

2020

MONTEREY
COUNTY

Crop & Livestock Report

Resilience

— IN ADVERSITY —

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OF FOOD & AGRICULTURE
Karen Ross, Secretary

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In accordance with Sections 2272 and 2279 of the California Food and Agricultural Code, I am pleased to announce the release of the 2020 Annual Crop and Livestock Report for the County of Monterey. This report reflects a production gross value of \$3,910,135,000 which is a decrease of 11.3% from 2019. The values represented in this report reflect gross value of agricultural commodities grown in Monterey County, and does not consider costs associated with labor, field preparation, planting, irrigating, harvesting, distribution, and other production activities.

The COVID-19 pandemic and 2020 wildfires depressed the production of most of our crops. The pandemic emergency restrictions resulted in the closure of schools and cancellation of conferences among the many impacts. Agriculture subsequently suffered the loss of much of the foodservice sector. In some instances, ash from the wildfires made some produce unsellable, resulting in crop losses. The following are the major increases and decreases for 2020:

Strawberries moved up to the top crop spot with a value of \$922,683,000. This represents a 26% increase from 2019 and is largely attributed to increased acreage and pricing for strawberries. Leaf lettuce dropped to the second most valuable crop at \$712,681,000 with a decline of 15.2% or \$127,874,000 compared to the previous year. This decrease mostly resulted from lower pricing for leaf lettuce. Head lettuce remained the third most valuable crop at \$428,580,000, a decrease of 16.6% or \$85,508,000 from the previous year. The lessened value in head lettuce was due to a reduction in acreage and lower average pricing for lettuce. Broccoli maintained its fourth place ranking despite a 25.3% decrease to \$341,495,000. Broccoli's decrease in value compared to 2019 was mostly due to less production.

Vegetable Crops saw a decrease in value of \$574,480,000 to \$2,524,608,000. Fruit and Nut Crops saw an increase of \$96,591,000 to \$1,124,737,000. (The Fruits and Nuts category without including Wine Grapes values, saw an increase of \$176,696,000 or nearly 21%, to \$1,018,746,000 due in part to the increase in value of strawberries.) Wine Grapes saw a significant decrease of 43% or \$80,105,000 to reach a total for red and white varieties of \$105,991,000 partly due to effects of wildfires, the COVID-19 pandemic, a decrease in production and average price per ton. Nursery Crops suffered a decrease of 16.8% or \$24,143,000 due to reduced acreage, production, and prices once again favoring an increase in imports and demand for cannabis greenhouse production.

Field Crops increased in value by \$927,000 to \$25,481,000. Livestock and Poultry remained stable at \$110,891,000.

In addition to reporting information on the status of agriculture in the County, this year we are highlighting the resilience of Monterey County Agriculture in the face of the worldwide pandemic caused by COVID-19, local wildfires, and how the agricultural industry, health care providers, community groups, County Board of Supervisors, and others collaborated in response to adversity. This report also highlights Monterey County essential agricultural workers for their hard work and perseverance to provide food even when the COVID-19 pandemic was at its worst.

I would also like to express my appreciation to the agricultural industry in providing us with vital information to make this report possible. I am especially appreciative of all the hard work and diligence of our staff and would like to thank Rich Ordonez, Graham Hunting, Yvonne Perez, Shayla Neufeld, Mayra Marrufo, as well as those who assisted in compiling, analyzing and reviewing the information.

Respectfully submitted,

Henry S. Gonzales
Agricultural Commissioner



Ag Community Responds to Adversity

Norm Groot, Executive Director – Monterey County Farm Bureau



Workers maintaining social distance as the River Fire burns in the distance.

We all know that 2020 was the year we would rather forget. But it did help farmers and ranchers to adapt to adversity in the face of multiple crisis events, proving that Monterey County Agriculture is resilient and remarkable.

Of course, no one could predict how fast the impacts of the pandemic would be. When the first shelter-in-place order was issued by our county in March 2020, there was an immediate reaction, both in the marketplace and the workplace. Employers were forced to scramble for available face coverings, gloves, and plexiglass shields, at the same time adjusting how harvest crews would operate, transportation of farmworkers to and from fields, and then a sudden shift in the marketplace. Commercial contracts vaporized and restaurants reduced their orders. The first four weeks of the shelter-in-place were chaotic. Farmers, shippers, and processors worked together to come up with creative solutions.

With the aid of trade associations here in Monterey County, the first of its kind “Advisory for Agricultural Worker Protection” (Advisory) appeared just three days after the shelter-in-place order, providing information and resources to farmers and farmworkers. During the next months the Advisory would be updated no less than six times with new and better information on workplace practices and resources for employers.

Responding to this adversity, we saw new ways of harvesting veggies and leafy greens that socially distanced the harvest crew members. Buses made multiple trips to and from fields to allow distance and assigned seating during transport. Our Agricultural

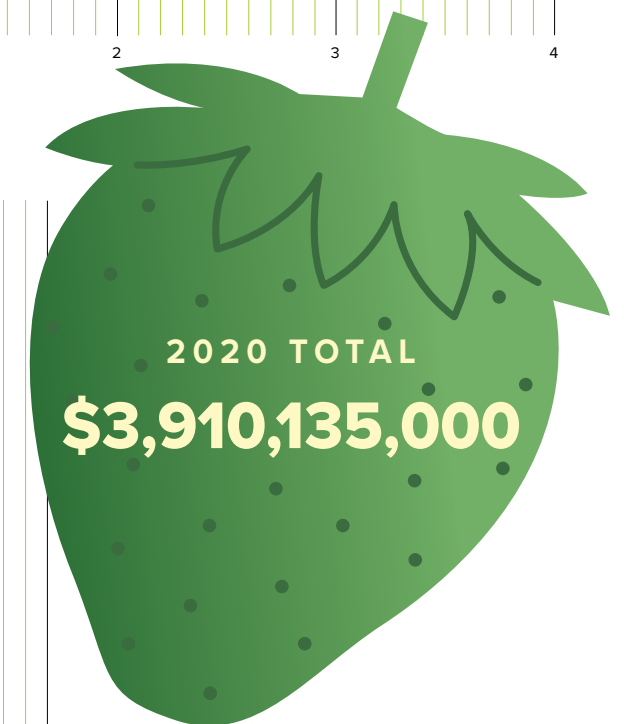
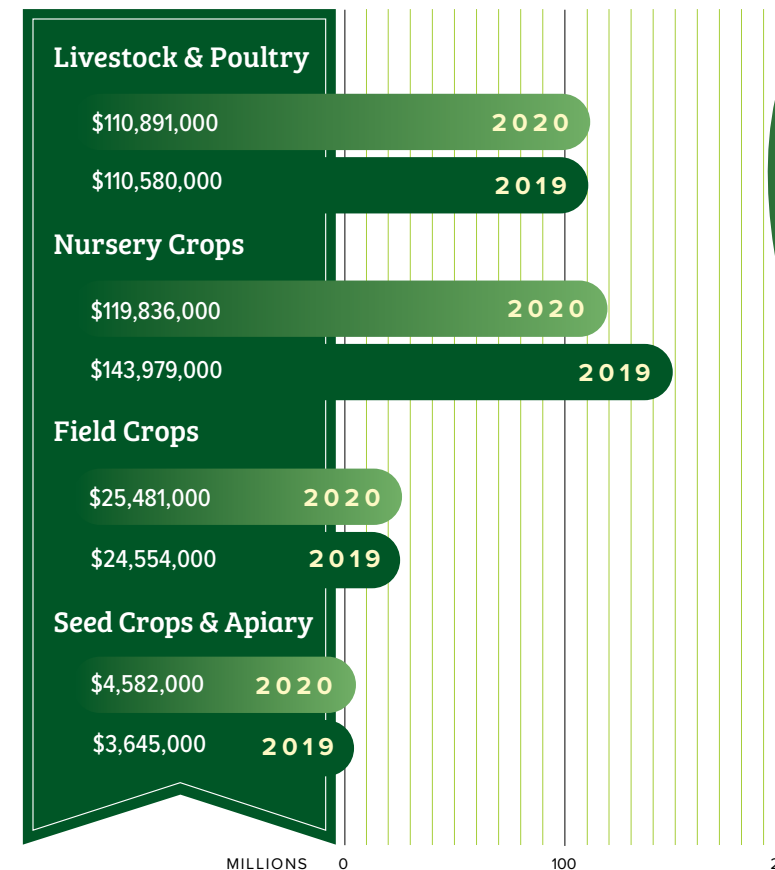
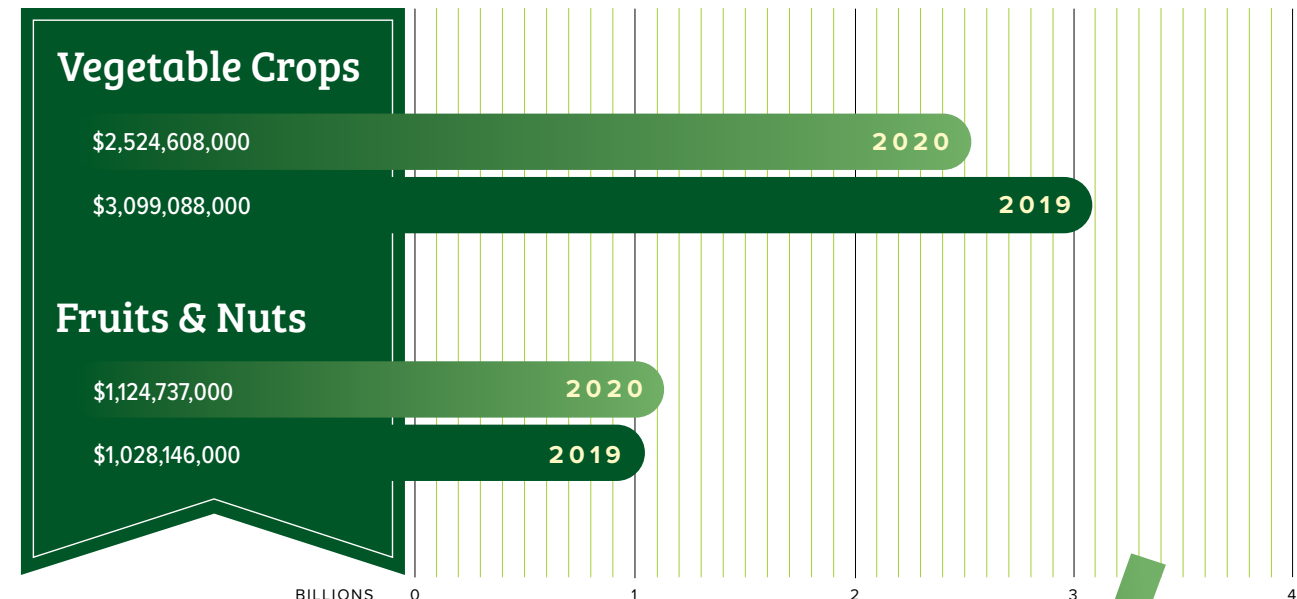
Commissioner’s Office helped to distribute over 2 million pieces of personal protective equipment (PPE), along with supplies secured by trade associations. Best of all, isolation housing was provided to those farmworkers either diagnosed or exposed to COVID-19 through a unique grower-led program which ultimately became the model for the state’s program implemented much later in the pandemic.

Working together, leaders from the County, our County Supervisors, agricultural trade associations, the hospitality sector, and labor councils, brought about a unified effort to bring vaccinations to our farmworkers first. Realizing the most vulnerable in our community are those who grow and harvest our food supplies, the recognition that we must protect our farmworkers was a remarkable achievement in bringing our community together behind a common goal.

Then the wildfires hit our County in August and September 2020, causing mass evacuations and impacting our air quality severely for weeks on end. Working together, a supply of N95 masks were secured and distributed through the Agricultural Commissioner’s Office in coordination with trade associations and other agencies. Coordinated information from Cal Fire, Sheriff’s Department, and other agencies was sent out daily to farmers, ranchers, and vintners to provide the earliest opportunities to protect employees and property. The response from our community as a whole helped to keep our food supply moving throughout this unwanted crisis.

All that happened in 2020 shows how resilient our local agricultural community is and how rapid responses to crisis can be obtained.

Gross Production Value MONTEREY COUNTY



Monterey County's Major Crop Trends

CROP		2000	2010	2020
Artichoke	Acre	6,780	4,959	3,616
	Value	\$43,494,000	\$47,828,000	\$34,952,000
	CPI Adjusted*	\$65,370,000	\$56,767,000	—
Broccoli	Acre	61,500	60,926	43,943
	Value	\$355,713,000	\$297,125,000	\$341,495,000
	CPI Adjusted	\$534,652,000	\$352,658,000	—
Cauliflower	Acre	17,480	19,444	17,138
	Value	\$118,528,000	\$110,554,000	\$192,790,000
	CPI Adjusted	\$178,144,000	\$131,217,000	—
Celery	Acre	8,136	12,305	9,905
	Value	\$108,240,000	\$175,595,000	\$114,920,000
	CPI Adjusted	\$162,681,000	\$208,414,000	—
Grapes (Wine)	Acre	45,043	45,893	44,886
	Value	\$216,430,000	\$172,916,000	\$105,991,000
	CPI Adjusted	\$325,287,000	\$205,234,000	—
Head Lettuce	Acre	57,800	44,574	39,077
	Value	\$427,521,000	\$511,904,000	\$428,580,000
	CPI Adjusted	\$642,550,000	\$607,580,000	—
Leaf Lettuce	Acre	48,373	95,436	54,912
	Value	\$302,762,000	\$724,619,000	\$712,681,000
	CPI Adjusted	\$455,041,000	\$860,052,000	—
Mushroom	Pounds	47,246,000	37,204,000	38,893,000
	Value	\$73,704,000	\$69,199,000	\$75,841,000
	CPI Adjusted	\$110,775,000	\$82,132,000	—
Nursery	Acre	1,881	2,106	565
	Value	\$194,251,000	\$266,121,000	\$119,836,000
	CPI Adjusted	\$291,954,000	\$315,860,000	—
Spinach	Acre	13,890	9,329	16,430
	Value	\$76,605,000	\$127,520,000	\$141,284,000
	CPI Adjusted	\$115,135,000	\$151,354,000	—
Strawberry	Acre	6,990	10,664	10,044
	Value	\$227,984,000	\$751,114,000	\$922,683,000
	CPI Adjusted	\$342,653,000	\$891,499,000	—
TOTAL OF MAJOR CROPS ABOVE	Acre	267,873	305,636	240,446
	Value	\$2,145,232,000	\$3,254,495,000	\$3,191,053,000
	CPI Adjusted	\$3,224,215,000	\$3,862,767,000	—

*<https://www.usinflationcalculator.com/inflation/consumer-price-index-and-annual-percent-changes-from-1913-to-2008/>

Monterey County's Top Crops

CROP	2020 CROP VALUE	2020 CROP RANKING	2019 CROP RANKING
Strawberry	\$922,683,000	1	2
Leaf Lettuce	\$712,681,000	2	1
Head Lettuce	\$428,580,000	3	3
Broccoli	\$341,495,000	4	4
Cauliflower	\$192,790,000	5	5
Spinach	\$141,284,000	6	10
Nursery & Flowers	\$119,836,000	7	9
Brussels Sprout	\$116,250,000	8	7
Celery	\$114,920,000	9	12
Livestock & Poultry	\$110,891,000	10	11
Misc. Vegetables	\$108,587,000	11	6
Wine Grape	\$105,991,000	12	8
Mushroom	\$75,841,000	13	13
Cabbage	\$51,872,000	14	14
Peas	\$47,470,000	15	16
Lemon	\$36,720,000	16	17
Raspberry	\$36,641,000	17	18
Onion, Dry	\$35,964,000	18	19
Artichoke	\$34,952,000	19	15
Carrot	\$27,492,000	20	20
Rangeland	\$20,112,000	21	23
Blackberry	\$15,692,000	22	24
Spring Mix	\$15,049,000	23	22
Kale	\$13,932,000	24	21
Garlic	\$13,736,000	25	26
Chard	\$9,634,000	26	25

Thank You, Essential Agricultural Workers of Monterey County.

Thank you, agricultural workers of Monterey County for continuing to work even when the risk of infection and the uncertainty of the COVID-19 pandemic was at its greatest. You worked so hard to provide food for yourself, your family, for many in our community, in the state, nation, and the world. Your labor is vital to the economy of the county. Our community has always recognized your work as a crucial part of the agricultural industry but the COVID-19 pandemic has brought additional recognition to this importance. You are essential to the security of the nation's critical infrastructure of food and agriculture.



CROP ¹	YEAR	ACREAGE	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL ²
Anise / Fennel	2020	484	19.14	9,300	ton	\$903.00	\$8,398,000
	2019	863	19.10	16,500	ton	\$1,150.00	\$18,975,000
Artichoke	2020	3,616	7.12	25,700	ton	\$1,360.00	\$34,952,000
	2019	3,835	7.87	30,200	ton	\$1,760.00	\$53,152,000
Asparagus	2020	330	3.64	1,200	ton	\$1,940.00	\$2,328,000
	2019	552	3.75	2,070	ton	\$2,590.00	\$5,361,000
Bok Choy	2020	185	10.69	1,980	ton	\$918.00	\$1,818,000
	2019	284	11.25	3,200	ton	\$1,020.00	\$3,264,000
Broccoli, Bulk ³	2020	—	—	75,000	ton	\$877.00	\$65,775,000
	2019	—	—	106,000	ton	\$835.00	\$88,510,000
Broccoli, Fresh	2020	32,958	6.85	226,000	ton	\$1,220.00	\$275,720,000
	2019	40,520	7.85	318,000	ton	\$1,160.00	\$368,880,000
Broccoli, Total	2020	43,943	—	—	—	—	\$341,495,000
	2019	54,027	—	—	—	—	\$457,390,000
Brussels Sprout	2020	6,094	10.25	62,500	ton	\$1,860.00	\$116,250,000
	2019	4,891	9.95	48,700	ton	\$1,960.00	\$95,452,000
Cabbage, Bulk	2020	—	—	51,400	ton	\$317.00	\$16,294,000
	2019	—	—	70,500	ton	\$270.00	\$19,035,000
Cabbage, Fresh	2020	2,662	20.10	53,500	ton	\$665.00	\$35,578,000
	2019	2,740	26.80	73,400	ton	\$581.00	\$42,645,000
Cabbage, Total	2020	5,220	—	—	—	—	\$51,872,000
	2019	5,372	—	—	—	—	\$61,680,000

¹ Organic production included.

² Totals may not calculate due to rounding.

³ Bulk may include one or more of the following: foodservice, processing and/or value added.

Vegetable Crops (continued)

CROP	YEAR	ACREAGE	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Carrot, Bulk	2020	—	—	36,200	ton	\$380.00	\$13,756,000
	2019	—	—	42,000	ton	\$360.00	\$15,120,000
Carrot, Fresh	2020	1,170	17.30	20,200	ton	\$680.00	\$13,736,000
	2019	1,290	18.20	23,500	ton	\$640.00	\$15,040,000
Carrot, Total	2020	2,438	—	—	—	—	\$27,492,000
	2019	2,690	—	—	—	—	\$30,160,000
Cauliflower, Bulk	2020	—	—	27,900	ton	\$624.00	\$17,410,000
	2019	—	—	27,800	ton	\$693.00	\$19,265,000
Cauliflower, Fresh	2020	14,567	10.85	158,000	ton	\$1,110.00	\$175,380,000
	2019	16,141	9.75	157,000	ton	\$1,230.00	\$193,110,000
Cauliflower, Total	2020	17,138	—	—	—	—	\$192,790,000
	2019	18,989	—	—	—	—	\$212,375,000
Celery, Bulk	2020	—	—	18,700	ton	\$403.00	\$7,536,000
	2019	—	—	24,900	ton	\$488.00	\$12,151,000
Celery, Fresh	2020	9,212	26.97	248,000	ton	\$433.00	\$107,384,000
	2019	9,305	35.50	330,000	ton	\$528.00	\$174,240,000
Celery, Total	2020	9,905	—	—	—	—	\$114,920,000
	2019	10,005	—	—	—	—	\$186,391,000
Chard	2020	991	6.75	6,690	ton	\$1,440.00	\$9,634,000
	2019	1,249	7.50	9,370	ton	\$1,310.00	\$12,275,000
Cilantro	2020	613	7.50	4,600	ton	\$1,590.00	\$7,314,000
	2019	1,150	7.60	8,740	ton	\$1,560.00	\$13,634,000
Garlic	2020	1,030	9.82	10,100	ton	\$1,360.00	\$13,736,000
	2019	844	10.19	8,600	ton	\$1,320.00	\$11,352,000
Kale	2020	1,749	8.73	12,900	ton	\$1,080.00	\$13,932,000
	2019	2,183	10.00	21,800	ton	\$1,380.00	\$30,084,000
Leek	2020	568	12.09	6,870	ton	\$1,540.00	\$10,580,000
	2019	684	11.97	8,190	ton	\$1,470.00	\$12,039,000

"Working together, leaders from the County, our County Supervisors, agricultural trade associations, the hospitality sector, and labor councils, brought about a unified effort to bring vaccinations to our farmworkers first."

Vegetable Crops (continued)

CROP	YEAR	ACREAGE	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Lettuce, Total ⁴	2020	93,919	—	—	—	—	\$1,141,261,000
	2019	99,123	—	—	—	—	\$1,354,643,000
Misc. Vegetables, Bulk	2020	—	—	79,800	ton	\$675.00	\$53,865,000
	2019	—	—	171,000	ton	\$710.00	\$121,410,000
Misc. Vegetables, Fresh	2020	9,067	6.68	60,600	ton	\$903.00	\$54,722,000
	2019	11,300	7.03	79,400	ton	\$950.00	\$75,430,000
Misc. Vegetables, Total ⁵	2020	21,010	—	—	—	—	\$108,587,000
	2019	35,624	—	—	—	—	\$196,840,000
Mushroom	2020	115	—	38,893,000	lbs	\$1.95	\$75,841,000
	2019	144	—	45,703,000	lbs	\$1.90	\$86,836,000
Napa Cabbage	2020	254	14.80	3,760	ton	\$967.00	\$3,636,000
	2019	436	15.52	6,770	ton	\$1,040.00	\$7,041,000
Onion, Dry	2020	2,324	27.90	64,800	ton	\$555.00	\$35,964,000
	2019	2,146	27.49	59,000	ton	\$617.00	\$36,403,000
Parsley	2020	120	10.02	1,200	ton	\$1,240.00	\$1,488,000
	2019	250	10.70	2,680	ton	\$1,460.00	\$3,913,000
Peas ⁶	2020	4,376	—	—	—	—	\$47,470,000
	2019	5,357	—	—	—	—	\$52,640,000
Peppers ⁷	2020	518	17.40	9,010	ton	\$394.00	\$3,550,000
	2019	590	18.70	11,000	ton	\$406.00	\$4,466,000
Radish	2020	168	12.03	2,020	ton	\$1,050.00	\$2,121,000
	2019	195	11.46	2,230	ton	\$1,000.00	\$2,230,000
Spinach, Bulk	2020	—	—	132,000	ton	\$900.00	\$118,800,000
	2019	—	—	114,000	ton	\$960.00	\$109,440,000
Spinach, Fresh	2020	1,810	8.50	15,400	ton	\$1,460.00	\$22,484,000
	2019	1,530	8.50	13,000	ton	\$1,360.00	\$17,680,000
Spinach, Total	2020	16,430	—	—	—	—	\$141,284,000
	2019	13,550	—	—	—	—	\$127,120,000
Spring Mix	2020	1,663	8.96	14,900	ton	\$1,010.00	\$15,049,000
	2019	2,771	8.95	24,800	ton	\$916.00	\$22,717,000
Squash	2020	133	10.34	1,380	ton	\$613.00	\$846,000
	2019	104	10.55	1,100	ton	\$595.00	\$655,000
VEGETABLE CROPS TOTAL	2020	235,095					\$2,524,608,000
	2019	267,898					\$3,099,088,000

⁴ See Lettuce Production, page 9

⁵ Includes: Arugula, Beet, Broccolini, Cactus Pear, Collard Green, Cucumber, Fava Bean, Frisée, Green Onion, Herbs, Kohlrabi, Mache, Mustard, Pumpkin, Radicchio, Rappini, Salad Products, Tomato and Turnip.

⁶ Includes: Bulk

⁷ Includes: Bell Pepper, Chili Pepper and Pimento.



CROP	YEAR	ACREAGE	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
HEAD LETTUCE							
Naked	2020	—	—	5,796,000	ctn ⁸	\$11.30	\$65,495,000
	2019	—	—	5,656,000	ctn	\$13.60	\$76,922,000
Wrapped	2020	—	—	20,548,000	ctn	\$13.80	\$283,562,000
	2019	—	—	21,536,000	ctn	\$14.90	\$320,886,000
Bulk	2020	—	—	283,000	ton	\$281.00	\$79,523,000
	2019	—	—	306,000	ton	\$380.00	\$116,280,000
HEAD LETTUCE, TOTAL	2020	39,007	1,005	39,202,000	ctn	—	\$428,580,000
	2019	40,277	1,020	41,083,000	ctn	—	\$514,088,000
LEAF LETTUCE							
Butter Leaf	2020	939	950	892,000	ctn	\$10.40	\$9,277,000
	2019	1,045	950	993,000	ctn	\$10.90	\$10,824,000
Endive	2020	329	900	266,000	ctn	\$11.30	\$3,006,000
	2019	318	1,100	350,000	ctn	\$9.26	\$3,241,000
Escarole	2020	236	900	143,000	ctn	\$12.30	\$1,759,000
	2019	171	1,100	188,000	ctn	\$13.50	\$2,538,000
Green Leaf	2020	4,779	950	4,540,000	ctn	\$13.30	\$60,382,000
	2019	6,406	950	6,086,000	ctn	\$10.59	\$64,451,000
Red Leaf	2020	2,694	950	2,559,000	ctn	\$12.50	\$31,988,000
	2019	3,194	950	3,034,000	ctn	\$11.10	\$33,677,000
Leaf Lettuce, Bulk	2020	—	—	34,800	ton	\$581.00	\$20,219,000
	2019	—	—	35,100	ton	\$630.00	\$31,059,000
Romaine, Fresh ⁹	2020	33,410	1,000	33,410,000	ctn	\$13.90	\$464,399,000
	2019	35,203	1,000	35,203,000	ctn	\$14.28	\$502,699,000
Romaine, Bulk	2020	—	—	239,000	ton	\$509.00	\$121,651,000
	2019	—	—	238,000	ton	\$807.00	\$192,066,000
LEAF LETTUCE, TOTAL	2020	54,912	—	54,802,000	ctn	—	\$712,681,000
	2019	58,846	—	58,728,000	ctn	—	\$840,555,000
LETTUCE CROPS TOTAL	2020	93,919					\$1,141,261,000
	2019	99,123					\$1,354,643,000

⁸ Carton

⁹ Includes: Romaine Hearts



Fruit & Nut CROPS

CROP	YEAR	ACREAGE	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Avocado	2020	223	5.58	1,240	ton	\$2,380.00	\$2,951,000
	2019	225	6.56	1,480	ton	\$2,500.00	\$3,700,000
Blackberry	2020	225	9.00	2,030	ton	\$7,730.00	\$15,692,000
	2019	226	8.94	2,020	ton	\$6,660.00	\$13,453,000
Grapes (Wine) ¹⁰	2020	44,886	2.10	94,300	ton	—	\$105,991,000
	2019	44,683	2.95	132,000	ton	—	\$186,096,000
Lemon	2020	1,360	25.00	34,000	ton	\$1,080.00	\$36,720,000
	2019	1,270	29.41	37,400	ton	\$1,200.00	\$44,880,000
Misc. Fruit ¹¹	2020	404	3.62	1,460	ton	\$2,780.00	\$4,059,000
	2019	425	3.29	1,400	ton	\$2,530.00	\$3,542,000
Raspberry	2020	579	8.70	5,040	ton	\$7,270.00	\$36,641,000
	2019	570	9.80	5,590	ton	\$7,820.00	\$43,714,000
Strawberry, Fresh	2020	10,044	34.90	351,000	ton	\$2,600.00	\$912,600,000
	2019	9,232	35.64	329,000	ton	\$2,200.00	\$723,800,000
Strawberry, Processed	2020	—	—	18,500	ton	\$545.00	\$10,083,000
	2019	—	—	18,400	ton	\$487.00	\$8,961,000
Strawberry, Total	2020	10,044	—	370,000	ton	—	\$922,683,000
	2019	9,232	—	347,000	ton	—	\$732,761,000
FRUIT & NUT CROPS TOTAL	2020	47,131					\$1,124,737,000
	2019	56,631					\$1,028,146,000

¹⁰ Represents bearing acres only; see Wine Grape Production, pages 20-21.
¹¹ Includes: Apple, Blueberry, Kiwi, Loganberry, Olallieberry, Olive and Walnut.

Strawberry Farmers Respond Quickly & Consistently

Rick Tomlinson, President - California Strawberry Commission

Thank you to the many individuals that worked to maintain and safeguard the food supply chain throughout the COVID pandemic. Your many efforts are deeply appreciated.

As news of the impending global pandemic spread, the Commission worked throughout the year with government agencies and other leaders in agriculture to inform our farmers and protect essential workers and consumers.

On March 4, 2020, two weeks before the governor issued the first shelter-in-place order, the Commission began training farmworkers on COVID safeguards and sent out the first of 69 industry notices advising farmers about the looming pandemic threat. By March 16, the daily guidance had become so comprehensive that the Commission launched a coronavirus news and resources hub for the agriculture industry on calstrawberry.com. This platform was used throughout the year as a resource to strawberry operations and to publicly show how farmers were responding quickly, reasonably and responsibly.

By March 23, all 400 strawberry farms in the state had received training tools, materials and COVID safety information, specifically tailored to farming.

In parallel with the industry efforts to safeguard the workplace, the Commission also deployed the first multi-lingual public service announcements in California. Multiple ads and public service announcements about COVID safeguards—produced in English, Spanish and Mixtec—began running April 1 and were heard over 25 million times.

Simultaneous with implementing COVID safeguards and public service announcements, the produce market collapsed. The government shelter-in-place order sent a shock wave throughout the entire food supply chain that left farms with canceled orders for crops that had been planted months before COVID hit. In the first two months alone, California strawberry farmers lost over \$60 million. This happened just as the strawberry industry was ramping up for peak season, jeopardizing over 50,000 farmworker jobs, and the livelihood of 400 family farms.

Strawberry farmers turned to USDA on April 2, urging them to use emergency funding powers to purchase strawberries to stabilize the market, save jobs and provide healthy food to millions of Americans who were losing their jobs.

As a direct result of these efforts from strawberry farmers and other agricultural organizations, on April 27, the USDA announced the purchase and distribution through food banks and other non-profits of over \$3 billion of 12 fruit and vegetable crops, including strawberries. Combined with extensive efforts by the entire supply chain, the market stabilized in May and total volume in 2020 was down only 10% from 2018. As the 2020 strawberry season concluded in November, strawberry farms had returned to full employment, with sick time, health benefits and over \$1 billion in farmworker wages for the year.

Nearly a full year after COVID began in the U.S, on February 3, 2021, the Commission was given the opportunity to co-host the first large-scale vaccination clinic for farm workers on the Central Coast. By March 6, the Commission had co-hosted eight vaccination clinics for over 5,000 farm workers and all Central Coast Counties began vaccinating the agriculture sector.

2020 was a devastating year, but the resilience of our farmers, and the quick and consistent action by the strawberry industry, kept farms safe and allowed them to rebound and continue providing delicious and nutritious strawberries to American consumers, while significantly contributing to local communities with jobs, purchases and tax revenues.



Monterey County Ag Community Shows Resilience

Henry S. Gonzales, Monterey County Agricultural Commissioner



A field of brussels sprouts shrouded in the haze of wildfires.

The year 2020 will forever be remembered for the COVID-19 pandemic that infected over 171 million people, took over 3 million lives, and wreaked havoc on economies worldwide. Monterey County was similarly, but proportionately impacted by the pandemic. Monterey County also suffered through the River, Carmel, Dolan, and Coleman wildfires during the ever-developing pandemic. The adversity of the pandemic and wildfire disasters challenged the resilience of county governments, businesses, and residents. As some businesses closed to reduce the spread of the pandemic, agriculture could not close or stop producing the bounty of fresh fruits and vegetables, healthy animal proteins, and ornamental and medicinal plants essential to human life.

The Cybersecurity and Infrastructure Security Agency, an agency within the United States Department of Homeland Security, lists Food and Agriculture among the nation's 16 Critical Infrastructure Sectors. Indeed, the food and agriculture sector has been long recognized for their essential role in the production, processing and delivery of food and agricultural products to people across America and the world. Food and agriculture workers along with workers from the other 15 sectors, are essential to the security of the nation and the economic engine of Monterey County.

Early in the pandemic it was realized that agricultural workers were in greater peril of contracting COVID-19 than most residents.

With COVID-19 being primarily transmitted from person to person via minute particles within our breath, working and living near one another placed most agricultural workers in jeopardy. It was obvious there was a compelling need for action to help protect our agricultural workers. They are not only essential to our critical infrastructure, county economy, and food and agricultural sector; but are also more susceptible to infection due to reasons beyond their control.

To increase protections for agricultural workers, Monterey County Supervisor Luis Alejo called together a group of local agriculture leaders, and along with Monterey County Supervisor Christopher Lopez launched an effort to develop best practices for agricultural employers to protect agricultural workers. The effort came to fruition in the *Advisory for Agricultural Worker Protection During COVID-19 Crisis on the Central Coast* (see page 14).

Early in the pandemic, anecdotal reports of agricultural losses and reductions circulated. Between April 20, 2020, and April 24, 2021, to gain a better understanding of the losses, the Agricultural Commissioner's Office conducted a survey of agricultural producers. The survey showed significant losses particularly among growers providing fresh produce to the foodservice sector. The closing of schools and the cancellation of most conferences and travel resulted in the cancellation of contracts for fresh produce. Approximately 20% of county growers responded to the survey. Of those responding to the survey, 38% reported losses. A total of 2,093 acres were reported as a loss or not planted. Losses continued after the survey and are reflected in the overall numbers in this year's crop report.

In partnership with the California Department of Food and Agriculture (CDFA) and the California Department of Pesticide Regulation (CDPR), County Agricultural Commissioners (CAC) statewide distributed hundreds of thousands of surgical masks to help protect farmworkers from contracting the coronavirus. The pandemic had made the surgical masks and other protective items scarce. The CDFA and CDPR were able to obtain surgical masks and other protective items from the California Governor's Office of Emergency Services. In addition to the surgical masks, CACs helped distribute cloth face coverings, latex gloves, hand sanitizer, and N95 respirators designated for pesticide handlers. Additionally, the worldwide non-profit humanitarian aid organization MedShare donated 54,000 Disney character children's cloth face coverings for the children of farmworkers. All of these items were distributed by staff from the Agricultural Commissioner's Office directly to farmworkers and through community-based organizations, growers and farm labor contractors.

Besides distributing face coverings and other protective items, the Agricultural Commissioner's Office created and distributed thousands of COVID-19 informational cards to farmworkers. The Spanish language wallet-sized cards listed symptoms of COVID-19, along with information about where farmworkers could receive free medical attention, information, food, and childcare. The cards also identified farmworkers as essential agriculture workers.

The Agricultural Commissioner's Office partnered with several community groups to create a public service announcement (PSA) video in Spanish and Mixtec. The PSA featured recognizable individuals in the community including the Mexican Consulate speaking directly to farmworkers about the actions they could take to protect themselves, their families, and the community from COVID-19.

The wildfires presented yet another set of emergencies for Monterey County agriculture. The wildfire smoke created a hazard for farmworkers. Prior to the wildfires, the Agricultural Commissioner's Office had started distributing N95 respirators to pesticide applicators. When the first wildfire struck, the N95 respirators were redirected to protect farmworkers from the wildfire smoke. The losses primarily to wine grapes and strawberries were estimated at \$74,586,292.

The Agricultural Commissioner's Office, as a key part of the nation's critical infrastructure, continued with their essential work serving the agriculture industry and community. The Agricultural Commissioner's Office continued to inspect and certify produce destined for export, inspected pesticide applications for farmworker safety, conducted pesticide exposure investigations, inspected farmer's markets, and conducted all work mandated of the agency as essential to our nation's security.



Worker prunes grapes while using face covering.

Monterey County Agriculture Advocates for Farmworkers Throughout This Pandemic

Luis A. Alejo, Monterey County Supervisor, District 1



Workers practicing COVID-19 protective measures.

March 17, 2021, marked the one-year anniversary of Monterey County’s first approved Shelter-In-Place Order. This order placed major restrictions on residents and businesses alike on the very day the county confirmed its first two COVID-19 infection cases.

Since agriculture businesses were deemed “essential,” workers continued harvesting and processing crops despite the order. Local agricultural leaders and elected officials immediately went to work to devise protocols for the safety and protection of tens of thousands of agriculture and cannabis workers throughout the county.

Supervisor Chris Lopez and I, along with Agricultural Commissioner Henry Gonzales, the Grower Shipper Association, the Monterey County Vintners and Growers Association, the Monterey County Farm Bureau, the California Strawberry Commission and the Coastal Growers Association, began meeting daily. Only three days later, on March 20, we released the “Advisory for Agricultural Worker Protection” (Advisory), the first-of-its-kind in the nation. It even predated Cal/OSHA’s first guidance released over two weeks later on April 6.

The Advisory created protocols to protect workers from exposure to COVID-19, including hygiene and routine sanitation for work sites, employee training, addressing the needs of high-risk

workers, and safety measures for transporting workers and for employer-sponsored housing.

The protocols were voluntary but had the strong support of Monterey County’s agricultural industry for its implementation. A confidential hotline was also later created by the Agricultural Commissioner’s Office to address and troubleshoot complaints from workers or family members.

The collaboration with the agriculture industry has continued since the inception of the pandemic and resulted in Monterey County being the first county in the state to advocate for PPE, priority testing, alternative housing programs, and priority vaccination for agricultural workers. The Advisory was recently updated again as local workers began returning to work in this new harvest season and thousands more began migrating back to the Salinas Valley.

Monterey County has certainly been a model of collaboration in addressing the unique needs of our critical and essential agricultural workforce, but as the pandemic rages on, there is much more to do.

Luis A. Alejo is the Monterey County Supervisor for District 1, which includes most of the city limits of Salinas. His farmworker family originally migrated in the 1950s to Soledad before settling in Watsonville.

Nursery, Cut Flowers & Foliage

CROP	YEAR	ACREAGE	PRODUCTION QUANTITY	UNIT	VALUE PER UNIT	TOTAL
Vegetable Transplants	2020	37.2	1,815,610,000	per plant	\$0.04	\$72,624,000
	2019	49.0	1,054,691,000	per plant	\$0.05	\$52,735,000
Misc. Nursery Products ¹²	2020	349	7,729,000	various	\$5.65	\$43,669,000
	2019	423	21,139,000	various	\$3.72	\$78,676,000
Misc. Cut Flowers & Foliage ¹³	2020	179	3,366,000	various	\$1.05	\$3,543,000
	2019	273	6,830,000	various	\$1.84	\$12,568,000
NURSERY, CUT FLOWERS & FOLIAGE TOTAL	2020	565				\$119,836,000
	2019	745				\$143,979,000

¹² Includes: Begonia, Bulbs, Christmas Trees, Herbs, Fruit & Nut Trees, Jasmine, Money Tree, Natives, Orchids, Poinsettia, Potted Plants, and Turf.
¹³ Includes: Alstroemeria, Calla Lily, Carnations, Chrysanthemum, Curly Willow, Dahlia, Eucalyptus, Freesia, Gerbera, Gladiolas, Hydrangea, Iris, Lavender, Lily (Asiatic & Oriental), Marigold, Narcissus, Protea, Ranunculus, Roses, Snapdragon, Statice, Stock, Sunflower, Tulips, and Zinnia.

"The collaboration with the agriculture industry has continued since the inception of the pandemic and resulted in Monterey County being the first county in the state to advocate for PPE, priority testing, alternative housing programs, and priority vaccination for agricultural workers."

Monterey County Agriculture Advocates for Farmworkers Throughout This Pandemic // Page 14

Apiary & Seed PRODUCTION

Apiary Production

CROP	YEAR	COLONIES	PRODUCTION	UNIT	VALUE PER UNIT	TOTAL
Honey	2020	—	10,925	lbs	\$2.31	\$25,200
	2019	—	11,500	lbs	\$2.26	\$26,000
Pollination ¹⁴	2020	2,451	—	colony	\$66.00	\$162,000
	2019	2,579	—	colony	\$65.30	\$168,000
Wax	2020	—	342	lbs	\$4.59	\$1,570
	2019	—	360	lbs	\$4.50	\$1,620
APIARY PRODUCTION TOTAL	2020					\$189,000
	2019					\$196,000

Seed Production

CROP	YEAR	ACREAGE	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Bean Seed	2020	620	1.21	750	ton	\$3,220.00	\$2,415,000
	2019	577	1.07	617	ton	\$3,310.00	\$2,042,000
Misc. Seed ¹⁵	2020	705	0.67	472	ton	\$4,190.00	\$1,978,000
	2019	477	0.94	448	ton	\$3,140.00	\$1,407,000
SEED PRODUCTION TOTAL	2020	1,325					\$4,393,000
	2019	1,054					\$3,449,000

¹⁴ Seed Crops Pollination Services

¹⁵ Includes: Barley, Broccoli, Cauliflower, Corn, Cucumber, Pea and Sunflower Seeds.



CROP	YEAR	ACREAGE	PRODUCTION PER ACRE	TOTAL	UNIT	VALUE PER UNIT	TOTAL
Barley, Grain	2020	3,988	0.96	3,830	ton	\$143.00	\$548,000
	2019	3,841	1.13	4,340	ton	\$156.00	\$677,000
Bean ¹⁶	2020	1,180	1.50	1,770	ton	\$2,080.00	\$3,682,000
	2019	903	1.39	1,260	ton	\$1,850.00	\$2,331,000
Hay, Alfalfa	2020	913	3.22	2,940	ton	\$109.00	\$320,000
	2019	1,048	3.67	3,850	ton	\$122.00	\$470,000
Misc. Field Crops ¹⁷	2020	2,971	—	—		—	\$758,000
	2019	2,591	—	—		—	\$684,000
Oat ¹⁸	2020	258	1.93	498	ton	\$122.00	\$60,800
	2019	358	1.84	659	ton	\$116.00	\$76,400
Rangeland	2020	1,058,545	—	—	acre	\$19.00	\$20,112,000
	2019	1,069,238	—	—	acre	\$19.00	\$20,316,000
FIELD CROPS TOTAL	2020	1,067,855					\$25,481,000
	2019	1,072,189					\$24,554,000

¹⁶ Includes: Peruano, Pintos, Pink, Pinquito and Lima Beans.

¹⁷ Includes: Pastureland and Wheat (grain).

¹⁸ Includes: Hay Oats and Misc. Oats.



Livestock & Poultry

CROP	YEAR	HEAD	PRODUCTION	UNIT	VALUE PER UNIT	TOTAL
Cattle & Calves	2020	25,300	177,000	cwt ¹	\$136.00	\$24,072,000
	2019	25,000	175,000	cwt	\$135.00	\$23,625,000
Stocker	2020	60,700	429,000	cwt	\$136.00	\$58,344,000
	2019	60,400	428,000	cwt	\$137.00	\$58,636,000
Sheep & Lambs	2020	1,150	1,427	cwt	\$157.00	\$224,000
	2019	1,200	1,490	cwt	\$160.00	\$238,000
Hogs	2020	1,550	419,000	lbs	\$0.60	\$251,000
	2019	1,600	433,000	lbs	\$0.65	\$281,000
Misc. Livestock ¹⁹ & Poultry ²⁰ Products	2020	—	—	—	—	\$28,000,000
	2019	—	—	—	—	\$27,800,000
LIVESTOCK & POULTRY TOTAL	2020					\$110,891,000
	2019					\$110,580,000

¹⁹ Includes: Bulls, Cull Cows, Dairy Cows, Milk Manufacturing and Market Milk.

²⁰ Includes: Eggs, Hatcheries and Poultry.

¹Hundredweight (100 pounds)

"So far, MCAC staff has distributed over 50,000 bottles of hand sanitizer, 101,500 reusable adult cloth masks, 41,400 reusable children's cloth masks, 200,000 vinyl gloves, 1,766,890 disposable surgical masks, and 857,960 N95 respirators."

PPE Distribution: Prioritizing the Health & Safety of Our Essential Workers // Page 19

PPE Distribution: Prioritizing the Health & Safety of Our Essential Workers

Patrick Rodriguez, Monterey County Agricultural Inspector/Biologist



Agricultural Commissioner's Office essential workers distributing personal protective equipment.

In March of 2020, California Governor Gavin Newsom, and Monterey County Health Officer Edward Moreno, issued Shelter-in-Place orders to protect the health and well-being of citizens from the spread of COVID-19. As essential government workers, personnel from the Monterey County Agricultural Commissioner's Office (MCAC) were exempted from the orders. This allowed MCAC to continue providing valuable services to the agricultural industry in Monterey County.

As the pandemic worsened, the available supply of personal protective equipment (PPE) and hand sanitizer began to dwindle. The MCAC took decisive action as a result. The MCAC office surveyed the local agricultural community to assess PPE and hand sanitizer needs county-wide. The survey results showed a dire need was looming.

With the health and safety of the agricultural workers in mind, and in cooperation with the California Office of Emergency Services (Cal OES), the MCAC took steps to obtain a supply of PPE and hand sanitizer to provide to local growers, farm labor contractors, and pest control businesses to give, free of charge to their workers.

In 2020, the MCAC office received multiple shipments of hand sanitizer, disposable surgical masks, reusable cloth masks and N95 respirators.

These supplies were distributed at eight events held over the course of a year at the MCAC's main office in Salinas, King City, and several smaller distribution events in partnership with local community-based organizations and industry trade associations.

In addition to the pandemic related lack of PPE availability, growers faced another obstacle when a mid-August lightning storm ignited not just one fire, but three wildfires. The River, Carmel and Dolan fires produced challenging conditions throughout the county. The MCAC was able to provide much needed N95 particulate respirators to the agricultural community to protect workers from smoke inhalation, allowing for growing operations to continue throughout the smoke-filled weeks that followed.

So far, MCAC staff has distributed over 50,000 bottles of hand sanitizer, 101,500 reusable adult cloth masks, 41,400 reusable children's cloth masks, 200,000 vinyl gloves, 1,766,890 disposable surgical masks, and 857,960 N95 respirators.

The Monterey County Agricultural Commissioner's Office will hold more distribution events during 2021.



WHITE GRAPE VARIETIES	HARVESTED ACRES	AVERAGE PRICE PER TON	TOTAL TONS	TOTAL VALUE
Chardonnay	16,758	\$1,140	41,500	\$47,310,000
Pinot Gris	1,207	\$950	5,310	\$5,045,000
Sauvignon Blanc	1,101	\$1,040	3,400	\$3,536,000
Gewurztraminer	789	\$645	5,420	\$3,496,000
Riesling	1,420	\$799	1,760	\$1,406,000
Pinot Blanc	101	\$1,250	641	\$801,000
Muscat Blanc	148	\$1,180	352	\$415,000
Malvasia Bianca	115	\$1,140	303	\$345,000
Albarino	34	\$1,270	142	\$180,000
Vioginier	112	\$1,630	71	\$116,000
Grenache Blanc	20	\$1,180	95	\$112,000
Chenin Blanc	128	\$1,560	68	\$106,000
Other Whites ²¹	223	\$1,420	228	\$324,000
SUBTOTAL WHITE GRAPE	22,156		59,300	\$63,192,000

RED GRAPE VARIETIES	HARVESTED ACRES	AVERAGE PRICE PER TON	TOTAL TONS	TOTAL VALUE
Pinot Noir	10,655	\$1,520	14,500	\$22,040,000
Cabernet Sauvignon	5,057	\$920	13,100	\$12,052,000
Merlot	3,975	\$813	2,960	\$2,406,000
Grenache	330	\$1,360	1,390	\$1,890,000
Syrah	1,177	\$1,460	960	\$1,402,000
Petite Sirah	367	\$1,480	890	\$1,317,000
Malbec	307	\$1,490	320	\$477,000
Zinfandel	132	\$1,530	173	\$265,000
Gamay Valdiguie	30	\$1,020	245	\$250,000
Cabernet Franc	110	\$1,470	106	\$156,000
Cinsaut	3	\$1,230	88	\$108,000
Petit Verdot	199	\$1,130	91	\$103,000
Other Reds ²²	388	\$1,610	207	\$333,000
SUBTOTAL RED GRAPE	22,730		35,000	\$42,799,000

²¹ Other Whites Include: Arneis, Gruner Veltliner, Marsanne, Melon, Picpoul Blanc, Roussanne, Sauvignon Musque, Semillon, and Vermentino.

²² Other Reds Include: Barbera, Carignane, Dolcetto, Dornfelder, Fresia, Montepulciano, Mouvedre, Negrette, Sangiovese, Tannat, Tempranillo, Teroldego, and Trousseau.



YEAR	NONBEARING ACRES	BEARING ACRES	TOTAL TONS	VALUE
2020	1,028	44,886	94,300	\$105,991,000
2019	1,147	44,683	132,000	\$186,096,000
2018	1,137	44,924	180,000	\$247,758,000
2017	896	44,299	171,000	\$239,027,000
2016	1,496	44,771	172,000	\$238,892,000
2015	2,549	44,296	140,300	\$185,925,000
2014	2,512	45,993	200,000	\$247,357,000
2013	1,531	42,986	185,000	\$226,982,000
2012	1,936	45,130	172,000	\$214,306,000
2011	2,006	43,034	124,000	\$140,976,000
2010	2,572	43,321	177,000	\$172,916,000

"When the first wildfire struck, the N95 respirators were redirected to protect farmworkers from the wildfire smoke. The losses primarily to wine grapes and strawberries was estimated at \$74,586,292."

Monterey County Ag Community Shows Resilience // Pages 12-13



	2020	2019
COMMODITY GROUPS	COMMODITY ACRES	COMMODITY ACRES
Citrus & Tree Fruit	159	131
Grapes, Table & Wine	1,057	523
Strawberry	2,926	2,051
Other Berries & Fruit	1,093	635
Broccoli	7,601	5,440
Carrot	581	238
Celery	2,681	1,717
Lettuce	22,356	15,940
Spinach	11,801	10,972
Misc. Vegetables	11,036	8,618
Fallow	684	265
All Other Field Crops	17,594	15,172
Livestock Acreage	53,240	26,657
TOTAL ACRES*	132,809	88,359
TOTAL PRODUCERS	276	286
REPORTED GROSS SALES	\$757,887,000	\$562,702,000

*2019 Total Acreage Updated
 Organic Production & Gross Sales Table - Data provided by California Department of Food and Agriculture - State Organic Program from individually reported annual registrations. More detailed information allowed better reporting for 2019 and 2020 data. Producers and Gross Sales are not itemized to assure confidentiality of individual business information.

Exports by Commodity

COMMODITY	2020	TOTAL POUNDS
Lettuce		154,725,000
Strawberry		74,316,000
Broccoli		37,281,000
Celery		29,093,000
Cauliflower		24,286,000
Spinach		18,910,000
Cabbage		7,254,000
Raspberry		3,381,000
Radicchio		3,312,000
Carrot		2,329,000
Leek		2,126,000
Seeds		2,099,000
Other		10,310,000
TOTAL		371,262,000

COMMODITY	2019	TOTAL POUNDS
Lettuce		110,203,000
Strawberry		87,229,000
Broccoli		37,081,000
Celery		22,638,000
Cauliflower		18,904,000
Spinach		17,599,000
Cabbage		8,208,000
Raspberry		4,311,000
Radicchio		4,083,000
Carrot		3,405,000
Leek		2,153,000
Brussels Sprout		1,490,000
Other		10,190,000
TOTAL		327,494,000

Exports by Trade Partners

COUNTRY	2020	TOTAL POUNDS
Mexico		131,293,000
Canada		109,543,000
Taiwan		77,707,000
Japan		20,857,000
Hong Kong		7,662,000
Korea, Republic of		6,160,000
Saudi Arabia		5,274,000
European Union		3,434,000
United Arab Emirates		3,122,000
Kuwait		2,228,000
Puerto Rico		1,565,000
Panama		754,000
Qatar		447,000

COUNTRY	2019	TOTAL POUNDS
Mexico		98,945,000
Canada		96,083,000
Taiwan		74,940,000
Japan		23,212,000
Hong Kong		8,690,000
Saudi Arabia		7,756,000
Korea, Republic of		4,376,000
Kuwait		2,336,000
United Arab Emirates		2,155,000
Singapore		2,089,000
European Union		1,754,000
Puerto Rico		1,554,000
Qatar		1,367,000

"As some businesses closed to reduce the spread of the pandemic, agriculture could not close or stop producing the bounty of fresh fruits and vegetables..."

Monterey County Ag Community Shows Resilience // Pages 12-13



Production and Value

PRODUCT	PRODUCTION	UNIT	\$ PER UNIT	VALUE
Nursery Products	2,063,000	Each	\$11.00	\$22,693,000
Flower (Mixed Light)	460,000	Pound	\$900.00	\$414,000,000
Flower (Indoor)	36,200	Pound	\$1,100.00	\$39,820,000
Trim	99,300	Pound	\$75.00	\$7,448,000
Seed	141,000	Each	\$1.00	\$141,000
TOTAL 2020				\$484,102,000
TOTAL 2019				\$449,688,000

Review of Production and Value Table - Total production and value for cannabis cultivation during 2020 was calculated at \$484.1 million. An increase of \$34.4 million from 2019 value resulted from greater production of flower and nursery products as well as consistent overall pricing for Monterey County cannabis products. The value is summarized and averaged as a gross production value. Capital expenditures, labor, profits, fees, taxes, and other overhead costs are not reflected in this total and it does not represent the net profit of the industry, or any individual cultivator.

Production by Type

PRODUCTION TYPE	PRODUCTION AREA (SQUARE FEET)	NURSERY PRODUCTS (EA)	DRIED FLOWER (LB)	TRIM (LB)	SEED (LB)
Nursery	1,053,000	1,750,000	—	—	141,000
Indoor	88,100	45,400	36,200	6,090	—
Mixed Light	2,891,000	268,000	460,000	93,200	—
TOTAL 2020	4,032,000	2,063,000	496,000	99,300	141,000
TOTAL 2019	n/a	1,442,000	454,000	223,600	n/a

Review of Production by Type Table - Monterey County cannabis production can be generalized into three groups: Nursery, Indoor and Mixed Light. Nursery products include clones/transplants, small potted plants (teens) and plants grown to produce clones (mothers). Indoor cultivation uses only artificial light and Mixed Light uses artificial and natural light; both production methods produce flowering plants. Trim (small pieces of flower and leaves containing cannabinoids) production reported decreased due to less external transfers and sales.

CDFA Issued Cultivation Licenses

LICENSE TYPES AND SQUARE FOOTAGE	NO. OF LICENSES PER TYPE	CULTIVATION TOTAL AREA (SQUARE FEET)	CULTIVATION TOTAL AREA (ACRES)
Nursery	49	—	—
Specialty Cottage Mixed Light (2,500 ft ²)	3	7,500	0.17
Specialty Cottage Indoor (500 ft ²)	2	1,000	0.02
Specialty Indoor (5,000 ft ²)	14	70,000	1.61
Specialty Mixed Light (5,000 ft ²)	22	110,000	2.53
Small Indoor (10,000 ft ²)	15	150,000	3.44
Small Mixed Light (10,000 ft ²)	383	3,830,000	87.9
Medium Indoor (22,000 ft ²)	2	44,000	1.01
Medium Mixed Light (22,000 ft ²)	10	220,000	5.05
TOTAL 2020	544	4,433,000	101.80
TOTAL 2019	470	3,771,000	86.57

Review of CDFA Issued Cultivation Licenses Table - In 2020, California Department of Food and Agriculture (CDFA) CalCannabis Licensing Branch issued 4.43 million square feet, or 101.8 acres, of cultivation license area in Monterey County. This table represents all licenses issued including Nursery. License types represent gross production area permitted by CDFA for cultivation and must not exceed each licensed square footage of flowering canopy. Nursery licenses are needed to cultivate vegetative plants, that are not flowering (mature), from seed or clones.

Utilization of CDFA Issued Cultivation Licenses

LICENSE TYPE	NO. OF LICENSES UTILIZED PER TYPE	CULTIVATION TOTAL AREA (SQUARE FEET)	CULTIVATION TOTAL AREA (ACRES)
Nursery	42	1,053,000	24.2
Indoor	19	88,100	2.02
Mixed Light	335	2,891,000	66.4
TOTAL	396	4,032,000	92.6

Review of Utilization of CDFA Issued Cultivation Licenses Table - This new table reflects reported utilization of CDFA issued cultivation licenses. Not all licenses, nor all square footage, issued by CDFA were utilized in production. New data available allows comparison between issued and utilization of licenses.

Cannabis Growth Supports Monterey County

Bob Roach, Executive Director – Monterey County Cannabis Industry Association



2020 was a challenging year and especially challenging for businesses that faced mandatory shutdowns and an uncertain future. Fortunately, the Monterey County Cannabis Industry was allowed to continue operations as essential businesses during the pandemic, and considering that cannabis remains illegal on the federal level, this designation was a defining moment for the industry.

Continuing to operate in a COVID-19 world proved to be challenging to all agricultural businesses. However, cannabis operators have always had to be adaptable and resilient and 2020 was no different.

New state policies and guidelines enacted to help businesses survive the global coronavirus pandemic were a welcomed relief. The assistance came as a mix of extensions, relief and deferrals from state taxes. Locally, Monterey County officials supported the industry by postponing a tax increase that had been scheduled to go into effect in July of 2020. State and county tax relief was a major help in keeping the cannabis industry moving forward.

Cannabis sales were high in March of 2020 when the stay-at-home orders were introduced. Many decided to stock up due to the unknowns the pandemic would bring. People found cannabis to be a way to stay calm and relaxed. Orders placed in advance and curbside pick-up became major keys to success for cannabis retailers and will likely remain strong even after the pandemic is over.

In 2020, California retailers sold approximately \$4.4 billion dollars of cannabis products to consumers, which was a significant increase

from the previous year. In this same year, local cannabis tax revenues provided \$20.5 million that was used to provide disaster and pandemic relief for all the communities of Monterey County. Major expenditures included \$500,000 for the Food Bank of Monterey County, \$9.9 million to fund the Emergency Operations Center response to COVID-19, and \$3 million for community outreach and education. Cannabis tax revenue was vital in providing essential funding to the county as other county revenue sources were negatively affected by the pandemic.

Thus far, the value of all cannabis tax expenditures by the County beginning in 2017 through February 2021 has totaled \$38,816,209.

Looking forward, the three state agencies currently regulating cannabis (Bureau of Cannabis Control, California Department of Food and Agriculture, and California Department of Public Health) would be consolidated into one agency to become the Department of Cannabis Control. It is hoped that this process will result in a smoother and more efficient regulatory system that is less complex and not unnecessarily burdensome on the industry.

2020 showed the resiliency and vitality of the local cannabis industry to Monterey County, the fourth largest cannabis county in the state as measured by the number of cannabis cultivation licenses. Monterey County cannabis is poised for future growth with plenty of greenhouse space and county leaders who continue to show support for the industry.



Monterey County Industrial Hemp production began on August 2019, after the Monterey County Board of Supervisors approved a one-year pilot program. Monterey County Industrial Hemp Ordinance No. 5314 established a new combined zoning district in Monterey County Code Chapter 21.49, “HMP” District, of the inland zoning ordinance where the cultivation of industrial hemp became an allowed use subject to certain regulations. The ordinance also amended the Sectional District Zoning Maps for areas in the North County Area Plan and South County Area Plan boundaries with a base zoning designation of Farmlands “F” and that were previously cultivated.

Within this established HMP District, industrial hemp cultivation is allowed, subject to approval of registration by the Agricultural Commissioner consistent with the California Hemp Law in Division 24 of the California Code of Regulations. Limitations in the Industrial Hemp Pilot Program include:

1. Approval of no more than 30 registrations by the Agricultural Commissioner.
2. The industrial hemp will be cultivated within the “HMP” District.
3. The industrial hemp will be cultivated on land that was previously cultivated with any crop.
4. The industrial hemp cultivation will be grown in acreages not exceeding one hundred (100) acres.
5. The Industrial hemp will be cultivated on land that is at least three (3) miles from an existing legal commercial cannabis cultivation site unless the setback is reduced or waived by written mutual consent of the industrial hemp cultivator and the cannabis cultivator(s).

The ordinance was later updated by the Monterey County Board of Supervisors, in May 2020, with the passage and adoption of Ordinance No. 5327, which re-opened registration for qualified operations; extended the length of the Industrial Hemp Pilot Program for a three-year period ending on December 31, 2022; allowed for split-parcel zoning, potentially allowing previously excluded portions of parcels to be included in the HMP District; and bans the use of artificial lights.

Since first allowing industrial hemp in Monterey County, 11 operations have registered with the Monterey County Agricultural Commissioner’s office and the California Department of Food and Agriculture (CDFA) Industrial Hemp Program, for a total of 732 acres permitted for cultivation. As a result, 48 acres of Industrial Hemp were grown in South Monterey County. To be considered Industrial Hemp, the Tetrahydrocannabinol (THC) concentration, which is the psycho active chemical found in cannabis, must be tested, and be found at less than 0.3% prior to harvest. If THC concentration is above 0.3% the crop cannot be harvested and must be destroyed. All harvested acres were tested for THC concentration. Three acres grown in 2020 tested to have more than 0.3% THC concentration, and were therefore destroyed.

Monterey County growers are all outdoors and utilize the natural flowering cycle of Industrial Hemp plants, thus they only get one crop rotation per year during September through October.

REGISTERED OPERATION TYPES	REGISTRATIONS	ACRES REGISTERED*	HARVESTED ACRES	PRODUCTION (LB)	VALUE
Cultivators	9	—	—	—	—
Breeders	1	—	—	—	—
EARI ²³	1	—	—	—	—
TOTAL	11	457.5	33	6,600	\$619,000

²³ Established Agricultural Research Institutions

*Acres registered, harvested acres, production, and value are not itemized by operation type for business confidentiality.



SUMMARY OF Pest Management

Monterey County's Invasive Weed program preserves agriculture, valuable habitat and community infrastructure by controlling noxious and invasive weeds. Pest Management and Eradication is the concerted effort to abate incipient and established infestations of biologically or economically important pests.

Roads are prime corridors for invasive plants that can be carried by passing vehicles and their loads. Roadside Treatment programs performed along county roads work to limit spread of weeds and eliminate new weeds before they are problematic. 714 gross acres of Yellow Starthistle infested rights of way were managed in South Monterey County.

The Monterey County Ag Commissioner's Office made a concerted mapping and surveying effort in 2020. All historical weed location data was consolidated into the CalFlora Observer Pro Weed Mapper System and shared with CalWeedMapper for regional collaboration and prioritization purposes. Roads included in our Roadside Spraying program and historical weed infestation sites were surveyed to establish current infestation levels of target weeds. Spreading populations of A-rated Skeletonweed (*Chondrilla juncea*) were detected and 43.5 gross acres immediately controlled. 3,220 gross acres were surveyed for A-rated Scotch Thistle and 223 gross acres of plants were treated. 8 gross acres of A-rated Puna Grass were manually controlled and 2,732 gross acres were surveyed and mapped.

The Monterey County Weed Management Area (WMA) is a cooperative effort composed of county departments, state agencies, and nonprofit groups concerned with the spread of invasive weeds and the protection of local environments. This group hosts the annual Central Coast Invasive Weed Symposium in collaboration with partners from the Santa Cruz County WMA to showcase regional projects, share developments in management strategies, circulate recent research and communicate regional priorities. CCIWS was not held in 2020 due to the COVID outbreak but 3 WMA meetings were held via zoom.

Residents and visitors to Monterey County can help reduce the spread of invasive weeds by cleaning their boots and tires after hiking and biking, watching for unusual plants and informing the Agricultural Commissioner's Office if they suspect an invasive plant in the county.

Gardeners and landscapers can vet their plant choices with PlantRight.org to find excellent horticultural alternatives to common invasive landscape plants.

Visit the California Invasive Plant Council website, www.cal-ipc.org, for extensive information on California's invasive plants, their regional prioritization and best management practices.

WEEDS OF CONCERN IN MONTEREY COUNTY

Fertile Capeweed, *Arctotheca calendula*

French Broom, *Genista monspessulana*

Cape Ivy, *Delairia odorata*

Arundo, *Arundo donax*

Pampas Grass, *Cortaderia selloana*

Purple Pampas Grass, *Cortaderia jubata*

Yellowstar-thistle, *Centaurea solstitialis*

Veldt Grass, *Ehrharta calycina*

Taurian Thistle, *Onopordum tauricum*

Puna Grass, *Achnatherum brachychaetum*

Skeletonweed, *Chondrilla juncea*

Scotch Thistle, *Onopordum acanthium*

Sticky Eupatorium, *Ageratina adenophora*

WEED ACTIVITIES SUMMARY

Gross Acres Surveyed	9,423
Gross Acres Treated	990
Net Acres Treated	336
Properties Surveyed	70
Properties Treated	7

Summary of Pest Detection & Exclusion Activities

Pest Detection is the systematic search for invasive pests throughout the county by means of trapping, luring and surveying. The goal is to detect novel pests before they become established so that eradication is biologically and economically feasible. Detection trapping is performed primarily by the County Agricultural Commissioner's offices.

2020 PEST DETECTION SUMMARY

TARGET PEST	INSECT HOSTS	TRAPS PLACED	SERVICINGS
Medfly	Fruit Trees	242	4,172
Melon Fruit Fly	Vegetable Gardens	100	1,010
Mexican Fruit Fly	Fruit Trees	121	3,662
Oriental Fruit Fly	Fruit Trees	242	4,172
Misc. Fruit Fly	Fruits and Vegetables	112	1,322
Gypsy Moth	Shade Trees	204	1,250
Japanese Beetle	Turf, Rose	181	1,346
Khapra Beetle	High Hazard Commodities	0	0
Light Brown Apple Moth	Ornamental/Commercial Crops	383	2,575
European Grapevine Moth	Grapes	2,159	24,293
Asian Citrus Psyllid - Urban/Commercial	Citrus	491	7,732
Glassy-Winged Sharpshooter	Nurseries/Urban Areas	622	8,974
European Grape Berry Moth	Grapes	662	4,423
European Stone Fruit Yellow	Stone Fruit Trees (Visual Survey)	178	n/a
TOTAL TRAPPING PROGRAM ACTIVITIES		5,697	64,931

Pest Exclusion is the process of monitoring the channels of trade through routine inspections and commodity certification to prevent the transport and introduction of economically important pests and pathogens. Inspections include phytosanitary field inspections, special surveys, incoming plant shipments, parcel terminals, and nursery stock inspections.

2020 PEST EXCLUSION SUMMARY

TARGET PEST	LOCATION	INSPECTIONS
Glassy-Winged Sharpshooter	Plant Nurseries / Homeowners	952
Gypsy Moth	Homeowners	14
Nursery Inspection	Plant Nursery	434
Shipments from Southern State	Plant Nurseries	10
Shipments from Non-Southern State	Plant Nurseries	192
Seed Inspections	Seed Companies	36
Seed Retailer/Labeler	Seed Companies	161
Seed Plant Quarantine Field Walks	Growers	352
Sudden Oak Death	Plant Nurseries / Homeowners	51
Incoming Parcels - Terminal Inspections	Terminals - Fed Ex	664
Incoming Parcels - Terminal Inspections	Terminals - UPS	138



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