antioch Kaiser	Thu	Orinda	Sat
Brentwood	Sat	Pinole	Sat
Clayton	Sat	Pittsburg	Sat
Concord	Tue + Thu	Pleasant Hill	Tue
Danville	Sat	Richmond	Fri
Diablo Valley Shadelands	Sat	Rossmoor	Fri
El Cerrito	Tue + Sat	San Ramon Bishop Ranch 2	Sat
Kensington	Sun	San Ramon Bishop Ranch 3	Thu
Martinez	Sun	Walnut Creek Kaiser	Tue
Moraga	Sun	Walnut Creek	Sun

August 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Fruit & Nut Crops

Crop	Year	Harvested Acreage	Production Per Acre	Harvested Tons	Value Per Ton	Total Value [1]
Apricots	2017	125	2.85 tons	356	$3,206	$1,141,000
	2016	101	5.15 tons	520	$2,063	$1,073,000
Cherries	2017	566	2.99 tons	1,680	$3,591	$6,033,000
	2016	580	1.48 tons	858	$4,660	$3,998,000
Grapes	2017	2,545	5.05 tons	12,900	$924	$11,920,000
	2016	2,499	5.05 tons	12,600	$1,096	$13,810,000
Nectarines	2017	27	5.28 tons	143	$2,835	$405,000
	2016	31	5.73 tons	176	$2,712	$483,000
Olives	2017	174	2.50 tons	435	$885	$385,000
	2016	158	2.13 tons	337	$876	$295,000
Peaches	2017	101	4.57 tons	463	$2,652	$1,228,000
	2016	125	5.88 tons	735	$2,491	$1,831,000
Plums & Pluots	2017	42	4.92 tons	207	$2,326	$481,000
	2016	38	5.46 tons	207	$3,234	$669,000
Walnuts	2017	474	1.93 tons	915	$2,610	$2,388,000
	2016	450	2.28 tons	1,030	$1,776	$1,829,000
Miscellaneous [2]	2017	184	various	various	various	$1,860,000
	2016	201				$1,685,000
Total	2017	4,234				$25,841,000
	2016	4,183				$25,673,000

[1] Values represent rounded estimates based on data collected from producers, experts, and the literature.

[2] Includes almonds, apples, apriums, Asian pears, berries, citrus, figs, melons, pears, pecans, persimmons, pistachios, prunes, pomegranates, quinces and strawberries.

September 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 Labor Day	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Field Crops

Crop	Year	Harvested Acreage	Production Per Acre	Tons Harvested	Unit	Value Per Unit	Total Value [1]
Alfalfa Hay	2017	1,774	3.75	6,650	Ton	$167.51	$1,114,000
	2016	1,909	4.16	7,940		$155.70	$1,236,000
Cereal Hay	2017	1,542	2.42	3,730	Ton	$103.00	$384,000
	2016	2,917	4.54	13,200		$55.38	$731,000
Field Corn	2017	2,781	3.16	8,790	Ton	$155.15	$1,364,000
	2016	7,408	3.92	29,000		$153.55	$4,453,000
Irrigated Pasture	2017	5,450	n/a	n/a	Acre	$300.00	$1,635,000
	2016	5,450				$300.00	$1,635,000
Rangeland	2017	169,000	n/a	n/a	Acre	$21.00	$3,549,000
	2016	169,000				$21.00	$3,549,000
Wheat	2017	2,943	1.35	3,970	Ton	$152.38	$605,000
	2016	3,063	2.06	6,310		$183.68	$1,159,000
Misc.[2]	2017	2,503	various	various	var.	various	$921,000
	2016	7,658					$4,082,000
Total	**2017**	**185,993**					**$9,572,000**
	2016	**197,405**					**$16,845,000**

[1] Values represent rounded estimates based on data collected from producers, experts, and literature.

[2] Includes barley, corn silage, forage hay, hay (wild), rye, safflower, silage, straw, Sudan grass, and sorghum.

October 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Nursery Production

Commodity	Year	Greenhouse Production	Field Production	Total Value[1]
Flowers & Foliage	2017 2016	n/a 26,000 sq.ft.	n/a n/a	n/a $20,000
Nursery Products [2]	2017 2016	49,300 sq.ft. 39,725 sq.ft.	23.0 acres 21.0 acres	$8,717,000 $6,629,000
Total	2017 2016			$8,717,000 $6,649,000

[1] Values represent rounded estimates based on data collected from producers, experts and literature.

[2] Includes Christmas Trees, Cactus, Ground Covers, Propagative Materials, Ornamental Trees & Shrubs, Fruit Trees, Cut Flowers.

November 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11 Veterans Day	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28 Thanksgiving Day	29	30

Pest Detection

Insect Pest	Total No. of Traps	Total Trap Servicings	Insect Pest	Total No. of Traps	Total Trap Servicings
Asian Citrus Psyllid	855	4,570	Japanese Beetle	704	4,834
General Fruit Fly	885	27,419	Mediterranean Fruit Fly	853	13,426
Glassy-Winged Sharpshooter	818	14,201	Melon Fly	836	10,097
Gypsy Moth	703	5,010	Oriental Fruit Fly	913	14,349

December 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25 Christmas Day	26	27	28
29	30	31 New Year's Eve				

Pest Exclusion

Post Office/UPS/FedEx – Package Inspections	5,405
Truck Shipment Inspections from within California	1,867
Truck Shipment Inspections from other States	173
Household Goods Inspections for Gypsy Moth	68
Non-native Pest Interceptions	12
Canine Detection Non-native Pest Interceptions [1]	231
Quarantine Pest, Certification and Markings Rejections	123

[1] Interceptions in Contra Costa, San Joaquin, Santa Clara, and Yolo Counties

Pest Management

Weed Pest	Sites Surveyed	Acres Treated	Acres Surveyed	Control Method
Artichoke Thistle	44	45.5	41,714	Chemical
Purple Starthistle	19	5.8	2,539	Chemical

http://www.co.contra-costa.ca.us/1542/Agriculture-Weights-Measures

CONTRA COSTA COUNTY

Department of Agriculture Weights & Measures

2380 Bisso Ln, Concord, CA 94520 **TEL (925) 608-6600** FAX (925) 608-6620