

California Fruit & Nut Review



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grapes were being laid and wine grapes were being harvested. Harvest of stone fruits made good progress during the month and was beginning to wind down by September 1. The Bartlett pear harvest was near the end by late August with good quality reported. Asian and other pear harvests were also active. Apple harvest gathered momentum with early variety picking. Almond growers began harvest of early varieties by late August. Walnut trees were treated for codling moths. Olives were maturing well. Central Valley growers were planting strawberries. The new crop Navel oranges were maturing well. Growers in Southern California were picking Valencia oranges and lemons.

SEPTEMBER CROP COMMENTS

Harvest of grapes for fresh use was active in the San Joaquin Valley during August. Major varieties that were picked included Thompson Seedless, Red Globe, and Flame Seedless. By the end of August, raisin

FRUIT AND NUT STATISTICS AT A GLANCE

Crop	Bearing Acreage		Yield Per Acre		Estimated Production		Production Percent Change	Next Crop Update
	1998	1999	1998	1999	1998	1999		
NUT CROPS	Acres		Pounds		1,000 Pounds			
Almonds (Shelled)	460,000	475,000	1,130	1,600	520,000	830,000	60	January 2000
Pecans	2,600	---	692	---	1,800	---		October 8, 1999
Pistachio (In-Shell)								
Marketable In-Shell	---	---	---	---	138,000	---		
Shelling Stock	---	---	---	---	50,000	---		
Total	65,900	68,000	2,850	1,620	188,000	110,000	-41	January 2000
			Tons		1,000 Tons			
Walnuts (In-Shell)	193,000	193,000	1.18	1.45	227.0	280.0	23	January 2000
FRUIT CROPS								
Apples	37,000	35,000	11.00	11.80	407.5	412.5	1	January 2000
Apricots	20,000	19,000	5.65	6.58	113.0	125.0	11	January 2000
Cherries	17,500	17,500	0.88	2.86	15.0	50.0	233	January 2000
Grapes, Raisin	275,000	275,000	7.85	8.18	2,158.0	2,250.0	4	October 8, 1999
Grapes, Table	83,000	85,000	7.78	8.82	645.0	750.0	16	October 8, 1999
Grapes, Wine	385,000	410,000	6.68	7.32	2,570.0	2,900.0	13	October 8, 1999
Grapes, All	743,000	770,000	7.23	7.66	5,373.0	5,900.0	10	October 8, 1999
Olives	35,300	35,300	2.55	3.54	90.0	125.0	39	January 2000
Peaches, Clingstone	30,400	29,800	17.19	18.46	522.5	550.0	5	January 2000
Peaches, Freestone	36,100	37,000	9.80	9.32	355.0	345.0	-3	January 2000
Pears, Bartlett	15,000	15,000	17.20	19.00	277.0	285.0	3	January 2000
Pears, Other	4,300	4,300	6.98	6.98	30.0	30.0		January 2000
Prunes (Dried Weight)	83,000	83,000	1.30	2.17	108.0	180.0	67	January 2000
BERRIES	1998	1999	1998	1999	1998	1999		
			Cwt.		1,000 Cwt.			
Strawberries	24,200	24,700	580	600	14,040	14,820	6	Dec. 10, 1999
CITRUS CROP 1/	1998-99	1999-00	1998-99	1999-00	1998-99	1999-00		
			Cartons		1,000 Cartons			
Grapefruit	16,600	---	1,024	---	17,000	---		Sept. 23, 1999
Lemons	48,500	---	742	---	36,000	---		Sept. 23, 1999
Oranges, Navel	125,000	130,000	336	616	42,000	80,000	91	January 2000
Oranges, Valencia	72,000	---	472	---	34,000	---		Sept. 23, 1999
Tangerines 2/	8,600	---	395	---	3,400	---		Sept. 23, 1999

1/ Grapefruit - 33.5 lbs. per carton, Lemons - 38.0 lbs. per carton, Oranges - 37.5 lbs. per carton, Tangerines - 37.5 lbs. per carton.

2/ Includes tangelos, tangerines, and tangors.

1999-2000 CALIFORNIA NAVEL ORANGE FORECAST

The initial 1999-2000 Navel orange forecast is 80.0 million (37.5-pound) cartons, up 90 percent from last season's freeze-damaged crop of 42.0 million cartons. Of this 80.0 million, 75.0 million cartons are forecast to

be in the Central Valley. Fruit set and size are average and the crop is maturing well.

CALIFORNIA CENTRAL VALLEY NAVEL ORANGES 1/

Crop Year 2/	Final Utilized Production 3/ (37.5-Lb. Cartons)	Bearing Acres	Average Trees Per Acre	Average Set Per Tree
1984-85	43,386,000	93,039	128	354
1985-86	57,612,000	94,074	128	457
1986-87	58,566,000	94,997	128	544
1987-88	53,588,000	96,110	126	361
1988-89	58,326,000	98,766	126	570
1989-90	79,242,000	101,525	125	541
1990-91	25,514,000	104,560	124	498
1991-92	60,406,000	102,000	124	---
1992-93	81,034,000	102,612	121	572
1993-94	63,800,000	106,381	121	452
1994-95	66,358,000	107,049	121	457
1995-96	69,750,000	113,000	121	460
1996-97	71,700,000	115,000	121	359
1997-98	81,000,000	116,500	121	407
1998-99	18,500,000	118,000	121	380
1999-00	75,000,000	118,000	121	458

1/ Data for final utilized production and bearing acres are from the orange industry. Acreage data is number of acres of bearing age (more than four years old). Some fruit could have been picked from trees younger than four years old, but not enough to consider the tree full bearing

2/ Data for 1990-91 and 1998-99 (freeze years) were not used in forecasting the 1999-00 crop. No Objective Measurement Survey was conducted for the 1991-92 season due to lack of funding.

3/ California Agricultural Statistics Service preliminary forecast for 1999-00.

1999 PISTACHIO PRODUCTION FORECAST AT 110 MILLION POUNDS

California pistachio production for 1999 is forecast at 110 million pounds. The 80 percent confidence interval is from 80 to 130 million pounds. This means that 80 percent of the time the actual production will fall within this range. This forecast is based on an objective measurement survey conducted by the California Agricultural Statistics Service under the sponsorship of the California Pistachio Commission. The survey collects data such as clusters per tree, nuts per cluster, percent of bearing trees,

as well as weight and size information. Due to the later than usual spring, the crop is approximately two to three weeks behind normal. In recent years, production has remained more stable as Pioneer Gold rootstock (verticillium wilt resistant) has increasingly replaced the older Atlantica rootstock. The Pioneer Gold generally bears heavy on even years and the Atlantica on odd.

Year	Samples Completed 2/	Estimated Average Number Of Clusters Per Tree	Estimated Percent Of All Spaces That Contain		Count Data			In-Hull Data 3/			Kernel Data 3/			
			Bearing Trees	Pollinators	Nuts Per Cluster (Filled & Blank)	Percent Of Nuts Filled	Est. Total Number Of Filled Nuts Per Tree	Weight Per Nut (Includes Blanks)	Weight Per Nut (Filled)	In-Hull Cross Suture	Average Weight Per Kernel	Suture	Cross Suture	Length
1986	332	1,090	79.8	6.1	11.5	77.3	9,689	2.77	---	15.63	1.000	10.50	10.49	17.00
1987	286	655	81.1	5.9	8.8	67.6	3,891	2.51	---	14.95	0.912	10.36	9.56	16.51
1988	347	1,181	83.2	5.7	10.5	80.7	10,032	2.61	---	14.13	0.832	10.02	9.37	15.87
1989	367	344	85.8	6.1	11.4	72.9	2,864	2.84	---	14.70	0.979	10.71	9.97	17.40
1990	373	1,479	85.6	6.3	10.1	73.5	10,942	2.43	---	14.14	0.871	10.12	9.32	16.11
1991	389	439	87.7	5.9	11.1	77.8	3,794	2.99	---	15.41	0.963	10.69	10.11	16.68
1992	394	1,670	86.3	6.8	7.2	70.4	8,433	3.04	---	15.26	1.240	10.96	10.35	17.79
1993	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1994	491	797	87.4	6.0	11.9	80.6	7,647	2.92	---	15.02	0.952	10.43	9.68	16.97
1995	586	974	89.9	5.4	9.2	78.9	7,114	3.07	3.26	15.51	0.949	10.33	9.94	16.40
1996	562	739	89.3	5.3	10.3	65.7	5,007	2.52	2.72	14.87	0.775	9.76	9.08	15.70
1997	642	1,049	89.5	5.4	10.4	76.0	8,326	2.78	2.92	14.92	0.896	10.56	9.60	16.55
1998	610	895	90.9	5.0	13.8	77.2	9,542	2.86	3.04	15.05	0.828	10.31	9.51	16.48
1999	603	591	90.5	5.6	11.1	70.4	4,630	2.82	3.09	15.29	0.928	10.16	9.78	16.72

1/ Survey was not conducted in 1993.

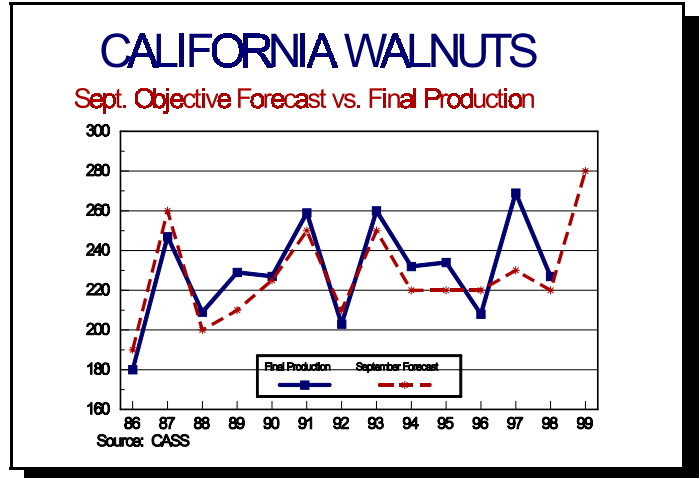
2/ Number of samples is based on the August Pistachio Objective Measurement Survey. There are two trees per sample.

3/ All weights are in grams. Suture, cross suture and length measurements are in millimeters.

WALNUT PRODUCTION FORECAST

The 1999 California walnut production is forecast at a record high 280,000 tons, up 23 percent from 1998's production of 227,000 tons. This forecast is based on the Walnut Objective Measurement Survey. The Objective Measurement Survey was conducted August 1 through August 22, 1999. Due to a cool spring, the crop is about two weeks behind normal. The early and mid-season varieties look to be about average, while the late varieties, such as Hartley and Chandler, look to be very strong this season. Quality is expected to be excellent, with very little damage.

The 1999 Objective Measurement Survey utilized a total of 640 blocks with two sample trees per block. Survey data indicated an average nut set of 1,709, up 21 percent from 1998's average of 1,407. The Hartley nut set was up 54 percent; Serr, down 39 percent; Franquette, up 86 percent; Chandler, up 18 percent from 1998. Percent of sound kernels in-shell was a record high 97.9 percent Statewide. In-shell weight per nut was 23.0 grams, while the average in-shell suture measurement was 32.2 millimeters. The average length in-shell was 39.4 millimeters.



WALNUTS PER TREE, BY DISTRICT

Year	Coast ^{1/}	Sacramento Valley ^{2/}	San Joaquin Valley ^{3/}	State ^{4/}
1988	1,359	2,390	1,837	2,008
1989	1,427	2,182	1,537	1,785
1990	1,637	2,380	1,835	2,028
1991	1,955	2,620	2,210	2,340
1992	1,567	1,902	1,380	1,604
1993	1,530	2,703	1,596	2,068
1994	1,813	1,961	1,602	1,773
1995	1,420	2,253	1,451	1,777
1996	1,362	1,836	1,497	1,630
1997	1,128	2,233	1,439	1,753
1998	1,070	1,654	1,253	1,407
1999	1,355	2,180	1,250	1,709

- ^{1/} Coast includes: Contra Costa, Lake, Monterey, Napa, San Benito, San Luis Obispo, Santa Clara, and Sonoma counties.
- ^{2/} Sacramento Valley includes: Butte, Colusa, El Dorado, Glenn, Sacramento, Solano, Sutter, Tehama, Yolo, and Yuba counties.
- ^{3/} San Joaquin Valley includes: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare counties.
- ^{4/} District and State averages are derived by weighting county averages by county bearing acreage figures.

CALIFORNIA WALNUT OBJECTIVE MEASUREMENT SURVEY DATA

Year	Bearing Acres ^{1/}	Total Production (Tons)	Nuts Set Per Tree	Kernel Grade - Percent Sound	In-Shell Weight (gm)	In-Shell Width (mm)	In-Shell Length (mm)	In-Shell Cross-Width (mm)
1988	177,000	209,000	2,008	96.2	21.2	32.5	39.1	32.7
1989	179,000	229,000	1,785	97.0	21.5	32.3	39.1	32.6
1990	181,000	227,000	2,028	96.3	21.8	32.3	38.8	32.4
1991	181,000	259,000	2,340	95.5	20.8	31.5	39.0	31.1
1992	178,000	203,000	1,604	96.9	22.7	32.6	39.5	32.9
1993	185,000	260,000	2,068	95.8	22.9	32.6	40.0	32.5
1994	189,000	232,000	1,773	95.6	22.1	32.2	39.4	32.2
1995	193,000	234,000	1,777	93.1	20.8	31.7	39.2	31.3
1996	192,000	208,000	1,630	94.4	22.1	32.3	39.0	32.5
1997	193,000	269,000	1,753	97.3	22.9	32.3	38.6	32.6
1998	193,000	227,000	1,407	94.4	21.4	31.9	39.5	31.8
1999	193,000	280,000	1,709	97.9	23.0	32.2	39.4	32.7

^{1/} Bearing years include plantings of the following: Chandler, Chico, Howard, Tulare (1995 & Earlier); 50-55, 59-124, 4946, Amigo, Ashley, Bardoni, Cisco, Earhorn, Grove, Gustine, Honeycutt, Houston, Jensen, Lompoc, Marchetti, Nuggett, Payne, Pedro, Serr, Sunland, Tehama, Trinta, UCD 67-13, Vina, Westside (1994 and Earlier); Franquette, Franquette Scharsch, Mayette, Placentia, Poe, Willsons/Willsons Wonder, Woodland (1992 & Earlier); all other varieties not specified (1993 & Earlier).

Florida Citrus

Florida's citrus belt generally received adequate to surplus rainfall and thunderstorms during the month of August. A few groves on the high sand hills received variable to light rains, therefore, requiring periodic irrigation. Conversely, several growers on the lower east coast and the west coast complained of frequent heavy downpours with occasional flooding and erosion. An abundance of new growth occurred on trees of all ages in all areas. New crop fruit is making very good progress. Two

packing houses have packed new crop early-bloom Navels. They will be shipped between the 3rd and the 7th of September. Several fresh fruit houses are also testing grapefruit for early harvest. Caretakers have been very active cutting and applying herbicides to cover crops. Growers are applying summer sprays and fertilizers between rain showers. Dead trees and abandoned groves are being pushed and burned. Some new reset trees are being planted in the larger groves.