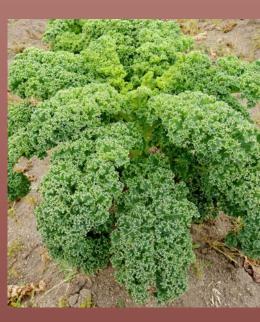
2015 AGRICULTURAL CROP REPORT











COUNTY OF SAN MATEO

SAN MATEO COUNTY DEPARTMENT OF AGRICULTURE &

WEIGHTS AND MEASURES

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Agricultural Commissioner Sealer of Weights and Measures

Fred Crowder

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COASTSIDE RAIN STATIONS

	Half Moon Bay	<u>Pescadero</u>
Year	inches	inches
2014/2015	16.45	21.38
2013/2014	9.44	11.25
2012/2013	18.78	20.11
2011/2012	16.16	18.32
2010/2011	27.75	29.38
2009/2010	25.34	30.28
2008/2009	20.74	25.69
2007/2008	20.65	21.86
2006/2007	18.29	15.13
2005/2006	35.58	30.30
2004/2005	37.83	32.61

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COUNTY OF SAN MATEO DEPARTMENT OF AGRICULTURE / WEIGHTS AND MEASURES



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California Department of Food & Agriculture and

San Mateo County Board of Supervisors

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Adrienne J. Tissier, District 5

As specified by California Food and Agricultural Code Sections 2272 and 2279, it is a privilege to present the San Mateo County Agricultural Crop Report for 2015. This year's report reflects an estimated agricultural production value of \$132 million, a decrease of \$19.7 million from the previous year.

Commodity values for individual crops were mostly up; however, Indoor Grown Floral and Nursery Crops, had an estimated value of \$75.3M, a decline of \$23.8M. This is due to cutbacks in the production of indoor floral and nursery crops in response to a shrinking agricultural workforce. Federal immigration policy and economics have influenced the availability of migrant farm labor in all agricultural regions and San Mateo County having a smaller, more isolated industry, is particularly vulnerable.

Other commodities losing in reported value are Forest Products with a \$1.2M reduction. Though the unit value per board foot was higher in 2015, the number of board feet harvested decreased by 30%. Outdoor Floral and Nursery Crops saw a reduction of \$471K, or 2.3%, while the overall value of wine grapes dropped an estimated \$354K, or 34%, because of "shatter", a condition resulting from unfavorable environmental conditions early in the season.

Higher commodity values, increases in planted acreage and yields boosted the Vegetable Crop commodity group by over \$5.8M, or 26.1% overall. The highest valued crops in the category were Brussels sprouts valued at \$15.2M, an individual increase of 27.5%, followed by Leeks at \$2.8M, an increase of 39.9%, Fava Beans at \$1.9M, an increase of 6.3%, and Miscellaneous Vegetables at \$6.1M, an increase of 28.4%.

Improved reporting, including commodity price information for beans, hay, grains, pasture, and range boosted the overall estimated value of the Field Crop category to \$875K, an increase of \$150K, or 20.7%. In response to ongoing drought, the number of cattle on the range has continued to drop; however, the overall estimated value of Livestock was \$2.4M, an increase of \$187K over the previous year.

Though many "per unit values" in this report are higher, that does not necessarily reflect higher returns to growers. Also higher are the costs for farm supplies, labor, seed, starts, soil amendments, etc. The reported dollar values in this report reflect the gross value of the agricultural commodities produced and do not account for costs associated with production, harvesting and distribution.

I would like to thank the agricultural producers who shared production information making this report possible. I would also like to thank our department staff, especially Kelly Mayer, who compiled and organized the data into the final report as well as took many of the beautiful pictures.

Fred Crowder

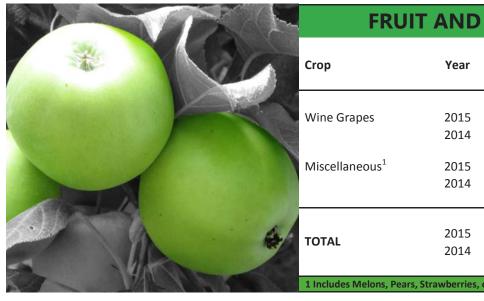
Respectfully Submitted,

Agricultural Commissioner Sealer of Weights and Measures



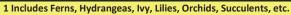
VEGETABLE CROPS

			PROD	DUCTION		<u>\</u>	/ALUE
Crop	Year	Acres	Per Acre	Total	Unit	Per Unit	Total
Artichokes	2015	66	2.92	193	Ton	\$1,708	\$330,000
	2014	64	3.93	252	Ton	1,139	287,000
Beans, Fava	2015	292	3.42	999	Ton	1,913	1,911,000
	2014	265	3.29	872	Ton	2,062	1,798,000
Beans, Snap	2015	45	4.20	189	Ton	1,668	315,000
	2014	80	2.77	222	Ton	1,378	306,000
Brussels Sprouts	2015	784	10.26	8,044	Ton	1,894	15,235,000
	2014	736	10.17	7,485	Ton	1,596	11,946,000
Leeks	2015	150	13.07	1,961	Ton	1,408	2,761,000
	2014	134	13.36	1,790	Ton	1,103	1,974,000
Peas	2015	165	1.70	281	Ton	2,242	630,000
	2014	168	1.64	276	Ton	2,010	555,000
Pumpkins	2015	187	5.05	944	Ton	667	630,000
	2014	175	5.00	875	Ton	584	511,000
Miscellaneous Vegetables	2015	416					6,072,000
Field and Indoor Grown ¹	2014	365					4,730,000
TOTAL	2015	2,105					\$27,884,000
TOTAL	2014	1,987					22,107,000
1 Includes Cauliflower, Herbs, Lettuce	. Mushrooms. P	otatoes, Squash	. Tomatoes, etc.				



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Crop	Year	Acres	Total Value
Wine Grapes	2015	165	\$677,000
	2014	154	1,031,000
Miscellaneous ¹	2015	112	1,807,000
	2014	105	1,763,000
TOTAL	2015	277	\$2,484,000
	2014	259	2,794,000
4 Includes Maleus Desus			

FLORAL AND NURSERY CROPS INDOOR GROWN Crop Year **Square Feet Total Value** Potted Plants¹ 2015 \$71,121,000 6,682,000 Flowering & Foliage 94,495,000 2014 7,220,000 2015 996,000 3,694,000 **Cut Flowers** ² 2014 1,123,000 4,105,000 **Bedding Plants,** 2015 163,000 451,000 Cuttings and Liners ³ 479,000 2014 122,000 2015 7,841,000 \$75,266,000 **TOTAL** 2014 99,079,000 8,465,000



² Includes Alstroemeria, Lilies, Roses, Tulips, etc.

rnamentals Nursery Stock ¹ Christmas Trees (cut) Year 2015 2014 2015 2014	Acres	Total Value
Nursery Stock ¹ 2015 2014 Christmas Trees (cut) 2015		iotai value
Nursery Stock 2014 Christmas Trees (cut)		
Christmas Trees (cut)	95	\$14,089,000
Christmas Trees (cut)	110	14,447,000
Christmas Trees (Cut) 2014	158	309,000
	158	314,000
2015	253	\$14,398,000
ubtotal 2014	268	14,761,000
2015	289	\$5,290,000
ut Flowers ² 2015 2014	300	5,398,000
2015	F42	<u> </u>
DTAL 2015	542	\$19,688,000
2014	568	20,159,000
ncludes herbaceous perennials, shrubs and trees. Includes Dahlias, Hydrangeas, Lilies, Sunflowers, Yarrow, etc.		

³ Includes Grasses, Ivy, Vegetables, etc.

LIVESTOCK			
Commodity	Year	Number Head Sold	Total Value
Cattle and Calves	2015	1,306	\$1,719,000
	2014	1,562	1,691,000
Other ¹	2015	7,430	673,000
	2014	6,532	514,000
TOTAL	2015	8,736	\$2,392,000
	2014	8,094	2,205,000

1 Includes Goats, Poultry, Sheep, Swine, etc.



LIVESTOCK PRODUCTS AND APIARY

Commodity	Year	Production	Unit	<u>V/</u> Per Unit	ALUE Total
Honey	2015	26,000	lbs	\$9.09	\$236,000
	2014	40,000	lbs	8.28	331,000
Beeswax	2015	846	lbs	6.48	5,000
	2014	1,007	lbs	5.99	6,000
Other ¹	2015				1,445,000
	2014				1,321,000
TOTAL	2015 2014				\$1,686,000 1,658,000
1 Includes Eggs, Cheese, W	/ool, etc.				

			CR	<u></u>	DC
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			PRODUCTION			VA	<u>ALUE</u>
Commodity	Year	Acres	Per Acre	Total	Unit	Per Unit	Total
Beans, Dry Edible ¹	2015	69	1.04	72	Ton	\$4,849	\$349,000
Deans, Dry Earlie	2014	54	0.75	41	Ton	4,944	203,000
Grain ²	2015	83	0.78	65	Ton	494	32,000
	2014	117	0.50	59	Ton	261	15,000
Hay							
Oat & Rye	2015	452	1.90	859	Ton	168	144,000
Oat & Nye	2014	376	2.24	842	Ton	199	168,000
Volunteer	2015	114	3.41	389	Ton	48	19,000
volunteer	2014	124	2.32	288	Ton	49	14,000
Pasture							
Irrigated	2015	114				155	18,000
irigatea	2014	137				142	19,000
Othor	2015	22,365				14	313,000
Other	2014	21,889				14	306,000
TOTAL	2015	23,197					\$875,000
IOIAL	2014	22,697					725,000

¹ Includes Cranberry, Fava, etc.

² Includes Barley, Oats, Quinoa, Rye and Wheat



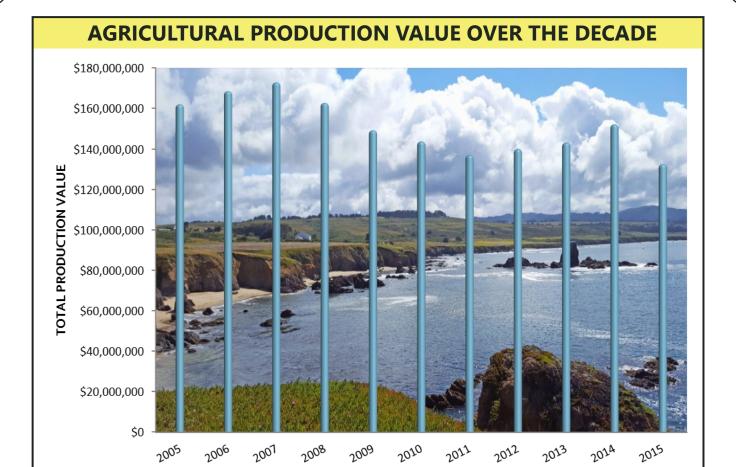
FOREST PRODUCTS

Year	Board Feet	Total Value
2015	4,691,000	\$2,183,000
2014	6,724,000	3,426,000

	RECAPITULATIO	N	
	2015	2014	Net Difference
Floral and Nursery Crops	\$94,954,000	\$119,238,000	-\$24,284,000
Vegetables	27,884,000	22,107,000	5,777,000
Fruit and Nut Crops	2,484,000	2,794,000	-310,000
Forest Products	2,183,000	3,426,000	-1,243,000
Livestock	2,392,000	2,205,000	187,000
Livestock Products and Apiary	1,686,000	1,658,000	28,000
Field Crops	875,000	725,000	150,000
TOTAL	\$132,458,000	\$152,153,000	-\$19,695,000



MILLION DOLLAR CROPS						
	2015	2014				
Flowering & Foliage Potted Plants (Indoor Grown)	\$71,121,000	\$94,495,000				
Brussels Sprouts	15,235,000	11,946,000				
Ornamental Nursery Stock	14,089,000	14,447,000				
Cut Flowers (Outdoor Grown)	5,290,000	5,398,000				
Cut Flowers (Indoor Grown)	3,694,000	4,105,000				
Leeks	2,761,000	1,974,000				
Forest Products	2,183,000	3,426,000				
Fava Beans	1,911,000	1,798,000				
Cattle and Calves	1,719,000	1,691,000				
Livestock Products (eggs, wool, cheese, etc.)	1,445,000	1,321,000				



YEAR

	50 YEARS AGO						
	Top Ten Agricultural Commodities in 1965						
1	Carnations (Indoor Grown)	2,244,000	Square Feet	\$2,785,000			
2	Flowering Potted Plants (Indoor Grown)	978,000	Square Feet	2,155,000			
3	Miscellaneous Vegetables	389	Acres	1,883,000			
4	Ornamental Nursery Stock (Outdoor Grown)	Not A	vailable	1,540,000			
5	Brussels Sprouts	1,150	Acres	1,474,000			
6	Ornamental Nursery Stock (Indoor Grown)	359,000	Square Feet	880,000			
7	Chrysanthemums (Indoor Grown)	1,677,000	Square Feet	680,000			
8	Strawflowers (Outdoor Grown)	139	Acres	663,000			
9	Milk (Market)	136,000	Hundredweight	607,000			
10	Cattle and Calves	3,560	Head	523,000			

SAN MATEO COUNTY SUSTAINABLE AGRICULTURE REPORT

The many ecological relationships integrated with agriculture bring stewardship to the forefront to sustain a healthy balance between natural resources and economic growth. Our Department works with backyard and commercial agricultural producers, importers and exporters in the following programs to uphold this ideology.

PEST EXCLUSION

Pest Management begins with preventing the introduction and limiting the spread of agricultural pests, a program known as Pest Exclusion. Our department inspects incoming and outgoing shipments of agricultural products for proper certification and to prevent harmful pests from traveling into and out of our county. Shipments having pests, or those that do not meet regulatory compliance may be rejected.

Type of Shipment	Inspections	Rejections	Pests Intercepted	
Parcel Carriers	18,197	79	18	
Truck	994	3	2	
Air	2,783	60	31	
Sea Containers	14	0	0	
Household Goods (Gypsy Moth)	72	0	0	
Nursery Stock (GWSS)	1,744	2	9	
Other	1	0	0	



	EXC	DIIC PESISII	NTERCEPTED		
Pest	Rating*	Number of Interceptions	Pest	Rating**	Number of Interceptions
Bactrocera correcta guava fruit fly	А	1	Ants (various species)	Q	5
Coccus viridis green scale	А	1	Leaf & Plant hoppers (various species)	Q	4
Diaphorina citri Asian citrus psyllid	Α	2	Mealybugs (various species)	Q	5
Hemiberlesia palmae tropical palm scale	Α	1	Mites (Tetranychus sp.)	Q	5
Ischnaspis longirostris black thread scale	Α	1	Moths & Butterflies (various species)	Q	11
<i>Pinnaspis buxi</i> boxwood scale	Α	5	Nematodes (Xiphinema basiri)	Q	1
Pinnaspis strachani lesser snow scale	Α	2	Scales (various species)	Q	10
Pseudaulacaspis cockerelli Oriental scale	Α	2	Thrips (various species)	Q	3
Pseudaulacaspis pentagona white peach scale	А	1	Whiteflies (<i>Trialeurodes sp.</i>)	Q	1
Zachrysia provisoria Cuban brown snail	Α	1	Other (various species)	Q	4

[&]quot;"A" pest ratings denote pests of known economic significance requiring containment, eradication and rejection.

^{** &}quot;Q" pest ratings are given to pests of suspected economic significance requiring containment, eradication and rejection.

SAN MATEO COUNTY SUSTAINABLE AGRICULTURE REPORT

PEST DETECTION

Each year insect traps are placed, inspected, serviced and removed by pest detection staff throughout San Mateo County. In 2015, 3,826 traps were deployed and serviced 56,299 times. As a result of these efforts, two Asian Citrus Psyllids (ACP) were trapped in citrus trees in Daly City and Pacifica, and a Guava Fruit Fly (GFF) was trapped in a fruit tree in San Carlos (photo at right). In response to these finds, additional "delimitation" traps were placed in the area around the find properties but no additional ACP or GFF were found. Because multiple ACP were found, a two year quarantine has been imposed for a 5 - mile radius around the find locations.

Asian Citrus Psyllid Japanese Beetle

European Corn Borer Khapra Beetle

European Grape Vine Moth Mediterranean Fruit Fly

European Pine Shoot Moth Melon Fly

Glassy-winged Sharpshooter Mexican Fruit Fly

artinus:

Gypsy Moth Oriental Fruit Fly

Fruit Fly Species of *Bactrocera, Dacus, Ceratitis* and *Anastrepha*

PEST ERADICATION

The San Mateo County Weed Management Area (WMA) program is a collaboration between landholders, property managers, public and private entities focused on preventing and controlling invasive weeds. County General Fund money supplemented department resources allowing for expanded efforts to manage some of the weeds mentioned below.

Weed Species	Fertile Capeweed Arctotheca calendula	Skeletonweed Chondrilla juncea	Purple Loosestrife Lythrum salicaria	Jubata Grass Cortaderia jubata
Characteristics	Perennial rosettes w/ daisy-like yellow flowers, A-Rated*	Perennial or biennial, basal rosettes w/ wiry stems and small yellow flowers, A-Rated*	Perennial clumps up to 3 meters tall w/ spikes of purple flowers, B-Rated**	Perennial grass, long leaves from base w/ plumed panicles maturing violet to white C-Rated***
Reproduction	Seeds - up to 4000/ plant, viable 2+ years Vegetative stolons	Seeds - up to 15,000/plant, 2% viable to 3 years Vegetative roots	Seeds, up to 2 million/ plant, viable up to 3 years	Seeds - up to 100,000/ plant, viable up to 1 year, dispersed by wind for several miles
Distribution	Open or disturbed sites; found at one site in the county on Pescadero Rangeland Disturbed land; San Carlos, near Caltrain tracks (Atherton to Burlingame) and Edgewood Road/Hwy 280		Wetlands; found at Reflection Lake in La Honda	Mostly along coast in bare/sandy soil; found in thousands of acres throughout the county
Monitoring & Control	Flagged, mapped, hand pulled and treated with herbicides	Mapped, hand pulled, herbicide treatment and 2 biocontrol agents released: gall mite, Eriophyes chon- drillae, and rust fungus, Puccinia chondrillina	Flagged, mapped, and hand pulled	Mapped, mechanical methods, and treated with herbicides

^{*}A - Rated pests are highly invasive, considered detrimental to agriculture and the environment, and regulated for eradication.

^{**}B - Rated pests may be detrimental to agriculture and eradication and is subject to the discretion of the local Agricultural Commissioner.

^{***}C - Rated pests are at the discretion of the county Agricultural Commissioner.

SAN MATEO COUNTY SUSTAINABLE AGRICULTURE REPORT

INTEGRATED PEST MANAGEMENT

When controlling pests, Integrated Pest Management (IPM) can improve efficacy, reduce costs, environmental impacts, and boost economic returns. Using customized approaches for controlling individual pest populations, IPM allows agricultural producers to reduce dependence on chemicals while enhancing pest management outcomes. Also known as "intelligent pest management", IPM relies on monitoring, establishing thresholds, sanitation, cultural and mechanical controls, predators, bio-controls, and natural enemies to achieve long term pest control solutions. When necessary, chemical controls are considered utilizing the least toxic material that will be effective. IPM options utilized by San Mateo County producers include:

Bee & Bird Netting	Insect Growth Regulators	Pheromone Disruptors & Traps
Botanical Extracts	Insecticidal Soaps	Predatory Mites
Companion Planting	Lacewings	Refined Oils
Cover Crops	Ladybird Beetles	Sticky Traps
Crop Rotation	Mowing	Soil Steam Sterilization
Deer Fencing	Mulching	Temperature/ Humidity Control
Diatomaceous Earth	Owl Boxes	Torching Weeds
Field Sanitation	Parasitic Wasps	Weed Covers
Hedgerows	Parasitic Nematodes	Vertebrate Traps

ORGANIC FARMING

Year	Organic Farms	Production Acreage
2015 2014	24 19	619 622
2013	16	373

Although the number of registered organic agricultural producers in San Mateo County increased in 2015, production acreage decreased. The estimated gross production value of organic commodities for 2015 is \$6,345,000; a 20.9% increase over the previous year due to higher per unit value.

CERTIFIED FARMERS' MARKETS

Certified Farmers' Markets cut out the middle man as well as costs associated with labeling, sizing, standard pack, marketing and distribution. Local Certified Farmers' Markets feature a farmer's freshest pickings and are where consumers can go to buy direct from the grower. In 2015, San Mateo County agricultural staff certified 24 Farmers' Markets and issued 65 Certified Producer's Certificates to San Mateo County growers. There are 994 market days per year, with 217 total producers in all Certified Farmers' Markets. County Biologists inspect both county growing grounds and the market booths to confirm that producers grow what they sell. Buy your local produce with confidence at your Certified Farmers' Markets in San Mateo County.

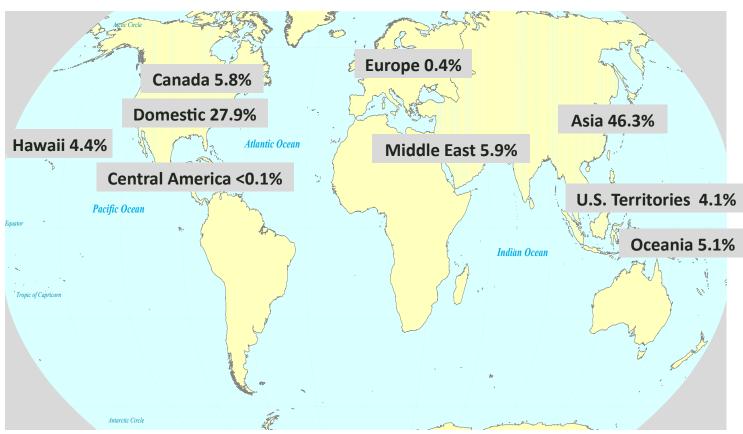


For an up-to-date market list visit: www.smcgov.org/agwm

SAN MATEO COUNTY AGRICULTURAL EXPORTS

Having San Francisco International Airport and many nearby ports, San Mateo County is a busy center for trade. Outgoing shipments of agricultural products require pest inspection and certification and in 2015, Department staff issued 2,058 Federal Phytosanitary Certificates facilitating transport of agricultural products to 30 countries, and 1,209 State Phytosanitary Certificates to transport products to 23 states.

As shown below, the majority of shipments leaving San Mateo County are destined for Asia.



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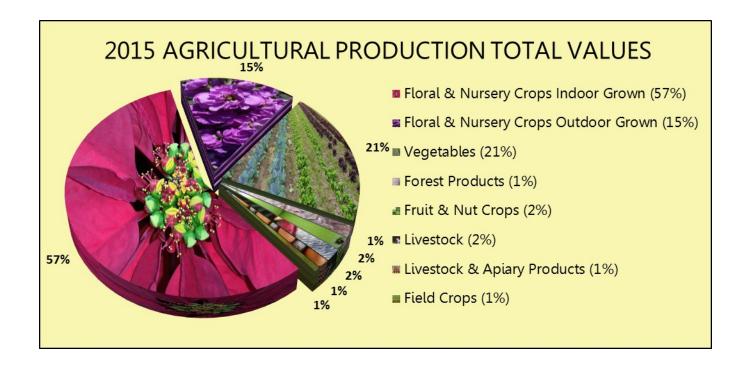
COUNTRIES THAT REQUIRED PHYTOSANITARY CERTIFICATES IN 2015						
Bahrain	Macao	Philippines				
Cambodia	Mexico	Qatar				
Canada	Micronesia	Saudi Arabia				
China	Myanamar	Singapore				
Hong Kong	Netherlands	South Korea				
India	New Zealand	Taiwan				
Indonesia	Norway	Thailand				
Japan	Oman	United Arab Emirates				
Kuwait	Palau	United Kingdom				
Lebanon	Panama	Viet Nam				



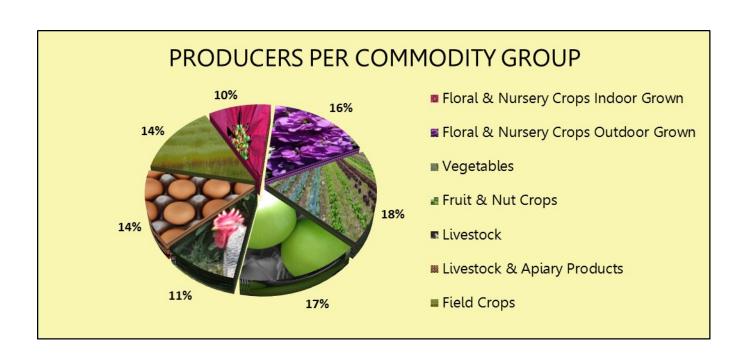
<u>Species</u>	<u>Year*</u>	<u>Pounds</u>	<u>Value</u>	<u>Species</u>	<u>Year*</u>	<u>Pounds</u>	<u>Value</u>
Crab, Dungeness	2014	2,476,812	\$8,675,002	Seabass, white	2014	18,292	96,926
, ,	2013	2,400,347	7,460,044	Ĺ	2013	394	2,137
Squid, market	2014	17,344,080	5,635,174	Tuna, Albacore	2014	22,156	49,951
	2013	15,238,707	4,953,848		2013	37,278	98,361
Salmon, Chinook	2014	182,440	1,164,610	Rockfish, all	2014	27,957	46,082
	2013	510,654	3,591,319		2013	79,642	77,145
Prawn, spot	2014	24,426	356,461	Sanddab	2014	72,570	38,460
	2013	26,964	357,646		2013	106,456	53,815
Halibut, California	2014	44,926	241,718	Lingcod	2014	8,131	26,137
	2013	45,644	242,566		2013	4,422	17,698
Sole, all	2014	165,109	167,444	Bonito, Pacific	2014	63,374	20,597
	2013	99,046	95,481		2013	0	0
Crab, rock	2014	52,464	139,400	Miscellaneous	2014	19,069	18,132
unspecified	2013	24,149	69,369		2013	16,902	8,697
Sablefish	2014	82,709	122,855	Flounder, all	2014	12,744	13,793
	2013	61,642	95,183		2013	5,646	5,920
Grand Total			2014	20,617,			\$16,812,742
	2013 18,657,893 lbs \$17,129,229						

COMMERCIAL FISH CATCH

Source: California Department of Fish and Game Poundage Value of Landings Princeton-Half Moon Bay. Informational only, value not included in Annual Report *Values shown are from previous year



With posted losses in indoor grown ornamental crops along with a 6% increase in vegetable production values, the graphic (above) shows that the value of indoor grown crops compared to outdoor grown crops were almost even in 2015. Nonetheless, indoor grown ornamental crops only represented 10% of all the agricultural producers (below) with the rest of the agricultural producers balancing the production total when the dollar value is not in focus.



COUNTY OF SAN MATEO DEPARTMENT OF AGRICULTURE/WEIGHTS & MEASURES

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