

TECHNICAL MEMORANDUM**CALIFORNIA RAISIN 2022 ACREAGE AND AGE MAPPING**

PREPARED FOR: Dori Williams/Raisin Administrative Committee
Debbie Powell/Raisin Administrative Committee

PREPARED BY: Joel Crowther/Land IQ
Casey Gudel/Land IQ
Joel Kimmelshue/Land IQ

DATE: March 27, 2023

INTRODUCTION

Land IQ was contracted by the Raisin Administrative Committee (RAC) to develop a comprehensive map of raisin acreage and age in California. Historically, the RAC has relied upon grower input and surveys conducted by the California Department of Food and Agriculture (CDFA) and the United States Department of Agriculture (USDA) National Agricultural Statistics Service (NASS) to determine raisin acreage. Acreage estimated using surveys can often be inaccurate as surveys are not spatial and cannot detect first-time raisin growers, growers that fail to respond or growers that respond erroneously. Using multiple lines of evidence, Land IQ is producing the first comprehensive spatial representation of raisin acreage and age in California.

Raisins have been grown in California since the nineteenth century (Colby, 1924). Reported raisin acreage in California remained relatively constant from 1984 to 2000, and since then has declined in a linear fashion by around 6,850 acres per year (NASS, 2022b). Figure 1 shows the annual bearing raisin acreage from 1984 to 2021 as reported in the annual USDA Noncitrus Fruits and Nuts Summary (NASS, 2022b).

In the 2021 California Grape Acreage Report, produced by CDFA in cooperation with NASS, 98.9% of the standing raisin acreage was found in five counties—Fresno, Madera, Kern, Tulare, and Kings (CDFA, 2022). These counties were selected as the spatial extent for which raisins would be mapped. The period of analysis for mapping standing raisin acreage was the 2022 water year, which ran from October 1, 2021, to September 30, 2022. Standing acreage and other attributes were analyzed for both the beginning and ending dates of the water year.

The final acreage and age results are presented below as well as in an attached Excel spreadsheet. These results will also be delivered to the RAC for their review via a web-based map display tool.

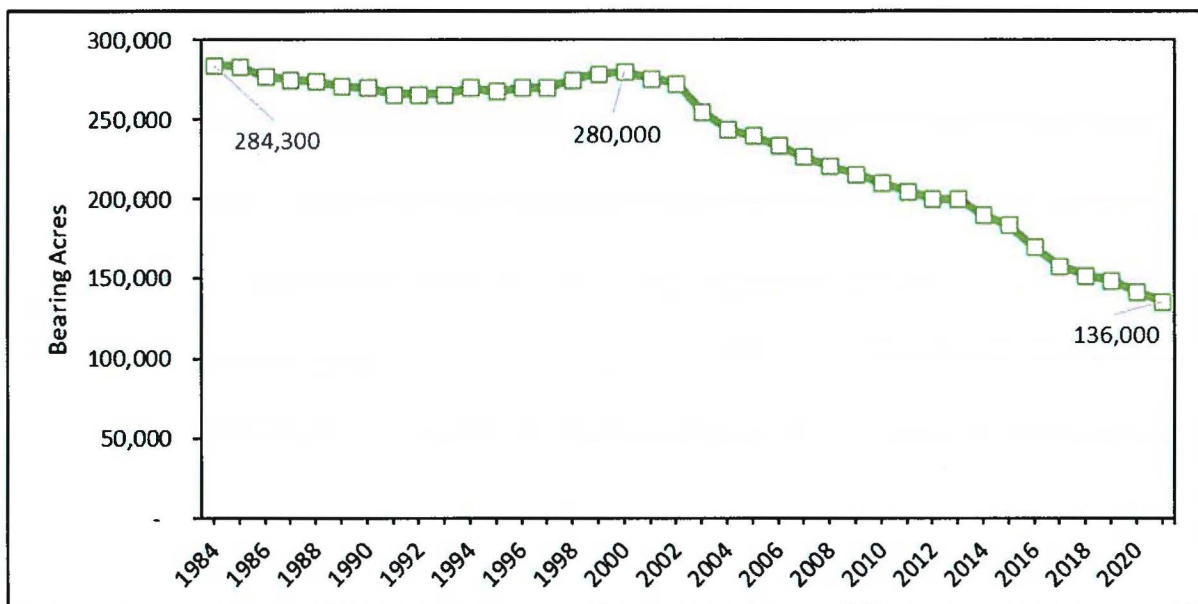


Figure 1. Reported bearing raisin acreage, 1984 to 2021 (CDFA, 2022).

METHODOLOGY

The statewide crop mapping layer developed by Land IQ for the California Department of Water Resources for the 2021 water year (October 1, 2020, to September 30, 2021) was used as the base mapping layer for this project. In this dataset, grapes (grouped as raisin, table, and wine) statewide were mapped with 99.9% classification accuracy. Accuracy is validated with actual, in-the-field, ground truthing of a subset of the entire population of grape vineyards. From this base mapping layer, multiple lines of evidence were utilized to differentiate raisin grapes from table and wine grapes. These included pesticide reporting data and analysis of satellite and high-resolution imagery, informed with agronomic and raisin production systems knowledge.

SPATIAL PESTICIDE USE PERMITS

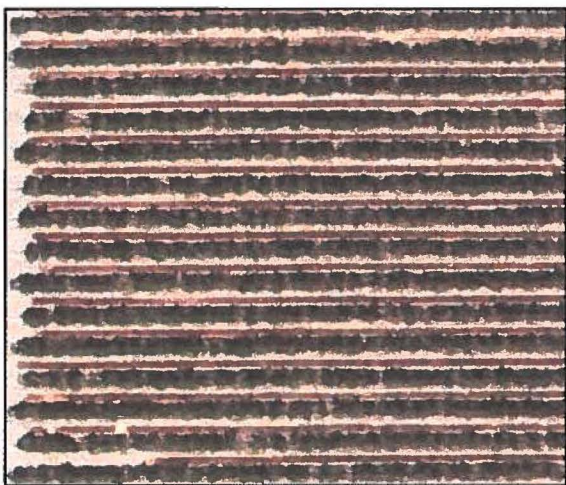
As a first step, annual spatial records of pesticide use permits were obtained from the California Agricultural Commissioners and Sealers Association (CACASA). These records often differentiate between raisin and wine grapes but do not indicate which are table. In addition, many permit holders use the generic category of “grapes.” While generally accurate, both spatial and classification errors exist in these data, and some vineyards had no associated permit data within the study area.

IMAGERY ANALYSIS

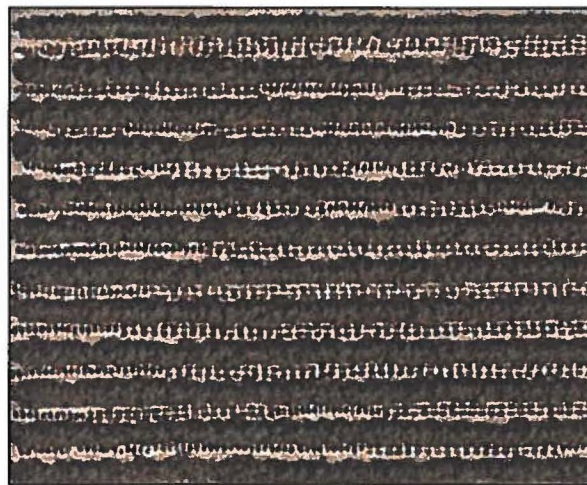
To detect and further review vineyards with missing or erroneous pesticide permit information, publicly available satellite imagery from the Landsat and Sentinel-2 missions was downloaded for the study area for a three-year period. Taken together, these missions provide imagery every 2 to 3 days. From this imagery, a time-series reflecting the change in canopy cover over time was generated for each individual vineyard. These differences in canopy characteristics are related to trellis design, crop phenology and management practices, which help to distinguish between the different grape types.

DETAILED REVIEW

After incorporating information from these two lines of evidence, approximately two-thirds of mapped raisin acreage was subjected to a vineyard-by-vineyard review using high-resolution historical Google Earth and Google Street View imagery. Most of the study area contained several images from August or September in which drying raisins were visible (Figures 2 and 3).



**Figure 2. Raisins drying near Raisin City, CA.
Google Earth imagery, September 24, 2009.**



**Figure 3. Raisins drying near Raisin City, CA.
Google Earth imagery, August 23, 2018.**

Every vineyard with only “Grape” listed as a permitted crop was individually reviewed in Fresno and Madera counties. Vineyards in the remaining counties were reviewed when canopy coverage was lower than the average table grape vineyards grown on Y-trellis systems, which are common to Kern and Tulare counties. Any vineyard with multiple grape classes and/or other crops listed on the permit or that had no permit information was also individually reviewed.

The remaining third of acreage that was not individually reviewed had raisin grapes listed as the only permitted crop on the pesticide use permit and had a spectral signature indicative of typical single-wire or T-trellis raisin grapes. These vineyards were reviewed at a broader scale to check for partial vineyard removal or misclassification.

UNCERTAINTY

A small proportion of raisin acreage (1.3%) was flagged as uncertain when no reporting or visual evidence was available to confirm a classification of raisin. This occurred primarily in newly planted vineyards which were previously raisins and that had been replanted to grapes. It also included older vineyards for which imagery during harvest was not available. The evidence used for final classification was more indirect, making use of the previous grape classification or the most common grape type found in the vicinity. Additionally, 45 vineyards (752 acres) were classified as either table or wine but have a chance of being raisin grapes. These vineyards will be provided to RAC for further investigation if desired.

ADDITIONAL ATTRIBUTES

Time-series analysis allows for the mapping of additional attributes apart from the standing raisin acreage. The following attributes were also recorded:

- Removed – Vineyards were classified as removed when the vines were removed at some point during the 2022 water year. Some of these vineyards were replanted to grapes in the same year. Typically, the classification of young grapes remained the same as the previous classification unless additional evidence to the contrary was available. These young vineyards were part of the group of vineyards flagged as uncertain.
- Abandoned – These vineyards were identified by their extremely low canopy vigor. Vineyard abandonment as well as the year in which it occurred was visually confirmed using high-resolution imagery. Vineyards abandoned in the 2021 or 2022 water year are considered Short-Term Abandoned. Vineyards abandoned prior to the 2021 water year are considered Long-Term Abandoned.
- Overhead Arbor – Raisins grown on an overhead arbor trellis system have vines trained with the fruit concentrated in alternating row middles (Fidelibus, 2014). Prior to harvest, fruit-bearing canes are severed. The grapes are dried on the vine and then mechanically harvested. The unique nature of this trellis system allows for accurate identification using high-resolution imagery and/or time-series analysis (Figure 4).

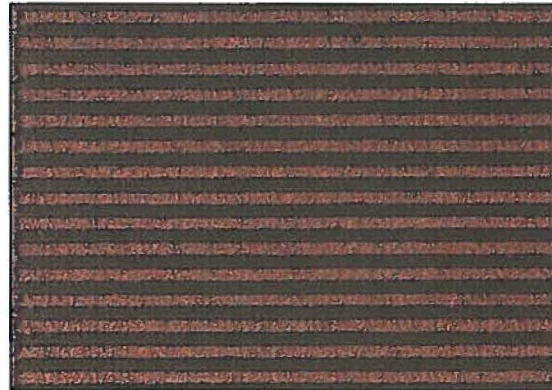


Figure 4. Aerial view of raisins grown on overhead arbor trellis system. Google Earth imagery, August 23, 2018.

AGE

To determine the planting year for each vineyard, a time-series analysis was conducted using Landsat satellite imagery collected from 1984 to 2022. For each year and for each vineyard, the average Normalized Difference Vegetation Index (NDVI) value from June to August was calculated. NDVI is a remote sensing index that is directly correlated to the amount of photosynthetic vegetation. The time-series for each vineyard was then analyzed to identify the most recent planting year. The planting year was identified when the NDVI value falls below a predefined threshold, indicating bare ground. To confirm the planting year, an increasing trend in the average NDVI values following the planting year must be apparent.

If the planting year could not be confirmed using these criteria, the planting year was assumed to be prior to 1984. Low-confidence vineyards were individually reviewed using historic Google Earth and National Agricultural Imagery Program (NAIP) aerial imagery. Just over half (50.9%) of raisin vineyards were individually reviewed. Planting year could be confirmed with most certainty after 1998, when aerial images were available on a semi-frequent basis. Prior to this, judgments were limited to a review of the time-series for each vineyard. Planting year should be considered accurate to within one year.

RESULTS

At the beginning of the 2022 water year (October 1, 2021), the standing acreage of active and abandoned raisins in the five-county mapping extent was 103,018 acres (Table 1). The standing raisin acreage of active and abandoned raisins at the end of the water year (September 30, 2022) was 97,774 acres (Table 2; Figure 5). Of the standing raisin acreage, there were 1,237 acres of either short-term or long-term abandoned raisins at the beginning of the water year and 1,157 acres at the end of the water year.

Table 1. Standing Raisin Acreage and Status – October 1, 2021

County	Active Acreage	Short-Term Abandoned ¹ Acreage	Long-Term Abandoned ² Acreage	Total Standing Acreage
Fresno	73,481	654	466	74,601
Kern	6,777	0	0	6,777
Kings	1,825	9	9	1,843
Madera	17,033	0	63	17,096
Tulare	2,666	24	11	2,701
Total	101,782	687	550	103,018

¹ Abandoned during the 2021 water year.

² Abandoned prior to the 2021 water year.

Table 2. Standing Raisin Acreage and Status – September 30, 2022

County	Active Acreage	Short-Term Abandoned ¹ Acreage	Long-Term Abandoned ² Acreage	Total Standing Acreage
Fresno	68,919	634	388	69,941
Kern	6,945	0	0	6,945
Kings	1,767	9	9	1,785
Madera	16,595	19	63	16,678
Tulare	2,390	24	11	2,425
Total	96,616	686	471	97,774

¹ Abandoned during the 2021 or 2022 water year.

² Abandoned prior to the 2021 water year.

A comparison of mapped standing raisin acreage at the beginning and end of the 2022 water year, the total raisin acreage reported by the CDFA in the 2021 grape acreage report (CDFA, 2022), and the 2021 bearing or harvested acreage reported by each county in their annual crop reports (Fresno, 2022; Kern, 2022; Kings, 2022; Madera, 2022; Tulare, 2022) shows noticeable differences (Table 3). The reported

2021 raisin acreage from CDFA and county crop reports is 28.4% and 23.6% higher, respectively, than the mapped standing acreage at the beginning of the 2022 water year.

Table 3. Standing Raisin Acreage Comparison

County	Land IQ 1-OCT-2021 Standing Acreage	Land IQ 30-SEP-2022 Standing Acreage	CDFA/NASS 2021 Standing Acreage ¹	County Crop Reports 2021 Bearing or Harvested Acreage ²
Fresno	74,601	69,941	95,217	85,299*
Kern	6,777	6,945	9,133	12,700†
Kings	1,843	1,785	392	1,847*
Madera	17,096	16,678	21,751	20,850*
Tulare	2,701	2,425	5,768	6,630†
Total	103,018	97,774	132,261	127,326

¹ CDFA/NASS California Grape Acreage Report 2021 Crop (NASS, 2022b).

² 2021 County Crop Reports (Fresno, 2022; Kern, 2022; Kings, 2022; Madera, 2022; Tulare, 2022).

* Bearing acreage.

† Harvested acreage.

A net decline in raisin acreage occurred during the 2022 water year (Table 4). An estimated total of 1,134 acres of raisin grapes were planted during the 2022 water year. Two-thirds of this acreage is found on land that was not previously planted to raisin grapes. Just over half (53%) of newly planted acreage was marked as uncertain when no direct evidence could be found to confirm that the new planting was raisin grapes. 6,378 acres of raisin grapes were removed during the 2022 water year.

Table 4. 2022 Water Year Net Change in Raisin Acreage

County	Newly Planted Acreage	Removed & Replanted Acreage	Total Planted Acreage	Removed Acreage (Not Replanted)	Net Change in Acreage
Fresno	96	227	323	4,755	(4,659)
Kern	487	0	487	319	167
Kings	0	0	0	58	(58)
Madera	175	149	324	594	(419)
Tulare	0	0	0	276	(276)
Total	758	376	1,134	6,002	(5,245)

The standing acreage of raisins under an overhead arbor trellis system differed noticeably between the Land IQ mapping and CDFA/NASS harvested acreage reporting (Table 5). The proportion of total standing raisin acreage grown under this trellis system at the end of the 2022 water year was 20.9%. A total of 487 acres of raisin grapes (all in Kern County) were planted under overhead arbor during the 2022 water year. Eleven acres were removed during the 2022 water year. The average vineyard size for raisin grapes under overhead arbor is 61.1 acres, significantly larger than the average of 17.5 acres for all other raisin grape vineyards.

Table 5. Standing Raisin Acreage under Overhead Arbor Trellis System

County	1-OCT-2021 Standing Acreage	30-SEP-2022 Standing Acreage	CDFA/NASS Harvested Acreage ¹
Fresno	7,640	7,639	6,088
Kern	5,048	5,534	809
Kings	1,576	1,576	0
Madera	5,579	5,569	5,470
Tulare	101	101	275
Total	19,944	20,419	12,642

¹ 2021 California Raisin Grape Mechanical Harvest Report (NASS, 2022a).

The summary of raisin acreage by planting year (Table 6) shows that 55.4% of mapped raisin acreage was planted prior to 1984, and nearly three-fourths (74.1%) of raisin acreage is 20 years old or older. In the 2021 California Grape Acreage Report, raisin planting year is reported from 2014 to 2021, totaling 7,182 acres (CDFA, 2022). Land IQ mapped 11,933 acres planted during the same timeframe.

Table 6. Standing Raisin Acreage by County by Planting Year – September 30, 2022

Date Range	Fresno	Kern	Kings	Madera	Tulare	Total
Before 1984	46,076	993	65	5,613	1,426	54,173
1984 - 1986	898	130	-	289	157	1,474
1987 - 1989	1,448	49	-	282	75	1,854
1990 - 1992	2,263	-	-	297	94	2,655
1993 - 1995	2,533	39	-	386	2	2,960
1996 - 1998	1,343	61	6	770	128	2,307
1999 - 2001	1,764	95	1,168	1,920	27	4,974
2002 - 2004	2,369	7	143	1,054	27	3,599
2005 - 2007	1,615	341	48	1,209	181	3,394
2008 - 2010	1,429	-	27	297	21	1,774
2011 - 2013	2,820	1,527	8	1,095	91	5,542
2014 - 2016	1,907	2,059	266	939	76	5,247
2017 - 2019	2,664	685	55	1,532	5	4,940
2020 - 2022	813	958	-	996	114	2,880
Total	69,941	6,945	1,785	16,678	2,425	97,774

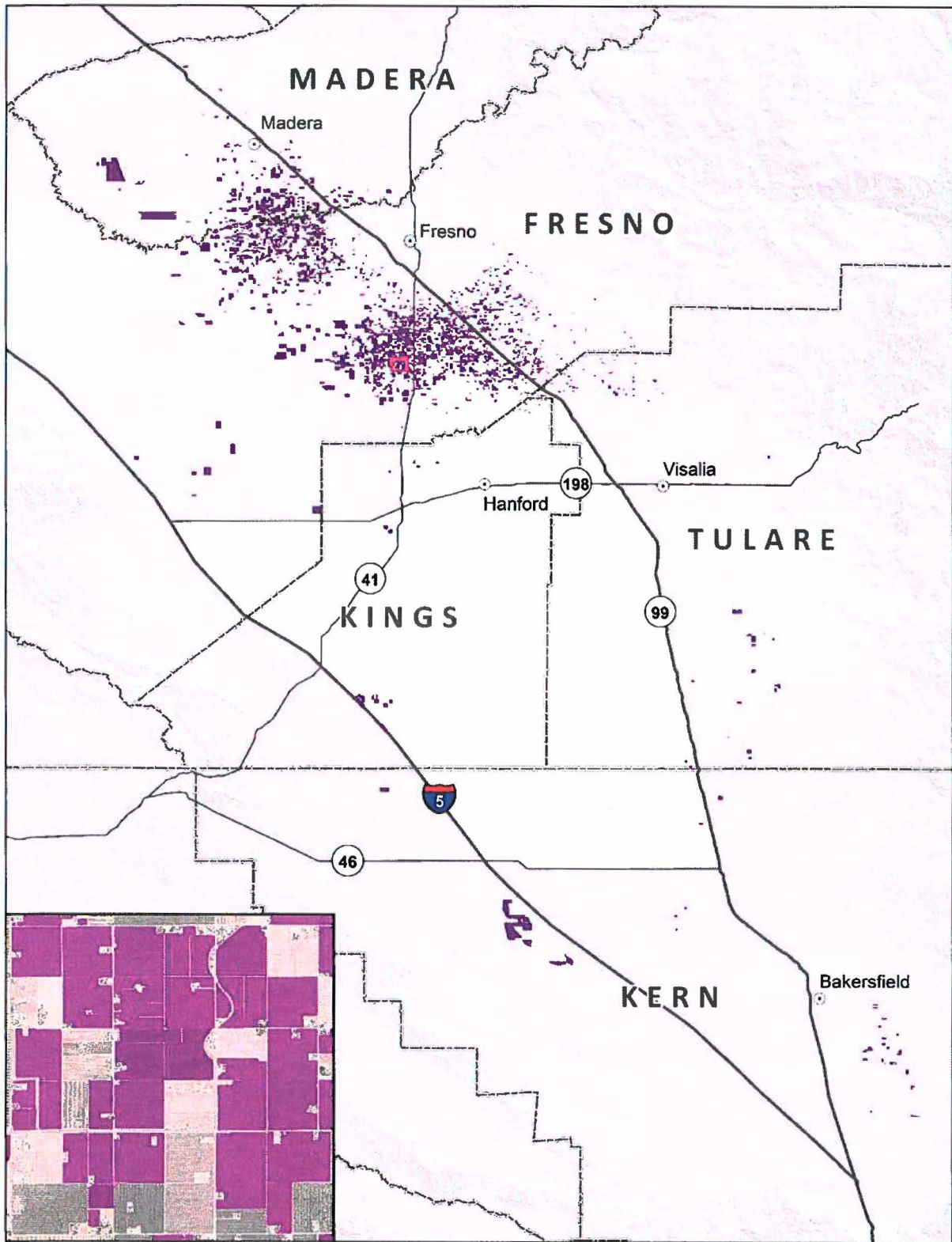


Figure 5. Extent of mapped raisin acreage at end of 2022 water year.

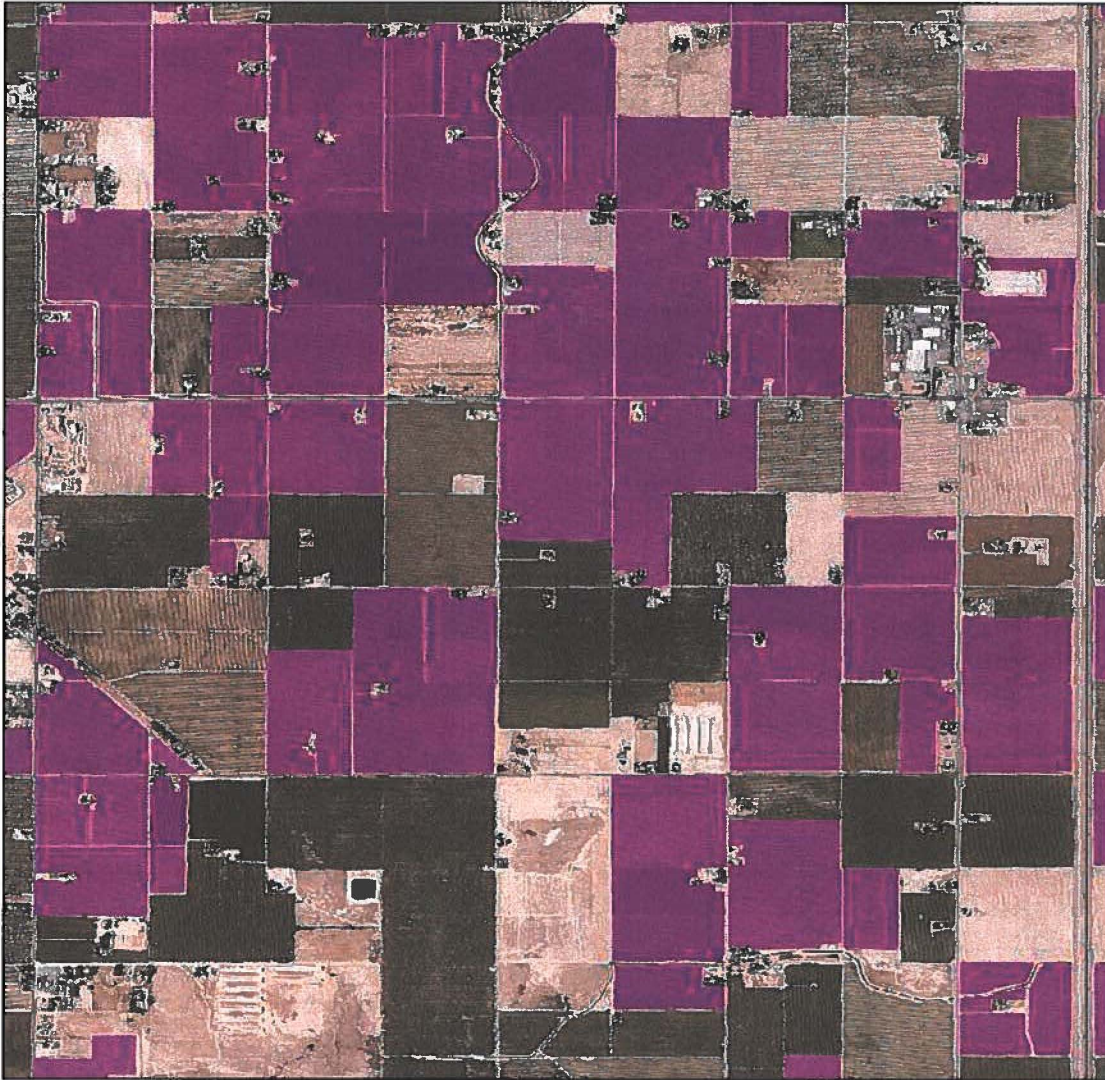


Figure 6. View of delineated raisin vineyard boundaries near Caruthers, CA.

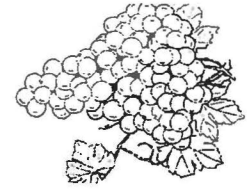
CONCLUSIONS/RECOMMENDATIONS

Land IQ has completed the first comprehensive map of raisin grapes in California. The mapped standing raisin acreage at the end of the 2022 water year was 97,774 acres as compared to 103,018 acres at the beginning of the year (Table 3). This initial map of raisin acreage will provide numerous benefits, not only including an accurate assessment of acreage but the precise location of each vineyard and how they relate to other spatial attributes (e.g. irrigation districts, regulatory boundaries, soil type, proximity to other crops, processors, haul routes, etc.). With over 5% of the total acreage removed in one year and considering the significant difference between mapped and surveyed acreage, we recommend subsequent acreage updates be conducted on an annual basis to assess industry change over time. The level of effort required for annual acreage updates will be less than the initial mapping and age classification work.

REFERENCES

- California Department of Food and Agriculture. 2022. California Grape Acreage Report 2021 Crop. Available at https://www.nass.usda.gov/Statistics_by_State/California/Publications/Specialty_and_Other_Releases/Grapes/index.php (verified 21 February 2023).
- Colby, C.C. 1924. The California Raisin Industry—A Study in Geographic Interpretation. *Annals of the Association of American Geographers*, 14(2):49-108. Available at <https://www.tandfonline.com/doi/pdf/10.1080/00045602409356893> (verified 21 February 2023).
- Fidelibus, M.W. 2014. Grapevine Cultivars, Trellis Systems, and the Mechanization of the California Raisin Industry. *HortTechnology*, 24(3):285-289. Available at <https://journals.ashs.org/horttech/view/journals/horttech/24/3/article-p285.xml> (verified 21 February 2023).
- Fresno County Department of Agriculture. 2022. 2021 Crop Report. Available at <https://www.co.fresno.ca.us/departments/agricultural-commissioner/fresno-county-crop-report-dmi> (verified 21 February 2023).
- Kern County Department of Agriculture and Measurement Standards. 2022. 2021 Kern County Agricultural Crop Report. Available at <http://www.kernag.com/caap/crop-reports/crop-reports.asp> (verified 21 February 2023).
- Kings County Department of Agriculture/Measurement Standards. 2022. 2021 Crop Report. Available at <https://www.countyofkings.com/departments/general-services/agriculture-department-measurement-standards/ag-services/crop-reports-1941-2013/test> (verified 21 February 2023).
- Madera County Department of Agriculture. 2022. 2021 Crop and Livestock Report. Available at <https://www.maderacounty.com/government/agricultural-commissioner-weights-and-measures/annual-crop-reports/crop-reports-the-2010s/crop-reports-the-2020s/-fsiteid-1> (verified 21 February 2023).
- National Agricultural Statistics Service, US Department of Agriculture. 2022a. 2021 California Raisin Grape Mechanical Harvest Report. Available at https://www.nass.usda.gov/Statistics_by_State/California/Publications/Specialty_and_Other_Releases/Grapes/index.php (verified 21 February 2023).
- National Agricultural Statistics Service, US Department of Agriculture. 2022b. Noncitrus Fruits and Nuts. Available at <https://usda.library.cornell.edu/concern/publications/zs25x846c> (verified 21 February 2023).
- Tulare County Agricultural Commissioner/Sealer of Weights and Measures Department. 2022. 2021 Tulare County Crop and Livestock Report. Available at <https://agcomm.co.tulare.ca.us/pest-exclusion-standardization/crop-reports1/crop-reports-2021-2030/> (verified 21 February 2023).

2003 California Grape Acreage Report



Released: May 25, 2004
12:00 P.M. PDT



CALIFORNIA AGRICULTURAL
STATISTICS SERVICE

RESULTS

California's 2003 grape acreage is estimated by the California Agricultural Statistics Service (CASS) at 882,000 acres. Of the total acres, 819,000 were bearing and 63,000 were non-bearing. The breakdown by type is as follows: Raisin type totaled 260,000 acres with 255,000 bearing and 5,000 non-bearing; Table type totaled 93,000 acres with 85,000 bearing and 8,000 non-bearing; Wine type totaled 529,000 acres with 479,000 bearing and 50,000 non-bearing.

The Thompson Seedless variety – used for raisins, fresh market, concentrate, and wine – continues to be, by far, the leading grape planted in California. Flame Seedless is the leading table type grape. Leading wine varieties are Chardonnay and Cabernet Sauvignon.

ESTIMATED GRAPE ACREAGE 1/

Type	2001	2002	2003	Percent Change
Raisin	283,000	279,000	260,000	-6.8
Bearing	276,000	273,000	255,000	-6.6
Non-Bearing	7,000	6,000	5,000	-16.7
Table	98,000	97,000	93,000	-4.1
Bearing	88,000	88,000	85,000	-3.4
Non-Bearing	10,000	9,000	8,000	-11.1
Wine	570,000	556,000	529,000	-4.9
Bearing	480,000	486,000	479,000	-1.4
Non-Bearing	90,000	70,000	50,000	-28.6
All Grapes	951,000	932,000	882,000	-5.4
Bearing	844,000	847,000	819,000	-3.3
Non-Bearing	107,000	85,000	63,000	-25.9

1/ Reported data with an allowance for incompleteness.

OBJECTIVES

The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

Users are cautioned that this report consists of two parts:

- ▶ Estimated grape acreage -- bearing, non-bearing, and total.
- ▶ Detailed data by variety, year planted, and county -- as voluntarily reported by grape growers and maintained in CASS' data base.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- ▶ A voluntary census of approximately 10,000 grape growers is unlikely to ever attain 100 percent completeness.
- ▶ It is extremely difficult for a small staff in Sacramento to detect growers that are planting grapes for the first time.

- ▶ The detailed data reflects vine removals from more than 41,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2003 prior to being pulled out, and that acreage has already been removed from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers included on CASS' data base. The mailing was made in late December 2003 to approximately 10,000 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail or telephone.

To arrive at the estimated grape acreage, the CASS grape acreage data base was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission. The raisin industry did not fund the acreage survey this year so the raisin variety data are not included in this report.

Appreciation is due the following office staff for the hundreds of hours spent phoning and processing survey information: Jeff Olson (Agricultural Statistician), Pam Benner, Regina Claypoole, Carol Cole, Pearl Gonzalez, Ann Jehn, Janell McAllister, Susan Novak, Lupe Oropeza, Jeremiah Rhine, Cordia Weems and Sheryl Zazzi.

VIC TOLOMEO
Director

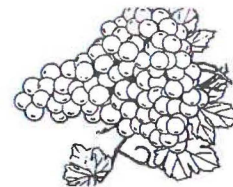
JACK RUTZ
Deputy Director

GARY NELSON – SHAWN CLARK
Agricultural Statisticians, Estimates Group

Comments or questions should be directed to:

California Agricultural Statistics Service
P.O. Box 1258, Sacramento, CA 95812-1258
Phone: (916) 498-5161 – FAX: (916) 498-5186

2004 California Grape Acreage Report



Released: March 30, 2005
12:00 P.M. PDT



CALIFORNIA AGRICULTURAL
STATISTICS SERVICE

RESULTS

California's 2004 wine-type grape acreage is estimated by the California Agricultural Statistics Service (CASS) at 513,000 acres. Of the total acres, 473,000 were bearing and 40,000 were non-bearing. Table-type grape acreage totaled 92,000 acres with 83,000 bearing and 9,000 non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless is the leading table-type grape.

ESTIMATED GRAPE ACREAGE 1/

Type	2002	2003	2004	Percent Change
Raisin 2/	279,000	260,000	248,000	-4.6
Bearing	273,000	255,000	244,000	-4.3
Non-Bearing	6,000	5,000	4,000	-20.0
Table	97,000	93,000	92,000	-1.1
Bearing	88,000	85,000	83,000	-2.4
Non-Bearing	9,000	8,000	9,000	12.5
Wine	556,000	529,000	513,000	-3.0
Bearing	486,000	479,000	473,000	-1.3
Non-Bearing	70,000	50,000	40,000	-20.0
All Grapes 2/	932,000	882,000	853,000	-3.3
Bearing	847,000	819,000	800,000	-2.3
Non-Bearing	85,000	63,000	53,000	-15.9

1/ Reported data with an allowance for incompleteness.

2/ Raisin acreage for 2004 is Preliminary. Final data will be available June 1, 2005.

OBJECTIVES

The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

Users are cautioned that this report consists of two parts:

- Estimated grape acreage – bearing, non-bearing, and total.
- Detailed data by variety, year planted, and county – as voluntarily reported by grape growers and maintained in CASS' data base.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary census of approximately 10,000 grape growers is unlikely to ever attain 100 percent completeness.
- It is extremely difficult for a small staff in Sacramento to detect growers that are planting grapes for the first time.

- The detailed data reflects vine removals from more than 21,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2004 prior to being pulled out, and that acreage has already been removed from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers included on CASS' data base. The mailing was made in late September 2004 to approximately 10,000 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail or telephone.

To arrive at the estimated grape acreage, the CASS grape acreage data base was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission. The raisin industry funded the acreage survey this year. The raisin variety data will be released on June 1, 2005.

Appreciation is due the following office staff for the hundreds of hours spent phoning and processing survey information: Jeff Olson, Pam Benner, Pearl Gonzalez, Ann Jehn, Lupe Oropeza, Cordia Weems and Sheryl Zazzi.

VIC TOLOMEO
Director

JACK RUTZ
Deputy Director

GARY NELSON – SHAWN CLARK
Agricultural Statisticians, Estimates Group

Comments or questions should be directed to:

California Agricultural Statistics Service
P.O. Box 1258, Sacramento, CA 95812-1258
Phone: (916) 498-5161 – FAX: (916) 498-5186



2006 California Grape Acreage Report

National
Agricultural
Statistics
Service

In Cooperation with the California Department of Food and Agriculture

California Field Office • P.O. Box 1258 • Sacramento, CA 95812 • (916) 498-5161 • www.nass.usda.gov/ca

Released: March 29, 2007 12:00 P.M. PDT • Frequency: Annual

RESULTS

California's 2006 wine-type grape acreage is estimated at 527,000 acres. Of the total acres, 480,000 were bearing and 47,000 were non-bearing. Table-type grape acreage totaled 93,000 acres with 83,000 bearing and 10,000 non-bearing. Acreage of raisin-type grapes totaled 240,000 acres, of which 234,000 were bearing and 6,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2004	2005	2006	Percent Change
Raisin	248,000	246,000	240,000	-2.4
Bearing	244,000	240,000	234,000	-2.5
Non-Bearing	4,000	6,000	6,000	NC
Table	92,000	93,000	93,000	NC
Bearing	83,000	83,000	83,000	NC
Non-Bearing	9,000	10,000	10,000	NC
Wine	513,000	522,000	527,000	1.0
Bearing	473,000	477,000	480,000	0.6
Non-Bearing	40,000	45,000	47,000	4.4
All Grapes	853,000	861,000	860,000	-0.1
Bearing	800,000	800,000	797,000	-0.4
Non-Bearing	53,000	61,000	63,000	3.3

1/ Reported data with an allowance for incompleteness.

OBJECTIVES

The California Field Office of the USDA's National Agricultural Statistics Service (NASS) conducts an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

Users are cautioned that this report consists of two parts:

- ▶ Estimated grape acreage -- bearing, non-bearing, and total.
- ▶ Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in NASS' data base.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- ▶ A voluntary survey of approximately 8,500 grape growers is unlikely to ever attain 100 percent completeness.
- ▶ It is difficult for USDA, NASS to detect growers who are planting grapes for the first time.

- ▶ The detailed data reflects vine removals from nearly 22,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2006 prior to being pulled out. As a result, harvested acreage removed in 2006 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers included on NASS' data base. The mailing was made in late September 2006 to approximately 8,500 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the NASS grape acreage data base was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

Appreciation is due the following office staff for the hundreds of hours spent collecting and processing survey information: Kelly Albello, Peggy Gibson, Pearl Gonzalez, Ann Jehn, Jeff Olson, Lupe Oropeza, Cordia Weems, and Sheryl Zazzi.

VIC TOLOMEO
Director

JACK RUTZ -- SARAH HOFFMAN
Deputy Directors

DOUG FLOHR -- SUZANNE AVILLA
Statisticians, Estimates Group

Comments or questions should be directed to:

USDA-NASS, CALIFORNIA FIELD OFFICE
P.O. Box 1258, Sacramento, CA 95812-1258
Phone (916) 498-5161 -- Fax (916) 498-5186



United States Department of Agriculture
National Agricultural Statistics Service

California Grape Acreage Report 2007 Summary



Cooperating with the California Department of Food and Agriculture

California Field Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (916) 498-5186 Fax · www.nass.usda.gov/ca

Released: **March 31, 2008, 12:00 p.m. PDT** • Frequency: Annual

RESULTS

California's 2007 wine-type grape acreage is estimated at 523,000 acres. Of the total acres, 480,000 were bearing and 43,000 were non-bearing. Table-type grape acreage totaled 92,000 acres with 82,000 bearing and 10,000 non-bearing. Acreage of raisin-type grapes totaled 233,000 acres, of which 227,000 were bearing and 6,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2005	2006	2007	Percent Change
Raisin	246,000	240,000	233,000	-2.9
Bearing	240,000	234,000	227,000	-3.0
Non-Bearing	6,000	6,000	6,000	NC
Table	93,000	93,000	92,000	-1.1
Bearing	83,000	83,000	82,000	-1.2
Non-Bearing	10,000	10,000	10,000	NC
Wine	522,000	527,000	523,000	-0.8
Bearing	477,000	480,000	480,000	NC
Non-Bearing	45,000	47,000	43,000	-8.5
All Grapes	861,000	860,000	848,000	-1.4
Bearing	800,000	797,000	789,000	-1.0
Non-Bearing	61,000	63,000	59,000	-6.4

1/ Reported data with an allowance for incompleteness.

OBJECTIVES

The California Field Office of the USDA's National Agricultural Statistics Service (NASS) conducts an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

Users are cautioned that this report consists of two parts:

- Estimated grape acreage—bearing, non-bearing, and total.
- Detailed data by variety, and year planted – as voluntarily reported by grape growers and maintained in NASS' database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,100 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult for USDA, NASS to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 25,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2007 prior to being pulled out. As a result, harvested acreage removed in 2007 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers included on NASS' database. The mailing was made in late September 2007 to approximately 8,100 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the NASS grape acreage database was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

Appreciation is due the following office staff for the hundreds of hours spent collecting and processing survey information: Kelly Albello, Peggy Gibson, Pearl Gonzalez, Jeff Olson, Lupe Oropeza, Cordia Weems, and Sheryl Zazzi.

VIC TOLOMEO, Director
JACK RUTZ – SARAH HOFFMAN, Deputy Directors

DOUG FLOHR – SUZANNE AVILLA
Statisticians – Estimates Group



United States Department of Agriculture
National Agricultural Statistics Service

California Grape Acreage Report 2008 Summary



Cooperating with the California Department of Food and Agriculture

California Field Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (916) 498-5186 Fax · www.nass.usda.gov/ca

Released: March 31, 2009, 12:00 p.m. PDT · Frequency: Annual

RESULTS

California's 2008 wine-type grape acreage is estimated at 526,000 acres. Of the total acres, 482,000 were bearing and 44,000 were non-bearing. Table-type grape acreage totaled 93,000 acres with 83,000 bearing and 10,000 non-bearing. Acreage of raisin-type grapes totaled 225,000 acres, of which 221,000 were bearing and 4,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2006	2007	2008	Percent Change
Raisin	240,000	233,000	225,000	-3.4
Bearing	234,000	227,000	221,000	-2.6
Non-Bearing	6,000	6,000	4,000	-33.3
Table	93,000	92,000	93,000	+1.1
Bearing	83,000	82,000	83,000	+1.2
Non-Bearing	10,000	10,000	10,000	NC
Wine	527,000	523,000	526,000	2/
Bearing	480,000	480,000	482,000	2/
Non-Bearing	47,000	43,000	44,000	+2.3
All Grapes	860,000	848,000	844,000	2/
Bearing	797,000	789,000	786,000	2/
Non-Bearing	63,000	59,000	58,000	-1.7

1/ Reported data with an allowance for incompleteness.

2/ The percent change was less than 1 percent.

OBJECTIVES

The California Field Office of the USDA's National Agricultural Statistics Service (NASS) conducts an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

Users are cautioned that this report consists of two parts:

- Estimated grape acreage—bearing, non-bearing, and total.
- Detailed data by variety, and year planted — as voluntarily reported by grape growers and maintained in NASS' database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,100 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult for USDA, NASS to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 25,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2008 prior to being pulled out. As a result, harvested acreage removed in 2008 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers included on NASS' database. The mailing was made in late September 2008 to approximately 8,100 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the NASS grape acreage database was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

Appreciation is due the following office staff for the hundreds of hours spent collecting and processing survey information: Kelly Albelo, Peggy Gibson, Pearl Gonzalez, Katherine Graham, Jeff Olson, Lupe Oropeza, Cordia Weems and Sheryl Zazzi.

VIC TOLOMEO, Director
SARAH HOFFMAN – KELLY KRUG, Deputy Directors

DOUG FLOHR – JENNIFER VAN COURT
Statisticians – Estimates Group



United States Department of Agriculture
National Agricultural Statistics Service

California Grape Acreage Report

2009 Summary



Cooperating with the California Department of Food and Agriculture

California Field Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (916) 498-5186 Fax · www.nass.usda.gov/ca

Released: **March 30, 2010, 12:00 p.m. PDT** · Frequency: Annual

RESULTS

California's 2009 wine-type grape acreage is estimated at 531,000 acres. Of the total acres, 489,000 were bearing and 42,000 were non-bearing. Table-type grape acreage totaled 93,000 acres with 84,000 bearing and 9,000 non-bearing. Acreage of raisin-type grapes totaled 219,000 acres, of which 216,000 were bearing and 3,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2007	2008	2009	Percent Change
Raisin	233,000	225,000	219,000	-2.7
Bearing	227,000	221,000	216,000	-2.3
Non-Bearing	6,000	4,000	3,000	-25.0
Table	92,000	93,000	93,000	NC
Bearing	82,000	83,000	84,000	+1.2
Non-Bearing	10,000	10,000	9,000	-10.0
Wine	523,000	526,000	531,000	2/
Bearing	480,000	482,000	489,000	+1.5
Non-Bearing	43,000	44,000	42,000	-4.5
All Grapes	848,000	844,000	843,000	2/
Bearing	789,000	786,000	789,000	2/
Non-Bearing	59,000	58,000	54,000	-6.9

1/ Reported data with an allowance for incompleteness.

2/ The percent change was less than 1 percent.

OBJECTIVES

The California Field Office of the USDA's National Agricultural Statistics Service (NASS) conducts an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

Users are cautioned that this report consists of two parts:

- Estimated grape acreage—bearing, non-bearing, and total.
- Detailed data by variety, and year planted — as voluntarily reported by grape growers and maintained in NASS' database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,000 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult for USDA, NASS to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 21,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2009 prior to being pulled out. As a result, harvested acreage removed in 2009 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers included on NASS' database. The mailing was made in late September 2009 to approximately 8,000 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the NASS grape acreage database was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

Appreciation is due the following office staff for the hundreds of hours spent collecting and processing survey information: Kelly Albelo, Peggy Gibson, Pearl Gonzalez, Katherine Graham, Jeff Olson, Lupe Oropeza, Jennifer Travis, Cordia Weems and Sheryl Zazzi.

VIC TOLOME0, Director
SARAH HOFFMAN – KELLY KRUG, Deputy Directors
DOUG FLOHR – JENNIFER VAN COURT
Statisticians – Estimates Group



United States Department of Agriculture
National Agricultural Statistics Service

California Grape Acreage Report 2010 Summary



Cooperating with the California Department of Food and Agriculture

California Field Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (916) 498-5186 Fax · www.nass.usda.gov/ca

Released: March 31, 2011, 12:00 p.m. PDT · Frequency: Annual

RESULTS

California's 2010 grape acreage totaled 842,000 acres. Of the total grape acreage, 792,000 were bearing while 50,000 were non-bearing. The wine-type grape acreage is estimated at 535,000 acres. Of the total acres, 497,000 were bearing and 38,000 were non-bearing. Table-type grape acreage totaled 94,000 acres with 85,000 bearing and 9,000 non-bearing. Acreage of raisin-type grapes totaled 213,000 acres, of which 210,000 were bearing and 3,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2008	2009	2010	Percent Change
Raisin	225,000	219,000	213,000	-2.7
Bearing	221,000	216,000	210,000	-2.8
Non-Bearing	4,000	3,000	3,000	NC
Table	93,000	93,000	94,000	1.1
Bearing	83,000	84,000	85,000	1.2
Non-Bearing	10,000	9,000	9,000	NC
Wine	526,000	531,000	535,000	0.8
Bearing	482,000	489,000	497,000	1.6
Non-Bearing	44,000	42,000	38,000	-9.5
All Grapes	844,000	843,000	842,000	-0.1
Bearing	786,000	789,000	792,000	0.4
Non-Bearing	58,000	54,000	50,000	-7.4

1/ Reported data with an allowance for incompleteness.

OBJECTIVES

The California Field Office of the USDA's National Agricultural Statistics Service (NASS) conducts an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

Users are cautioned that this report consists of two parts:

- Estimated grape acreage—bearing, non-bearing, and total.
- Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in NASS' database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,300 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult for USDA, NASS to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 13,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2010 prior to being pulled out. As a result, harvested acreage removed in 2010 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers included on NASS' database. The mailing was made in late September 2010 to approximately 8,300 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the NASS grape acreage database was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

Appreciation is due the following office staff for the hundreds of hours spent collecting and processing survey information: Kelly Albelo, Peggy Gibson, Pearl Gonzalez, Katherine Graham, Jeff Olson, Lupe Oropeza, Kim Moreno, Cordia Weems and Sheryl Zazzi.

VIC TOLOME0, Director
SARAH HOFFMAN – KELLY KRUG, Deputy Directors
DOUG FLOHR – JENNIFER VAN COURT
Statisticians – Estimates Group



United States Department of Agriculture
National Agricultural Statistics Service

California Grape Acreage Report 2011 Summary



Cooperating with the California Department of Food and Agriculture

California Field Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (916) 498-5186 Fax · www.nass.usda.gov/ca

Released: **March 30, 2012, 12:00 p.m. PDT** • Frequency: Annual

RESULTS

California's 2011 grape acreage totaled 848,000 acres. Of the total grape acreage, 796,000 were bearing while 52,000 were non-bearing. The wine-type grape acreage is estimated at 543,000 acres. Of the total acres, 506,000 were bearing and 37,000 were non-bearing. Table-type grape acreage totaled 96,000 acres with 85,000 bearing and 11,000 non-bearing. Acreage of raisin-type grapes totaled 209,000 acres, of which 205,000 were bearing and 4,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2009	2010	2011	Percent Change
Raisin	219,000	213,000	209,000	-1.9
Bearing	216,000	210,000	205,000	-2.4
Non-Bearing	3,000	3,000	4,000	33.3
Table	93,000	94,000	96,000	2.1
Bearing	84,000	85,000	85,000	NC
Non-Bearing	9,000	9,000	11,000	22.2
Wine	531,000	535,000	543,000	1.5
Bearing	489,000	497,000	506,000	1.8
Non-Bearing	42,000	38,000	37,000	-2.6
All Grapes	843,000	842,000	848,000	0.7
Bearing	789,000	792,000	796,000	0.5
Non-Bearing	54,000	50,000	52,000	4.0

1/ Reported data with an allowance for incompleteness.

OBJECTIVES

The California Field Office of the USDA's National Agricultural Statistics Service (NASS) conducts an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

Users are cautioned that this report consists of two parts:

- Estimated grape acreage—bearing, non-bearing, and total.
- Detailed data by variety, and year planted — as voluntarily reported by grape growers and maintained in NASS' database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,500 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult for USDA, NASS to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 19,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2011 prior to being pulled out. As a result, harvested acreage removed in 2011 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers included on NASS' database. The mailing was made in late September 2011 to approximately 8,500 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the NASS grape acreage database was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

Appreciation is due the following office staff for the hundreds of hours spent collecting and processing survey information: Kelly Albello, Peggy Gibson, Pearl Gonzalez, Katherine Graham, Jeff Olson, Lupe Orpeza, Kim Moreno, Cordia Weems and Sheryl Zazzi.

VIC TOLOMEO, Director
SARAH HOFFMAN – KELLY KRUG, Deputy Directors

DOUG FLOHR – JENNIFER VAN COURT
Statisticians – Estimates Group

California Grape Acreage Report, 2012 Summary



California Department of Food and Agriculture, California Agricultural Statistics Service

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Region Office

Pacific Region Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (916) 498-5186 Fax · www.nass.usda.gov/ca

Released: March 29, 2013

RESULTS

California's 2012 grape acreage totaled 847,000 acres. Of the total grape acreage, 793,000 were bearing while 54,000 were non-bearing. The wine-type grape acreage is estimated at 546,000 acres. Of the total acres, 508,000 were bearing and 38,000 were non-bearing. Table-type grape acreage totaled 98,000 acres with 85,000 bearing and 13,000 non-bearing. Acreage of raisin-type grapes totaled 203,000 acres, of which 200,000 were bearing and 3,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2010	2011	2012	Percent Change
Raisin	213,000	209,000	203,000	-2.9
Bearing	210,000	205,000	200,000	-2.4
Non-Bearing	3,000	4,000	3,000	-25.0
Table	94,000	96,000	98,000	2.1
Bearing	85,000	85,000	85,000	NC
Non-Bearing	9,000	11,000	13,000	18.2
Wine	535,000	543,000	546,000	0.6
Bearing	497,000	506,000	508,000	0.4
Non-Bearing	38,000	37,000	38,000	2.7
All Grapes	842,000	848,000	847,000	-0.1
Bearing	792,000	796,000	793,000	-0.4
Non-Bearing	50,000	52,000	54,000	3.8

1/ Reported data with an allowance for incompleteness.

OBJECTIVES

This office conducts an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

Users are cautioned that this report consists of two parts:

- Estimated grape acreage—bearing, non-bearing, and total.
- Detailed data by variety, and year planted — as voluntarily reported by grape growers and maintained in our database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,500 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 19,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2012 prior to being pulled out. As a result, harvested acreage removed in 2012 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers included on our database. The mailing was made in late September 2012 to approximately 8,500 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the grape acreage database was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

VIC TOLOMEO, Director
KELLY KRUG, Deputy Director

DOUG FLOHR – JENNIFER VAN COURT
Statisticians – Estimates Group

California Grape Acreage Report, 2013 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office

Pacific Regional Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 15, 2014

RESULTS

California's 2013 grape acreage totaled 878,000 acres. Of the total grape acreage, 820,000 were bearing while 58,000 were non-bearing. The wine-type grape acreage is estimated at 570,000 acres. Of the total acres, 525,000 were bearing and 45,000 were non-bearing. Table-type grape acreage totaled 105,000 acres with 95,000 bearing and 10,000 non-bearing. Acreage of raisin-type grapes totaled 203,000 acres, of which 200,000 were bearing and 3,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2011	2012	2013	Percent Change
Raisin	209,000	203,000	203,000	(NC)
Bearing	205,000	200,000	200,000	(NC)
Non-Bearing	4,000	3,000	3,000	(NC)
Table	96,000	98,000	105,000	7.1
Bearing	85,000	85,000	95,000	11.8
Non-Bearing	11,000	13,000	10,000	-23.1
Wine	543,000	546,000	570,000	4.4
Bearing	506,000	508,000	525,000	3.3
Non-Bearing	37,000	38,000	45,000	18.4
All Grapes	848,000	847,000	878,000	3.7
Bearing	796,000	793,000	820,000	3.4
Non-Bearing	52,000	54,000	58,000	7.4

1/ Reported data with an allowance for incompleteness.

(NC) No Change

OBJECTIVES

The California Department of Food and Agriculture partners with the Pacific Regional Office of the USDA's National Agricultural Statistics Service (NASS) to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- Estimated grape acreage – bearing, non-bearing, and total.
- Detailed data by variety, and year planted – as voluntarily reported by grape growers and maintained in our database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,500 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 7,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2013 prior to being pulled out. As a result, harvested acreage removed in 2013 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our database. The mailing was made in late November 2013 to approximately 8,500 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the grape acreage data base was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

Several County Agricultural Commissioners provided a significant number of individual grower changes. We would particularly acknowledge the work of the Merced, Napa, and Sonoma county staff.

VIC TOLOMEO, Director
DAVE DEWALT & KELLY KRUG, Deputy Directors
JENNIFER VAN COURT
Statistician – Estimates Group



California Grape Acreage Report, 2014 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Field Office

Pacific Regional Field Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 14, 2015

RESULTS

California's 2014 grape acreage totaled 928,000 acres, according to USDA's National Agricultural Statistics Service, California Field Office. Of the total grape acreage, 865,000 were bearing while 63,000 were non-bearing. The wine-type grape acreage is estimated at 615,000 acres. Of the total acres, 565,000 were bearing and 50,000 were non-bearing. Table-type grape acreage totaled 121,000 acres with 110,000 bearing and 11,000 non-bearing. Acreage of raisin-type grapes totaled 192,000 acres, of which 190,000 were bearing and 2,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/ 2/

Type	2012	2013	2014	Percent Change
Raisin	203,000	203,000	192,000	-5.4
Bearing	200,000	200,000	190,000	-5.0
Non-Bearing	3,000	3,000	2,000	-33.3
Table	118,000	120,000	121,000	0.8
Bearing	105,000	110,000	110,000	(NC)
Non-Bearing	13,000	10,000	11,000	10.0
Wine	588,000	610,000	615,000	0.8
Bearing	550,000	565,000	565,000	(NC)
Non-Bearing	38,000	45,000	50,000	11.1
All Grapes	909,000	933,000	928,000	-0.5
Bearing	855,000	875,000	865,000	-1.1
Non-Bearing	54,000	58,000	63,000	8.6

1/ Reported data with an allowance for incompleteness.

2/ 2012 and 2013 have been revised since the 2013 Grape Acreage Report.

(NC) No Change

OBJECTIVES

The California Department of Food and Agriculture partners with the Pacific Regional Office of the USDA's National Agricultural Statistics Service (NASS) to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- Estimated grape acreage – bearing, non-bearing, and total.
- Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in our database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,800 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 27,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2014 prior to being pulled out. As a result, harvested acreage removed in 2014 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our database. The mailing was made in late November 2014 to approximately 8,800 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the grape acreage data base was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

Several County Agricultural Commissioners provided a significant number of individual grower changes. We would particularly acknowledge the work of the Merced, Napa, and Sonoma county staff.

VIC TOLOMEO, Director
CURT STOCK, Deputy Director

JENNIFER VAN COURT & LENA SCHWEDLER
Statisticians – Estimates Group



California Grape Acreage Report, 2015 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office

Pacific Regional Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 12, 2016

RESULTS

California's 2015 grape acreage totaled 918,000 acres. Of the total grape acreage, 856,000 were bearing while 62,000 were non-bearing. The wine-type grape acreage is estimated at 608,000 acres. Of the total acres, 560,000 were bearing and 48,000 were non-bearing. Table-type grape acreage totaled 124,000 acres with 112,000 bearing and 12,000 non-bearing. Acreage of raisin-type grapes totaled 186,000 acres, of which 184,000 were bearing and 2,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2013	2014	2015	Percent Change
Raisin	203,000	192,000	186,000	-3.1
Bearing	200,000	190,000	184,000	-3.2
Non-Bearing	3,000	2,000	2,000	(NC)
Table	120,000	121,000	124,000	2.5
Bearing	110,000	110,000	112,000	1.8
Non-Bearing	10,000	11,000	12,000	9.1
Wine	610,000	615,000	608,000	-1.1
Bearing	565,000	565,000	560,000	-0.9
Non-Bearing	45,000	50,000	48,000	-4.0
All Grapes	933,000	928,000	918,000	-1.1
Bearing	875,000	865,000	856,000	-1.0
Non-Bearing	58,000	63,000	62,000	-1.6

1/ Reported data with an allowance for incompleteness.

(NC) No Change

OBJECTIVES

The California Department of Food and Agriculture partners with the Pacific Regional Office of the USDA's National Agricultural Statistics Service (NASS) to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- Estimated grape acreage -- bearing, non-bearing, and total.
- Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in our database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,800 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 38,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2015 prior to being pulled out. As a result, harvested acreage removed in 2015 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our database. The mailing was made in late November 2015 to approximately 8,800 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the grape acreage data base was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.

CHRIS MESSER, Director
TRAVIS AVERILL, Deputy Director
CURT STOCK, Deputy Director

JENNIFER VAN COURT, Statistician
LENA SCHWEDLER, Statistician



California Grape Acreage Report, 2016 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office

Pacific Regional Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 498-5161 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 20, 2017

RESULTS

California's 2016 grape acreage totaled 897,000 acres. Of the total grape acreage, 841,000 were bearing while 56,000 were non-bearing. The wine-type grape acreage is estimated at 602,000 acres, with 560,000 bearing and 42,000 non-bearing. Table-type grape acreage totaled 123,000 acres, with 111,000 bearing and 12,000 non-bearing. Acreage of raisin-type grapes totaled 172,000 acres, with 170,000 bearing and 2,000 non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2014	2015	2016	Percent Change
Raisin	192,000	186,000	172,000	-7.5
Bearing	190,000	184,000	170,000	-7.6
Non-Bearing	2,000	2,000	2,000	(NC)
Table	121,000	124,000	123,000	-0.8
Bearing	110,000	112,000	111,000	-0.9
Non-Bearing	11,000	12,000	12,000	(NC)
Wine	615,000	608,000	602,000	-1.0
Bearing	565,000	560,000	560,000	(NC)
Non-Bearing	50,000	48,000	42,000	-12.5
All Grapes	928,000	918,000	897,000	-2.3
Bearing	865,000	856,000	841,000	-1.8
Non-Bearing	63,000	62,000	56,000	-9.7

1/ Reported data with an allowance for incompleteness.

(NC) No Change

OBJECTIVES

The California Department of Food and Agriculture partners with the Pacific Regional Office of the USDA's National Agricultural Statistics Service (NASS) to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- Estimated grape acreage -- bearing, non-bearing, and total.

- Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in our database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 9,100 grape growers is unlikely to attain 100 percent completeness.
- It is difficult to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 36,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2016 prior to being pulled out. As a result, harvested acreage removed in 2016 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our database. The mailing was sent in late October 2016 to approximately 9,100 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the grape acreage data base was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.



California Grape Acreage Report, 2017 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office

Pacific Regional Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 738-6600 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 19, 2018

RESULTS

California's 2017 grape acreage totaled 880,000 acres. Of the total grape acreage, 829,000 were bearing while 51,000 were non-bearing. The wine-type grape acreage is estimated at 599,000 acres. Of the total acres, 560,000 were bearing and 39,000 were non-bearing. Table-type grape acreage totaled 121,000 acres with 111,000 bearing and 10,000 non-bearing. Acreage of raisin-type grapes totaled 160,000 acres, of which 158,000 were bearing and 2,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2015	2016	2017	Percent Change
Raisin	186,000	172,000	160,000	-7.0
Bearing	184,000	170,000	158,000	-7.1
Non-Bearing	2,000	2,000	2,000	(NC)
Table	124,000	123,000	121,000	-1.6
Bearing	112,000	111,000	111,000	(NC)
Non-Bearing	12,000	12,000	10,000	-16.7
Wine	608,000	602,000	599,000	-0.5
Bearing	560,000	560,000	560,000	(NC)
Non-Bearing	48,000	42,000	39,000	-7.1
All Grapes	918,000	897,000	880,000	-1.9
Bearing	856,000	841,000	829,000	-1.4
Non-Bearing	62,000	56,000	51,000	-8.9

1/ Reported data with an allowance for incompleteness.

(NC) No Change

OBJECTIVES

The California Department of Food and Agriculture partners with the Pacific Regional Office of the USDA's National Agricultural Statistics Service (NASS) to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- > Estimated grape acreage -- bearing, non-bearing, and total.
- > Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in our database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- > A voluntary survey of approximately 8,300 grape growers is unlikely to attain 100 percent completeness.
- > It is difficult to detect growers who are planting grapes for the first time.
- > The detailed data reflects vine removals from about 22,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2017 prior to being pulled out. As a result, harvested acreage removed in 2017 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our database. The mailing was sent in late October 2017 to approximately 8,300 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the grape acreage data base was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.



California Grape Acreage Report, 2018 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office

Pacific Regional Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 738-6600 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 19, 2019

RESULTS

California's 2018 grape acreage totaled 925,000 acres. Of the total grape acreage, 863,000 were bearing while 62,000 were non-bearing. The wine-type grape acreage is estimated at 637,000 acres. Of the total acres, 590,000 were bearing and 47,000 were non-bearing. Table-type grape acreage totaled 132,000 acres with 121,000 bearing and 11,000 non-bearing. Acreage of raisin-type grapes totaled 156,000 acres, of which 152,000 were bearing and 4,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2016	2017	2018	Percent Change
Raisin	172,000	160,000	156,000	-2.5
Bearing	170,000	158,000	152,000	-3.8
Non-Bearing	2,000	2,000	4,000	100.0
Table	123,000	121,000	132,000	9.1
Bearing	111,000	111,000	121,000	9.0
Non-Bearing	12,000	10,000	11,000	10.0
Wine	602,000	599,000	637,000	6.3
Bearing	560,000	560,000	590,000	5.4
Non-Bearing	42,000	39,000	47,000	20.5
All Grapes	897,000	880,000	925,000	5.1
Bearing	841,000	829,000	863,000	4.1
Non-Bearing	56,000	51,000	62,000	21.6

1/ Reported data with an allowance for incompleteness.

OBJECTIVES

The California Department of Food and Agriculture partners with the Pacific Regional Office of the USDA's National Agricultural Statistics Service (NASS) to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- > Estimated grape acreage -- bearing, non-bearing, and total.
- > Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in our database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- > A voluntary survey of approximately 8,300 grape growers is unlikely to attain 100 percent completeness.
- > It is difficult to detect growers who are planting grapes for the first time.
- > The detailed data reflects vine removals from over 17,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2018 prior to being pulled out. As a result, harvested acreage removed in 2018 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our database. The mailing was sent in late October 2018 to approximately 8,300 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the grape acreage data base was compared with data provided from the 2017 Census of Agriculture and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.



California Grape Acreage Report, 2019 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office

Pacific Regional Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 738-6600 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 21, 2020

RESULTS

California's 2019 grape acreage totaled 918,000 acres. Of the total grape acreage, 860,000 were bearing while 58,000 were non-bearing. The wine-type grape acreage is estimated at 635,000 acres. Of the total acres, 590,000 were bearing and 45,000 were non-bearing. Table-type grape acreage totaled 130,000 acres with 121,000 bearing and 9,000 non-bearing. Acreage of raisin-type grapes totaled 153,000 acres, of which 149,000 were bearing and 4,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/

Type	2017	2018	2019	Percent Change
Raisin	160,000	156,000	153,000	-1.9
Bearing	158,000	152,000	149,000	-2.0
Non-Bearing	2,000	4,000	4,000	(NC)
Table	121,000	132,000	130,000	-1.5
Bearing	111,000	121,000	121,000	(NC)
Non-Bearing	10,000	11,000	9,000	-18.2
Wine	599,000	637,000	635,000	-0.3
Bearing	560,000	590,000	590,000	(NC)
Non-Bearing	39,000	47,000	45,000	-4.3
All Grapes	880,000	925,000	918,000	-0.8
Bearing	829,000	863,000	860,000	-0.3
Non-Bearing	51,000	62,000	58,000	-6.5

1/ Reported data with an allowance for incompleteness.

OBJECTIVES

The California Department of Food and Agriculture partners with the Pacific Regional Office of the USDA's National Agricultural Statistics Service (NASS) to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- > Estimated grape acreage -- bearing, non-bearing, and total.
- > Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in our list of grape vineyards.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- > A voluntary survey of approximately 8,900 grape growers is unlikely to attain 100 percent completeness.
- > It is difficult to detect growers who are planting grapes for the first time.
- > The detailed data reflects vine removals from 24,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2019 prior to being pulled out. As a result, harvested acreage removed in 2019 is included in the estimated acreage, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our list of grape vineyards. The mailing was sent in October 2019 to approximately 8,900 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, our list of grape vineyards was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.



California Grape Acreage Report, 2020 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office

Pacific Regional Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 738-6600 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 20, 2021

RESULTS

California's 2020 grape acreage totaled 895,000 acres. Of the total grape acreage, 844,000 were bearing while 51,000 were non-bearing. The wine-type grape acreage is estimated at 620,000 acres. Of the total acres, 580,000 were bearing and 40,000 were non-bearing. Table-type grape acreage totaled 130,000 acres with 122,000 bearing and 8,000 non-bearing. Acreage of raisin-type grapes totaled 145,000 acres, of which 142,000 were bearing and 3,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE ¹

Type	2018	2019	2020	Percent Change
Raisin	156,000	153,000	145,000	- 5.2
Bearing	152,000	149,000	142,000	- 4.7
Non-Bearing	4,000	4,000	3,000	- 25.0
Table	132,000	130,000	130,000	(NC)
Bearing	121,000	121,000	122,000	+ 0.8
Non-Bearing	11,000	9,000	8,000	- 11.1
Wine	637,000	635,000	620,000	- 2.4
Bearing	590,000	590,000	580,000	- 1.7
Non-Bearing	47,000	45,000	40,000	- 11.1
All Grapes	925,000	918,000	895,000	- 2.5
Bearing	863,000	860,000	844,000	- 1.9
Non-Bearing	62,000	58,000	51,000	- 12.1

¹ Reported data with an allowance for incompleteness.

(NC) No Change

OBJECTIVES

The USDA's National Agricultural Statistics Service (NASS) Pacific Regional Office partners with California Department of Food and Agriculture, California Table Grape Commission, and Raisin Administrative Committee to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- Estimated grape acreage -- bearing, non-bearing, and total.
- Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in our list of grape vineyards.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,900 grape growers is unlikely to attain 100 percent completeness.
- It is difficult to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from 30,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2020 prior to being pulled out. As a result, harvested acreage removed in 2020 is included in the estimated acreage, but excluded from the detailed data

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our list of grape vineyards. The mailing was made in October 2020 to approximately 8,900 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken.

To arrive at the estimated grape acreage, our list of grape vineyards was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.



California Grape Acreage Report, 2021 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office

Pacific Regional Office · P.O. Box 1258 · Sacramento, CA 95812 · (916) 738-6600 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 20, 2022

RESULTS

California's 2021 grape acreage totaled 881,000 acres. Of the total grape acreage, 829,000 were bearing while 52,000 were non-bearing. The wine-type grape acreage is estimated at 615,000 acres. Of the total acres, 575,000 were bearing and 40,000 were non-bearing. Table-type grape acreage totaled 128,000 acres with 118,000 bearing and 10,000 non-bearing. Acreage of raisin-type grapes totaled 138,000 acres, of which 136,000 were bearing and 2,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE ¹

Type	2019	2020	2021	Percent Change
Raisin	153,000	145,000	138,000	-4.8
Bearing	149,000	142,000	136,000	-4.2
Non-Bearing	4,000	3,000	2,000	-33.3
Table	130,000	132,000	128,000	-3.0
Bearing	121,000	122,000	118,000	-3.3
Non-Bearing	9,000	10,000	10,000	(NC)
Wine	635,000	625,000	615,000	-1.6
Bearing	590,000	585,000	575,000	-1.7
Non-Bearing	45,000	40,000	40,000	(NC)
All Grapes	918,000	902,000	881,000	-2.3
Bearing	860,000	849,000	829,000	-2.4
Non-Bearing	58,000	53,000	52,000	-1.9

¹ Reported data with an allowance for incompleteness.
(NC) No Change

OBJECTIVES

The USDA's National Agricultural Statistics Service (NASS) Pacific Regional Office partners with California Department of Food and Agriculture, California Table Grape Commission, and Raisin Administrative Committee to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- Estimated grape acreage – bearing, non-bearing, and total.
- Detailed data by variety, and year planted – as voluntarily reported by grape growers and maintained in our list of grape vineyards.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,800 grape growers is unlikely to attain 100 percent completeness.
- It is difficult to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from 18,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2021 prior to being pulled out. As a result, harvested acreage removed in 2021 is included in the estimated acreage for 2021, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our list of grape vineyards. The mailing was made in October 2021 to approximately 8,800 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. This report includes responses from growers received through the middle of April 2022.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission and the Raisin Administrative Committee.



California Grape Acreage Report, 2022 Summary



California Department of Food and Agriculture

Cooperating with the USDA, National Agricultural Statistics Service, Pacific Regional Office

Pacific Regional Office · 650 Capitol Mall, Suite 6-100 · Sacramento, CA 95814 · (916) 738-6600 · (855) 270-2722 Fax · www.nass.usda.gov/ca

Released: April 19, 2023

RESULTS

California's wine-type grape acreage is estimated at 615,000 acres. Of the total acres, 575,000 were bearing and 40,000 were non-bearing. Table-type grape acreage totaled 127,000 acres with 120,000 bearing and 7,000 non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety.

ESTIMATED GRAPE ACREAGE ^{1 2}

Type	2020	2021	2022	Percent Change
Raisin	145,000	138,000	(NA)	(NA)
Bearing	142,000	136,000	(NA)	(NA)
Non-Bearing	3,000	2,000	(NA)	(NA)
Table	132,000	128,000	127,000	-0.8
Bearing	122,000	118,000	120,000	1.7
Non-Bearing	10,000	10,000	7,000	-30.0
Wine	625,000	615,000	615,000	(NC)
Bearing	585,000	575,000	575,000	(NC)
Non-Bearing	40,000	40,000	40,000	(NC)
All Grapes	902,000	881,000	(NA)	(NA)
Bearing	849,000	829,000	(NA)	(NA)
Non-Bearing	53,000	52,000	(NA)	(NA)

¹ Reported data with an allowance for incompleteness.

² The Raisin Administrative Committee did not fund the Grape Acreage Survey in 2022, therefore the Raisin Type and All Grape totals are unavailable.

(NA) Not available.

(NC) No Change.

OBJECTIVES

The USDA's National Agricultural Statistics Service (NASS) Pacific Regional Office partners with California Department of Food and Agriculture and the California Table Grape Commission to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- Estimated grape acreage -- bearing, non-bearing, and total.
- Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in our list of grape vineyards.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 7,500 grape growers is unlikely to attain 100 percent completeness.
- It is difficult to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals of table and wine type grapes from 11,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2022 prior to being pulled out. As a result, harvested acreage removed in 2022 is included in the estimated acreage for 2022, but excluded from the detailed data.

PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to table and wine grape growers from our list of grape vineyards. The mailing was made in October 2022 to approximately 7,500 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. This report includes responses from growers received through the middle of April 2023.

ACKNOWLEDGMENTS

We sincerely thank the many farm operators, owners, and management firms providing the information. Funding was provided by an assessment on wine grapes plus funding from the California Table Grape Commission.

Grape Reports

Grape Acreage Report

Detailed Report for 2022 Crop Year

[Summary PDF \(Acreage/2023/grpacSUMMARY2022Crop.pdf\)](#)

[Detailed Reports Archive \(Acreage/Reports/index.php\)](#) (Current and Historic)

Grape Crush Reports

[Previous Grape Crush Reports \(1976 - Current\) \(Crush/Reports/index.php\)](#) PDF and XLS

Visit [CDFA Grape Crush \(https://www.cdfa.ca.gov/mkt/grapecrush\)](https://www.cdfa.ca.gov/mkt/grapecrush) for workbook and instructions

Pierce's Disease

[California Grower Survey Results 2019 \(Crush/Reports/202001pdgwss.pdf\)](#)

Acreage

Grapes (Summary)

[Apr 19, 2023 \(Acreage/2023/grpacSUMMARY2022Crop.pdf\)](#)

[Apr 20, 2022 \(Acreage/2022/grpacSUMMARY2021Crop.pdf\)](#)

[Apr 20, 2021 \(Acreage/2021/grpacSUMMARY2020Crop.pdf\)](#)

[Apr 21, 2020 \(Acreage/2020/202004grpacSUMMARY2019Crop.pdf\)](#)

[Apr 19, 2019 \(Acreage/2019/201904grpacSUMMARY2018Crop.pdf\)](#)

[Apr 19, 2018 \(Acreage/2018/201804grpacSUMMARY.pdf\)](#)

[Apr 20, 2017 \(Acreage/2017/201704grapeacres.pdf\)](#)

[Apr 12, 2016 \(Acreage/2016/201604grpac.pdf\)](#)

[Apr 14, 2015 \(Acreage/2015/201503grpac.pdf\)](#)

[Apr 15, 2014 \(Acreage/2014/201403grpac.pdf\)](#)

[Mar 29, 2013 \(Acreage/2013/201303grpac.pdf\)](#)

[Mar 30, 2012 \(Acreage/2012/201203grpac.pdf\)](#)

[Mar 31, 2011 \(Acreage/2011/201103grpac.pdf\)](#)

[Mar 30, 2010 \(Acreage/2010/201003grpac.pdf\)](#)

[Mar 31, 2009 \(Acreage/2009/200903grpac.pdf\)](#)

[Mar 31, 2008 \(Acreage/2008/200803grpac.pdf\)](#)

[Mar 29, 2007 \(Acreage/2007/200703grpac.pdf\)](#)

[Mar 30, 2005 \(Acreage/2005/200503grpac.pdf\)](#)

[May 25, 2004 \(Acreage/2004/200405grpac.pdf\)](#)

— NO report 2006