



Item 11a.

2021 SANMATEO COUNTY AGRICULTURAL CROP REPORT







DEPARTMENT OF AGRICULTURE/WEIGHTS & MEASURES

Karen Ross, Secretary California Department of Food & Agriculture and San Mateo County Board of Supervisors Dave Pine, District 1 Carole Groom, District 2 Don Horsley, District 3 Warren Slocum, District 4 David Canepa, District 5



It is my pleasure to present the 2021 Annual Crop Report for San Mateo County pursuant to Section 2279 of the California Food and Agricultural Code. The total estimated gross value of San Mateo County agricultural production in 2021 was \$97,969,000, an increase of 5.17% from 2020. It is important to note this gross value does not represent the net profit or loss, as it does not account for the inputs such as labor, packaging, transportation, and other production costs.

Steady sales over 2021 indicate San Mateo County's agricultural industry is stabilizing after 2020's adverse year resulted in a 28.5% loss in the gross value of agricultural commodities. Floral and Nursery Crops are up 3.79% from 2020 and maintains the majority share of San Mateo County's total production value. Vegetables declined in both acreage and value as traditional row crops continue to be hardest hit by land transfer, drought, and erratic weather patterns. Both Livestock and Livestock Products and Apiary categories have sustained similar values from last year. Forest Products fluctuates from year to year, but in 2021 substantially increased (618%) from 2020 due to the harvesting of timber in the CZU complex fire burn area. We expect to see an increase in timber harvesting into 2022 as post-fire timber salvage activities continue.

Whether a visitor or resident of San Mateo County, the decisions we make as individuals from farm to table play a role in the sustainability of the local agricultural industry. As climate and the economy shift, we can expect our farmers and ranchers to make similar adjustments to their practices in response to water availability, labor and housing, climate policy, and demands of the consumer. The question we will need to confront into the future is how we can leverage and support the working lands in our community to not only feed us, but to be a part of the solution to environmental and personal wellbeing.

Putting together this report, could not be done without my staff's steady focus throughout the year. A special thanks to Kelly Mayer, Jenny Gossett, and Michael Wong for their creative vision in the design and editorials found in this report. My sincere appreciation goes out to the producers that share their business information with us, as it gives us a true representation of the agricultural production in San Mateo County.

Respectfully submitted,

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Koren J. Widdel Agricultural Commissioner Sealer of Weights and Measures

Deputy Agricultural Commissioner/Sealers

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GROSS PRODUCTION VALUE

Commodity Group	2021	2020
Floral and Nursery Crops	\$60,268,000	\$58,065,000
Vegetables	\$21,167,000	\$22,275,000
Livestock	\$5,697,000	\$5,585,000
Forest Products	\$4,908,000	\$684,000
Fruit and Nut Crops	\$2,648,000	\$3,520,000
Field Crops	\$1,877,000	\$1,624,000
Livestock Products and Apiary	\$1,404,000	\$1,403,000
Total	\$97,969,000	\$93,156,000







FLORAL AND NURSERY CROPS

INDOOR GROWN

Сгор	Year	Square Feet	Total Value
Flowering and Foliage	2021	2,035,000	\$35,574,000
Potted Plants ¹	2020	1,882,000	\$36,838,000
Cut Flowers ²	2021	1,068,000	\$2,332,000
Cut riowers	2020	1,240,000	\$1,888,000
Bedding Plants, Cuttings,	2021	283,000	\$6,072,000
Other ³	2020	531,000	\$5,619,000
TOTAL	2021	3,386,000	\$43,978,000
IUIAL	2020	3,653,000	\$44,345,000

¹Includes Begonias, Lilies, Orchids, Poinsettia, Succulents, etc. ²Includes Alstroemeria, Freesia, Hemp, Lilies, Ranunculus, etc. ³Includes Herbs, Seeds, Succulents, Vegetables, etc.

Finding Footing

As life readjusted from the initial shocks to living with a pandemic, wholesale markets stabilized and home gardening enthusiasm continued. Potted plant cultivation grew in terms of area occupied in greenhouse spaces, but the value dropped by a little more than \$1.2M due to smaller pot sizes with respective lower prices per pot, more wholesale sales, and changes to plant types grown. Conversely, indoor cut flowers experienced a drop in greenhouse occupancy due to many hemp growers not renewing registrations, but for those remaining along with traditional flower growers, buyer demand was steady for greenhouse-quality cut flowers. Bedding plants and propagative cultivation experienced a similar decrease in space occupation, but had strong sales throughout the year with continued consumer interest in home vegetable and flower gardens.

FLORAL AND NURSERY CROPS

OUTDOOR GROWN

Сгор	Year	Acres	Total Value	
Ornamontal Nurson, Stack ¹	2021	73	\$12,637,000	
Ornamental Nursery Stock	2020	77	\$10,275,000	
	2021	167	\$499,000	
Christmas Trees (cut)	2020	151	\$369,000	
Cut Eloworc ²	2021	180	\$3,154,000	
Cut i towers	2020	178	\$3,076,000	
ΤΟΤΑΙ	2021	420	\$16,290,000	
IUIAL	2020	406	\$13,720,000	

¹Includes herbaceous perennials, shrubs and trees.

²Includes Dahlias, Hydrangeas, Ranunculus, Sunflowers, etc.

Sunshine Grown

Spending time in outdoor spaces continued to be in favor, along with live plant focal features. As some nursery stock growers expanded, others contracted a few fields resulting in a slight drop in acreage. Overall demand was up for full blooming beauties, greenery staples, and live holiday decorations resulting in a \$2.4M increase in sales. Greater gains would have been realized if not for the heavy rainfall events in the later part of the year. The holiday rebound continued as tree stands reached maturity for harvesting and increases in prices and sales boosted cut Christmas trees in 2021. Outdoor grown cut flowers had a steady year with slight increases to cultivated acreage and overall sales. As with indoor cut flowers, wholesale market contracts were on an upswing over last year despite still lacking bigger celebratory events, and direct marketing remained a viable option.



VEGETABLE CROPS

		PRODUCTION				VALUE	
Сгор	Year	Acres	Per Acre	Total	Unit	Per Unit	Total
Artichokes	2021	40	2.50	100	Ton	\$2,337	\$234,000
ALTEHORES	2020	46	2.40	110	Ton	\$2,698	\$297,000
Beans, Fava	2021	110	2.68	295	Ton	\$1,891	\$558,000
beans, rava	2020	176	2.34	412	Ton	\$1,547	\$637,000
Beans, Snap	2021	35	2.81	98	Ton	\$2,296	\$225,000
beans, shap	2020	36	2.42	87	Ton	\$2,750	\$239,000
Brussels Sprouts	2021	457	11.17	5,105	Ton	\$1,739	\$8,878,000
	2020	576	12.18	7,016	Ton	\$1,355	\$9,507,000
Leeks	2021	40	14.28	571	Ton	\$1,169	\$668,000
	2020	77	13.58	1,046	Ton	\$1,193	\$1,248,000
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Peas	2021	134	1.68	225	Ton _	\$3,299	\$742,000
	2020	124	0.75	93	Ton	\$5,770	\$537,000
	/				_	*	*
Pumpkins	2021	15/	5.72	898	l on	\$1,385	\$1,244,000
	2020	160	6.83	1,093	Ion	\$1,133	\$1,238,000
	2024	222					<u> </u>
Miscellaneous Vegetables	2021	322					\$8,618,000
(Field and indoor Grown')	2020	350					\$8,572,000
	2024	4 205					C24 4/7 000
TOTAL	2021	1,295					\$21,167,000
	2020	1,545					\$22,275,000

¹Includes Herbs, Kale, Lettuce, Mushrooms, Peppers, Squash, Tomatoes, etc.



FRUIT AND NUT CROPS

Сгор	Year	Acres	Total Value	
Wine Grapes,	2021	137	\$1,414,000	
Red Varietals	2020	137	\$1,044,000	
Wine Grapes,	2021	40	\$376,000	
White Varietals	2020	39	\$268,000	
Miscollopoous ¹	2021	115	\$858,000	
Miscellaneous	2020	2020 139		
ΤΟΤΑΙ	2021	292	\$2,648,000	
IUTAL	2020	315	\$3,520,000	

¹Includes Apples, Berries, Chestnuts, Stone Fruits, etc.

Too Much, Too Little

Despite the reduction of 250 acres in production, vegetable value went down just 5%. Fruit production also down in acreage, unfortunately did not fare as well with an overall downturn of 25% in value from 2020 mostly due to losses in berries. Fruit and vegetable growers left fields lie fallow as some decided to pull back for reasons not limited to: rippling effects of the 2020 CZU fire, irrigation issues and lack of succession. Too much and too little rainfall kept all agricultural producers on edge. Brussels sprout growers lost more than 37 acres and \$900K of sales due to high volume rainfall events in October and December causing drainage and harvesting problems in lower lying fields. Another \$100K was lost in artichokes, fava beans and peas during the same events. Although drought reduced other fruit production, red and white wine varietals realized higher values with gains in tonnage produced and value.





LIVESTOCK

Commodity	Year	Number Head Sold	Total Value
Cattle and Calves	2021 2020	1,406 1,350	\$2,924,000 \$3,542,000
			•
Other ¹	2021 2020	87,103 65,598	\$2,773,000 \$2,043,000
TOTAL	2021 2020	88,509 66,948	\$5,697,000 \$5,585,000

¹Includes Goats, Lambs, Pigs, Poultry, etc.

LIVESTOCK PRODUCTS AND APIARY

Commodity	Year	Production	<u>V/</u> Per Unit	<u>ALUE</u> Total
Honey	2021 2020	38,000 lbs 41,000 lbs	\$10.99 \$11.10	\$418,000 \$455,000
Other ¹	2021 2020			\$986,000 \$948,000
TOTAL	2021 2020			\$1,404,000 \$1,403,000

¹Includes Beeswax, Cheese, Eggs, Wool, etc.

Making History

Another banner year for poultry added to the highest overall total dollar value of livestock in San Mateo County's history. Pasture-raised animals and regenerative farming practices lead the way for county ranchers centralized along coastal areas. Lack of response from some cattle ranchers along with earlier sales/less weight for reported sales of calves (as is standard for years deep into drought) contributed to reduced overall value for the Cattle and Calves commodity category. Strong egg production and sales supported livestock products. More bee hives were in production in 2021, but pounds of honey produced per hive was down likely from continued drought stress. Dry crops had their share of drought woes, but greater acreage and values drove up bean and hay crops. Pasture rancher response was low, resulting in possibly lower acreage accounted for if changes to range occurred between 2020 and 2021. As expected from post CZU fires and pressure on forest management, timber harvested in 2021 rose over 1000% to 12,843,000 board feet with a 618% increase in total value.



FIELD CROPS

	PRODUCTION			V	ALUE		
Commodity	Year	Acres	Per Acre	Total	Unit	Per Unit	Total
Beans, Dry ¹	2021	142	0.58	82	Ton	\$10,742	\$881,000
Deallo, Di j	2020	101	0.79	80	Ton	\$8,700	\$696,000
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Grain ²	2021	99	0.54	53	Ton	\$452	\$24,000
	2020	66	1.64	108	Ion	\$306	\$33,000
Oat & Dua	2024	470	2.05	000	Tan	¢040	¢200_000
	2021	478	2.05	980	Ton	ې۲۱3 د ۲۵۵	\$209,000
Пау	2020	470	2.00	900	TON	2192	\$164,000
Volunteer	2021	165	1 35	223	Ton	\$108	\$24 000
Hav	2020	155	1.66	257	Ton	\$106	\$27,000
	2020	100		207	1011	<i>Q</i> 100	<i>421,000</i>
Irrigated	2021	221				\$235	\$52,000
Pasture	2020	257				\$157	\$40,000
Other	2021	24,533				\$28	\$687,000
Pasture	2020	26,852				\$24	\$644,000
τοτλι	2021	25,638					\$1,877,000
IUTAL	2020	27,909					\$1,624,000

¹Includes Cranberry, Gigante, Romano, Scarlet Runner, etc. ²Includes Barley, Oats, Quinoa, Rye and Wheat

FOREST PRODUCTS				
Year	Board Feet	Total Value		
2021 2020	12,843,000 1,114,000	\$4,908,000 \$684,000		



COMMERCIAL FISH CATCH

Species	Year	Pounds	Value	Species	Year	Pounds	Value
Crab,	2021	1,079,864	\$6,165,960	Crab Back	2021	66,237	\$147,550
Dungeness	2020	684,019	\$2,687,694	CIAD, ROCK	2020	12,304	\$28,290
	2021	5,526,231	\$3,259,600		2021	23,876	\$71,058
Squid, Market	2020	4,925,740	\$2,909,702	Tuna, Albacore	2020	28,672	\$83,993
Salmon,	2021	317,699	\$2,948,910	Soallrchin	2021	4,933	\$53,308
Chinook	2020	433,062	\$3,538,946	Sea Urchin	2020	9,645	\$58,596
Halibut,	2021	104,384	\$539,616	Canddah	2021	70,353	\$35,192
California	2020	91,056	\$453,236	Sanudad	2020	9,636	\$4,779
Dockfish all	2021	279,565	\$289,859	lingend	2021	16,408	\$28,971
ROCKIISH, du	2020	220,307	\$175,671	LINGCOO	2020	11,036	\$17,704
Sablafich	2021	69,717	\$249,792	Missellaneour	2021	11,101	\$19,569
Sablensn	2020	68,086	\$214,042	Miscellaneous	2020	13,905	\$7,502
Sole, all	2021	154,888	\$151,134	Flounder, all	2021	5,161	\$6,429
	2020	182,038	\$168,450		2020	5,770	\$6,319
Grand	Total	202 202	21 20	7,730,417 lbs 7,205,895 lbs		\$13,96 \$10,42	6,948 0,785

Source: California Department of Fish and Game Poundage Value of Landings Princeton-Half Moon Bay. Informational only, value not included in Annual Report

WATER RESOURCES





According to NOAA, California is experiencing an unprecedented drought characterized by a combination of prolonged above average temperatures and below average precipitation. Rainfall data taken from the Western Regional Climate Center for Half Moon Bay shows monthly totals in 2021 were about 50% of average as compared with the last 20 years resulting in dry creeks, below average groundwater levels, and low running wells. This does not include October and December that saw above average precipitation as atmospheric rivers moved through the Bay Area resulting in short, concentrated downpours.

San Mateo County growers endured the long-lasting effects of drought interrupted by the two major rainfall events in later 2021. Those events caused drainage issues in fields and resulted in rotted vegetables that were inaccessible for harvest due to thick mud. It also highlighted the urgency to increase surface storage capacity and harness excessive rainfall to mitigate the dry times.





DROUGHT CONDITIONS

As shown by the U.S. Drought Monitor, conditions worsened in 2021, but slightly improved after late year rainfall events. In April 2021, San Mateo County drought intensity went from a D2 Severe Drought designation to D3 Extreme Drought. The D3 category is characterized by major crop and pasture losses as well as widespread water shortages. Conditions remained in the D3 designation until late December when San Mateo County received almost 12 inches of rain in the last few weeks of the year, returning the county to the D2 designation.



SUSTAINABLE AGRICULTURE REPORT

Sustainable Agriculture utilizes farming practices that conserve resources and plant health, and ensures the economic vitality of the farm. Activities carried out through our programs such as Pest Exclusion, Pest Detection, and Weed Management provide safeguards to maintain livestock and crop health. Early pest detection and proactive management of invasive pests using Integrated Pest Management strategies help protect California's agricultural industry and reduces environmental stressors.

PEST EXCLUSION

Pest Exclusion inspections of imported agricultural shipments prevent the introduction and establishment of damaging pests. Exotic pests are regularly intercepted by Staff Biologists at parcel facilities, San Francisco International Airport, nurseries and other entry points during daily inspections.

Origin certifications are also verified for compliance with plant quarantines, regulations and entry requirements. When an infested or noncompliant shipment is found, it may be destroyed, reconditioned and released, or returned to the shipper.

Type of Shipment	Inspected	Rejected	Pests Intercepted
Parcel Carriers	30,270	125	35
Truck	782	16	9
Air	3,174	26	19
Sea Containers	3	0	0
Household Goods (Gypsy Moth)	11	0	0
Nursery Stock (GWSS)	2,787	0	0

A - Rated Pests (Number of times intercepted)



Bactrocera dorsalis oriental fruit fly (2) Ceroplastes rusci fig wax scale (1) Dreissena rostriformis quagga mussel (1) Elsinoë australis sweet orange scab (1) Ferrisia virgata striped mealybug (1) Frankliniella schultzei cotton bud thrips (1) Phytolacca heterotepala Mexican pokeweed (1) Pinnaspis buxi boxwood scale (1) Pinnaspis strachani lesser snow scale (6) Pseudaulacaspis cockerelli magnolia white scale (2) Pseudaulacaspis pentagona white peach scale (1) Rubrocuneocoris calvertae plant bug (1) Selenaspidus articulatus rufous scale (2) Zachrysia provisoria snail (1)

While performing routine inspections, biologists found numerous A and Q rated insect and weed pests and diseases as confirmed by the CDFA plant pest laboratory. Pests go through scientific review to determine their harmful potential. A-rated pests and diseases are of known economic significance requiring containment, eradication, and rejection. Q-rated determinations are suspected to cause harm to agriculture or the environment, resulting in the same regulatory action of containment, eradication and rejection to keep them out of trade.

PEST DETECTION

Pest Detection staff place and monitor insect traps in San Mateo County to find pests before infestation takes hold. In 2021, 4,132 traps were paired with host plants and serviced 52,474 times. It was an uneventful trapping season without any finds of the harmful insect pests from the targeted list as checked by our Pest Detection Specialists.



Asian Citrus Psyllid European Corn Borer European Grape Vine Moth European Pine Shoot Moth Fruit Fly Species of Bactrocera, Dacus, Ceratitis, and Anastrepha **Glassy-winged Sharpshooter** Gypsy Moth Japanese Beetle

WEED MANAGEMENT

The San Mateo County Weed Management Area (WMA) Group met online throughout 2021 due to COVID-19 precautions and shared valuable information on weed management to improve economic, aesthetic, and environmental health in the county. Members and guest speakers covered topics on: Early Detection Rapid Response (EDRR) species, recruiting volunteers, weed treatments, successes and failures, grazing as a tool, as well as the importance of sanitation methods in the field to prevent weed spread. New outreach efforts are underway to educate growers



as well as flower wholesalers and retailers on noxious weeds that are trending through the floral industry.

Our department continued surveying and mapping, as well as contracted eradication efforts for Fertile Capeweed (Arctotheca calendula) and Skeleton Weed (Chondrilla juncea) while we expanded collaborative efforts with public and private landowners. Once again, our department was able to secure California Department of Food and Agriculture (CDFA) Noxious Weed Grant Project funding. We passed it through to Golden Gate National Recreation Area at Rancho Corral de Tierra for an ongoing Jubata grass (Cortaderia jubata) management project that expands on a similar previously funded project on adjacent lands. Funding was additionally awarded to a larger San Francisco Bay-wide project spearheaded by the California Invasive Plant Council (Cal-IPC) towards eradication of Algerian sea lavender (Limonium ramosissimum) for preservation of salt marsh habitat vital to endemic flora and fauna including federally designated endangered species. CDFA with Cal-IPC also kicked off a statewide Regional Weed Prioritization project in 2021 with County Agricultural Commissioners and WMAs to identify EDRR species and coordinate management at a landscape-scale.



INTEGRATED PEST MANAGEMENT

Integrated Pest Management (IPM) is a systematic approach to managing destructive pests and keeping them below economic thresholds. IPM begins with identification and monitoring of target pests and uses interactive control strategies including: natural enemies, biological controls, sanitation, lesser toxic pesticides, traps, and pheromones to disrupt reproduction.

Many methods of IPM are utilized throughout the county to improve how resources are being used, known as regenerative agriculture. Applying certain IPM practices not only controls pests, but also benefits biodiversity in both the soil and surrounding environment. Crop and grazing rotations, cover crops, and mulching are just a few techniques implemented by agricultural producers that help capture and store (a.k.a. sequester) carbon dioxide, creating healthier soils to support production as well as combat weather impacts of climate change such as extreme fluctuations in soil moisture. The California Department of Food and Agriculture's (CDFA) Healthy Soils Program provides grant money to farmers and ranchers who implement regenerative practices to improve soil health, sequester carbon and reduce greenhouse gas emissions. In 2021 San Mateo County growers received \$140,000 in funding for projects including cover cropping, compost application, and hedgerow planting.

For information on agricultural financial resources, please visit: https://www.smcgov.org/agwm/financial-resources



ORGANIC FARMING

San Mateo County agricultural land registered with California Department of Food and Agriculture (CDFA) as organic production was an estimated 605 acres (excluding rangeland) totaling an estimated gross production value of \$12,283,000 in 2021. The county had 25 registered organic producers, steadily decreasing from the peak 34 registrants in 2017, a downward trend seen both in our county and statewide. Declines in these values may be attributed to several factors; at the local level they include effects of the pandemic, 2020 CZU fire, water shortages and alternative certifications for ecologically-balanced farming practices.

Throughout the year our biologists sample various registered producers at cultivation sites, the wholesale produce market and Certified Farmers' Markets to ensure organic regulations are upheld.



INDUSTRIAL HEMP & COMMERCIAL CANNABIS

The hemp industry tried to find balance in the markets over the year while the state worked to align with federal regulations. Most of the San Mateo County hemp registrants did not renew for cultivation in 2021, but those who remained found their rhythm in the specialized coastal growing conditions. Due to mild temperatures, hemp cultivation has been limited to greenhouse grown in the county. Department biologists performed sampling with 19 site visits over the year to ensure hemp plants were within the allowed THC tolerance of $\leq 0.3\%$ prior to harvest.

Active Registrants in 2021	Registered Square Footage*
4	1,739,000

*Cultivation/storage. Actual cultivated/harvested area and value incorporated into Cut Flower Indoor commodity category to protect privacy.

2021 was a challenging year for cannabis growers in California, with mixed results for county cultivators. As permitting issues were addressed, output grew, but not enough to meet demand for some growers, while others were unable to harness premium wholesale prices. The ebb and flow of this new industry has yet to stabilize and in the meantime, the state merged cannabis regulatory programs into one Department of Cannabis Control (DCC) working to streamline processes and regulations and create an equitable market.

DCC Cultivation License Type and # in 2021	Square Footage
Small Mixed-Light (5), Medium Mixed-Light (3), Nursery (2)	178,781

More information on applications, FAQs, and regulations may be found: Hemp: https://www.cdfa.ca.gov/plant/industrialhemp/ Cannabis: https://cannabis.ca.gov/



DIRECT MARKETING

In a smaller agricultural community without many large-scale operations, direct marketing is essential to the survival and diversity of farming operations. Direct sales from producers to consumers provide greater profits for farmers, reduce packaging and transportation, promote the local agricultural economy, and increase access to the freshest produce, flowers, and meat. These avenues include: Certified Farmers' Markets (CFMs), Community Supported Agriculture (CSA), Farm Stands and U-pick. In a time when social interactions have been strained, connections made through direct marketing help balance mental and physical health to benefit the local communities.

To find up-to-date locations of Certified Farmers' Markets in San Mateo County, please visit: https://www.smcgov.org/agwm/find-certified-farmers-market

For more information on Community Support Agriculture, Farm Stands and U-pick producers, please visit: https://www.smccvb.com/fresh-as-it-gets/

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