

# Tree Nuts Outlook

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## Almond and Walnut Forecast to Decline

The 2021/22 domestic season has begun for most tree nuts. Almond and walnut production is forecast to decline. In California, almond and walnut orchards faced harsh weather conditions and an on-going drought. In the previous season (2020/21), record production of most U.S. tree nuts, along with large beginning stocks, contributed to overall record supplies and generally lower grower prices (table 4). Overall, exports increased despite tariffs and port issues, including port congestion, shipping delays and container shortages in California. The marketable quantity of all U.S. tree nuts, led by almonds, walnuts, and pistachios, was estimated at 4.5 billion pounds (shelled basis) in 2020/21, up 24 percent from the previous season. The production may be reduced in the 2021/22 season as a result of the alternate bearing nature of tree nuts.

**Almond crop expected to decline in 2021/22:** The 2020/21 (August–July) almond production was the largest on record, over 3 billion pounds and valued at \$5.6 billion. California’s average yield was 2,490 pounds per acre, a 320-pound increase from the previous year. Strong international demand led to a 30-percent increase in U.S. exports in 2020/21 compared with 2019/20, including shipments to the top markets of India and China. The large supply and high ending stocks, likely lowered grower prices in 2020/21.

The 2021 *California Almond Objective Measurement Report*, released by USDA, NASS in July 2021, forecast a 2.80-billion-pound crop (shelled basis) for the 2021/22 season, a 10 percent decrease in production from the previous season. Bearing acreage increased in 2021 but due to low water allocation and record high temperatures in June the crop did not develop as well as expected, reducing nut set per tree. The forecast smaller crop and strong demand should put upward pressure on 2021/22 grower prices.

**Walnut production forecast to decline in 2021/22:** 2020/21 (September–August) was a record year for walnut production, at 785,000 tons, with bearing acres of 380,000, up 4 percent from last season. This volume drove U.S. walnut grower prices to their lowest level since 2008 (table 5, reported on shelled basis). Combined with abundant supplies and international demand, exports grew 25 percent from last season. The 2021 *California Walnut Objective Measurement Report*, released by USDA, NASS on September 1, forecast walnut production to decline to 1.34 billion pounds (or 670,000 tons) on an in-shell basis, down 15 percent from last

year. A high degree of frost damage and the on-going drought decreased nut sets per tree, likely supporting 2021/22 walnut grower prices.

**Hazelnut production forecast on par with 2020/21:** As of September 2021, the Hazelnut Marketing Board projected Oregon’s production to be 62,600 tons for 2021/22 (July–June). The Hazelnut Marketing Board released its annual *Subjective Yield Survey*, conducted in mid-July. Some growers project growth, while others expect a decrease due to an ice storm in February, and heat and drought in the summer months. In May 2021, the USDA, NASS *Noncitrus Fruit and Nuts 2020 Summary* estimated 2020 hazelnut production at 63,000 tons, on high-bearing acres and average yield. Oregon’s hazelnut 2021/22 production is estimated to be less than one percent lower than the 2020/21 harvest. High carryover stocks in 2020/21 will likely put downward pressure on hazelnut grower prices this season.

**Record high U.S. pistachios in 2020/21:** U.S. production rose 41 percent from the previous season (September–August) to over 1 billion pounds (in-shell basis), or 525 million pounds (shelled basis) in 2020/21. Pistachios are an alternate-bearing crop, and the 2020/21 season was an “on” year for California. In addition, favorable weather, increases in bearing acres, and new plantings led to a record for pistachio production, valued at \$2.87 billion.

U.S. exports (September through July) were up 21 percent from the same period last season, with higher volumes to China and Germany, top foreign markets for U.S. pistachios. Imports although very small —roughly 1 percent of the U.S. pistachio market in 2020/21— are up this season. U.S. imports are expected to increase roughly 100 percent compared with the previous season due to higher shipments from Turkey. A record-setting domestic crop will leave 2020/21 ending stocks at above-average levels, putting downward pressure on grower prices.

**Lower pecan prices in 2020/21:** Domestic pecan production in 2020/21 (October–September) is expected to be 13 percent higher than last season to 153 million pounds (shelled basis). Georgia’s production increased, making it the top supplier again. Freezing temperatures earlier in the season lowered yields in other top-producing States, including Arizona, New Mexico, and Oklahoma. Increasing domestic supply and above-average beginning stocks, drove down 2020/21 grower prices from the previous season. U.S. exports to China were up this season through July, likely a result of high Chinese demand, and low pecan prices. USDA, NASS will release the initial U.S. pecan production forecast for the 2021/22 season in its October 2021 *Crop Production* report.

**Smaller macadamia nut crop for 2020/21:** Hawaii’s macadamia production in declined 2020/21, as growers reported disease and labor shortages, putting upward pressure on 2020/21

grower prices. The smaller crop and higher prices slowed export volumes to several markets, including Hawaii's top export markets—China, Japan, and Canada. Shelled Imports, largely from South Africa, Kenya, and Australia, declined in 2020/21.

Table 4--Tree nuts: Supply, utilization, and grower price in the United States, by commodity and marketing year, 2016/17-2020/21

Season <sup>1</sup>	Utilized production	Loss and exempt <sup>2</sup>	Marketable production <sup>3</sup>	Imports	Beginning stocks	Total supply	Ending stocks	Exports	Utilization		Season-average grower price	
									Domestic	Per capita		
-----1,000 pounds (shelled basis)-----												
											Pounds	\$/lb
<b>Almonds</b>												
2016/17	2,140,000	46,984	2,093,016	26,585	412,001	2,505,017	398,677	1,436,349	669,991	2.07	2.39	
2017/18	2,270,000	54,734	2,215,266	32,523	398,677	2,646,466	359,013	1,534,858	752,596	2.31	2.53	
2018/19	2,280,000	55,821	2,224,179	32,282	359,013	2,615,476	318,319	1,524,772	772,383	2.36	2.50	
2019/20	2,560,000	59,809	2,500,191	26,318	318,319	2,844,828	450,122	1,611,200	783,506	2.38	2.45	
2020/21 P	3,115,000	70,187	3,044,813	21,625	450,122	3,516,560	608,137	2,092,588	815,834	2.46	1.83	
<b>Hazelnuts</b>												
2016/17	35,106	741	34,365	11,508	211	46,084	3,106	25,372	17,605	0.05	1.35	
2017/18	25,600	85	25,515	13,775	3,106	42,396	1,401	20,039	20,956	0.06	1.15	
2018/19	40,800	261	40,539	16,764	1,401	58,704	6,524	20,622	31,557	0.10	0.90	
2019/20	35,200	278	34,922	13,522	6,524	54,968	3,724	21,786	29,458	0.09	0.96	
2020/21 P	48,854	1,182	47,672	10,539	3,724	61,936	7,166	27,032	27,738	0.08	1.05	
<b>Pecans</b>												
2016/17	127,935	-	127,935	132,637	55,633	316,205	69,489	103,655	143,062	0.44	2.59	
2017/18	141,146	-	141,146	137,100	69,489	347,734	80,081	113,472	154,182	0.47	2.33	
2018/19	103,600	-	103,600	166,009	80,081	349,690	87,953	93,892	167,844	0.51	1.75	
2019/20	134,701	-	134,701	153,759	87,953	376,413	103,045	96,667	176,701	0.54	1.84	
2020/21 P	152,679	-	152,679	137,967	103,045	393,692	84,192	115,056	194,443	0.60	1.43	
<b>Walnuts</b>												
2016/17	608,431	883	607,548	15,731	56,571	679,850	49,372	446,957	183,521	0.57	0.93	
2017/18	557,143	884	556,259	12,740	49,372	618,370	56,046	399,256	163,068	0.50	1.25	
2018/19	601,476	886	600,591	2,556	56,046	659,192	58,504	419,333	181,355	0.55	0.68	
2019/20	559,240	854	558,386	2,680	58,504	619,570	54,521	387,819	177,231	0.54	0.95	
2020/21 P	685,381	873	684,508	1,933	54,521	740,961	62,000	483,564	195,397	0.59	0.61	
<b>Macadamias</b>												
2016/17	-	-	19,081	17,478	na	36,558	na	13,327	23,231	0.07	1.00	
2017/18	-	-	22,261	21,107	na	43,367	na	9,978	33,389	0.10	1.10	
2018/19	-	-	16,037	28,114	na	44,150	na	7,325	36,825	0.11	1.19	
2019/20	-	-	18,490	25,483	na	43,973	na	8,844	35,129	0.11	1.20	
2020/21 P	-	-	17,945	18,517	na	36,461	na	5,578	30,884	0.09	1.24	
<b>Pistachios</b>												
2016/17	446,299	-	446,299	1,363	51,133	498,795	126,769	231,847	140,179	0.43	1.68	
2017/18	226,915	-	226,915	1,585	126,769	355,269	39,548	179,090	136,631	0.42	1.69	
2018/19	487,457	-	487,457	1,284	39,548	528,289	65,247	303,577	159,465	0.49	2.65	
2019/20	370,725	-	370,725	1,628	65,247	437,600	72,078	207,612	157,910	0.48	2.81	
2020/21 P	524,822	-	524,822	3,317	72,078	600,217	142,637	251,764	205,816	0.62	2.75	
<b>Other nuts</b>												
2016/17	-	-	-	491,927	-	491,927	-	124,291	367,637	1.13	-	
2017/18	-	-	-	519,958	-	519,958	-	138,514	381,444	1.17	-	
2018/19	-	-	-	473,195	-	473,195	-	117,694	355,501	1.08	-	
2019/20	-	-	-	532,551	-	532,551	-	106,343	426,208	1.29	-	
2020/21 P	-	-	-	511,832	-	511,832	-	80,620	431,211	1.30	-	
<b>Total</b>												
2016/17	3,376,852	48,609	3,328,244	697,229	575,549	4,601,024	647,413	2,381,797	1,571,811	4.85	-	
2017/18	3,243,064	55,704	3,187,361	738,837	647,413	4,573,611	536,089	2,395,209	1,642,263	5.04	-	
2018/19	3,529,370	56,967	3,472,403	720,219	536,089	4,728,711	536,547	2,487,232	1,704,931	5.20	-	
2019/20	3,678,356	60,941	3,617,415	755,941	536,547	4,909,903	683,490	2,440,270	1,786,143	5.42	-	
2020/21 P	4,544,681	72,242	4,472,439	705,729	683,490	5,861,659	904,132	3,056,202	1,901,325	5.74	-	

P = Preliminary.

<sup>1</sup> Season begins in July for hazelnuts, macadamias, and other tree nuts (includes Brazil, pignolias, chestnuts, cashews, and mixed nuts); August for almonds; September for pistachios and walnuts; and October for pecans.

<sup>2</sup> Utilized production minus marketable production, which includes inedibles and noncommercial usage.

<sup>3</sup> Marketable production is used to calculate consumption.

Source: USDA, Economic Research Service calculations.