Solano CountyCrop and Livestock Report

• 73rd Annual | 1949 - 2022





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AGRICULTURAL COMMISSIONER SEALER OF WEIGHTS AND MEASURES

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

Pursuant to California Food and Agricultural Code sections 2272 and 2279, I am pleased to present the 2022 Solano County Crop and Livestock Report. This report reflects the gross value of agricultural production. It does not measure producer profit or loss, nor account for the extended benefits agriculture generates in the local economy.

The gross value of Solano County agricultural production in 2022 was \$390,881,000, representing a \$16,761,000 decrease, or 4% downturn, from 2021. Extreme weather events throughout the year impacted crop and livestock production: freezing temperatures in late February severely damaged the developing almond and olive crops; early September brought a relentless heatwave with temperatures peaking at well over 100 degrees across the county for nine consecutive days, including localized highs of over 115 degrees, desiccating grapes on the vine; mid-September rains temporarily halted the final weeks of tomato harvest and caused tomatoes still in the field to mold; the excessive heat and untimely rain likewise led to mold and poor kernel color in the walnut crop; a third year of drought continued to stress soil moisture, groundwater and rangeland conditions; and, in early December, Lake Berryessa dropped to its lowest level since 1994.

Processing tomatoes were the top grossing crop for the first time since 2015 with a record value of \$47,353,000, a 7% increase, despite a shorter crop than 2021, due to higher contract pricing. Nursery products ranked second in value increasing 1% to \$43,698,000. Cattle and calves were third in value at \$36,218,000, increasing 14% on higher pricing than 2021 even though drought conditions forced reductions in herd sizes. Alfalfa ranked fourth in value at \$30,946,000 increasing 8% on all-time high pricing due to product demand driven by prolonged drought and a corresponding decline in alfalfa production across the western states. The winegrape crop was smaller than the previous year due to impacts from the September heatwave, but rose 3% in value to \$26,164,000 on stronger pricing. Almond production dropped 60% due to frost damage and walnuts suffered from heat, rain and the lowest prices since 1999. Pollination, sheep and lambs, and prunes rounded out the top 10 crops of 2022.

I would like to express my great appreciation to all the farmers, ranchers and cooperating agencies who contributed information used to produce this report as well as a sincere gratitude to our Agriculture Department staff for their efforts and teamwork compiling the data and bringing the report to fruition.

This report, and all previous crop reports dating to 1949, along with information about the programs and services provided by the Department of Agriculture/Weights and Measures may be viewed online at www.SolanoCounty.com/AG.

Respectfully submitted,

Ed King

Agricultural Commissioner/Sealer of Weights and Measures

PROCESSING TOMATOES

The 2022 Solano County tomato crop yielded an all-time high farm gate value of \$47.3 million

Processing tomatoes are one of Solano County's most prolific and enduring crops annually ranking within the top 5 commodities in value since the 1950s. The 2022 crop continued this trend with an all-time high farm gate value of \$47.3 million. Solano ranks 8th among California counties in processing tomato production with crops averaging nearly 475,000 tons in recent years. In 2022, Solano growers produced 4% of the statewide harvest and 14% of the Sacramento Valley harvest. Contract rates negotiated between the California Tomato Growers Association and processors rose 24% from \$84.50 to \$105 per ton in 2022 due not only to demand for tomato products, but also to compensate for economic inflation which caused production costs to climb sharply and prolonged drought conditions which drove a decrease in overall statewide production in 2021. This increase in pricing, along with a smaller frost-damaged almond crop, helped make processing tomatoes Solano's top grossing crop for the first time since 2015.



Springtime begins a sequential progression of tomato plantings followed by summer harvests carefully orchestrated to provide a consistent flow of fresh fruit to local processors. Between March and May, growers plant greenhouse raised tomato starts. In mid-July, around 120 days after the first plantings, mechanical harvesters operated by small crews begin methodically sweeping through tomato fields cutting tomato plants at ground level and separating uniformly ripened fruit from vines. Electronic screeners and manual crews on harvesters detect and sort green and defective fruit before tomatoes are conveyed into tandem 25,000-pound capacity tubs for transport to local processors.

The beginning of harvest season sets off a steady march of tomato trucks, each carrying two of the fully loaded tubs, or about 300,000 individual tomatoes per load, from fields to the Campbell Soup Company's processing plant in Dixon. The Campbell's plant has been a fixture of Solano agriculture since 1976 employing 200 seasonal workers and providing local growers a readily accessible outlet for their freshly harvested tomatoes. Solano growers also truck tomatoes to the Pacific Coast Producer's processing plant in Woodland and some Yolo County farmers haul their tomatoes into Solano for processing at Campbells.

Before tomatoes enter processing plants, each load passes through a California Processing Tomato Advisory Board grading station where samples are tested for damage, mold, color, soluble solids and pH. During harvest season, which runs 90-100 days from July into early October, the Campbell's plant operates continuously, handling over 500 tubs, or 6,600 tons of tomatoes per day. Tomatoes



are processed into dice or paste and sealed in bulk 300-gallon aseptic bags within a few hours of harvest. Once processed and packed, containers are trucked to Woodland and rail shipped to other Campbell's facilities where paste and diced tomatoes are further processed into sauces, soups, salsas and juices.

Solano farmers grow dozens of varieties of processing tomatoes bred for local conditions, maturity timing, disease resistance and different end-product uses. Harvested acreage has fluctuated through the years reaching highs of over 23,000 acres per year in the 1990s. More recently, 9,000 to 10,000 acres are planted annually as part of a rotation that may include sunflowers, beans, corn and wheat. Most of the county's processing tomatoes are grown in the loamy alluvial soils of the Dixon Ridge, within a few miles of Campbell's, with some additional acreage in the Elmira-Maine Prairie and Ryer Island agricultural regions.

Twenty California counties now produce 95% of U.S. and more than 25% of the world's processing tomatoes. This command of domestic and international production is the result of a progressive biological and industrial evolution over the past seventy years driving

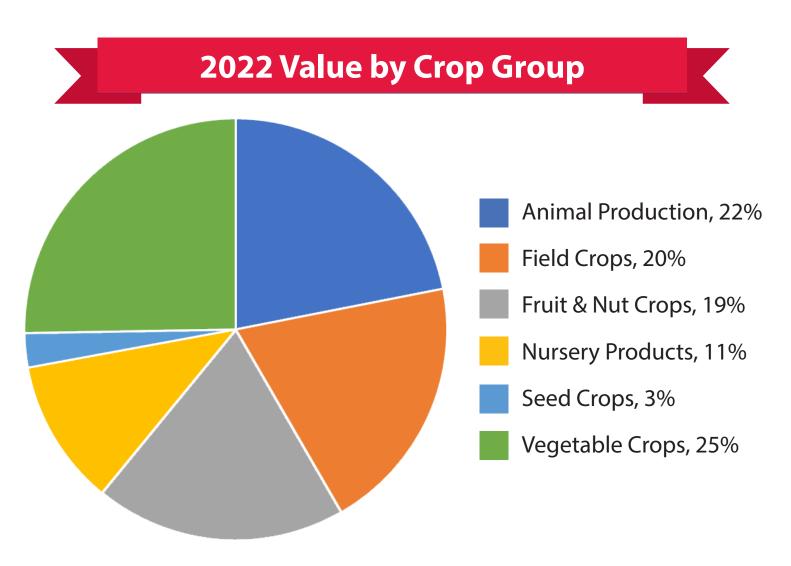
development of high-yield tomato cultivars and the U.C. Davis led invention of mechanical harvesters. During that time, California harvests increased from 15 to nearly 50 tons per acre as selective breeding produced tomatoes durable enough to withstand mechanical harvesting and gradually advanced characteristics suitable to regional growing conditions. Drip irrigation also largely replaced furrow irrigation resulting in water use efficiencies and better weed control. Looking ahead, urban development, pest and disease pressures, water supplies and weather extremes, including drought, early season freezes and summer heatwaves pose challenges to this important sector of Solano and California agriculture.



Value Summary

| YEAR | ANIMAL PRODUCTION ¹ | FIELD CROPS | FRUIT & NUT CROPS | NURSERY PRODUCTS | SEED CROPS | VEGETABLE CROPS | TOTAL VALUE |
|------|--------------------------------|----------------|----------------------|---------------------|---------------|--------------------|-------------|
| 2022 | 85,635,000 | 77,223,000 | 75,264,000 | 43,698,000 | 10,291,000 | 98,770,000 | 390,881,000 |
| 2021 | 73,044,000 | 62,824,000 | 129,943,000 | 43,086,000 | 12,354,000 | 86,391,000 | 407,642,000 |
| 2020 | 67,601,000 | 58,939,000 | 104,643,000 | 37,466,000 | 11,493,000 | 77,017,000 | 357,159,000 |
| 2019 | 63,814,000 | 64,530,000 | 113,091,000 | 31,231,000 | 16,686,000 | 82,761,000 | 372,113,000 |
| 2018 | 60,497,000 | 71,140,000 | 93,360,000 | 43,248,000 | 28,720,000 | 74,750,000 | 371,715,000 |
| 2017 | 50,756,000 | 64,474,000 | 108,353,000 | 44,627,000 | 21,459,000 | 64,887,000 | 354,556,000 |
| 2016 | 37,259,000 | 59,006,000 | 127,228,000 | 39,754,000 | 16,478,000 | 67,447,000 | 347,172,000 |
| 2015 | 57,277,000 | 78,454,000 | 87,741,000 | 37,648,000 | 11,729,000 | 81,020,000 | 353,869,000 |
| 2014 | 62,387,000 | 98,672,000 | 86,624,000 | 35,594,000 | 16,900,000 | 78,468,000 | 378,645,000 |
| 2013 | 51,340,000 | 88,744,000 | 97,150,000 | 35,144,000 | 16,628,000 | 59,209,000 | 348,215,000 |

¹⁾ Includes livestock and poultry, livestock and poultry products and apiary production



Top 10 Commodities

| COMMODITY | 2022 CROP VALUE | 2021 RANKING |
|-----------------------|-----------------|--------------|
| Tomatoes (Processing) | 47,353,000 | 2 |
| Nursery Products | 43,698,000 | 3 |
| Cattle & Calves | 36,218,000 | 4 |
| Alfalfa (Hay) | 30,946,000 | 5 |
| Grapes (Wine) | 26,164,000 | 6 |
| Almonds | 21,290,000 | 1 |
| Walnuts | 11,304,000 | 7 |
| Pollination | 9,340,000 | |
| Sheep & Lambs | 9,074,000 | 9 |
| Prunes (Dried) | 9,009,000 | 10 |



Fruit and Nut Crops

| CROP | YEAR HARVESTED ACRES | | PRODUCTION | | UNIT | VALUE | |
|----------------------------|----------------------|--------|------------|--------|------|----------|---------------|
| | | ACRES | PER ACRE | TOTAL | | PER UNIT | TOTAL |
| Almonds | 2022 | 17,940 | 0.44 | 7,920 | Ton | \$2,690 | \$21,290,000 |
| (Meats) | 2021 | 22,400 | 0.87 | 19,600 | Ton | \$3,640 | \$71,123,000 |
| Olives ¹ | 2022 | 97 | 0.45 | 44 | Ton | \$3,080 | \$133,000 |
| Olives | 2021 | 295 | 1.31 | 380 | Ton | \$3,620 | \$1,392,000 |
| Prunes | 2022 | 1,580 | 2.97 | 4,690 | Ton | \$1,920 | \$9,009,000 |
| (Dried) | 2021 | 1,480 | 2.81 | 4,150 | Ton | \$1,740 | \$7,218,000 |
| Walnuts | 2022 | 10,200 | 1.32 | 13,330 | Ton | \$850 | \$11,304,000 |
| vvairiuts | 2021 | 9,900 | 1.50 | 15,200 | Ton | \$1,338 | \$20,312,000 |
| Missellaneous ² | 2022 | 658 | | | | | \$7,364,000 |
| Miscellaneous | 2021 | 530 | | | | | \$4,456,000 |
| Total Fruit & | 2022 | 30,475 | | | | | \$49,100,000 |
| Nut Crops | 2021 | 34,605 | | | | | \$104,501,000 |

Figures may not add due to rounding.

1) Value per unit based on oil value.

| CROP | BEARING ACRES | NON-BEARING ACRES | |
|--------|------------------|----------------------|--|
| Almond | 23,600 | 3,900 | |
| Walnut | 11,000 | 400 | |
| Olive | 491 | 195 | |





²⁾ Includes almond hulls, apricots, aprium, blackberries, citrus, grapes (table), kiwi, nectarines, peaches, pears, persimmons, pistachios, plums, pluots and strawberries.

Vegetable Crops

| CROP | | YEAR | HARVESTED ACRES | PRODU | CTION | UNIT | VALUE | |
|------------|--------------------------|------|--------------------|----------|---------|------|----------|--------------|
| | | | ACRES | PER ACRE | TOTAL | | PER UNIT | TOTAL |
| Tor | natoes | 2022 | 9,500 | 45.60 | 439,000 | Ton | \$107.88 | \$47,353,000 |
| (Prod | cessing) | 2021 | 9,650 | 54.10 | 513,700 | Ton | \$85.87 | \$44,108,000 |
| Se | Dro cossin q | 2022 | 1,050 | | | | | \$2,507,000 |
| Vegetables | Processing | 2021 | 1,100 | | | | | \$2,985,000 |
| get | Z Z | 2022 | 1,550 | | | | | \$48,910,000 |
| > | Fresh | 2021 | 1,100 | | | | | \$39,298,000 |
| Total V | Total Vegetable Crops | | 12,100 | | | | | \$98,770,000 |
| | | | 11,850 | | | | | \$86,391,000 |

- 1) Includes cucumbers (pickling), onion and peppers.
 2) Includes beans, brassicas, carrot, corn, cucumber, endive, garlic, herbs, leafy greens, melons, $onions, peas, peppers, pumpkins, root\ vegetables, salad\ greens, sprouts, squash, sweet\ corn,$ tomatoes, tubers and watermelon.



Winegrapes

| CROP | YEAR | YEAR HARVESTED ACRES | | PRODUCTION | | VALUE | |
|-----------------|------|----------------------|----------|------------|-----|----------|--------------|
| | | ACILLS | PER ACRE | TOTAL | | PER UNIT | TOTAL |
| Dod Variation | 2022 | 2,168 | 5.17 | 11,200 | Ton | \$1,350 | \$15,161,000 |
| Red Varieties | 2021 | 2,181 | 5.55 | 12,100 | Ton | \$1,230 | \$14,928,000 |
| White Varieties | 2022 | 1,727 | 6.93 | 11,960 | Ton | \$920 | \$11,003,000 |
| write varieties | 2021 | 1,728 | 7.42 | 12,830 | Ton | \$820 | \$10,514,000 |
| Total Grapes | 2022 | 3,895 | 5.95 | 23,160 | Ton | | \$26,164,000 |
| | 2021 | 3,909 | 6.37 | 24,930 | Ton | | \$25,442,000 |



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Red Winegrapes

| VARIETY | HARVESTED ACRES | TONS | PRICE PER TON |
|--------------------|--------------------|-------|------------------|
| Pinot Noir | 766 | 4,590 | \$882 |
| Cabernet Sauvignon | 397 | 2,165 | \$2,095 |
| Petite Sirah | 323 | 2,424 | \$1,869 |
| Zinfandel | 185 | 347 | \$3,117 |
| Merlot | 141 | 512 | \$1,781 |
| Syrah | 118 | 187 | \$2,015 |
| Valdiguie | 52 | 286 | \$2,028 |
| Grenache | 50 | 208 | \$1,804 |
| Malbec | 30 | 51 | \$1,932 |
| Other Reds | 106 | 433 | \$1,695 |



White Winegrapes

| VARIETY | HARVESTED ACRES | TONS | PRICE PER TON |
|-----------------|--------------------|-------|------------------|
| Chardonnay | 914 | 5,421 | \$979 |
| Pinot Gris | 394 | 2,554 | \$706 |
| Sauvignon Blanc | 122 | 2,089 | \$1,315 |
| Chenin Blanc | 114 | 650 | \$542 |
| White Riesling | 58 | 319 | \$867 |
| Viognier | 47 | 185 | \$793 |
| Gewurztraminer | 30 | 248 | \$664 |
| Other Whites | 48 | 498 | \$875 |





Livestock and Poultry

| ITEM | YEAR | NUMBER OF HEAD | TOTAL LIVE | UNIT | VALUE | | |
|----------------------------|------|-------------------|---------------|------|----------|--------------|--|
| | | OI IILAD | WEIGHT | | PER UNIT | TOTAL | |
| Cattle and Calves | 2022 | 22,500 | 203,500 | Cwt. | \$178 | \$36,218,000 | |
| Cattle and Calves | 2021 | 25,400 | 238,000 | Cwt. | \$134 | \$31,882,000 | |
| Choop and Lambs | 2022 | 50,000 | 52,800 | Cwt. | \$172 | \$9,074,000 | |
| Sheep and Lambs | 2021 | 51,900 | 49,700 | Cwt. | \$179 | \$8,919,000 | |
| Miscellaneous ³ | 2022 | 901,400 | | | | \$1,166,000 | |
| Miscellaneous | 2021 | 920,000 | | | | \$1,158,000 | |
| Total Livestock | 2022 | 973,900 | | | | \$46,458,000 | |
| and Poultry | 2021 | 997,300 | | | | \$41,959,000 | |

- 1) Includes beef stocker gain value, dairy calves, dairy yearlings, dairy replacement heifers and dairy cull cows.
- 2) Includes feeder lamb gain.3) Includes goats and chickens.



Livestock and Poultry Products

| ITEM | YEAR | PRODUCTION | UNIT | VALUE | | |
|----------------------|------|------------|-------|----------|--------------|--|
| | | | | PER UNIT | TOTAL | |
| Eggs Chickon | 2022 | 88,000 | Dozen | \$5.80 | \$511,000 | |
| Eggs, Chicken | 2021 | 112,000 | Dozen | \$5.19 | \$581,000 | |
| Wool | 2022 | 37,400 | Lb. | \$2.89 | \$108,000 | |
| WOOI | 2021 | 72,700 | Lb. | \$2.11 | \$153,000 | |
| Miscellaneous 1 | 2022 | | | | \$28,308,000 | |
| Miscellaneous | 2021 | | | | \$22,800,000 | |
| Total Livestock | 2022 | | | | \$28,927,000 | |
| and Poultry Products | 2021 | | | | \$23,534,000 | |

Figures may not add due to rounding.
1) Includes market milk.



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Nursery Products

| ITEM | YEAR | ACREAGE | TOTAL VALUE |
|--------------------------------|------|---------|--------------|
| Nursery Stock ¹ | 2022 | 1,210 | \$38,908,000 |
| Nulsely Stock | 2021 | 1,270 | \$42,625,000 |
| Propagative Stock ² | 2022 | 130 | \$4,790,000 |
| Propagative Stock | 2021 | 58 | \$461,000 |
| Total Nurseny Dreduction | 2022 | 1,340 | \$43,698,000 |
| Total Nursery Production | 2021 | 1,328 | \$43,086,000 |

- 1) Includes christmas trees, cut flowers, greenhouse plants, herbaceous and woody ornamentals and turf.
- 2) Includes grafted grapevines, grapevine rootstock, grapevine cuttings and propagated fruit and nut trees.



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Apiary

| ITEM | YEAR | PRODUCTION | UNIT | UNIT | |
|--------------------------|------|------------|--------|----------|--------------|
| | | | | PER UNIT | TOTAL |
| Aniary Products | 2022 | | | | \$910,000 |
| Apiary Products ' | 2021 | | | | \$937,000 |
| Pollination ² | 2022 | 60,000 | Colony | \$154 | \$9,340,000 |
| Pollitation | 2021 | 39,000 | Colony | \$169 | \$6,614,000 |
| Total Aniany Duaduction | 2022 | | | | \$10,250,000 |
| Total Apiary Production | 2021 | | | | \$7,551,000 |

- 1) Includes honey, packaged bees and queen bees.
- 2) Value based on acreage of crops requiring bees for pollination and number of colonies required for adequate pollination.
- Colony fee varies by crop. Crops pollinated include almond, prune, sunflower and broccoli, cabbage and vine seed.





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Seed Crops

| CROP | YEAR | HARVESTED ACRES | PRODU | PRODUCTION | | VALUE | |
|----------------------------|------|--------------------|----------|------------|-----|----------|--------------|
| | | ACILLS | PER ACRE | TOTAL | | PER UNIT | TOTAL |
| Sunflower | 2022 | 4,420 | 874 | 4,004,000 | Lb. | \$1.87 | \$7,487,000 |
| | 2021 | 6,830 | 1,329 | 9,077,000 | Lb. | \$1.16 | \$10,529,000 |
| Miscellaneous ¹ | 2022 | 1,190 | | | | | \$2,804,000 |
| Miscellaneous | 2021 | 850 | | | | | \$1,825,000 |
| Total Seed Crops | 2022 | 5,610 | | | | | \$10,291,000 |
| | 2021 | 7,680 | | | | | \$12,354,000 |

Figures may not add due to rounding.

1) Includes asparagus, barley, broccoli, cabbage, cucumber, melon, squash, watermelon and wheat.



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Field and Forage Crops

| CROP | | YEAR HARVESTED ACRES | | PRODUCTION | | UNIT | VALUE | |
|------------------------|------------------------|----------------------|---------|------------|---------|------------|----------|--------------|
| | | | ACRES | PER ACRE | TOTAL | | PER UNIT | TOTAL |
| Poons Dry | | 2022 | 1,670 | 1.24 | 2,057 | Ton | \$1,520 | \$3,123,000 |
| Dec | Beans, Dry | | 1,400 | 1.22 | 1,700 | Ton | \$1,320 | \$2,284,000 |
| Cor | Corn (Grain) | | 1,920 | 6.35 | 11,380 | Ton | \$275 | \$3,130,000 |
| Coi | ii (Graiii) | 2021 | 2,290 | 6.05 | 13,800 | Ton | \$191 | \$2,644,000 |
| | Alfalfa | 2022 | 16,200 | 4.95 | 93,560 | Ton | \$330 | \$30,946,000 |
| | Allalla | 2021 | 23,200 | 5.53 | 128,000 | Ton | \$223 | \$28,606,000 |
| | Grain | 2022 | 3,500 | 3.13 | 10,960 | Ton | \$285 | \$3,123,000 |
| | Grain | 2021 | 3,330 | 3.05 | 10,200 | Ton | \$203 | \$2,064,000 |
| Нау | Duograss | 2022 | 5,490 | 2.80 | 14,940 | Ton | \$265 | \$3,959,000 |
| Ĭ | Ryegrass | 2021 | 6,160 | 2.60 | 16,000 | Ton | \$194 | \$3,106,000 |
| | Cudananas | 2022 | 4,070 | 3.61 | 16,530 | Ton | \$263 | \$4,349,000 |
| | Sudangrass | 2021 | 4,500 | 3.30 | 15,000 | Ton | \$199 | \$2,977,000 |
| | Cuass/Favaga | 2022 | 3,320 | 2.81 | 7,150 | Ton | \$250 | \$1,778,000 |
| | Grass/Forage | 2021 | 4,600 | 2.67 | 12,300 | Ton | \$187 | \$2,301,000 |
| Ç a | fflower | 2022 | 4,550 | 0.94 | 4,200 | Ton | \$702 | \$2,848,000 |
| Sa | mower | 2021 | 3,140 | 0.41 | 1,290 | Ton | \$315 | \$406,000 |
| т. | riticale | 2022 | 4,400 | 2.92 | 12,850 | Ton | \$235 | \$3,023,000 |
| " | iticale | 2021 | 6,560 | 2.66 | 17,400 | Ton | \$202 | \$3,531,000 |
| | Vheat | 2022 | 7,730 | 2.70 | 20,880 | Ton | \$289 | \$6,031,000 |
| V | viieat | 2021 | 11,300 | 2.09 | 23,700 | Ton | \$205 | \$4,861,000 |
| Miss | ellaneous ¹ | 2022 | 4,590 | | | | | \$5,808,000 |
| IVIISC | eliarieous | 2021 | 4,670 | | | | | \$4,194,000 |
| Pasture Acreage | | | | | Valu | e Per Acre | | |
| Irrigated | | 2022 | 17,500 | | | Acre | \$172 | \$3,016,000 |
| | | 2021 | 18,400 | | | Acre | \$138 | \$2,541,000 |
| Rangeland ² | | 2022 | 188,500 | | | Acre | \$29 | \$6,089,000 |
| | | 2021 | 187,600 | | | Acre | \$18 | \$3,309,000 |
| Total Field Crops | | 2022 | 263,440 | | | | | \$77,223,000 |
| | | 2021 | 277,150 | | | | | \$62,824,000 |

²⁾ Calculated using data from California Department of Conservation 2016-2018 Land Use Conversion Report.



¹⁾ Includes barley, corn silage and straw.

Pest PREVENTION

The California Food and Agricultural Code mandates pest prevention programs to prevent the introduction and spread of pests detrimental to California's agriculture, environment and economy. Pest prevention involves Pest Exclusion, Pest Detection, Pest Eradication, Pierce's Disease Control, Phytosanitary Certification, Nursery Inspection and Sudden Oak Death programs.

Pest Exclusion is the first line of defense in preventing detrimental, non-native pests from entering the county. In 2022, Agricultural Biologists made a total of 727 premise visits at shipping terminals, nurseries and residences. During these visits, 7,498 shipments of plants, seed, and household goods were inspected. A total of 81 shipments were rejected for live pests, material not properly certified, or improper container markings. Surveys were also performed at 48 locations for early detection of the invasive pest spotted lanternfly, a notable pest of grapes that is threatening to move westward from infested areas in the eastern U.S.

Pest Detection is Solano County's second line of defense against the introduction and spread of insect pests of concern. Insect traps are placed throughout the county and monitored for early detection of pests. In 2022, 23,131 trap inspections were conducted on a total of 2,659 traps in service throughout the county.

Pest Eradication. After successful early detection and control work in 2014, 2016 and 2021, a fourth occurrence of the parasitic weed Egyptian broomrape was found in a tomato field in 2022. As with previous detections, Agriculture Department staff surveyed and quarantined the affected field, removed broomrape plants and coordinated further eradication treatments with the grower. Because broomrape is a host-specific parasitic plant, successive host crops will be planted and monitored in the infested field in 2023 to ensure complete eradication.

The **Pierce's Disease Control Program** works to prevent the spread of the glassy-winged sharpshooter (GWSS), the primary insect vector of Pierce's disease in grapevines. In 2022, Agricultural Biologists and Aides inspected 1,356 shipments of nursery stock arriving from sharpshooter infested California counties.

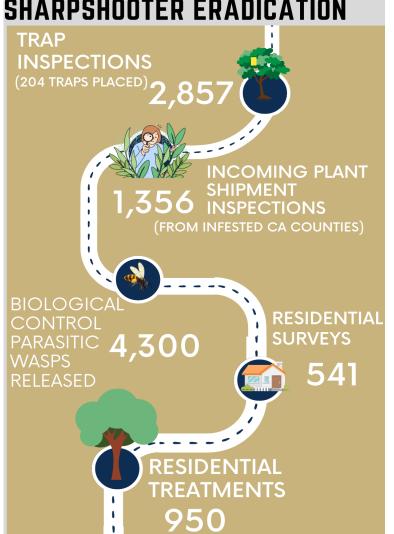
In October 2021, the Agriculture Department identified a new GWSS infestation in Vacaville's Browns Valley neighborhood—the first in the county since a previous Vacaville infestation was eradicated in 2008. The California Department of Food and Agriculture issued an emergency proclamation establishing a 3,500 acre quarantine area around Brown's Valley and declared actions necessary to eradicate the infestation. Eradication work continued in 2022 with visual surveys of GWSS host plants on 541 residential properties, pesticide treatments on 950 properties and the release of 4,300 biological control wasps that parasitize GWSS eggmasses. Biologists and Aides performed 2,857 inspections on 204 delimitation traps placed throughout the Browns Valley neighborhood. Visual surveys found presence of various GWSS life stages on 52 unique parcels while delimitation trapping found 58 additional adult sharpshooters.

The **Phytosanitary Certification Program** ensures that plants and plant commodities shipped to other states or foreign countries are free from injurious pests. Biologists and Aides performed 852 phytosanitary field inspections on 5,393 acres of seed crops.

Nursery Inspection and Sudden Oak Death. Biologists inspected 13 local nurseries that produce a variety of ornamental plants, sod (turfgrass), vegetable plants and fruit trees and vines for sale in California as well as other states and countries to ensure growing grounds meet standards of cleanliness for regulated pests. Biologists also conducted 44 inspections at 4 production shipping nurseries to prevent the spread of *Phytophthora ramorum*, the pathogen that causes Sudden Oak Death.



THE ROAD TO GLASSY-WINGED SHARPSHOOTER ERADICATION





| Pest Exclusion | | | | | |
|--------------------------|------------------------------|--|--|--|--|
| Shipment Inspections | Shipment Rejections | | | | |
| 7,498 | 81 | | | | |
| A,Q,W Pest Interceptions | Sudden Oak Death Inspections | | | | |
| 33 Species | 44 | | | | |



| Target Pest | Hosts | No. of Traps | No. of Trap Servicings |
|----------------------------|-----------------------------|--------------|---------------------------|
| Asian Citrus Psyllid | Citrus/Ornamentals | 287 | 1,074 |
| European Grape Berry Moth | Vineyards | 69 | 150 |
| European Grapevine Moth | Vineyards | 355 | 3,217 |
| Glassy-Winged Sharpshooter | Vineyards/Urban Landscaping | 883 | 10,071 |
| Japanese Beetle | Turf/Roses | 207 | 1,011 |
| Mediterranean Fruit Fly | Fruit Trees | 231 | 2,064 |
| Melon Fruit Fly | Vegetables | 88 | 847 |
| Nun Moth | Coniferous/Deciduous Trees | 18 | 99 |
| Oriental Fruit Fly | Fruit Trees | 86 | 765 |
| Other Exotic Fruit Flies | Fruit Trees | 88 | 2,136 |
| Rosy Moth | Deciduous Trees | 17 | 92 |
| Siberian Silk Moth | Coniferous/Deciduous Trees | 18 | 97 |
| Spongy Moth Complex | Coniferous/Deciduous Trees | 312 | 1,508 |

Exports



In 2022, the Solano County Agriculture Department issued 688 Federal Phytosanitary Certificates for agricultural commodities bound for export to 41 countries, including:

Argentina Australia French Southern Territories Belgium Germany Brazil Hong Kong Brunei Darussalam India Canada Indonesia Chile Israel China Italy Colombia Japan Costa Rica Jordan Dominican Republic Republic of Korea Lebanon Egypt Ethiopia Lithuania Fiji Malaysia

France Mexico
outhern Territories Mongolia
Germany Morocco
Hong Kong Norway
India Panama
Indonesia Philippines
Israel Poland
Italy Portugal
Japan Spain
Jordan Taiwan
ublic of Korea Thailand
Lebanon Republic of Türkiye
Lithuania United Kingdom

Commodities Certified for Export

Alfalfa
Almonds
Dried Fruit
Logs/Lumber
Nursery Stock
Oak Wine Barrels
Ryegrass
Seed (Cucumber, Lettuce,
Melon, Pepper, Squash
and Tomato)
Sudangrass

Certified Farmers' Markets

Certified farmers' markets provide an outlet for producers to sell fresh fruits, nuts, vegetables, herbs, cultivated mushrooms, shell eggs, honey, cut flowers, unprocessed grains and nursery stock directly to the public. Anyone who wishes to sell at a certified farmers' market must obtain a certified producer's certificate from the Agricultural Commissioner in the county where the commodity was grown. Certified producer's certificates verify that fresh agricultural products sold at a certified market are produced by the farmer selling the commodities. In 2022, the Agricultural Commissioner's Office issued certificates to 35 producers and 6 farmers' markets to sell local and regional produce in Solano County.

2023 Solano Certified Farmers' Markets

Benicia Certified Farmers' Market

Time: Thursdays 4:00 p.m. – 8:00 p.m. Months of Operation: April - October

Location: 1st Street between B & D Streets, Benicia

Fairfield Certified Farmers' Market

Time: Thursdays 3:00 p.m. – 7:00 p.m. Months of Operation: May - September Location: 600 Texas Street, Fairfield

Kaiser Vacaville Certified Farmers' Market

Time: Tuesdays 9:30 a.m. – 1:30 p.m. Months of Operation: June - December Location: 1 Quality Drive, Vacaville

Kaiser Vallejo Certified Farmers' Market

Time: Tuesdays 10:00 a.m. – 2:00 p.m. Months of Operation: Year-round

Location: Kaiser Hospital Campus, 975 Sereno Drive, Vallejo

Suisun Waterfront Certified Farmers' Market*

Time: Saturdays 9:00 a.m. – 1:00 p.m. Months of Operation: July - October Location: 2 Harbor Center Drive, Suisun City

Vacaville Certified Farmers' Market

Time: Saturdays 9:00 a.m. – 1:00 p.m. Months of Operation: Year-round

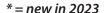
Location: Andrews Park, Creek Walk Plaza, 614 E. Monte Vista

Avenue, Vacaville

Vallejo Certified Farmers' Market

Time: Saturdays 8:30 a.m. – 2:00 p.m. Months of Operation: Year-round

Location: 400 Georgia St., Corner of Georgia & Marin, Vallejo



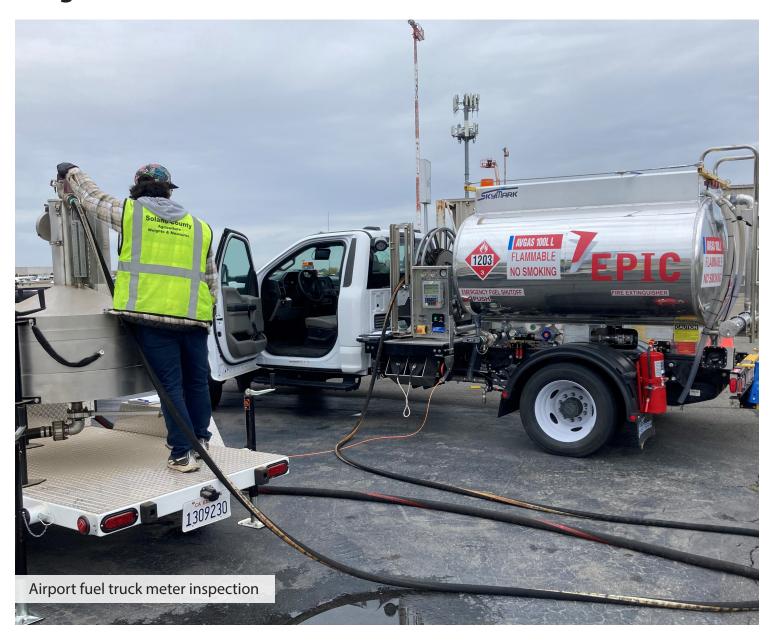








Weights and Measures



Ensuring you get what you pay for, since 1850

| Measuring Devices | Number Inspected | Compliance Rate |
|------------------------------------|---------------------|--------------------|
| Retail Motor Fuel Meters | 4,550 | 94% |
| Submeters - Electric, Vapor, Water | 527 | 81% |
| Retail Water Meters | 58 | 74% |
| Liquid Propane Meters | 50 | 77% |
| Fabric, Cordage, Wire Meters | 31 | 94% |
| Taxi Meters, Odometers | 68 | 100% |
| Misc. Measuring Devices | 16 | 100% |
| Devices Inspected | 5,300 | |
| Average Compliance Rate | 92% | |

| Weighing Devices | Number Inspected | Compliance Rate |
|----------------------------------|---------------------|--------------------|
| Computing, Counter Scales | 1,039 | 87% |
| Crane, Hanging, Hopper Scales | 13 | 100% |
| Dormant/Portable Platform Scales | 129 | 86% |
| Vehicle Scales | 69 | 92% |
| Livestock and Animal Scales | 36 | 68% |
| Railway Scales | 1 | 100% |
| Monorail Scales | 3 | 100% |
| | | |
| Devices Inspected | 1,2 | 290 |
| Average Compliance Rate | 87 | 7% |

County Overview

| POPULATION: 443,749 ¹ | | | | | |
|----------------------------------|-----------|-----------|----------------|--|--|
| Benicia | Dixon | Fairfield | Rio Vista | | |
| 26,180 | 19,018 | 119,526 | 9,988 | | |
| Suisun City | Vacaville | Vallejo | Unincorporated | | |
| 28,471 | 101,806 | 121,658 | 18,102 | | |

| LAND USE ² | | | | | |
|--|--------|--|---------|--|--|
| Land Area (square miles) | 910 | Farmland (acres) | 149,747 | | |
| Land Area (acres) 582,210 | | Grazing Land (acres) | 205,997 | | |
| Water Area (square miles) 87 Total Agricultural Land (acres) | | 355,744 | | | |
| Water Area (acres) | 55,370 | Urban Development - Non-Ag Lands (acres) | 1,096 | | |

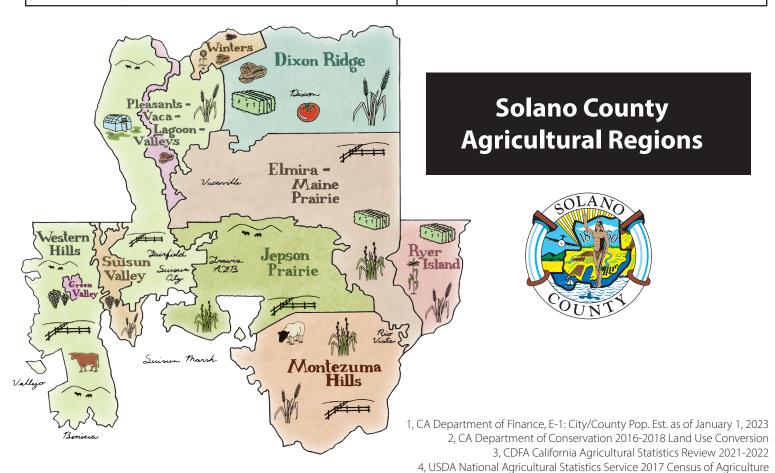
| FARMS | | | | | |
|---|-----|----------------------------------|---------------------|--|--|
| Average U.S. Size (acres) ⁴ | 441 | Number of Farms in U.S. | 2,042,2204 | | |
| Average California Size (acres) ³ | 351 | Number of Farms in California | 69,000 ³ | | |
| Average Solano County Size (acres) ⁴ | 404 | Number of Farms in Solano County | 849 ⁴ | | |

2021 CALIFORNIA RANKINGS

25th in Statewide Gross Agricultural Production Value

3rd Sheep and Lambs (9.1% of statewide value)

3rd Sunflower Seed (14.8% of statewide value)





SOLANO COUNTY Department of Agriculture, Weights and Measures

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