

2021 SONOMA COUNTY CROP REPORT





DEPARTMENT OF AGRICULTURE/WEIGHTS & MEASURES

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Karen Ross, Secretary
California Department of Food and Agriculture

and

The Honorable Board of Supervisors of Sonoma County:

Susan Gorin – First District

David Rabbitt – Second District

Chris Coursey – Third District, Vice Chair

James Gore – Fourth District, Chair

Lynda Hopkins – Fifth District

It is my privilege to present the 2021 Sonoma County Crop Report as prepared pursuant to Section 2279 of the California Food and Agricultural Code. The reported total value for 2021 was \$811,446,600 which represents a 19.2% increase from our 2020 value of \$680,648,600. This report reflects the gross production values, not the net income or costs of production and marketing.

It should be noted that 2021 was a year with many challenges. Drought conditions returned to Sonoma County and growers were forced to adapt to dwindling water supplies. The coronavirus pandemic continued to impact farms, nurseries, supply chains, and labor, and those impacts are reflected throughout this report.

The 2021 winegrape growing season saw growers adapting to the different challenges of a multi-year drought. This year's crop was heavier despite limited water availability and early season cold damage. A mild growing season and lack of extreme heat late in the summer saw for an uneventful, but slightly early harvest. Tonnage saw a return to historical averages with an increase of 39.1% from 2020 to 206,011 tons while value per ton for winegrapes increased to \$2,626 per ton. As a result, total winegrape value increased 51% compared to 2020 at \$540,954,500.

Apples saw a slight decline in value of Gravenstein apples from 2020. 2021 saw less apple tonnage brought to market by 23% from 2020 because of inclement weather during bloom and continued drought stress. Gravenstein prices per ton decreased by 11%, while the price per ton for late apples also decreased due to a lack of demand for processed apples. Overall the value of apples decreased by 24% compared to 2020.

The value of livestock and poultry products decreased 21% compared to 2020. This decrease is largely due to a 21% decrease in organic and conventional milk production despite a 10.8% increase in organic and a 13.7% increase in conventional milk value per unit. The value of wool production decreased 47% from 2020 due to a lack of global demand for wool and an increase in sheep predation.

Nursery products value was up 30% from 2020. This is attributed to an increase of 33% in ornamental plant sales, an increase of 47% in miscellaneous nursery plant sales, and a 52% increase in cut flower sales when combined make up the majority of nursery products. Bedding plants saw a decrease of 23.5% as more individuals reduced these plantings to conserve water. The increase in nursery product value from 2020 is also credited to an increase in demand of water-wise succulents, cacti and replant projects as the county continues the rebuild process after the fires.

This year's crop report highlights the water challenges faced by producers. In 2021, widespread water shortages required producers to adapt to diminishing water supplies by reducing operations, turning to alternative water sources, and changing cultural practices. We want to recognize the hardships our farmers, ranchers and producers face while maintaining a diverse agricultural industry and their continued work through the challenges of the coronavirus pandemic.

I would like to extend my gratitude and appreciation to all of the agricultural producers whose participation made this report possible. A sincere thank you to Misty Eland and Kayla Friedrichsen, Agricultural/Weights & Measures Inspectors, who collected and compiled these statistics, as well as the outstanding staff of the Department of Agriculture/Weights & Measures who contributed to the production of this report.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read 'Andrew F. Smith', is written in dark ink.

Andrew F. Smith
Agricultural Commissioner/Sealer of Weights & Measures

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AGRICULTURE IN SONOMA COUNTY: ADAPTIVE IN THE FACE OF DROUGHT

This year's crop report showcases the changing landscape of agriculture in Sonoma County and the adaptability of our growers in the face of a historic drought.

The history of Sonoma County is one of agricultural plenty. Sonoma County is built upon fertile land, nourished by soil from riparian floodplains. Our temperate climate and healthy soils have made the area extremely attractive to growers for decades. Over the years, our growers have produced a wide variety of crops and products, including peaches, prunes, hops, apples, olives, oats, hay, eggs, dairy products, and, of course, grapes.

Latitudinally, Sonoma County sits in a transition zone, meaning our rainfall can be unpredictable from one year to the next. Our county fluctuates between periods of heavy rain (El Niño) and drier, drought-prone years (La Niña), which can be attributed to both our transition zone status and the pathways of atmospheric rivers that run through the county. These atmospheric rivers are heavy with water vapor and often associated with pathways of heavy rainfall. In Sonoma County, atmospheric rivers account for about half of the water in the Russian River watershed, which provides a significant portion of the water in the county.

In times past, droughts were intense, but often followed by periods of rain to replenish the water lost in the dry period. Long-time residents will remember 1976 and 1977, when extreme drought reduced Lake Mendocino's water reservoirs to record lows. In 1977, the Farm Bureau encouraged the state to enact a state of emergency in order to provide relief to California farmers facing the effects of drought, and residents in Sonoma County cut their water usage in half. Thankfully, in 1978, the rain came, relieving residents and refilling our water supplies. To this day, the 1976/77 drought is considered one of the worst in Sonoma County history. That drought reinvigorated the efforts to complete the Warm Springs Dam, the project that would create Lake Sonoma. Today, Lake Sonoma is a vital source of drinking water to Sonoma County residents.

Starting in 2013, extreme drought reared its head again, with rain recorded at the lowest levels in 120 years. Grape growers, now the primary agricultural producers in the county, were forced to get creative and precise with their water usage until the rains came again, providing relief. Some growers chose to dry farm their older vines, and many reduced irrigation and frost protection efforts to minimal levels to save water. Now, as drought in California continues relentlessly, our growers have been forced to think creatively for the long-term health of their soils, crops, and herds.

In 2021, we saw extreme drought conditions. From May until November, Sonoma County dipped into what United States Department of Agriculture (USDA) designates as "D4: Extraordinary Drought." 2021 is considered Sonoma County's worst drought year on record, and in response the agricultural industry has had to adjust their water use significantly. Most of the county's agricultural water is

drawn from the Russian River watershed, which supplies Lake Sonoma and Lake Mendocino. Both reservoirs were low in 2021, with Lake Sonoma at 52.4% capacity and Lake Mendocino at 34.2%.

While lack of water harms all our agricultural industries, under particular pressure are our dairy and livestock ranchers, who during times of drought, face difficulty providing feed for their animals. Not only are pastures dry and inedible, but supplemental hay becomes expensive as the demand increases state-wide. Our county's organic ranchers can find themselves under greater stress because their animals are required to be raised on pasture for their first six months. In 2021, local ranchers reported that not only were their own irrigation ponds losing water faster than it was replenished, but those relying on recycled municipal water had their rations cut by up to 70%. As a result of this, some ranchers chose to sell portions of their herds to relieve the pressure of putting them out to pasture.

Grape growers saw an average harvest despite the water-conserving measures they took in 2021. As a result of less water being available during the growing season, growers faced increased pest pressure and, in some cases, underdeveloped fruit clusters. Water use focused on deficit irrigation, which prioritized irrigation water for young, developing vines and watering established vines only when stress indicated its necessity. These challenges aside, grape growers experienced an uneventful harvest season with no lingering heat waves, a quick ripening season, and thankfully no fires.

Drought will continue to be a struggle for Sonoma County agriculture, but as with all challenges, our growers, ranchers, and agricultural producers have shown their resiliency and ability to adapt. By altering cropping and irrigation patterns, fallowing land, reducing herd sizes and focusing on higher return crops on limited acreage, the industry takes steps to ensure that it can survive the hard times and preserve the livelihoods for generations to come.

In late 2021, Sonoma Water developed a Climate Action Plan that details their plans to both increase resiliency in our water systems and improve the management of our current water resources. The Drought Interagency Task Force was created as well, which relies on research and input from a diverse group of local and state partners to devise drought solutions. Our county is consistently evaluating water use and working to improve water retention in our surface water resources (such as ponds, reservoirs, and lakes), soils, and in our groundwater aquifers. Water is a common resource; it's up to all of us to contribute to conservation as well as judicious and responsible use of water to ensure agriculture remains a viable industry in the county.

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MILLION DOLLAR CROPS

MILLION DOLLAR CROPS

1	Winegrapes - All	\$540,954,500
2	Milk	\$124,450,800
3	Nursery - Ornamentals	\$25,954,900
4	Miscellaneous Livestock and Poultry Products	\$25,826,100
5	Nursery - Miscellaneous	\$22,147,300
6	Cattle and Calves	\$20,515,600
7	Miscellaneous Livestock and Poultry	\$12,062,900
8	Vegetables	\$7,580,600
9	Nursery - Cut Flowers	\$6,142,300
10	Nursery - Bedding Plants	\$5,923,000
11	Sheep and Lambs	\$4,887,200
12	Rye and Oat Hay Crops	\$2,384,800
13	Apples - Late Varieties	\$1,691,400
14	Apples - Gravenstein	\$1,277,900
15	Rye and Oat Silage Crops	\$918,300



NURSERY PRODUCTS



NURSERY PRODUCTS

Product	Year	Quantity	Unit	Total
Ornamentals	2021	898,802	plant	\$25,954,900
	2020	991,472	plant	\$19,477,600
Bedding Plants	2021	200,373	flat	\$5,923,000
	2020	306,986	flat	\$7,745,300
Christmas Trees	2021	2,995	units	\$202,200
	2020	2,604	units	\$177,900
Cut Flowers	2021			\$6,142,300
	2020			\$4,037,000
Miscellaneous Products (a)	2021			\$22,147,300
	2020			\$15,031,500
TOTAL VALUE	2021			\$60,369,700
	2020			\$46,469,300

(a) includes grapevines, deciduous fruit and nut trees, liners, bulbs, forest seedlings, house plants, orchids, cacti, herbaceous perennials, dried flowers, turf, and wreaths.

WINEGRAPE PRODUCTION - REDS

RED VARIETIES

TOP 13 BY VALUE - LISTED ALPHABETICALLY

Varietal	Year	Acreage			Production		
		Bearing	Non-Bearing	Total	Tons	\$/Ton	Total Value
Cabernet Franc	2021	552.0	33.0	585.0	1,150.4	\$3,866.85	\$4,448,400
	2020	557.0	29.0	586.0	942.4	\$3,534.95	\$3,331,300
Cabernet Sauvignon	2021	12,293.0	429.0	12,722.0	41,114.6	\$2,728.69	\$112,189,000
	2020	12,089.0	631.0	12,720.0	31,137.9	\$2,460.15	\$76,603,900
Carignane	2021	156.0	2.0	158.0	280.7	\$2,633.52	\$739,200
	2020	158.0	6.0	164.0	257.9	\$2,447.30	\$631,200
Grenache	2021	211.0	55.0	266.0	898.4	\$3,101.70	\$2,786,600
	2020	203.0	58.0	261.0	751.7	\$2,509.56	\$1,886,400
Malbec	2021	422.0	26.0	448.0	1,577.2	\$3,081.97	\$4,860,900
	2020	414.0	16.0	430.0	1,004.8	\$2,643.18	\$2,655,900
Mataro/ Mouvedere	2021	71.0	11.0	82.0	179.1	\$3,176.28	\$568,900
	2020	65.0	8.0	73.0	108.3	\$2,874.98	\$311,400
Merlot	2021	4,140.0	17.0	4,157.0	7,828.5	\$1,961.32	\$15,354,200
	2020	4,175.0	17.0	4,192.0	5,652.8	\$1,589.61	\$8,985,700
Petite Sirah	2021	651.0	26.0	677.0	2,163.9	\$2,996.48	\$6,484,100
	2020	641.0	42.0	683.0	1,622.1	\$2,706.91	\$4,390,900
Petit Verdot	2021	242.0	6.0	248.0	983.1	\$3,536.74	\$3,477,000
	2020	244.0	7.0	251.0	494.6	\$3,184.33	\$1,575,000
Pinot Noir	2021	12,608.0	265.0	12,873.0	48,496.5	\$3,512.27	\$170,332,800
	2020	12,516.0	497.0	13,013.0	29,263.7	\$3,146.85	\$92,088,500
Sangiovese	2021	278.0	4.0	282.0	879.7	\$2,493.41	\$2,193,500
	2020	279.0	4.0	283.0	398.9	\$2,364.77	\$943,300
Syrah-Shiraz	2021	1,326.0	34.0	1,360.0	2,450.6	\$2,871.85	\$7,037,800
	2020	1,352.0	29.0	1,381.0	1,581.5	\$2,472.14	\$3,909,700
Zinfandel	2021	4,613.0	116.0	4,729.0	11,660.0	\$3,113.73	\$36,306,100
	2020	4,654.0	105.0	4,759.0	8,397.0	\$2,624.37	\$22,036,800
TOTAL ALL REDS including other reds	2021	38,128.0	1,056.0	39,184.0	121,693.0	\$3,060.13	\$372,396,400
	2020	37,916.0	1,493.0	39,409.0	82,910.2	\$2,651.92	\$219,871,200



WINEGRAPE PRODUCTION - WHITES

WHITE VARIETIES

TOP 10 BY VALUE - LISTED ALPHABETICALLY

Varietal	Year	Acreage			Production		
		Bearing	Non-Bearing	Total	Tons	\$/Ton	Total Value
Chardonnay	2021	15,049.0	451.0	15,500.0	66,833.0	\$2,284.72	\$152,694,700
	2020	15,030.0	482.0	15,512.0	47,877.7	\$2,311.46	\$110,667,400
Gewürztraminer	2021	99.0	0.0	99.0	197.7	\$1,997.98	\$395,000
	2020	99.0	0.0	99.0	138.5	\$2,098.65	\$290,700
Muscat Blanc/ Muscat Canelli	2021	17.0	0.0	17.0	93.4	\$2,339.75	\$218,500
	2020	17.0	0.0	17.0	82.5	\$2,544.76	\$209,900
Pinot Blanc	2021	84.0	0.0	84.0	183.5	\$2,114.26	\$388,000
	2020	84.0	0.0	84.0	132.9	\$2,352.48	\$312,600
Pinot Gris	2021	397.0	0.0	397.0	1,157.6	\$1,865.39	\$2,159,400
	2020	408.0	0.0	408.0	1,040.6	\$1,841.05	\$1,915,800
Roussanne	2021	36.0	3.0	39.0	75.4	\$3,509.65	\$264,600
	2020	36.0	0.0	36.0	63.2	\$2,496.12	\$157,800
Sauvignon Blanc	2021	2,631.0	55.0	2,686.0	13,667.0	\$1,730.94	\$23,656,800
	2020	2,589.0	31.0	2,620.0	14,124.7	\$1,553.92	\$21,948,700
Semillon	2021	95.0	3.0	98.0	322.1	\$2,668.13	\$859,400
	2020	89.0	6.0	95.0	299.7	\$2,546.39	\$763,200
Viognier	2021	203.0	3.0	206.0	456.1	\$2,669.92	\$1,217,800
	2020	215.0	0.0	215.0	320.0	\$2,676.45	\$856,500
White Riesling	2021	28.0	2.0	30.0	138.3	\$750.00	\$103,700
	2020	39.0	2.0	41.0	135.4	\$2,327.10	\$315,100
TOTAL ALL WHITES including other whites	2021	18,950.0	537.0	19,487.0	84,318.2	\$2,191.56	\$184,788,400
	2020	18,912.0	552.0	19,464.0	65,174.9	\$2,149.05	\$140,064,100

TOTAL

WINEGRAPES
including all reds
and whites

2021	57,078.0	1,593.0	58,671.0	206,011.2	\$2,625.85	\$540,954,500
2020	56,828.0	2,045.0	58,873.0	148,085.1	\$2,414.23	\$357,511,500



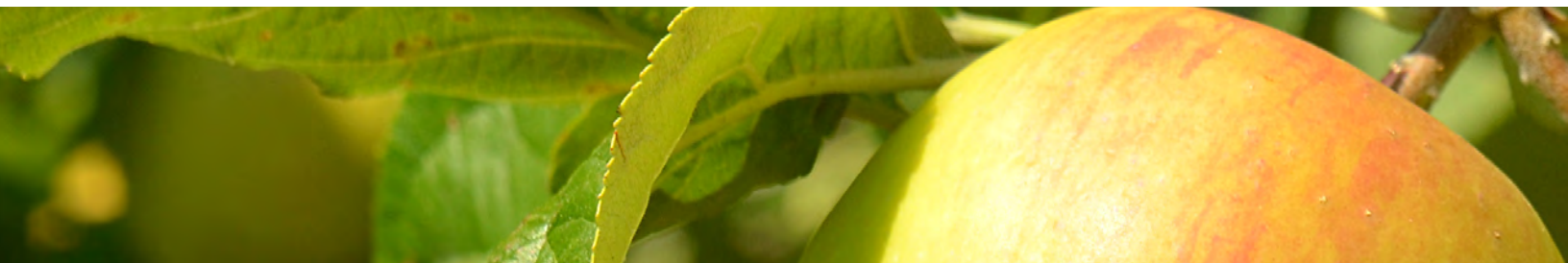
FRUIT AND NUT SUMMARY

FRUIT AND NUT SUMMARY

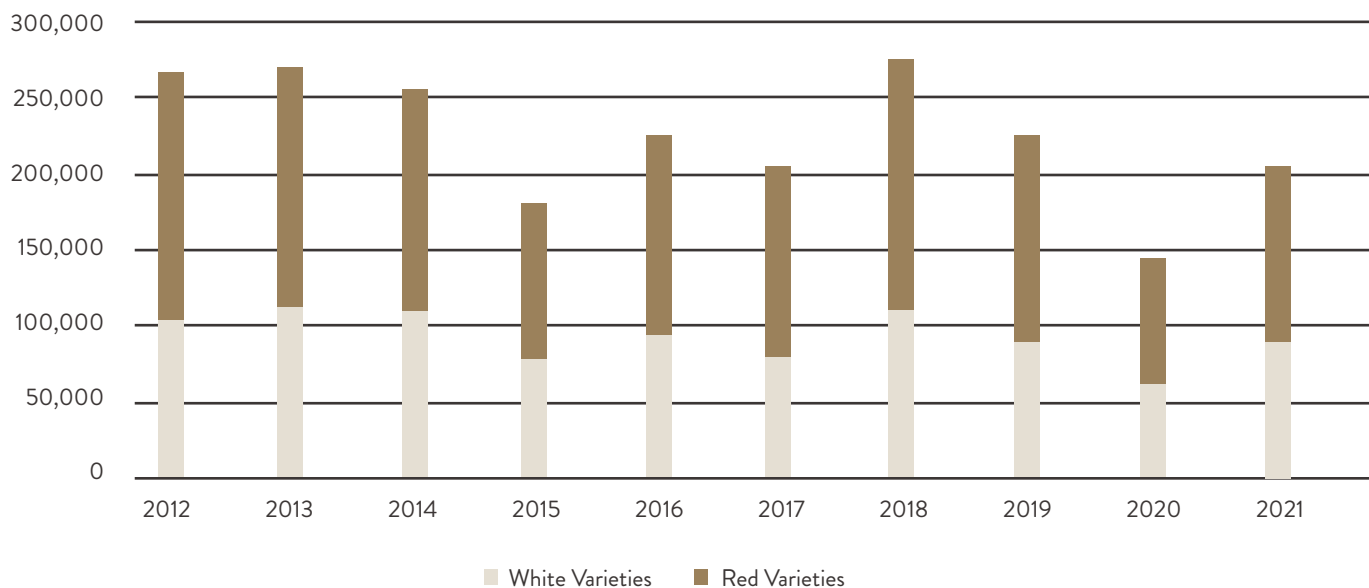
Crop	Year	Bearing Acres	Tons/Acre	Total Tons	\$/Ton	Dollar Value	Total
Apples (all)	2021	2,145	3.03	6,584	\$401		\$2,969,300
	2020	2,170	3.83	8,228	\$464		\$3,889,500
Fresh	2021					\$909,000	
	2020					\$1,165,864	
Processed (a)	2021					\$1,734,567	
	2020					\$2,719,850	
Grapes (wine)	2021	57,078	3.51	206,011	\$2,626		\$540,954,500
	2020	56,828	2.60	148,085	\$2,414		\$351,511,500
Olives	2021	391					\$400,300
	2020	386					\$523,300
Miscellaneous (b)	2021						\$314,600
	2020						\$254,000
TOTAL	2021						\$544,638,700
	2020						\$356,178,300

(a) includes canned, juice, cider, and vinegar.

(b) includes bush-berries, cane-berries, stone fruits, pears, kiwi, tree nuts, strawberries, figs, etc.



TONS OF SONOMA COUNTY GRAPES CRUSHED 2012-2021



APPLE PRODUCTION

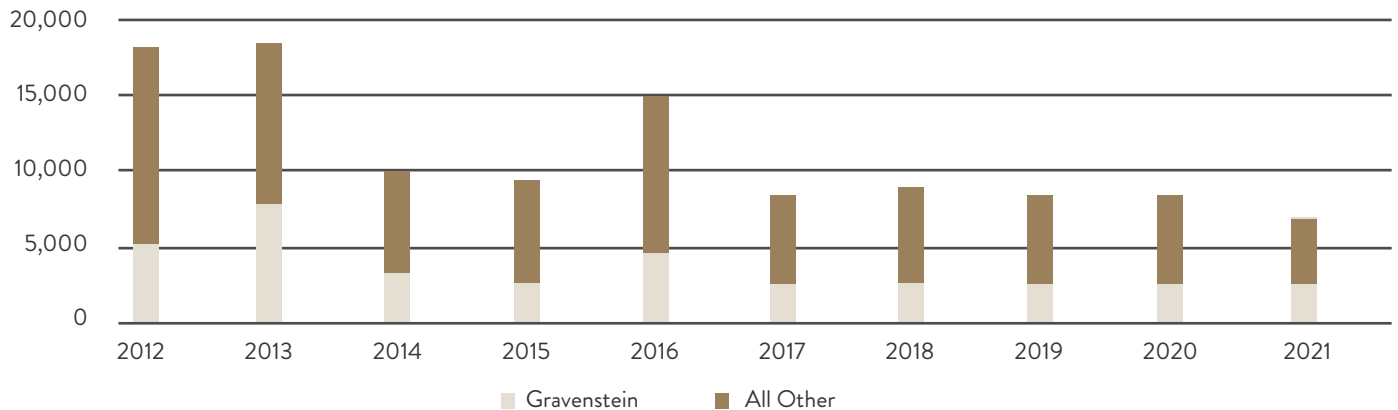
APPLE PRODUCTION

Crop	Year	Bearing Acres	Tons/Acre	Total Tons	\$/Ton	Dollar Value	Total
Gravenstein	2021	681	4.35	2,965	\$431		\$1,277,900
	2020	688	4.45	3,061	\$487		\$1,490,700
Fresh	2021			315	\$1,652	\$520,380	
	2020			386	\$1,376	\$531,850	
Processed (a)	2021			2,652	\$286	\$758,472	
	2020			2,675	\$358	\$957,650	
Late Apples	2021	1,464	2.32	3,410	\$496		\$1,691,400
	2020	1,479	3.54	5,249	\$457		\$2,398,800
Fresh	2021			425	\$1,682	\$714,850	
	2020			354	\$1,791	\$634,014	
Processed (a)	2021			2,985	\$327	\$976,095	
	2020			4,895	\$360	\$1,762,200	
TOTAL	2021	2,145	2.97	6,375	\$402		\$2,969,300
	2020	2,167	3.83	8,310	\$464		\$3,889,500

(a) includes canned, juice, vinegar, and cider.



TONS OF APPLES PRODUCED 2012-2021



VEGETABLE, FIELD CROP, AND APIARY PRODUCTION

VEGETABLES

Crop	Year	Harvested Acreage	Dollar Value
Miscellaneous	2021	447	\$7,580,600
Vegetables (a)	2020	402	\$5,831,200

(a) includes crucifers, squash, melons, mushrooms, potatoes, peppers, tomatoes, sprouts, leafy greens, etc.

FIELD CROPS

Crop	Year	Harvested Acreage	Tons/Acre	Total Tons	Unit	\$/Unit	Total
Hay, Rye and Oat	2021	2,952	5.4	15,989	ton	\$149.15	\$2,384,800
	2020	3,042	2.9	8,814	ton	\$131.00	\$1,154,600
Hay, Volunteer	2021	413	1.9	774	ton	\$151.30	\$117,100
	2020	676	1.6	1,081	ton	\$137.50	\$148,600
Green Chop (a)	2021	1,141	3.3	3,792	ton	\$24.00	\$91,000
	2020	1,076	4.8	5,168	ton	\$32.30	\$167,000
Oats, Grain	2021	105	0.6	61	ton	\$355.00	\$21,700
	2020	510	1.0	516	ton	\$346.00	\$178,700
Silage, Corn (a)	2021	99	14.5	1,440	ton	\$60.00	\$86,400
	2020	118	23.5	2,773	ton	\$54.00	\$149,800
Silage, Rye and Oat (a)	2021	2,273	5.8	13,118	ton	\$70.00	\$918,300
	2020	4,746	13.7	65,209	ton	\$34.00	\$2,217,100
Straw	2021						\$10,200
	2020						\$98,100
Miscellaneous (b)	2021						\$247,500
	2020						\$165,900
Pasture (c)	2021	6,337			acre	\$83.00	\$526,000
	2020	6,871			acre	\$89.00	\$611,700
Rangeland (c)	2021	308,732			acre	\$18.30	\$5,649,800
	2020	311,850			acre	\$20.32	\$6,336,800
TOTAL	2021	322,052					\$10,052,800
	2020	328,889					\$11,228,300

(a) much of the green chop and silage is not sold but used on the farm; value determined by its feed equivalent.

(b) includes alfalfa, barley, safflower, wheat, vetch, Sudan, etc.

(c) average potential grazing value per acre of forage.

APIARY PRODUCTS

Total Value (a)	2021	\$596,300
	2020	\$306,100

(a) includes honey, wax, and hives rented for pollination.





LIVESTOCK AND POULTRY

LIVESTOCK AND POULTRY

Livestock	Year	Number of Head	Live Weight	Unit	\$/Unit	Total
Cattle/Calves	2021	32,939	166,658	cwt.	\$123.10	\$20,515,600
	2020	33,129	167,047	cwt.	\$122.80	\$20,512,600
Sheep/Lambs	2021	25,400	30,640	cwt.	\$159.50	\$4,887,200
	2020	27,579	33,268	cwt.	\$159.50	\$5,306,400
Hogs	2021	2,426	6,065	cwt.	\$72.00	\$429,400
	2020	2,205	5,513	cwt.	\$72.00	\$390,400
Miscellaneous (a)	2021					\$12,062,900
	2020					\$43,446,100
TOTAL	2021					\$37,895,100
	2020					\$69,655,500

(a) includes chicks, pullets, fryers, roasters, ducks, turkey poults, turkeys, rabbits, goats, etc.

LIVESTOCK AND POULTRY PRODUCTS

Item	Year	Production	Unit	\$/Unit	Total
Milk, Organic	2021	3,624,522	cwt.	\$30.50	\$110,547,900
	2020	5,177,900	cwt.	\$27.52	\$142,495,800
Milk, Conventional	2021	839,040	cwt.	\$16.57	\$13,902,900
	2020	1,048,800	cwt.	\$14.57	\$15,281,000
Total Milk	2021	4,463,562	cwt.		\$124,450,800
	2020	6,226,700	cwt.		\$157,776,800
Wool	2021	71,520	lb.	\$0.51	\$36,500
	2020	106,746	lb.	\$0.65	\$69,400
Miscellaneous (a)	2021				\$25,826,100
	2020				\$33,133,600
TOTAL	2021				\$150,313,400
	2020				\$190,979,800

(a) includes market duck eggs, turkey hatching eggs, chicken eggs for consumption, egg by-products, and feathers.

LIVESTOCK AND POULTRY INVENTORY

Item	Number
Cattle/Calves (all)*	89,000
Milk Cows and Heifers (2 years and older)	32,000
Beef Cows and Heifers (2 years and older)	10,900
Sheep/Lambs (all)	15,925
Hogs	2,426
Laying Hens, Pullets, and Broilers	2,708,100
Goats	3,877

* Number of head as of January 1, 2022.

RECAPITULATION, TIMBER, AND FISHERIES

RECAPITULATION

	2020	2021	% Change
Apiary Products	\$306,100	\$596,300	94.8%
Vegetable Crops	\$5,831,200	\$7,580,600	30.0%
Field Crops	\$11,228,300	\$10,052,800	-10.5%
Nursery Products	\$46,469,400	\$60,369,700	29.9%
Livestock and Poultry	\$69,655,500	\$37,895,100	-45.6%
Livestock and Poultry Products	\$190,979,800	\$150,313,400	-21.3%
Fruit and Nut Crops	\$356,178,300	\$544,638,700	52.9%
TOTAL VALUE	\$680,648,600	\$811,446,600	19.2%

TIMBER HARVEST

Year	Production	Unit	Value (a)
2021	34,740,000	board feet	\$11,261,647
2020	11,383,000	board feet	\$4,562,733

(a) value of timber immediately before cutting.
Source: www.cdtfa.ca.gov/taxes-and-fees/timber-tax.htm#harvest.
Informational only.

COMMERCIAL FISH LANDINGS

Species	Year	Pounds	Value
Crab, Dungeness	2021	1,043,337	\$5,745,948
	2020	1,345,716	\$5,014,036
Salmon, Chinook	2021	649,107	\$4,465,643
	2020	661,715	\$4,349,004
Rockfish, all	2021	21,166	\$60,174
	2020	20,451	\$50,562
Halibut, California	2021	2,650	\$18,645
	2020	1,882	\$12,552
Miscellaneous	2021	304,762	\$254,257
	2020	984,772	\$665,602
Sablefish	2021	33,743	\$119,009
	2020	22,960	\$81,327
Lingcod	2021	7,041	\$30,750
	2020	4,800	\$19,498
Tuna, Albacore	2021	12,082	\$11,189
	2020	7,158	\$20,691
Cabezon	2021	56	\$349
	2020	18	\$135
TOTAL	2021	2,073,944	\$10,705,964
	2020	3,049,472	\$10,213,407

Source: <https://www.wildlife.ca.gov/fishing/commercial/landings>.
Data listed is most recent information available for commercial fisheries.
Informational only.



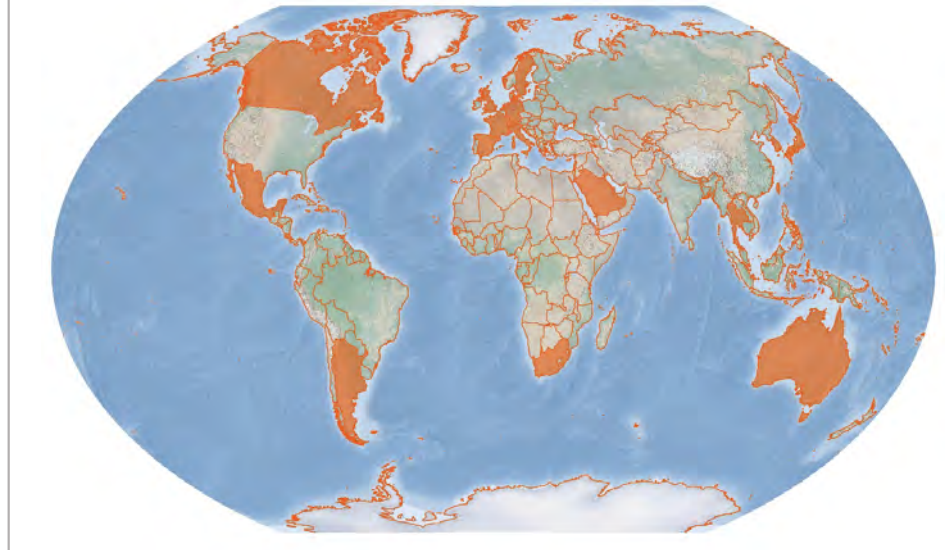
COMMODITY EXPORTS

In 2021, the Sonoma County Department of Agriculture/Weights & Measures issued 160 federal phytosanitary certificates for international shipments to 21 different countries and 5 state phytosanitary certificates for shipments within the United States. These certificates were issued by staff to ensure products produced or processed in Sonoma County meet the necessary import requirements. Phytosanitary certificates document that materials to be shipped have been inspected and certified free from pests as required by the importing state or country.

DESTINATION/CERTIFICATES

Mexico	- 80
China	- 15
Canada	- 12
France	- 9
Italy	- 9
Germany	- 5
Spain	- 5
Sweden	- 5
Costa Rica	- 4
Indonesia	- 2
Japan	- 2
Singapore	- 2
South Africa	- 2
Australia	- 1
Belgium	- 1
Brazil	- 1
Czech Republic	- 1
French Polynesia	- 1
Portugal	- 1
Thailand	- 1
Ukraine	- 1

COMMODITY SHIPMENT DESTINATIONS IN ORANGE



COMMODITIES EXPORTED

- Animal Feed
- Flower and Vegetable Seed
- Grapevines
- Herbs and Spices
- Lumber and Logs
- In Vitro Plantlets
- Oak Pieces for Winemaking
- Oak Wine Barrels
- Oak Wood Chips

AGRICULTURE DIVISION SUMMARY

Agriculture is one of the main industries in Sonoma County and provides a very significant base to the County's economy. The Department accomplishes the promotion and protection of agriculture through educational outreach and enforcement of federal, state, and county regulations. With restrictions of the public health orders put in place to combat the pandemic, the Division's ability to perform certain inspections was limited during periodic times of the year and reflected in the numbers below.

PEST DETECTION TRAPPING PROGRAM

Our Division trappers search for pests not known to occur in California. The purpose of this program is to detect the presence of pests before they become established over an area so large that eradicating the pest is no longer feasible. In 2021, 4,695 traps were placed for the detection of exotic insect pests including Mediterranean, Oriental, and Melon Fruit Flies, Gypsy Moth, Japanese Beetle, European Grapevine Moth, and Asian Citrus Psyllid. The traps were serviced 49,685 times.

The Division also placed 492 traps in nurseries and urban areas for the detection of Glassy-Winged Sharpshooter (GWSS), and serviced those traps 3,118 times. There were no GWSS detected in our traps in 2021.

Also, as a special project in 2021, the Division worked with the University of California Integrated Pest Management Program on a statewide survey for Invasive Shot-Hole Borer. 24 traps were deployed, targeting high risk areas such as campgrounds, firewood distribution sites, green waste processors, and riparian areas. The traps were serviced 96 times, and no Invasive Shot-Hole Borers were detected.

PEST EXCLUSION PROGRAM

The goal of our Pest Exclusion Program is to prevent the introduction and spread of exotic weeds, plant diseases, insect pests, or animal pests, which might be harmful to Sonoma County agriculture and our environment. To accomplish this goal, the Division inspects incoming plant shipments and rejects infested plant material. Staff visit shipping point terminals in the County daily to inspect packages, incoming plant material from out of state, nursery stock at nurseries, and vines for vineyard plantings. Additionally, inspections are conducted on incoming shipments at feed mills and outdoor household articles from areas known to be infested with Gypsy Moth. A total of 1,088 premise visits occurred in 2021, during which 12,288 shipments of plant material were inspected. 170 shipments of plant material were rejected for violations of state and federal quarantines. To prevent the spread of GWSS into Sonoma County, Division staff inspected 1,978 shipments of nursery stock arriving from infested counties within California. Five shipments of plant material were rejected for findings of viable GWSS egg masses.

PESTICIDE USE ENFORCEMENT PROGRAM

The Division performed 79 inspections related to commercial and agricultural pesticide use in Sonoma County. These inspections included in-progress inspections of the applicator and application equipment, post-application field worker safety inspections, and employee safety inspections at headquarters to review records and storage areas.

In 2021, the Division issued 147 private applicator certificates, 509 operator identification numbers and restricted material permits for agricultural pesticide use, reviewed 174 notices of intent for restricted materials, registered 245 agricultural or structural pest control businesses, 54 pest control advisors, and 97 farm labor contractors, and completed 11 investigations for suspected pesticide illnesses or complaints.

EXOTIC/INVASIVE PEST SPECIES INTERCEPTED

Brown Marmorated Stinkbug
Halymorpha halys

Glassy-Winged Sharpshooter
Homalodisca vitripennis

Japanese Knotweed
Fallopia japonica

Diaspidid Scale
Fiorinia externa

Vine Mealybug
Planococcus sp.

Apple Maggot
Rhagoletis pomonella

Boxwood Scale
Pinnaspis buxi

Blackthread Scale
Ischnaspis longirostris

Gray Pineapple Mealybug
Dysmicoccus neobrevipes

Bagrada Bug
Bagrada hilaris

Lesser Snow Scale
Pinnaspis Strachani

Magnolia White Scale
Pseudaulacaspis cockerelli

ORGANIC PRODUCTION

Beginning January 1, 2017, changes to the Organic Food and Farming Act no longer require organic registrants in California to provide detailed commodity information and acreage to the state upon initial registration or during renewal. Before these changes, the state and its counties had been collecting detailed information on specific crop commodities, their acreage, and associated value. This allowed counties to evaluate the contribution of organic agriculture to the overall County economy and to ascertain the ratio of organic to conventional acreage. The total production acreage is now reported by registrant rather than by commodity. Due to these changes, the Department can only report on the total organic acreage farmed in Sonoma County. There are 298 organic registrants farming approximately 78,014 acres throughout the County. This acreage figure may be inflated as much of this acreage experiences multiple cropping cycles per year.

For more information on the Organic Food and Farming Act, please visit the California Department of Food and Agriculture's State Organic Program website at https://www.cdfa.ca.gov/is/i_&_c/organic.html.

IN 2021, THE AGRICULTURE DIVISION:

- Inspected over 4.5 million chicken eggs for defects via representative sampling.
- Diverted 40,475 pounds of plastic containers from the landfill through the Division's two recycling events with approximately 189 participating growers.
- Surveyed over 1,100 Sonoma County producers in preparation for the 2021 Agricultural Crop Report.
- Conducted 6 continuing education sessions related to pesticide use regulations reaching over 605 attendees.
- Verified compliance with the California Seed Law for all seed producers in Sonoma County.
- Inspected 126 nursery growing areas, totaling more than 287 acres.
- Inspected 12 shipments of household articles for the presence of Gypsy Moth, which includes thoroughly examining outdoor items such as BBQs, boats, cars, firewood, recreational vehicles, patio furniture, and other articles originating from portions of the United States infested with Gypsy Moth.
- Issued 111 certified producer certificates and 18 farmers' market certificates for a total of 18 certified farmers' markets.
- Performed site inspections on 10 organic producers, inspected 16 organic producers at certified farmers' markets, and collected 5 samples of organic produce for residue testing.

TRANSGENIC CONTAMINATION PREVENTION ORDINANCE

The Transgenic Contamination Prevention Ordinance (GMO Ordinance) took effect November 9, 2016. The purpose of the GMO Ordinance is to protect Sonoma County's native plants, trees, and animals from transgenic contamination by genetically engineered organisms, sometimes referred to as "GMOs." The GMO Ordinance assigns our Department as the enforcement agency and makes it unlawful for any person, partnership, corporation, and entity of any kind to propagate, cultivate, raise, or grow genetically engineered organisms in the unincorporated portions of Sonoma County. In 2021, there were no complaints or investigations conducted related to the GMO Ordinance.

LAND STEWARDSHIP DIVISION SUMMARY

The Land Stewardship Division oversees the issuance of vineyard and orchard development permits, agricultural grading and drainage permits, frost protection system registrations within the Russian River watershed, enforces county-wide riparian corridor protections, and serves on the Sonoma County Project Review and Advisory Committee, the Sonoma County Environmental Review Committee and the Sonoma County Environmental Crimes Enforcement Task Force.

VINEYARD AND ORCHARD DEVELOPMENT

The Vineyard Erosion and Sediment Control Ordinance (VESCO) was originally adopted by the Sonoma County Board of Supervisors in 2000. Prior to developing and planting or replanting a vineyard or orchard, an application and plans are reviewed for approval by the Department of Agriculture/Weights & Measures. The purpose of the ordinance is to assist in preventing soil erosion and to protect water quality and other natural resources.

Through the administration of VESCO standards, the dedicated Division staff ensure that vineyards and orchards are developed in a manner that minimizes erosion and protects sensitive habitats.



Staff Photo for Department of Agriculture/Weights & Measures

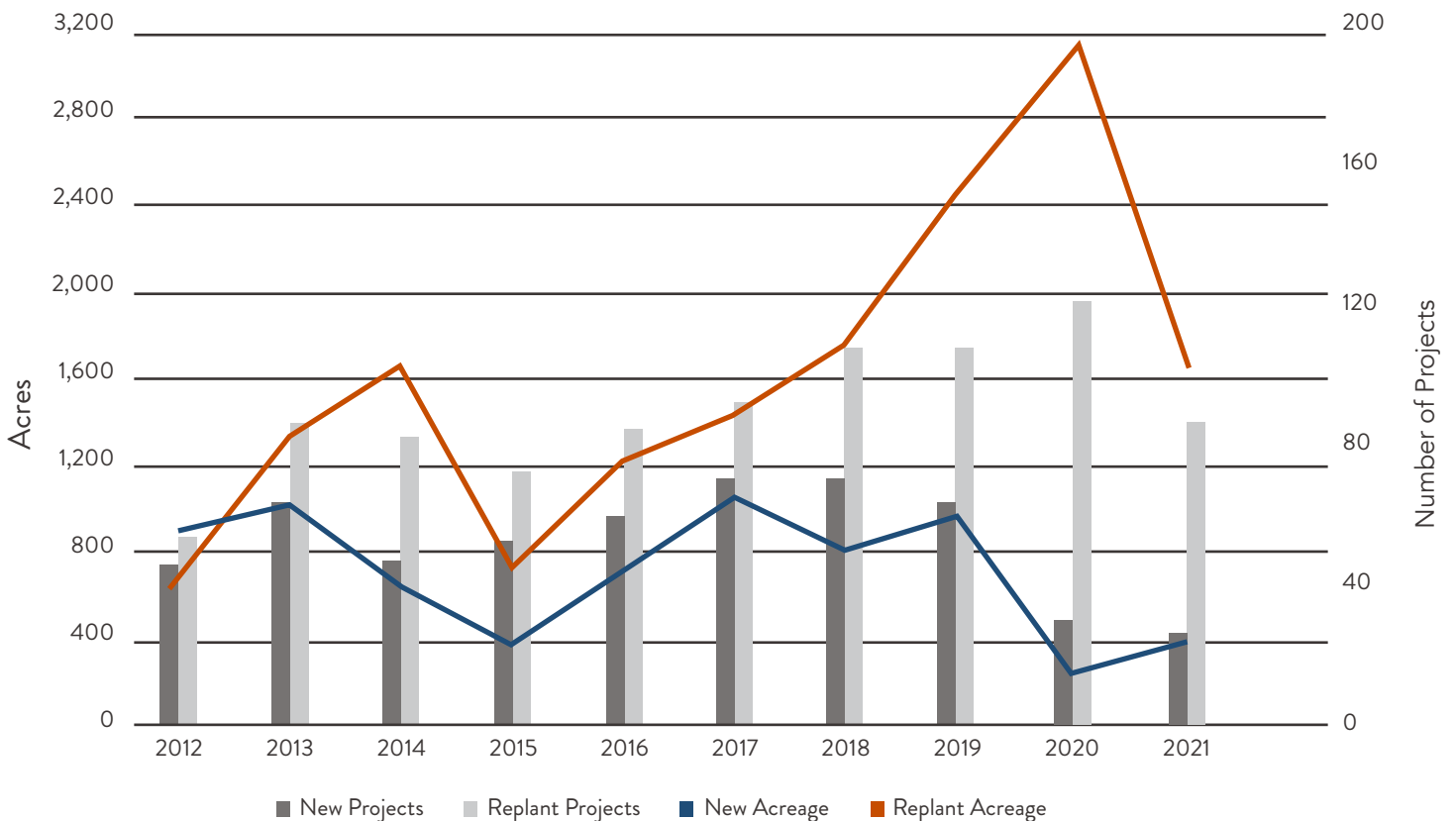
IN 2021, THE LAND STEWARDSHIP DIVISION:

- Released the final working version of the Best Management Practices and Technical Report Guidelines Manual for use in the VESCO program available for download on our website at www.sonomacounty.ca.gov/AWM/VESCO.
- Reviewed a total of 118 vineyard/orchard development projects representing a 22% decrease in projects from 2020. Of the 29 new projects, 15 were Level I and 14 were Level II. Of the 89 replant projects, 69 were Level I and 20 were Level II.
- Developed the Low Impact Vineyard Replant Registration process, also referred to as “pluck and plant”, which is an alternate permitting pathway for vineyard replanting.
- Developed a VESCO permit renewal process where VESCO permit holders can request a 5-year extension to their existing 5-year VESCO permit.
- Regulated over 500 frost protection systems within the Russian River watershed, including registering two new systems.

PROJECTS SUBMITTED

Year	New						Replants						Total	
	Level I		Level II		Projects Total	Acreage Total	Level I		Level II		Projects Total	Acreage Total	Projects	Acreage
Projects	Acreage	Projects	Acreage	Projects			Acreage	Projects	Acreage	Projects				
2012	35	327	11	589	46	916	50	633	4	35	54	668	100	1,584
2013	41	580	23	467	64	1,047	80	1,242	7	108	87	1,350	151	2,397
2014	25	307	22	321	47	628	76	1,546	7	103	83	1,649	130	2,277
2015	38	278	15	117	53	395	68	680	5	94	73	774	126	1,169
2016	38	434	22	306	60	740	72	1,128	13	301	85	1,429	145	2,169
2017	49	836	22	253	71	1,089	73	949	20	226	93	1,175	164	2,264
2018	37	302	34	523	71	825	91	1,231	18	272	109	1,503	180	2,328
2019	26	211	37	775	63	986	82	2,064	26	371	108	2,435	171	3,421
2020	15	53	15	213	30	266	98	2,437	25	706	123	3,143	153	3,409
2021	15	265	14	123	29	388	69	1,277	20	364	89	1,641	118	2,029

ACREAGE AND PROJECTS PER YEAR 2012-2021



WEIGHTS & MEASURES DIVISION SUMMARY

The Weights & Measures Division is committed to protecting the economic wellbeing of Sonoma County residents by preserving their confidence in the accuracy of the weighing and measuring instruments, product-labeling standards, pricing standards, and business practices in our local economy. The Division protects the economic interests of Sonoma County buyers and sellers by enforcing state and local weights and measures laws.

DEVICE REGISTRATION AND INSPECTION

Local consumers purchase many essential goods and services over commercial devices. California law defines a commercial device as, “...any approved device used in determination of the weight, measure, or count of any commodity or thing which is sold on the basis of weight, measure, count or thing upon which determination of a charge for service is based.” The accuracy and proper application of these devices is crucial in ensuring fairness in the marketplace. Division staff register and inspect commercial devices used in Sonoma County. In 2021, the Division registered over 34,000 commercial devices and inspected 6,968 of these devices.

PRICE VERIFICATION PROGRAM

Under a local county enacted ordinance, the Division is required to register local retailers that operate an automated point-of-sale system (price file database) used to determine the prices charged at the register. Division staff conduct annual price verification inspections at these retailers to determine if the business is meeting the pricing accuracy standards set forth in the ordinance. If a retailer overcharges their customers, they fail the inspection and are subject to administrative penalties and ongoing inspection until they can meet price accuracy standards. In 2021, the Division registered over 730 local businesses under the price verification program.

PACKAGED COMMODITIES PROGRAM

Under the Federal Fair Packaging and Labeling Act, packaged commodities offered for sale are required to conform to federal labeling standards. Packaged products must contain a label that identifies three main things: the identity of the commodity that declares the contents in the package, a responsibility statement that identifies who packaged the commodity, and a quantity statement that declares how much product is in the package. These three basic labeling requirements enable consumers with the ability to make value comparisons between products. Division staff audit packaged commodities at local retailers to determine the packer’s compliance with labeling requirements and to ensure that the net weight statement accurately reflects the package’s true quantity.

PETROLEUM PROGRAM

To guard against false or misleading advertisement claims or ambiguous product labeling, Division staff ensure that local service stations owners selling retail motor fuel comply with state advertising and labeling laws. Labeling at the dispenser must clearly identify the product, grades, octane, gallon price, and computed price.

CONSUMER COMPLAINTS

In 2021, Division staff investigated over 49 consumer complaints filed with our office. These consumer complaints included price overcharges at local retailers, issues with fuel meters at local fuel stations, improper utility billing at local mobile home parks and apartments, bulk-commodities sales complaints, and additional complaints.

IN 2021, THE WEIGHTS & MEASURES DIVISION.

• Registered over 1,920 local businesses and commercial device owners operating over 34,000 commercial devices. Of these, 6,968 of these devices were inspected, including:

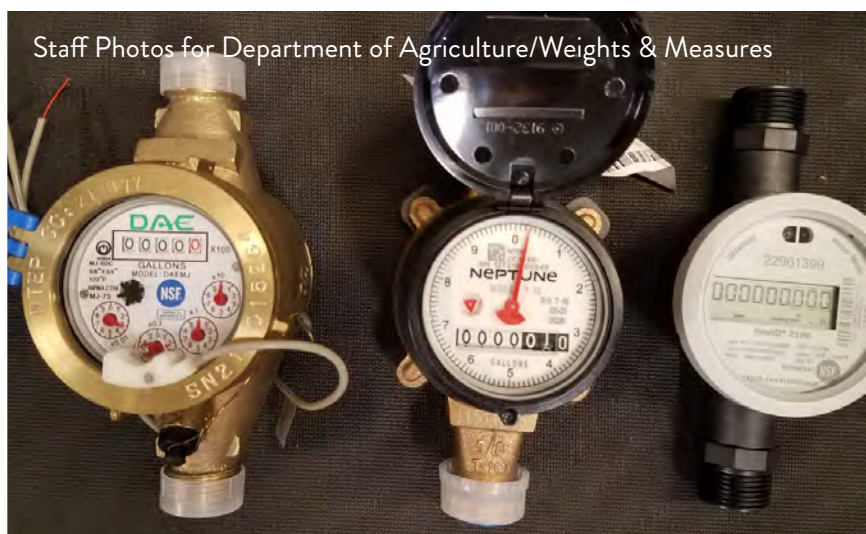
- 1,421 retail fuel meters
- 21 livestock scales
- 117 vehicle scales
- 618 utility electric meters
- 36 hanging scales
- 24 taxi meters
- 304 winery dormant scales
- 2,639 utility water meters
- 573 utility gas meters
- 1,645 computing/counter scales
- 106 crane scales

• Performed over 365 price verification inspections at local retailers.

• Price checked 10,588 items of which 2.5% of items were over-charged.

• Issued 84 notices of violation against retailers for over-charging errors.

• Issued 11 administrative penalties against retailers for failing price accuracy inspections.



Staff Photos for Department of Agriculture/Weights & Measures





Staff Photos for Department of Agriculture/Weights & Measures

SONOMA COUNTY FARMERS' MARKETS

BODEGA BAY

2255 Highway 1
May – October
Sunday, 10:00 am – 2:00 pm

CLOVERDALE

225 N Cloverdale Boulevard
January – March
Tuesday, 3:00 pm – 6:00 pm

April – November
2nd Tuesday, 3:00 pm – 6:00 pm

COTATI

La Plaza Park
June – August
Thursday, 4:30 pm – 7:30 pm

FORESTVILLE

6990 Front Street
June – September
Tuesday, 4:00 pm – 7:00 pm

GUERNEVILLE / RUSSIAN RIVER

16290 5th Street
June – September
Thursday, 3:00 pm – 7:00 pm

HEALDSBURG

Vine Street and North Street
May – November
Saturday, 9:00 am – 12:30 pm

Plaza Street and
Healdsburg Avenue
May – September
Tuesday, 9:00 am – 12:30 pm

OCCIDENTAL / COMMUNITY

Main Street b/w 1st and 3rd Streets
June – October
Friday, 4:00 pm – 8:00 pm

ROSELAND / EL MERCADITO

777 Sebastopol Road
January – December
Sunday, 11:00 am – 3:00 pm

PETALUMA / EAST SIDE

Lucchesi Park
January – December
Tuesday, 10:00 am – 1:30 pm

PETALUMA / EVENING

2nd Street b/w B and D Streets
June – August
Thursday, 4:30 pm – 8:00 pm

PETALUMA / WALNUT PARK

Walnut Park
May – November
Saturday, 2:00 pm – 5:00 pm

ROHNERT PARK

500 City Center Drive
June – August
Friday, 4:00 pm – 8:00 pm

SANTA ROSA / COMMUNITY

1501 Farmers Lane
January – December
Wednesday, 9:00 am – 1:00 pm

SANTA ROSA / OAKMONT

Oakmont Drive and
White Oak Drive
January – December
Saturday, 9:00 am – 12:00 pm

SANTA ROSA / ORIGINAL

50 Mark West Springs Road
March – December
Wednesday, 8:30 am – 1:00 pm

January – December
Saturday, 8:30 am – 1:00 pm

SANTA ROSA / WIC

1450 Guerneville Road
July – August
Thursday, 9:00 am – 12:00 pm

SEBASTOPOL

6901 McKinley Street
January – December
Sunday, 10:00 am – 1:30 pm

SONOMA / SONOMA VALLEY

Arnold Field
January – December
Friday, 9:00 am – 12:30 pm

SONOMA / THE SPRINGS

Boyes Boulevard at Highway 12
June – December
Sunday, 10:00 am – 2:00 pm

SONOMA / VALLEY OF THE MOON

Sonoma Town Plaza
May – September
Tuesday, 3:00 pm – 6:00 pm

WINDSOR

Windsor Town Green
May – December
Sunday, 10:00 am – 1:00 pm

DEPARTMENT STAFF



VISION

A thriving agricultural industry, healthy community, environment, and economy

MISSION

To promote and protect agriculture, the health and safety of our community, environment, and the economy through education and the enforcement of laws and regulations

AGRICULTURAL COMMISSIONER / SEALER OF WEIGHTS & MEASURES ANDREW F. SMITH

**Assistant Agricultural Commissioner /
Sealer of Weights & Measures**
Sue Ostrom

Chief Deputy Agricultural Commissioner
Pete Albers

Chief Deputy Sealer of Weights & Measures
Fernando Vasquez

Deputy Agricultural Commissioner
Dan Curtin Travis Howard Paul Turano

Senior Agricultural / Weights & Measures Inspector
Michael Barrett David Jagdeo Daniella Reagan
Colleen Boe Alex McVicker
Beverly Hammond Alexander Nguyen

Agricultural / Weights & Measures Inspector
Jordan Ash Kayla Friedrichsen Katy McCoy
Pierpaolo Aymar Enger German-Ramirez Rudy Ruelas
Jessica Cassatt Meghan Johnson Lukas Steinrueck
Misty Eland Thomas LeClere Jody Vent

Wildlife Specialist
Jeff Furlong Gary Johnson

Agriculture & Vineyard Conservation Coordinator
Andy Casarez

Vineyard Erosion Engineering Technician
John Bishop

Environmental Specialist
Ben Wishnoff

Administrative Services Officer
Gina Lehl

Administrative Aide
Michelle Johnson

Department Analyst
Esther Martinez

Administrative Staff
Jen Charter Mary Halasz Collene Hoaglin
Nina Reeser

Senior Agricultural Program Assistant
Maggie Furlong

Agricultural Program Assistant
Anna Ashbeck Christina David Bryan O'Malley
Nick Billesback Melissa Dudley Sara Pile
Delaney Boyd Heidi Fantacone Tim Van Deren
David Burtis Kyle Fistolera
Kelly Dabney Guadalupe Gallegos





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