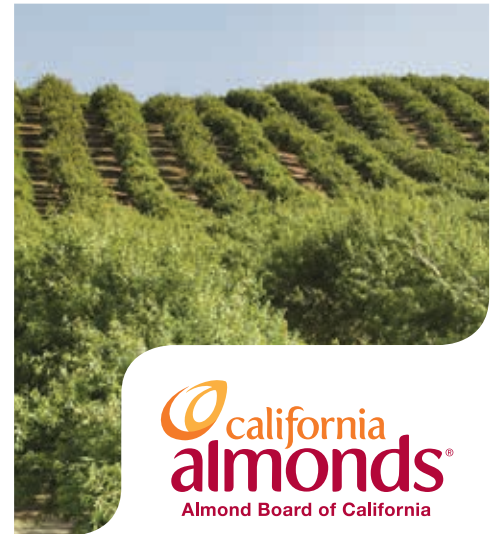




2012
Almond
Almanac



 **california**
almonds[®]
Almond Board of California





The California Almond Industry

At Your Fingertips

Almond Board of California (ABC) promotes almonds through its research-based approach to all aspects of farming, production and marketing on behalf of California Almond growers and processors. The Almond Almanac is Almond Board's annual report, which outlines the programs and projects that power the industry toward meeting its vision, and it provides a comprehensive analysis of the production and marketing of California Almonds.

The Almond Almanac is prepared by ABC on a crop-year basis, spanning August 1 through July 31, and includes comprehensive historical information about almond production, acreage and varieties, as well as shipment and market information. The statistical content is compiled using various handler forms required by the industry's Federal Marketing Order. Additional data, including crop estimates and farm price, are supplied by the USDA National Agricultural Statistics Service, California Field Office (NASS/CFO).

2012

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2012 Board of Directors



Bill Harp
Chair



Dave Baker
Vice Chair



Bill Brush



Scott Hunter

Vision:

To bring great taste, health and vitality to people around the world through the enjoyment of California Almonds.



Brad Klump



Dexter Long



John O'Shaughnessy

Mission:

To make California Almonds essential to customers and consumers worldwide through innovative research, market development and industry support.



Dave Phippen



Keith Rigg



John Thoming

2012

Introduction from CEO + Board Chair

Dear Industry Members and Allied Stakeholders,

2012 was a year of comprehensive implementation: new strategies, tactics and programs were executed across the panorama of Almond Board activities. An updated committee structure, involving dozens of industry volunteers, was established and is functioning well. It was a landmark year that produced the fruits of much of the planning and reengineering that took place during 2011.

Record production and shipment volumes were achieved in a market environment of rising prices. Increased investments in established and emerging markets respected a balanced approach to global market development. Industry workshops on almond economics gave California Almond growers new tools to help them sharpen their focus on costs and return on assets, and to better assist them with their global market-selling decisions. A blue ribbon Scientific Advisory Panel provided sage advice to ABC staff and committee management. A full-time employee was hired in Shanghai; ABC now has in-market employees in all priority markets and regions.

Our industry continues to dominate the global almond supply with increased production efficiencies. An in-depth assessment of Chinese almond production potential concluded that almond imports from California will be a necessity to meet increasing demand as Chinese domestic growers lack the proper agricultural conditions to produce a significant share of their nation's consumption. A slowdown in Australian almond expansion will mean more opportunity for California product to meet increasing global demand. And potential growth in other almond-producing countries does not represent a challenge to California's market share. Our ongoing focus on production research will ensure our competitive advantage, contributing favorably to grower return on investment.

In spite of the calamities in certain sectors of the world economy, the almond business has much for which to be grateful. We wish you prosperity and success as the industry continues to grow toward the realization of its vision to bring great taste, health and vitality to the world's consumers through the enjoyment of California Almonds.



Richard Waycott, President and CEO



Bill Harp, Chair





Strategic Priorities of Almond Board of California

Invest in programs and research that make almonds a Crop of Choice for California

- Promote sustainability of almond supply
- Enhance the industry-wide food safety system
- Identify and support basic and applied research to enhance production efficiency

Invest in programs and research that build market demand for almonds, making them the Nut of Choice

- Continue to expand the understanding of the health benefits and quality of almonds in support of market development strategies
- Implement programs to develop new markets and maintain existing ones
- Implement actions that mitigate trade barriers
- Improve market development resource allocation mechanisms and processes

Build an ABC organization that optimizes its effectiveness in establishing and executing goals

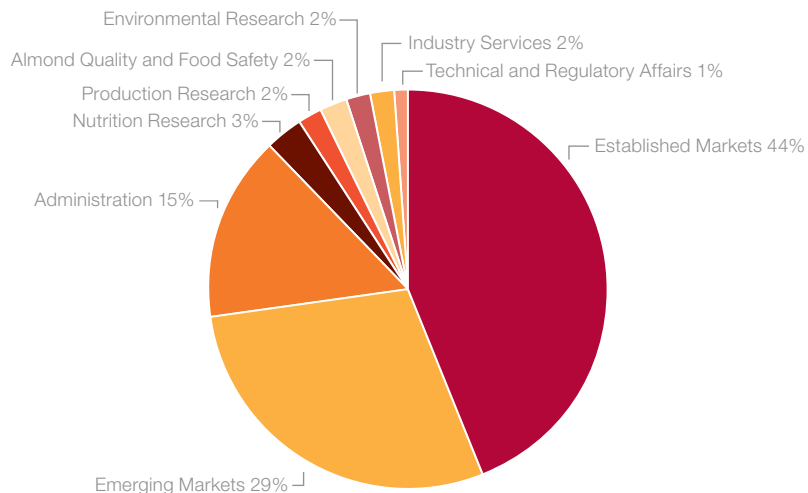
- Ensure that ABC representatives understand and adhere to fiduciary responsibility standards
- Implement Board of Director development initiatives, such as succession planning, formal orientation, board performance assessments and skills development and acquisition
- Optimize staff and committee structures and processes
- Articulate needs related to advocacy and seek out possible alternatives for meeting these needs



2012

Almond Board of California Programs + Budget

Program Budget Allocation fiscal year 2011/12



Source: Almond Board of California. *Global Technical and Regulatory Affairs.

Key programs for Almond Board of California contribute to meeting our vision and mission. These areas include a comprehensive global marketing program in established, emerging and exploratory markets; nutrition, production, environmental and technical research; a sustainability program; industry communications outreach; and more.

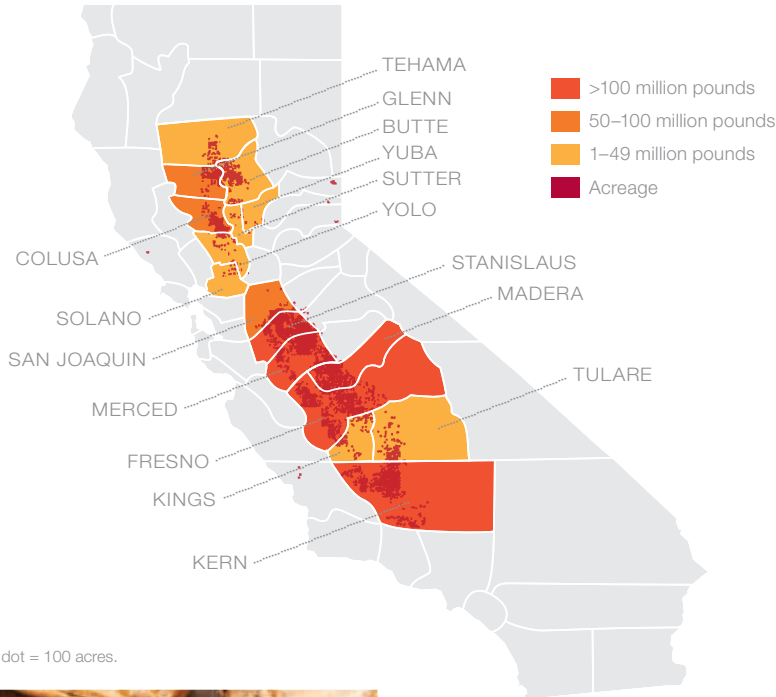
Almond Board programs are funded by a grower assessment placed on each pound of almonds produced. Each year, the ABC Board of Directors, made up of both growers and almond handlers, approves the allocation given to each program area. Almond Board staff is responsible for implementing the programs detailed on the following pages.

California Almond Industry Overview

California's Central Valley has the ideal growing conditions for growing almonds with its mild climate, rich soil and abundant sunshine. California Almonds make up about 80% of global and virtually 100% of domestic supply. According to the 2007 USDA Ag Census, there are around 6,500 California Almond farms. Of those, 72% are family owned and 51% are less than 50 acres.

During the 2011/12 crop year California Almonds produced 2.02 billion pounds of almonds on 760,000 bearing acres. In the same year, 104 handlers shipped a record-breaking 1.9 billion pounds of almonds, a 14% increase over the prior year.

Almond Production by County 2011/12



Distribution of Crop by Handler Size 2011/12

104 Handlers	Number of Handlers	Percentage of Crop Handled
<1M pounds	24	<1%
1-24M pounds	54	20%
25-49M pounds	15	24%
50-74M pounds	5	14%
>75M pounds	6	42%

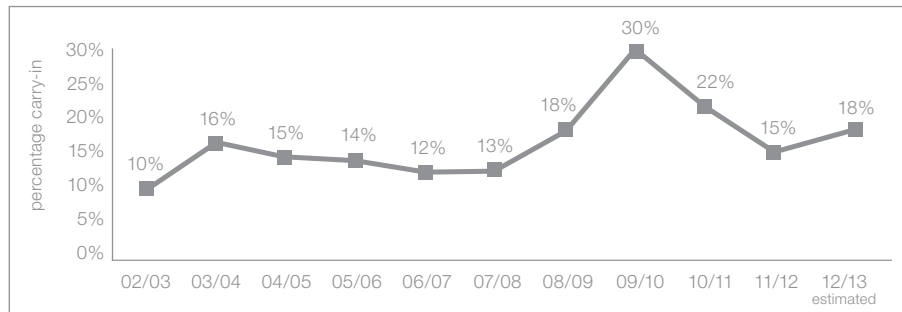


Historical Shipments

2011/12 production was an all-time record breaker at 2.02 billion pounds; 2012/13, forecasted at 2.1 billion pounds, would be the largest crop to date.

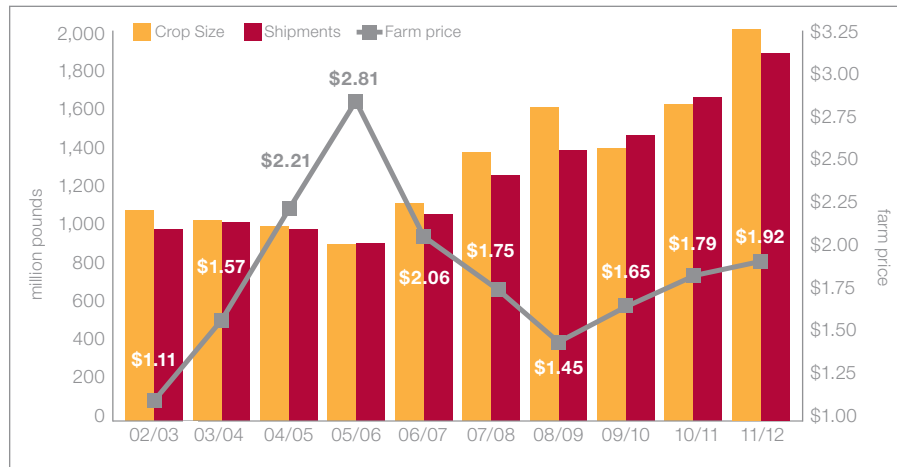
Overall, shipments increased to most markets. The U.S. remains the single largest market for California Almonds, hitting a new record of 547 million pounds and accounting for 29% of shipments. The remaining 71% of shipments was destined for export markets. These markets, led by China, Spain, India and Germany accounted for 1.4 billion pounds, also a new record.

Carry-In as a Percentage of Prior Year Shipments crop year 2002/03–2012/13



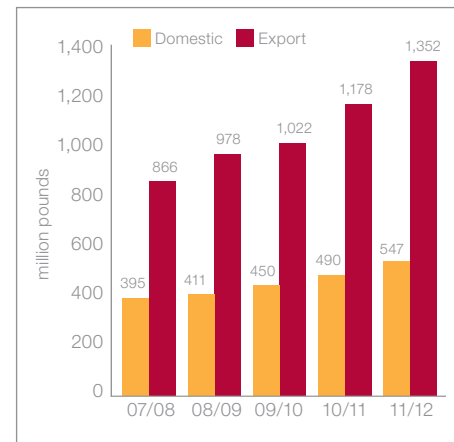
Source: Almond Board of California.

Historical Crop Size + Shipments vs. Farm Price crop year 2002/03–2011/12



Sources: Almond Board of California, USDA, NASS/CFO.

Domestic + Export Shipments 2007/08–2011/12 (million pounds)



Source: Almond Board of California.

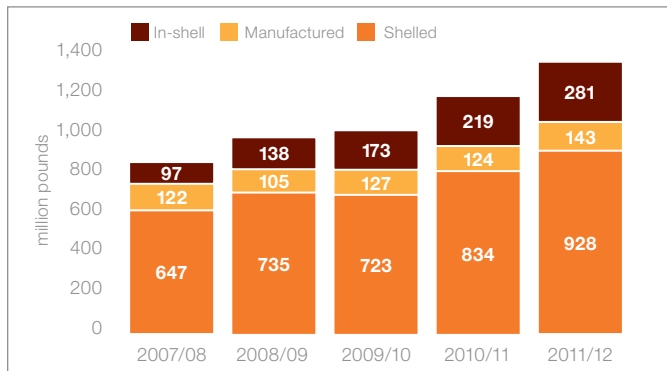
Position Report of California Almonds million pounds

Crop Year	Redetermined Marketable	Carry-in	Reserve	Total Salable Supply	Domestic Shipments	Export Shipments	Total Shipments	Salable Carryover
1993/94	470.0	133.6	N/A	603.6	162.0	336.5	498.5	102.6
1994/95	713.3	102.6	0.0	815.9	160.6	448.1	608.7	204.8
1995/96	352.3	204.8	N/A	557.1	132.8	335.1	467.9	92.8
1996/97	489.3	92.8	N/A	582.1	137.5	395.8	533.3	48.3
1997/98	736.8	48.3	N/A	785.1	159.6	452.4	612.1	172.0
1998/99	492.4	172.0	N/A	664.4	167.0	405.5	572.5	91.8
1999/00	795.5	91.8	0.0	887.3	209.6	503.0	712.6	174.7
2000/01	672.4	174.7	0.0	847.1	211.2	528.7	739.8	107.3
2001/02	794.8	107.3	N/A	902.1	239.3	581.8	821.1	80.9
2002/03	1,063.5	80.9	N/A	1,144.4	291.7	690.6	982.4	162.0
2003/04	1,011.1	162.0	N/A	1,173.1	312.2	712.1	1,024.3	148.9
2004/05	972.8	148.9	N/A	1,121.7	331.6	652.5	984.1	137.7
2005/06	888.7	137.7	N/A	1,026.4	303.9	610.4	914.2	112.2
2006/07	1,087.8	112.2	N/A	1,200.0	368.3	697.8	1,066.1	133.9
2007/08	1,358.3	133.9	N/A	1,492.2	394.8	866.4	1,261.2	231.2
2008/09	1,571.9	231.2	N/A	1,803.1	411.0	978.4	1,389.4	413.7
2009/10	1,379.0	413.7	N/A	1,792.7	449.5	1,022.0	1,471.5	321.3
2010/11	1,600.3	321.3	N/A	1,921.6	489.7	1,177.9	1,667.6	254.0
2011/12	1,979.9	254.0	N/A	2,233.9	546.7	1,351.9	1,898.6	335.2
2012/13*	2,037.0	335.2	N/A	2,372.2	605.0	1,485.0	2,090.0	282.2

Source: Almond Board of California. Note: Totals may not add precisely due to rounding.*Forecast.

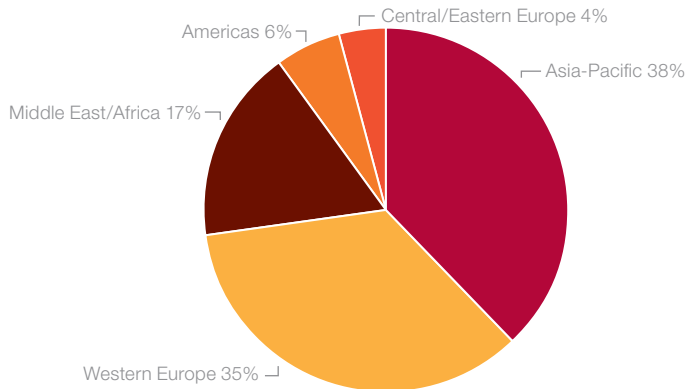
Destination Overview of California Almonds

Export Shipments by Product Type crop year 2007/08–2011/12



Source: Almond Board of California July 2012 Position Report.

California Almond Exports by Region 2011/12



Source: Almond Board of California July 2012 Position Report.
Note: Americas includes North and South America.

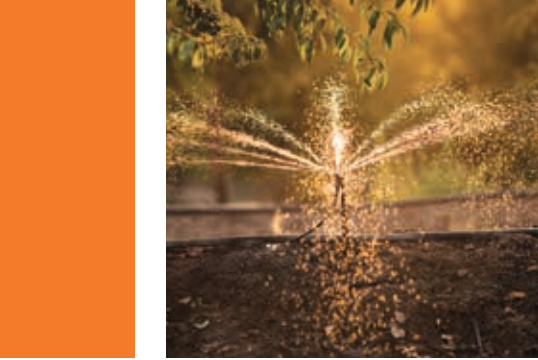
Top World Destinations 2011/12



Top Ten Export Destinations* 2011/12

*Top ten export markets represent 72% of total export shipments.

Source: Almond Board of California July 2012 Position Report.



World Destinations million pounds

World Region	Destination	2011/2012	2010/2011	2009/2010	2008/2009	2007/2008
AMERICAS						
North America	United States (Domestic)	546.71	489.68	449.50	410.99	394.77
	Canada	47.79	45.04	39.42	40.60	39.05
	Mexico	10.55	11.24	7.82	6.50	9.10
	Total North America (Domestic)	546.71	489.68	449.50	410.99	394.77
	Total North America (Export)	58.34	56.29	47.25	47.10	48.16
Latin America/Caribbean	Brazil	0.53	0.72	0.60	0.54	0.48
	Chile	7.86	6.12	6.96	3.06	3.96
	Peru	0.73	0.52	0.40	0.14	0.00
	Total Latin America/Caribbean	11.06	10.36	10.07	5.14	6.14
	TOTAL AMERICAS	69.40	66.65	57.32	52.24	54.30
	ASIA-PACIFIC					
Northeast Asia	China/Hong Kong	236.19	167.55	133.04	99.70	46.57
	Japan	61.87	55.82	52.93	48.99	47.08
	South Korea	44.84	32.07	25.69	21.21	16.77
	Taiwan	11.77	10.49	7.06	6.05	5.23
	Total Northeast Asia	354.66	265.93	218.72	175.96	115.65
Southeast Asia	Indonesia	1.72	1.40	1.38	1.37	0.96
	Malaysia	5.69	5.27	4.18	2.62	3.35
	Singapore	1.99	3.33	2.06	2.06	2.38
	Thailand	3.34	4.08	3.90	2.11	2.04
	Vietnam	17.53	2.91	4.27	0.91	2.05
	Total Southeast Asia	30.53	17.10	15.97	9.22	10.89
South/Central Asia	India	118.97	106.03	83.93	86.65	72.79
	Pakistan	5.67	6.43	4.86	4.29	1.80
	Total South/Central Asia	125.10	113.35	89.02	91.67	74.81
Australasia/Oceania	Australia	4.14	2.13	2.47	2.23	2.21
	New Zealand	2.44	1.73	2.24	1.37	1.63
	Total Australasia/Oceania	6.58	3.86	4.71	3.61	3.84
TOTAL ASIA-PACIFIC						
TOTAL ASIA-PACIFIC	516.88	400.24	328.43	280.45	205.20	
EUROPE						
Western Europe	Belgium	22.86	17.78	17.37	14.29	24.03
	Denmark	9.21	9.47	7.28	7.88	9.57
	Finland	1.33	1.45	2.82	1.29	1.15
	France	28.31	30.32	30.12	30.83	37.83
	Germany	116.52	113.16	109.04	105.69	105.11
	Greece	8.90	8.71	12.01	15.56	21.05
	Italy	45.27	43.07	34.64	37.33	43.40
	Netherlands	38.80	41.09	35.70	32.26	29.19
	Norway	5.68	4.20	4.76	4.59	4.15
	Portugal	1.85	2.94	2.51	1.48	1.55
	Spain	156.99	158.34	143.36	158.62	157.04
	Sweden	8.44	7.47	6.35	7.17	5.56

Source: Almond Board of California. Note: Totals may not add precisely due to rounding.

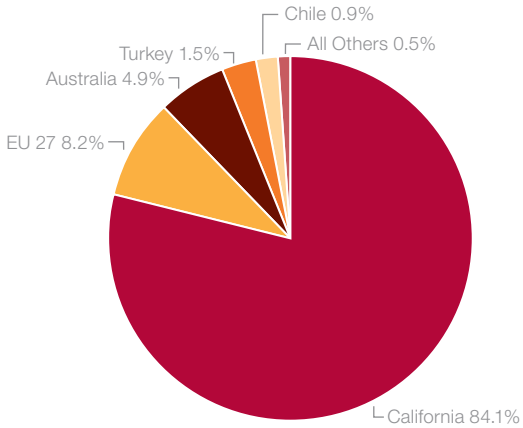
World Destinations (continued)

World Region	Destination	2011/2012	2010/2011	2009/2010	2008/2009	2007/2008
EUROPE continued						
Western Europe	Switzerland	5.99	5.85	5.66	4.60	5.32
	United Kingdom	24.51	25.58	25.66	26.24	24.27
	Total Western Europe	475.42	470.33	438.23	448.50	469.97
Central/Eastern Europe	Bulgaria	2.63	1.17	0.67	1.12	1.05
	Croatia	1.99	1.90	2.69	1.16	1.06
	Czech Republic	3.73	4.25	4.78	3.68	2.41
	Estonia	0.92	0.56	1.63	0.34	0.31
	Latvia	1.88	0.88	1.20	2.90	6.41
	Lithuania	1.75	1.80	1.54	1.27	1.26
	Poland	2.95	2.65	1.51	1.52	1.33
	Russia	38.57	33.55	22.69	19.73	20.07
	Serbia	0.60	0.66	0.31	0.69	0.04
	Ukraine	2.16	1.80	1.09	1.22	1.66
	Total Central/Eastern Europe	59.80	51.87	39.90	35.16	36.71
	TOTAL EUROPE	535.22	522.20	478.13	483.66	506.68
	MIDDLE EAST/AFRICA					
Middle East	Bahrain	1.19	0.84	0.74	0.88	0.59
	Cyprus	1.30	1.14	1.42	1.23	1.78
	Israel	4.63	6.14	6.57	7.04	6.21
	Jordan	8.60	10.05	8.80	9.81	5.14
	Kuwait	3.02	2.76	2.37	2.15	2.08
	Lebanon	6.85	8.39	5.59	7.93	3.84
	Qatar	1.00	0.62	0.37	0.30	0.23
	Saudi Arabia	19.63	10.84	7.52	6.02	6.18
	Turkey	59.30	38.09	36.60	28.69	16.16
	United Arab Emirates	93.92	82.58	67.20	68.22	44.95
	Total Middle East	199.59	161.67	137.27	132.33	87.79
North Africa	Algeria	11.97	11.25	6.88	14.26	3.84
	Egypt	9.41	7.12	8.62	10.22	3.88
	Libya	1.18	1.04	0.13	1.08	0.78
	Morocco	0.53	0.59	0.95	0.91	0.88
	Tunisia	2.47	3.01	1.24	0.72	0.04
	Total North Africa	25.57	23.01	17.81	27.19	9.42
Sub-Saharan Africa	South Africa	4.76	3.80	2.79	2.32	2.69
	Total Sub-Saharan Africa	5.25	4.13	3.00	2.47	3.00
	TOTAL MIDDLE EAST/AFRICA	230.41	188.81	158.08	162.00	100.21
TOTAL EXPORT SHIPMENTS		1,351.91	1,177.89	1,021.96	978.36	866.39
TOTAL GLOBAL SHIPMENTS		1,898.62	1,667.57	1,471.46	1,389.34	1,261.16

Note: Destinations that shipped more than 500,000 pounds are listed.



Percentage World Almond Production 2011/12



Source: Foreign Agricultural Service (FAS) Tree Nuts: World Market and Trade, October 2012.

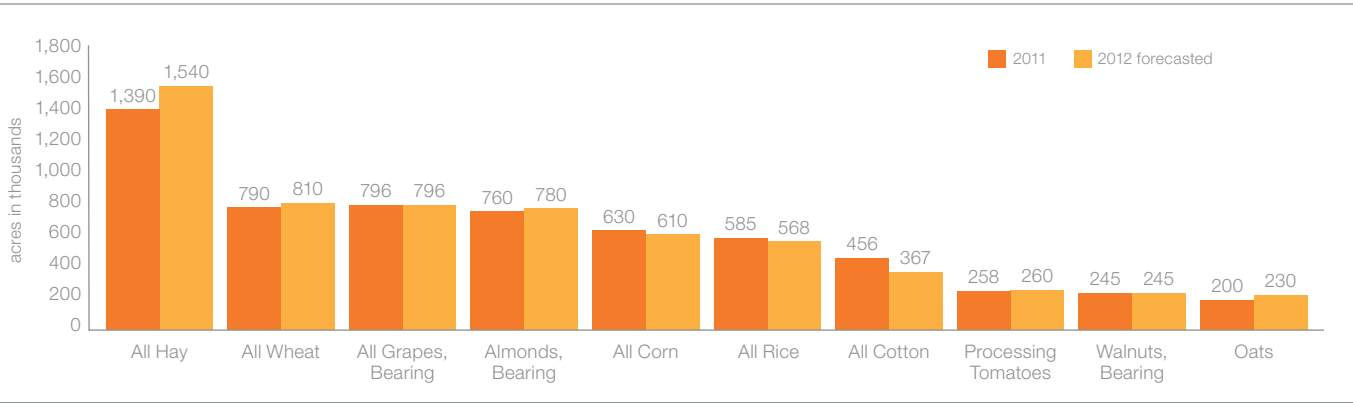
Forecasted World Almond Production 2012/13

Country	World Almond Production (kernel weight million lbs.)	Percentage of World Almond Production
California*	2,037	80%
Australia	154	6%
EU-27	144	6%
Turkey	35	1%
Tunisia	28	1%
Iran	27	1%
Chile	27	1%
Morocco	20	1%
China	11	<1%
Syria	11	<1%
Others	55	2%
World Total	2,548	100%

Source: INC (International Nut and Dried Fruit), *The Cracker 2012*.
 *California crop accounts for 3% loss and exempt.

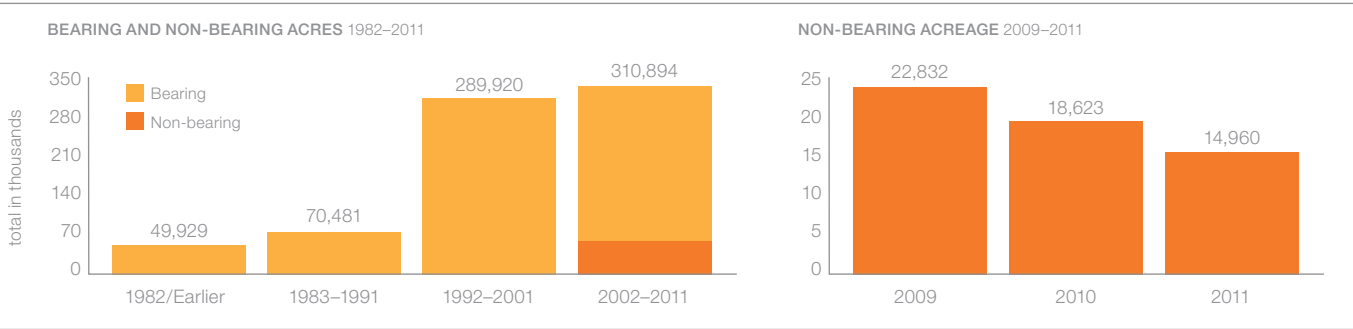


California Top Ten Acreage by Crop Total Planted or Bearing Crop Year 2011/12



Source: National Agricultural Statistics Service, California Field Office NASS/CFO.

California Almond Acreage by Year Planted

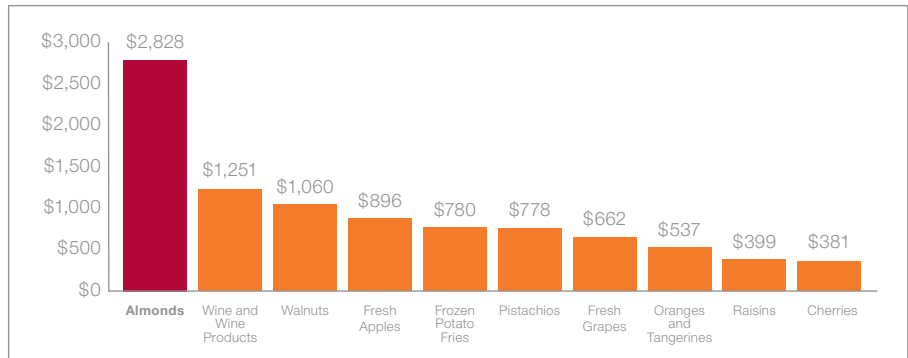


Source: National Agricultural Statistics Service, California Field Office NASS/CFO Acres Standing 2011. Note: Detailed data is voluntarily reported by growers to NASS/CFO; therefore, totals do not match annual USDA/NASS forecast.



Top Ten Exports by Value

Top Ten U.S. Specialty Crop Exports by Value 2011* (in millions)



Source: Bureau of the Census, U.S. Department of Commerce, Foreign Trade Statistics.
*Calendar year January through December 2011.

Top Ten California Agricultural Exports by Value 2010* (in millions)



Source: University of California, Agricultural Issues Center.
*Calendar year January through December 2010.

California Almond Production by County million pounds

Crop Year	Southern California Valley Counties								Northern California Valley Counties						All Others	Total
	Kern	Fresno	Stanislaus	Merced	Madera	San Joaquin	Tulare	Kings	Colusa	Glenn	Butte	Yolo	Tehama	Sutter		
2002/03	221.0	173.0	193.5	152.9	106.3	57.2	20.7	8.2	28.4	41.5	59.3	5.2	8.6	4.5	2.6	1,082.9
2003/04	205.9	176.9	169.3	129.3	94.5	55.3	18.5	12.3	55.0	42.3	50.0	6.6	8.0	5.7	4.1	1,033.6
2004/05	215.8	173.5	163.9	127.6	93.4	51.0	20.4	13.0	38.0	37.2	45.0	4.7	6.9	4.6	2.9	997.9
2005/06	210.1	160.1	132.2	102.1	82.4	41.8	15.9	12.0	40.3	42.6	50.4	5.6	8.4	4.6	2.7	911.4
2006/07	247.8	232.7	163.6	124.6	100.1	55.6	21.5	17.7	50.8	38.4	41.8	6.3	7.7	4.9	3.8	1,117.3
2007/08	271.0	253.8	223.3	172.9	125.3	75.2	26.7	17.9	66.2	51.8	66.7	10.0	11.4	5.6	5.1	1,383.6
2008/09	354.3	322.2	240.6	187.3	142.7	82.1	36.2	23.4	86.0	48.6	56.9	10.4	9.7	5.3	5.2	1,611.0
2009/10	317.9	281.9	198.8	156.7	112.3	70.7	32.6	20.6	75.7	52.7	49.2	12.4	10.9	5.2	4.9	1,402.6
2010/11	403.5	344.2	202.5	164.2	149.7	68.0	42.4	29.9	83.0	55.8	47.1	13.6	11.7	4.9	6.0	1,626.6
2011/12	472.6	443.0	269.7	216.7	206.1	87.9	44.5	39.0	85.5	59.7	49.0	17.9	11.9	6.9	6.6	2,017.1

Source: USDA Form FV193, Report of Inedible Content of Almond Receipts. Note: Totals may not add precisely due to rounding.

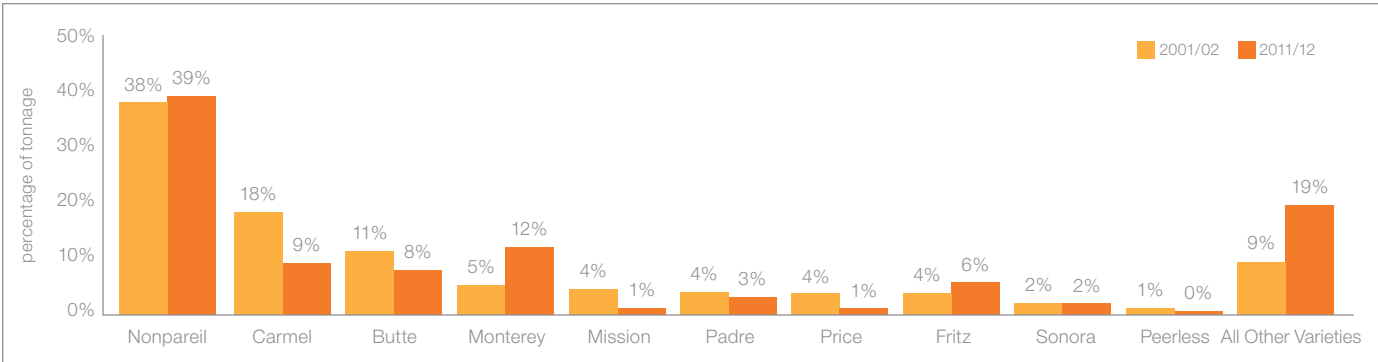
California Almond Receipts by County + Variety crop year 2011/12

Counties	% Crop	Nonpareil Lbs.	Monterey Lbs.	Butte/Padre Lbs.	Carmel Lbs.	Butte Lbs.	Fritz Lbs.	All Others Lbs.	All Varieties Lbs.
COAST COUNTIES									
Del Norte	0.01%	20,013	0	0	26,877	7,119	0	67,238	121,247
COAST TOTALS	0.01%	20,013	0	0	26,877	7,119	0	67,238	121,247
NORTH VALLEY									
Butte	2.43%	20,930,645	975,049	2,432,874	5,301,245	4,634,663	336,923	14,409,050	49,020,449
Colusa	4.24%	37,931,002	5,714,508	934,068	8,890,661	12,913,900	5,443,910	13,710,932	85,538,981
Glenn	2.96%	29,611,274	2,348,977	1,369,210	6,292,173	7,843,451	957,249	11,236,170	59,658,504
Sacramento	0.01%	40,760	0	0	0	48,731	21,491	73,250	184,232
Solano	0.25%	2,841,551	127,784	188,748	307,912	851,787	10,869	786,911	5,115,562
Sutter	0.34%	1,742,885	146,613	1,087,690	660,657	882,993	67,509	2,303,719	6,892,066
Tehama	0.59%	5,425,862	207,277	632,925	1,608,122	1,781,120	30,824	2,247,272	11,933,402
Yolo	0.89%	7,358,324	938,387	424,106	1,687,905	3,245,222	431,935	3,860,737	17,946,616
Yuba	0.06%	689,925	94,481	101,989	66,139	17,682	14,308	280,332	1,264,856
NORTH TOTALS	11.78%	106,572,228	10,553,076	7,171,610	24,814,814	32,219,549	7,315,018	48,908,373	237,554,668
SOUTH VALLEY									
Fresno	21.96%	165,737,882	65,386,856	46,707,822	28,226,193	42,071,467	20,784,188	74,066,245	442,980,653
Kern	23.43%	181,269,786	89,370,559	50,424,472	17,595,008	36,387,630	42,271,898	55,253,533	472,572,886
Kings	1.93%	15,459,755	4,918,065	8,107,293	1,396,222	1,410,654	2,947,973	4,781,269	39,021,231
Madera	10.21%	79,327,592	24,158,599	32,226,663	19,992,407	12,185,161	8,377,541	29,786,927	206,054,890
Merced	10.74%	80,990,710	18,191,022	23,433,805	29,626,049	14,606,125	9,679,306	40,189,334	216,716,351
San Joaquin	4.36%	36,663,471	2,117,450	14,423,715	15,578,074	3,516,852	4,918,939	10,713,699	87,932,200
Stanislaus	13.37%	101,190,408	17,957,951	35,638,417	43,670,272	13,272,895	11,187,015	46,814,928	269,731,886
Tulare	2.21%	18,046,233	5,629,392	5,364,330	1,852,781	3,377,761	4,363,904	5,870,496	44,504,897
SOUTH TOTALS	88.22%	678,685,837	227,729,894	216,326,517	157,937,006	126,828,545	104,530,764	267,476,431	1,779,514,994
ALL OTHERS									
Tuolumne	0.00%	25,333	0	0	0	0	0	0	25,333
ALL OTHERS TOTALS	0.00%	25,333	0	0	0	0	0	0	25,333
YTD TOTALS	100.00%	785,303,411	238,282,970	223,498,127	182,778,697	159,055,213	111,845,782	316,452,042	2,017,216,242

Source: USDA Form FV 193, Report of Inedible Content of Almond Receipts.

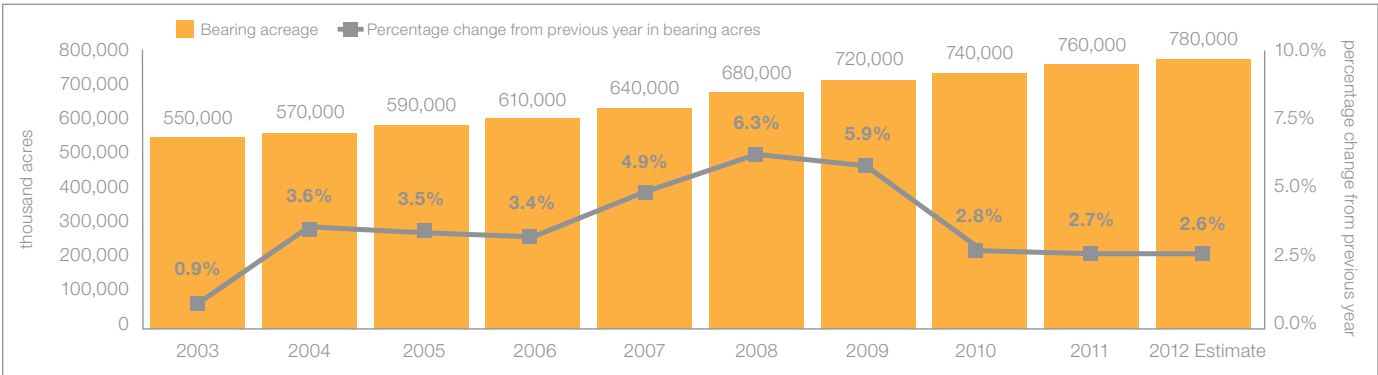
Top Ten California Almond Varieties + Bearing Acreage

Top Ten Almond-Producing Varieties 2001/02 vs. 2011/12 percentage of tonnage



Source: USDA Incoming Receipts from FV 193 certificates reported to Almond Board of California.

Almond Bearing Acreage crop year 2003–2012



Sources: USDA, NASS/CFO. 2010 Acreage Report.

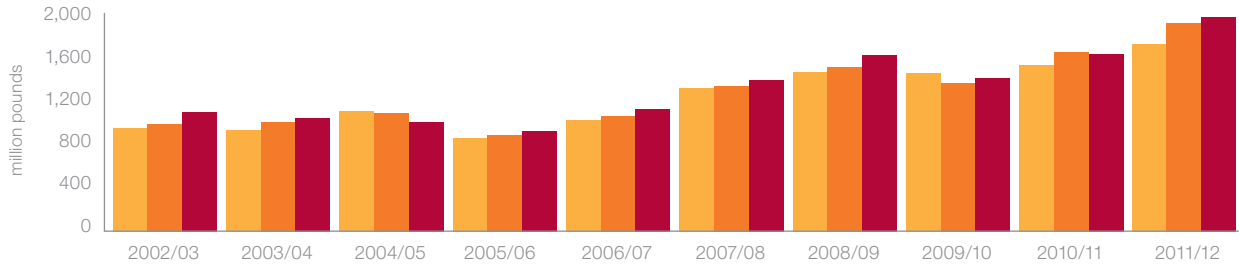


California Almond Crop Estimates vs. Actual Receipts million pounds

Crop Year	Objective Forecast	Handler Receipts	Loss and Exempt	Redetermined Marketable Weight	Pounds Rejects in Receipts
1993/94	470.0	488.2	18.2	470.0	9.8
1994/95	640.0	732.9	19.6	713.3	12.8
1995/96	310.0	366.7	14.4	352.3	10.4
1996/97	530.0	507.5	18.2	489.3	13.0
1997/98	680.0	756.5	19.7	736.8	14.3
1998/99	540.0	517.0	24.6	492.4	14.9
1999/00	830.0	829.9	34.4	795.5	9.3
2000/01	640.0	698.4	26.0	672.4	15.7
2001/02	850.0	824.1	29.3	794.8	16.7
2002/03	980.0	1,083.7	20.2	1,063.5	8.2
2003/04	1,000.0	1,032.9	21.8	1,011.1	19.8
2004/05	1,080.0	998.0	25.2	972.8	14.5
2005/06	880.0	911.7	23.0	888.7	16.0
2006/07	1,050.0	1,116.7	28.9	1,087.8	24.0
2007/08	1,330.0	1,383.0	24.7	1,358.3	17.2
2008/09	1,500.0	1,614.6	42.7	1,571.9	13.9
2009/10	1,350.0	1,405.9	26.9	1,379.0	19.6
2010/11	1,650.0	1,628.2	27.9	1,600.3	18.1
2011/12	1,950.0	2,020.4	40.5	1,979.9	16.1
2012/13*	2,100.0	*	63.0	2,037.0 [†]	*

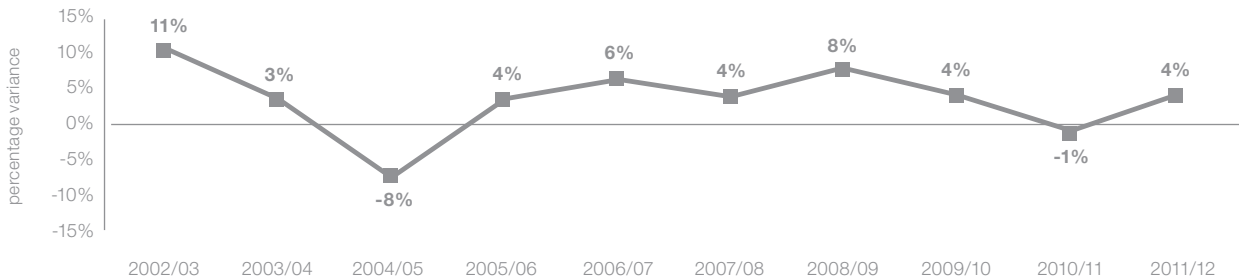
Source: Almond Board of California. Note: Objective forecast provided by USDA, NASS/CFO.
 *Not available at time of publication. [†]Estimate.

California Almond Crop Estimates vs. Actual Receipts crop year 2002/03–2011/12



Subjective Forecast	940	920	1,100	850	1,020	1,310	1,460	1,450	1,530	1,750
Objective Forecast	980	1,000	1,080	880	1,050	1,330	1,500	1,350	1,650	1,950
Actual Production	1,084	1,033	998	912	1,117	1,383	1,615	1,406	1,628	2,020

California Almond Receipts Variance from Forecast crop year 2002/03–2011/12



Source: Almond Board of California. Note: Objective forecast provided by USDA, NASS/CFO.

California Almond Acreage + Farm Value

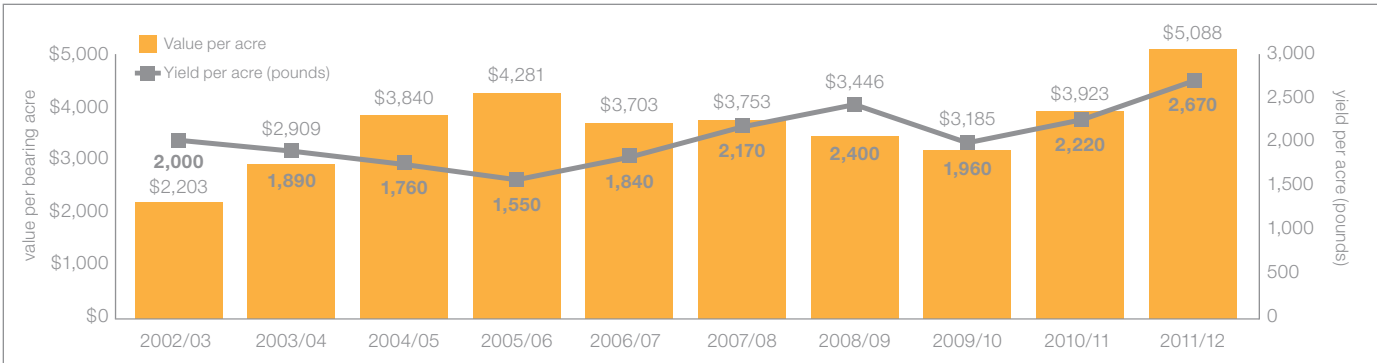
Crop Year	ACREAGE				YIELD		VALUE IN DOLLARS		
	Bearing	Non-Bearing	Total	New Plantings	Bearing Acre Yield (lbs.)	Production* (million lbs.)	Farm Price	Farm Value (\$1,000)	Value per Bearing Acre
2001/02	530,000	75,000	605,000	19,348	1,570	824.1	\$0.91	\$740,012	\$1,396
2002/03	545,000	65,000	610,000	15,857	2,000	1,083.7	\$1.11	\$1,200,687	\$2,203
2003/04	550,000	60,000	610,000	17,639	1,890	1,032.9	\$1.57	\$1,600,144	\$2,909
2004/05	570,000	70,000	640,000	36,220	1,760	998.0	\$2.21	\$2,189,005	\$3,840
2005/06	590,000	110,000	700,000	49,281	1,550	911.7	\$2.81	\$2,525,909	\$4,281
2006/07	610,000	145,000	755,000	35,486	1,840	1,116.7	\$2.06	\$2,258,790	\$3,703
2007/08	640,000	125,000	765,000	14,381	2,170	1,383.0	\$1.75	\$2,401,875	\$3,753
2008/09	680,000	115,000	795,000	21,678	2,400	1,614.6	\$1.45	\$2,343,200	\$3,446
2009/10	720,000	90,000	810,000	18,264	1,960	1,405.9	\$1.65	\$2,293,500	\$3,185
2010/11	740,000	85,000	825,000	13,362	2,220	1,628.2	\$1.79	\$2,903,380	\$3,923
2011/12	760,000	75,000	835,000	14,960	2,670	2,020.3	\$1.92	\$3,866,880	\$5,088
2012/13†	780,000	‡	‡	‡	2,690	2,100.0	‡	‡	‡

Source: USDA, NASS/CFO. Note: Almond Board of California does not track prices.

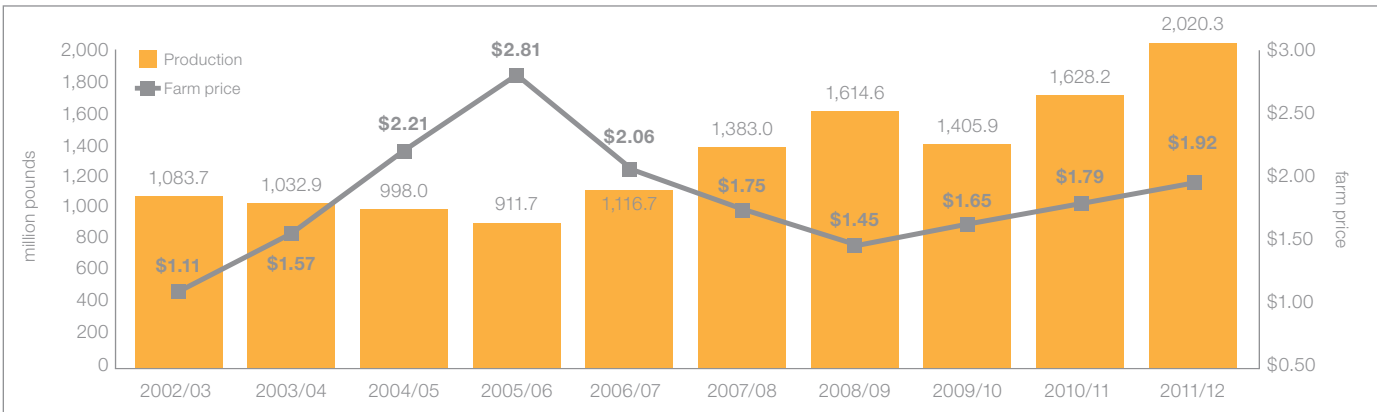
*Production numbers provided by Almond Board of California. †Estimated. ‡Not available at time of publication.



Crop Value and Yield per Bearing Acre crop year 2002/03–2011/12



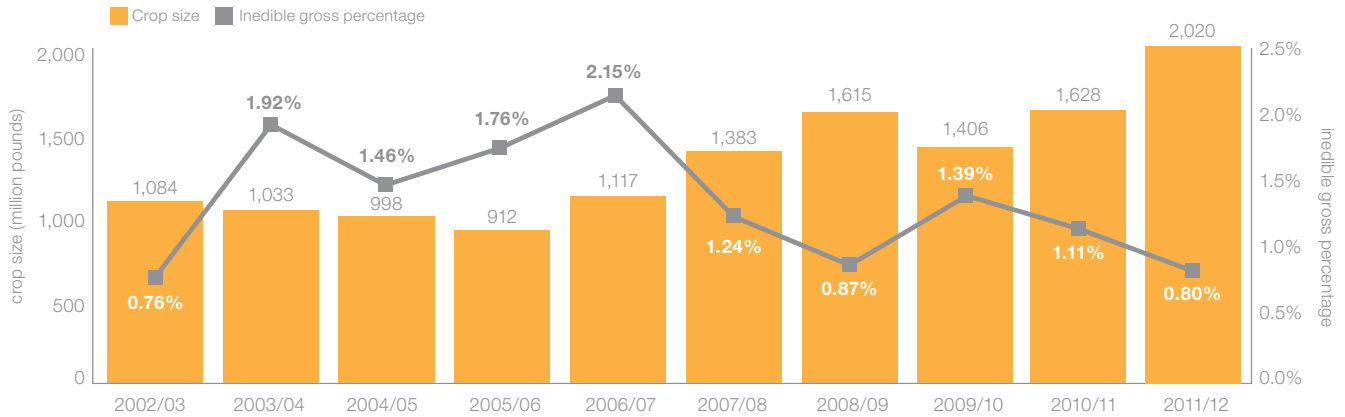
California Almond Production vs. Farm Price* crop year 2002/03–2011/12



Source: USDA, NASS/CFO. Note: Almond Board of California does not track prices.

*Production numbers provided by Almond Board of California.

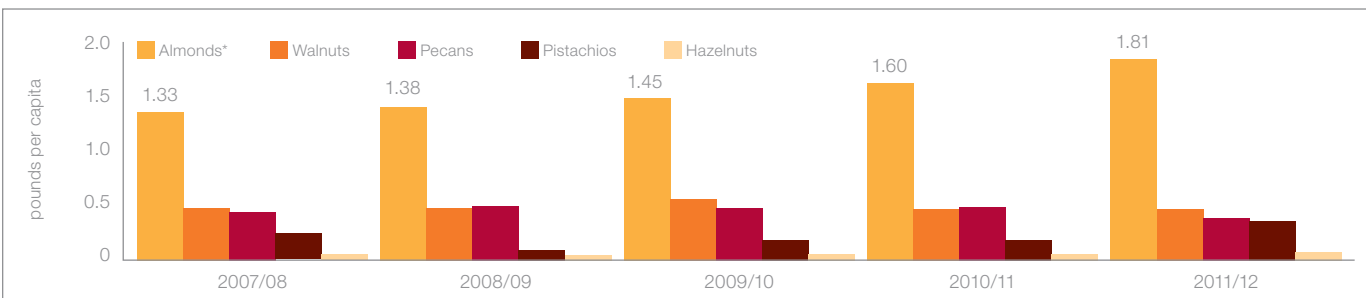
California Almond Crop-Size History vs. Inedible Percentage crop year 2002/03–2011/12



Source: Almond Board of California.



Domestic Per Capita Consumption of Competing Nuts crop year 2007/08–2011/12



Sources: USDA, Economic Research Service, *Fruit & Tree Nut Situation and Outlook*. *Almond Board of California.

U.S. Marketable Production + Imports of Competing Nuts million pounds (shelled basis)

Crop Year	ALMONDS		WALNUTS		HAZELNUTS		PECANS		PISTACHIOS		OTHER NUTS**	
	Crop	Imports	Crop	Imports	Crop	Imports	Crop	Imports	Crop	Imports	Crop	Imports
2002/03	1,063.5	1.9	240.5	0.2	15.3	16.4	78.4	41.7	149.5	0.8	26.7	301.7
2003/04	1,011.1	2.8	281.5	0.4	29.5	10.9	117.0	62.7	56.2	1.5	21.2	352.4
2004/05	972.8	5.7	288.4	0.8	27.2	12.8	82.6	81.2	170.5	0.8	18.7	402.4
2005/06	888.7	9.2	288.2	1.1	20.0	12.1	125.3	75.4	139.0	0.9	51.4	334.9
2006/07	1,087.8	8.1	294.6	2.3	36.4	13.5	91.4	57.0	119.0	1.4	27.8	358.8
2007/08	1,358.3	7.1	295.0	9.0	28.6	13.4	180.3	79.9	207.0	0.9	16.4	378.3
2008/09	1,571.9	4.2	395.5	2.0	26.2	10.0	94.3	61.9	135.4	0.9	32.7	360.4
2009/10	1,379.0	5.6	381.5	3.2	37.4	8.0	127.5	80.1	174.8	1.3	19.1	366.4
2010/11	1,600.3	8.1	436.8	0.5	21.3	11.0	140.4	82.8	250.1	0.5	18.2	379.5
2011/12†	1,979.9	15.9	406.2	4.9	30.3	9.7	124.6	74.7	301.7	0.9	22.3	333.1

**Other Nuts include brazil nuts, macadamia nuts, pine nuts, chestnuts, cashews and mixed nuts. †Preliminary.

Note: Marketable production is utilized production minus inedibles and noncommercial use. Source: USDA, Economic Research Service, *Fruit & Tree Nut Situation and Outlook*.

Research Program Introduction

The almond industry investment of close to \$40 million in research over the past 40 years, coupled with federal and state investments, has generated very high return, and we are recognized as world leaders in almond production, quality, safety and health benefits. This funding not only supports staff and facilities for basic laboratory and field research but also supports applied research and extension. Research done on university campuses, with University of California Cooperative Extension, and USDA Agricultural Research Service has improved the productivity and made California Almond growers more competitive in the international arena. Research also has helped producers use resources more efficiently and minimized environmental impacts.

But our world is changing. Public funding for research targeted at agricultural productivity has stagnated since the early 1980s. Continued funding cuts are threatening the research capacity for almonds and other California crops. Within the next decade, it is expected that the almond industry will lose half of its current farm advisors and agricultural experimental station research staff. Already, 44% of the state's almond acreage does not have coverage by farm advisors, who play a key role in adapting research findings to communicate to growers.

The Almond Board scientific staff is working very closely with our four industry committees that oversee the production, environmental, almond quality/food safety and nutrition research programs, along with the newly appointed external Scientific Advisory Panel to prioritize research needs for the industry in the future, and to explore ways to support research capacity through public and private partnerships. The external advisors are strongly urging us to communicate this erosion of research and extension infrastructure to a wider audience in order for California agriculture and the California Almond industry to maintain its competitive edge globally.

Published Papers 2012

Yield-scaled global warming potential from N₂O emissions and CH₄ oxidation for almond (*Prunus dulcis*) irrigated with nitrogen fertilizers on arid land

D Schellenberg, M Alsina, S Muhammad, C Stockert, M Wolff, B Sanden, P Brown, D Smart.

Departments of Viticulture and Enology, and Plant Sciences, UC Davis, Kern County Cooperative Extension, CA. *Agriculture, Ecosystems and Environment* (2012) 155.

Hull split and damaged almond volatiles attract male and female navel orangeworm

J Beck, B Higbee, D Light, W Gee, G Merrill, J Hayashi.

Plant Mycotoxin Research, Western Regional Research Center, USDA Albany, CA; Paramount Farming Company, Bakersfield, CA. *Journal of Agriculture and Food Chemistry* (2012) 60(3/3).

Impact of storage time and temperature on thermal inactivation of salmonella enteritidis PT 30 on oil-roasted almonds

S Abd, K McCarthy, L Harris

Department of Food Science and Technology, UC Davis, CA. *Journal of Food Science* (2012) 71(1).

California almond shelf life: lipid deterioration during storage

X Lin, J Wu, R Zhu, P Chen, G Huang, Y Li, N Ye, B Huang, Y Lai, H Zhang, W Lin, J Lin, Z Wang, H Zhang, R Ruan.

College of Bioscience and Biotechnology, Fuzhou Univ., China, Dept. of Bioproducts and Biosystems Engineering, Univ. of Minnesota, St. Paul, MN, Almond Board of California, Modesto, CA. *Journal of Food Science* (2012) 77(6).

The effect of almonds on inflammation and oxidative stress in Chinese patients with type 2 diabetes mellitus: a randomized crossover feeding trial

J Liu, Y Liu, C Chen, W Chang, C Chen.

School of Nutrition and Health Science, Taipei Medical University, Taiwan, Department of Food Science, Nutrition and Nutraceutical Biotechnology, Shih-Chien University, Taipei, Taiwan; Antioxidants Research Laboratory, USDA Human Nutrition Research Center on Aging, Tufts University, Boston, MA. *European Journal of Nutrition* (2012) 51.

Health benefits of almonds beyond cholesterol reduction

A Kamil, O Chen.

Antioxidants Research Laboratory, USDA Human Nutrition Research Center on Aging, Tufts University, Boston, MA. *Journal of Agricultural and Food Chemistry* (2012) 60(27).

Production + Environmental Research

Milestone: Advances in Nitrogen Use

As an industry, California Almonds have doubled yields over the last 20 years. One key has been advances in nutrition management, specifically nitrogen, that have been adopted by growers. These practices, largely derived from Almond Board-funded research, have given substantial boosts to productivity and production efficiency, and minimize negative environmental consequences like nitrate leaching into groundwater, runoff or seepage into waterways and off-gassing.

Adoption of nutrient management practices developed by ABC-funded Production and Environmental research, along with the adoption of other more sophisticated growing practices, can be seen in the improvement in yields vs. nitrogen (N) when comparing the 1970s–1980s to today. Back then, average yield of 1,200–1,300 kernel pounds per acre were attained with 200 pounds of N per acre for a nitrogen use efficiency (NUE, or the percentage of N applied actually removed in the harvested crop) of about 42–46% and best practice was a 2,000-pound yield with 200 pounds for an NUE of 50%. In contrast, recent results from research demonstrate NUEs of 75–85%. This is among the most efficient measured in agriculture. In a production setting, an NUE of more than 60% can be readily attained.

What is driving this change? There are several research findings that have been adopted by almond growers: fertigation through microsprinklers and drip; “spoon feeding” in season, making several runs of N at low doses that are timed to match demand and uptake during tree growth and fruit development; and soil and leaf sampling to determine tree nutrient status. Current ABC-funded research has further refined these practices and puts the almond industry at the forefront of nutrient management planning.

As already noted, the current production and environmental research and findings depict a “win-win.” The first win is increased production efficiency, particularly appropriate given the cost of nitrogen has increased by a factor of 2.5 compared to 20 years ago. The second win is minimal N offsite movement and environmental impact because increased N use efficiency means less N available in the environment to go elsewhere.

This progress clearly demonstrates almond industry commitment to applying the results of production and environmental research that advance farming practices. There is willingness to use the tools developed to improve efficiency for the benefit of almond operations, the environment, neighbors and communities, and this trend will continue.

Advantages in Nitrogen Use increased production efficiency with environmental excellence

	1970s–1980s	2012
Timing	<ul style="list-style-type: none">• One or two applications: either dormant or in season	<ul style="list-style-type: none">• <i>Spoon feeding</i>—multiple applications, low doses in season• Match demand during tree growth or crop development: 80% applied late spring to June or July
Application	<ul style="list-style-type: none">• Broadcast or banded• Flood or impact sprinkler	<ul style="list-style-type: none">• Fertigation through drip or microsprinkler
Nitrogen Use Efficiency (NUE)*	<ul style="list-style-type: none">• Best practice: 50%• The norm: 42–46%	<ul style="list-style-type: none">• 75–85%• Among the most efficient measured for any crop• Increased yields and production efficiency• Minimal water and air environmental impact

*NUE = N harvested in crop/N applied.

Production + Environmental Research (continued)

Environmental Excellence

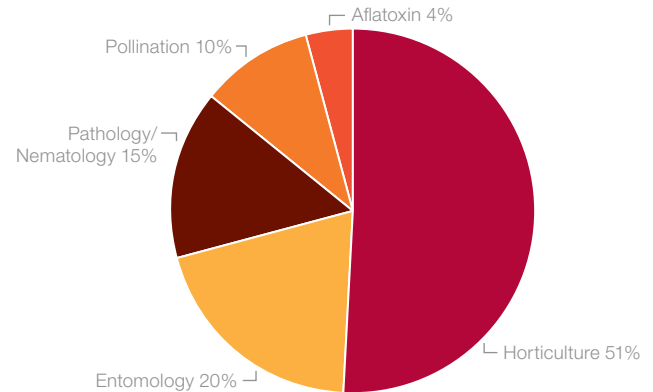
To address the complex environmental regulatory concerns facing almond growers, the Environmental Affairs Program focuses on research and environmental regulatory issues. Research highlights included the completion of a lifecycle assessment of almond production focusing on energy usage and greenhouse gas emissions. The analysis is eye opening in understanding how energy flows through the system. This project utilized data from both Production Research and Environmental Committee projects. Additional highlights are the use of research co-funded by ABC on soil fumigant emissions reduction by regulators. The key issue to emerge this past year is the concern about nitrates in groundwater. See table on page 25 for how ABC-funded research has increased nitrogen use efficiency for energy and greenhouse gases. The environmental stewardship of almond growers was highlighted in two tours for regulators in May and during harvest; outreach to growers also continues via the Almond Sustainability Program (see page 39).

Production Research Key Areas

Numerous production research investigations that are currently underway in diverse disciplines are aimed at increasing production efficiency, maintaining quality and minimizing environmental impact. Besides nitrogen use and fertility, examples include developing bio-rational pesticides, targeted sprayer application, reduced need for replant fumigation, more efficient irrigation by assessing yield vs. water applied, late spring and summer disease control along with fungicide resistance management, weed control, honey bee health and improved pollination practices, and harvest and stockpile best practices.

Mike Burden at Jackson-Rodden Ranch demonstrates irrigation management tools to environmental regulation and media.

Production Research key areas 2011/12



Source: Almond Board of California.
Note: Percentages are reflective of FY2011/12 budget.



Almond Quality + Food Safety

Almond Quality Insights

In 2012 several quality projects were continued, with a goal to better understand the impact of moisture on almond quality and shelf life. This understanding will pave the way for the development of tools and resources to maximize almond quality from the orchard throughout storage and distribution.

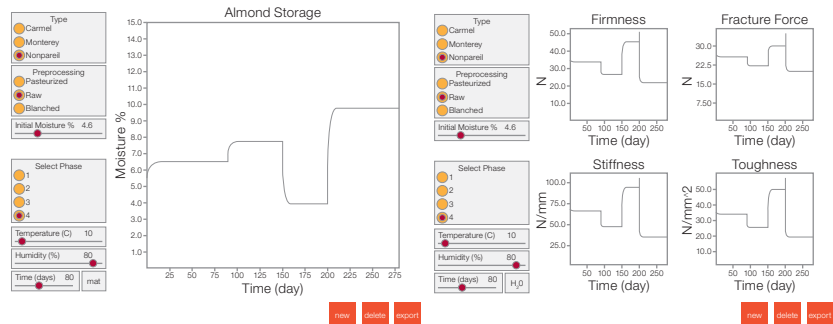
Online Predictive Model to Assess Impact of Storage Conditions

An interactive and online tool was developed for the almond industry to show how temperature and humidity affect almond moisture content and texture attributes during product storage. The current version of the model is applicable to raw, pasteurized and blanched kernels of Carmel, Monterey and Nonpareil varieties; can be evaluated at <http://rpaulsingh.com/Almond/AlmondStorage.html>.

Food Safety Milestone: Safe Surrogate Organism

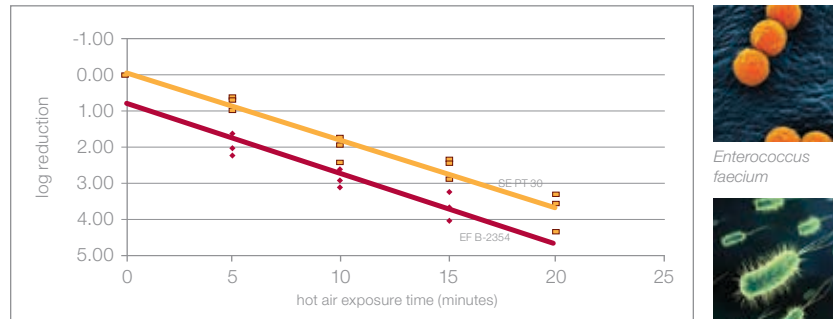
New ABC-funded safety research confirmed that *Enterococcus faecium* strain NRRL B-2354 is safe for use as a nonpathogenic surrogate organism for in-plant process validation. The study demonstrated that NRRL B-2354 is sensitive to medically relevant antibiotics and lacks key virulence factors. The findings helped in reversing the reclassification of biohazard safety level.

Almond Moisture and Texture online predictive model



Almond moisture and texture online model output illustration: moisture content varies with storage scenarios of different humidity and temperature over time.

Heat Resistance Comparison salmonella and surrogate at 280°F



The surrogate, *Enterococcus faecium* NRRL B-2354, and the pertinent pathogen, *Salmonella* Enteritidis Phage Type 30, show a similar heat resistance.

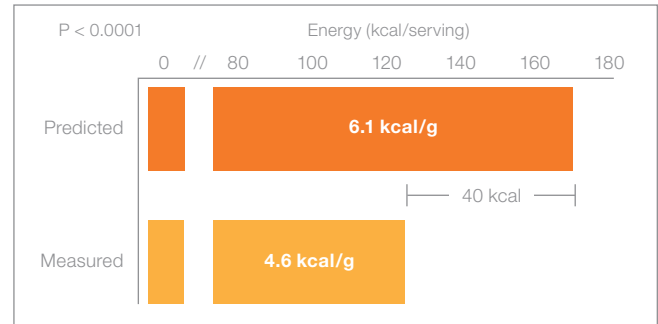
Nutrition Research

In 2012, three landmark human studies funded by Almond Board of California were published in top-ranked nutrition research journals. The *American Journal of Clinical Nutrition* featured two, and a third Taiwan-based study was featured in the *European Journal of Nutrition*. Drs. David Baer and Janet Novotny of the USDA's Food Components and Health Laboratory reported research results showing that whole almonds provide about 20% fewer available calories than currently stated on the Nutrition Facts Panel. The publication reported results of their research using a new method for measuring energy availability. Further research is needed to better understand the results of the study and how this technique for calculating calories could potentially affect the calorie count of other foods. Previous ABC-funded research has suggested for many years that the fat in almonds was not completely absorbed, but this was the first study to quantify the calories that are not completely digested and are excreted instead.

Dr. Gary Foster of Temple University showed that including two one-ounce servings of almonds daily for six months in a reduced-calorie diet resulted in weight loss and improved cardiovascular disease risk factors. "This is the longest and largest study to date on almond consumption in the context of a weight-management program," said Dr. Foster. He added "Because the study was conducted in a free-living population, the researchers were able to measure the impact of including almonds in a weight-loss diet in a real-world setting." Both papers have generated great media interest and continue to garner coverage in North America, Europe and beyond.

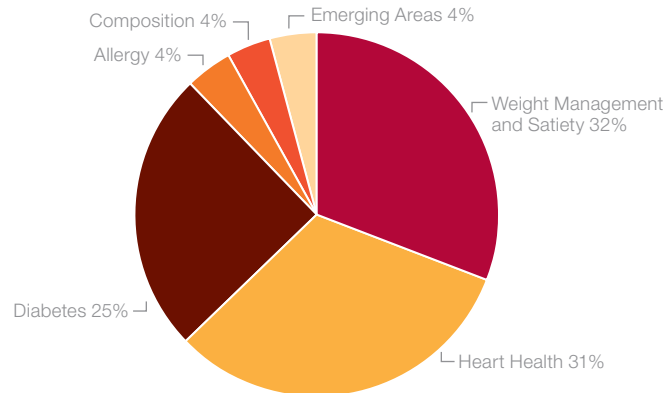
- Novotny JA, Gebauer SK, Baer DJ. 2012. "Discrepancy between the Atwater factor predicted and empirically measured energy values of almonds in human diets." *Am J Clin Nutr* 2012;96(2):296-301.
- Foster GD, Shantz KL, Vander Veur SS, et al. "A randomized trial of the effects of an almond-enriched, hypocaloric diet in the treatment of obesity." *Am J Clin Nutr* 2012;96(2):249-54.
- Liu JF, Liu YH, Chen CY et al. "The effect of almonds on inflammation and oxidative stress in Chinese patients with type 2 diabetes mellitus: a randomized crossover controlled feeding trial." *Eur J Nutr* 2012;Jun 22, [Epub ahead of print].

Measured vs. Predicted Energy Value of almonds



Source: Novotny JA, Gebauer SK, Baer DJ. 2012. Discrepancy between the Atwater factor predicted and empirically measured energy values of almonds in human diets. *Am J Clin Nutr* 2012;96(2):296-301.

Nutrition Research Key Areas 2011/12

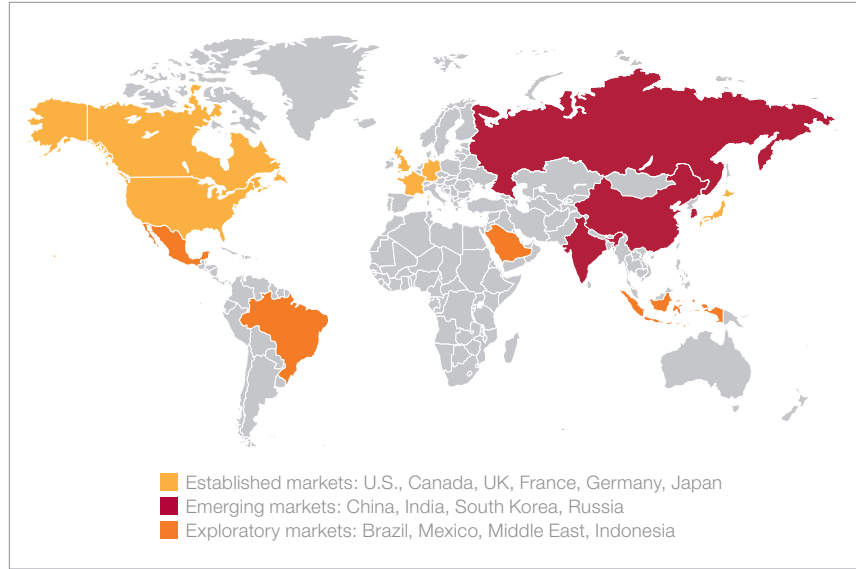


Source: Almond Board of California.

Global Market Development Overview

California Almond shipments have been growing at an average rate of 12% for the last five years and have more than doubled in the last ten. This is impressive growth for any industry, but can it continue? Regardless of what happens on the supply side, we believe the demand for almonds will continue to grow at a robust rate. Awareness of the nutritional value and health benefits of almonds continues to rise and consumer interest in almonds is at an all-time high. At the same time, our general growth in emerging markets like China, India and South Korea continues at an aggressive pace. The good news is that economic and lifestyle trends support continued growth in both of these areas.

Building on the insights gained in last year's Global Market Development Analysis, we have prioritized our growth opportunities and allocated resources in a way that balances our efforts between established, emerging and exploratory markets. This helps to focus our limited resources on the few most significant opportunities and should enable us to maximize our long-term potential while minimizing risk. We have also staffed up our international presence with dedicated regional marketing leadership in London, New Delhi and now Shanghai. Our market development plans for each region include elements for market access, trade stewardship and consumer marketing, each outlined in the following pages.



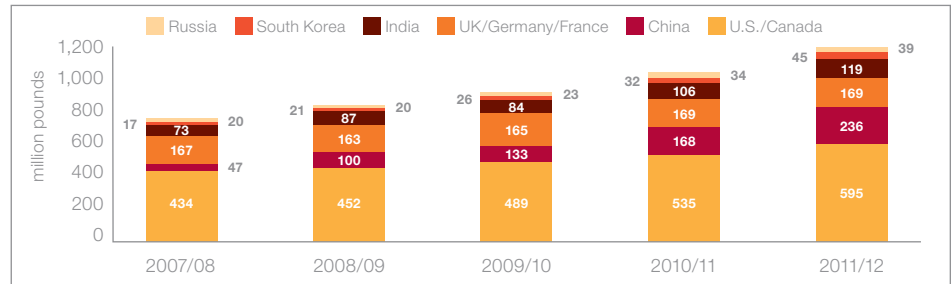


Marketing Overview

Around the world, Almond Board of California marketing programs are informed by market research and include elements of advertising, public relations and social media. This past year, we've expanded our social media presence by starting a Facebook page targeting the U.S. consumer and refining a Weibo account (Twitter equivalent) in China. In 2013, social media expansion will be focused on centralizing social media efforts worldwide, refining our tone of voice, expanding communities and starting new social channels that make sense for ABC around the world. Read more about the other key marketing programs in our emerging and established markets on the following pages.

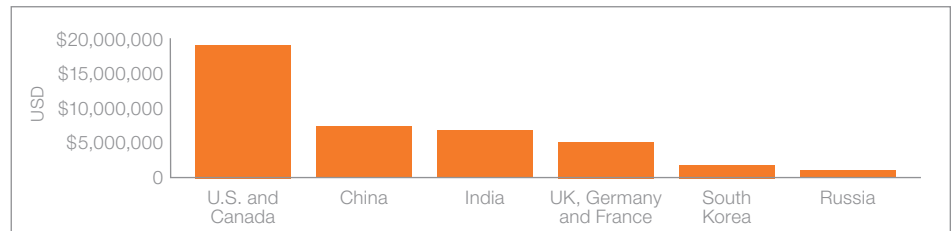


Historic Shipments by Region 2007/08–2011/12 (million pounds)



Source: Almond Board of California.

Global Marketing Budget 2011/12 (in millions)



Source: Almond Board of California.

European Union

Over the last two years, ABC has shifted efforts in the EU3 (France, Germany and UK) to market almonds as a snack. The most telling indicator that this strategic approach is working is the substantial volume retail sales growth in the UK (+18%) and France (+22%) while prices remained steady. Sales in Germany have remained flat, but we have seen changes in attitudes toward almonds in all three markets:

- There is a shift in how people think about almonds, with significant improvements in almond ratings on snack-specific attributes seen in 2012 with natural, convenient, health and indulgence included on the list.*
- The share of total almond purchases that were intended to be eaten as a snack increased significantly from 2010 to 2012 with the largest increase in the UK, from 16% in 2010 to 24% in 2012.*

FY2011/12 continued to leverage the success of the print and online Handbag campaign, originally introduced in October 2011. Two new executions were added to the campaign, which is themed around the contents of women's handbags, helping almonds stand out as a convenient and delicious snack. Further buzz for almonds was created using London taxis fully wrapped with California Almond imagery to remind the target audience that almonds are a smart on-the-go snacking solution. Almond messaging continued inside the taxis, and drivers were trained to reinforce California Almonds' key message and give snack packs to passengers that fit the target audience criteria.

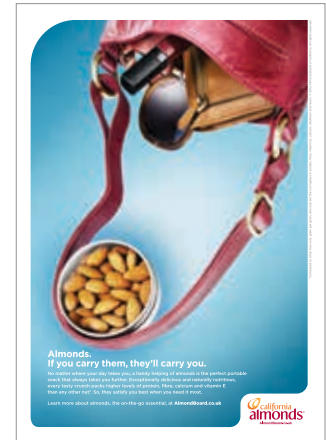
Testing of the UK consumer advertising campaign encouraging women to snack on almonds revealed over half of women took action or plan to take action as a direct result of seeing the ads.

The European team is also focused on communicating the body of growing scientific evidence of the health benefits of almond consumption. The recent lower-calorie research, conducted by David J. Baer, PhD, received mass media attention, reaching over 400 million consumers to date.

*Source: Sterling-Rice Group 2012 EU Consumer AAU.



Twenty London taxi cabs, fully wrapped in California Almond imagery, reminded the target that almonds are a smart on-the-go snack.



New UK Handbag print ads, themed around the content of women's handbags, focus on the convenience of snacking on California Almonds.

China

China is the largest export market for California Almonds. The Global Market Development Analysis (GMDA) pointed to China as the largest growth opportunity for almonds globally. The largest category of growth potential is believed to be in the snacking sector. To take advantage of the growing snack sector and elevate almonds within that category, a new snacking strategy was established in 2012. Almond Board conducted market research to gain consumer snacking behavior insights and build the foundation for the new strategy. The research showed consumers already snack on nuts regularly, and they value snack time in a social atmosphere that is fun and light-hearted.* They are also looking for snacks that have a positive impact on their health. Almond Board of California is expanding the investment in China to build awareness of almonds as a healthy snack by contracting with an advertising agency and employing an in-market staff member. The three core components of market development—market access, trade stewardship and marketing—are now working full force in China to ensure almonds are the nut of choice for consumers of this dynamic market.

At the end of FY2011/12, ABC launched a new print and online advertising campaign in China to raise consumer awareness on the benefits of snacking on almonds. The campaign is centered on the idea that snacking on almonds keeps you young at heart. This theme is built on the idea that Chinese consumers value snack time with friends and family in a fun, light-hearted, social atmosphere. The campaign is targeted at consumers in the major urban centers of Beijing, Shanghai and Guangzhou. To complement the campaign, the China team launched a new website in August 2012 to reflect the new campaign. Take a look at AlmondBoard.com.cn.

*Source: Sterling-Rice Group 2012 China Consumer Segmentation Study.



Example of new Chinese consumer advertising, which conveys the message that snacking on almonds keeps you young at heart.

India

Almonds, traditionally, are an integral part of the Indian culture. The time-honored practice of mothers giving soaked almonds to children first thing in the morning and the heavy gifting of almonds during festive occasions makes India a top strategic priority for Almond Board of California. Building on the traditional significance that almonds enjoy, a new consumer campaign was developed for the market over the last year.

The print and television campaign featured women as everyday heroes whose actions ensure the success of their children. This concept, targeting urban Indian housewives who are the custodians of customs and traditions, was determined after comprehensive consumer market research. The emotional connection with the target group reflected in all campaign performance measurement scores.

The campaign focuses on reinforcing traditions around almonds to help increase the frequency of consumption and establish almonds as an energy-packed treat to be enjoyed throughout the year, and not just in the traditional festive and winter months. Delivering on these strategic objectives, the campaign performance measurement research showed that 95% of people claimed to have had almonds in the previous month and 66% claimed to be having almonds all year round.

Testing of the Indian consumer advertising campaign, which encouraged women to make almonds a part of their daily routines, revealed that over 70% of respondents gave the campaign the best possible rating on parameters of likeability, relevance and believability. More than half also claimed they are much more likely to consume almonds as a direct result of seeing the campaign.



A sequence from the new TV commercial beautifully illustrating the central role that mothers play in our lives.



New Indian print ads celebrate mothers as everyday heroes and focus on California Almonds as a nutritious breakfast snack and an ideal gift.

South Korea and Russia

South Korea and Russia were both identified by the GMDA as emerging markets with significant potential to grow almond demand in the snacking category.

South Korea has steadily risen as a major export market and was the tenth largest export market for California Almonds at the end of the 2011 crop year. In 2012, a Free Trade Agreement between the U.S. and South Korea was enacted, which resulted in zero tariff on both in-shell and shelled almonds entering South Korea. Almond Board of California conducts year-round public relations outreach to educate consumers on the health benefits of snacking on California Almonds. Given the increased focus on this market as a result of the GMDA, Almond Board has been conducting consumer research to determine if program modifications can lead to stronger demand generation in South Korea.

Almond Board of California has been carrying out trade stewardship activities in Russia since 2005. During this time, shipments to Russia have increased about 130%. The GMDA identified snacking in Russia as a growth opportunity. In order to create a strategic approach to assess the development of this program and market, opportunity assessment research is being conducted in Russia. The research will help:

- Build market knowledge
- Provide better understanding of the Russian consumers' lifestyles and food choices; assess opportunities and change forces relating to food, health and almonds
- Identify considerations for consumer targeting and messaging
- Inform the future direction and focus of marketing programs in Russia

In August 2012, Russia joined the World Trade Organization (WTO) after 18 years of negotiations. Prior to joining, Russia, the world's ninth largest economy, was the largest economy outside of the WTO.



Feature coverage of California Almonds in Russia's *Confectionery & Bakery Production* trade magazine.



Onsite almond trial showcasing the convenience and portability of almonds as a smart snack.



Almond spokesperson JwaJeong Choi delivering key snacking messages to South Korean consumers.

Trade Stewardship

Overview

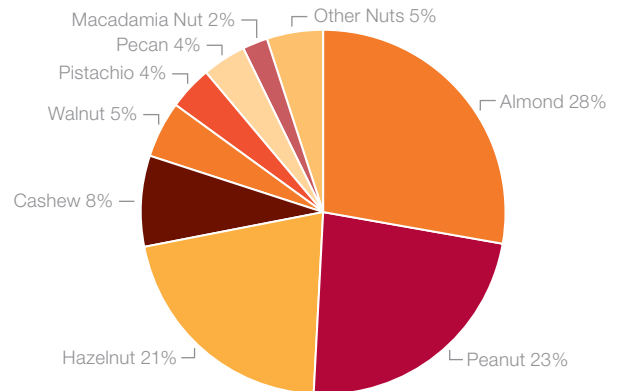
Almond Board of California reaches out to food professionals from around the globe to educate them about using almonds as an ingredient in new products or in menu development. Examples of these efforts include workshops, trade missions, trade shows, advertising, collateral and eNewsletters; programs that reach out to an ever-increasing number of food manufacturers, retailers or importers. Key markets for these efforts include not only North America and Europe, but also India and China—emerging economies that are quickly developing food processing sectors to meet the growing demand for almond products. As a result of these and industry efforts, almonds continue to have a strong presence in product development and have maintained their position as the number one nut in new product introductions since 2006.*

*Innova Market Insights, New Products Database, 2011.



In 2012 ABC developed a new food professional print campaign focusing on snacking, chocolate and cereal.

Share of Nut Mentions 2011



Source: Innova New Product database and Sterling-Rice Group Global New Products Introduction Report, 2011.

Nut Introductions by Nut Type change from 2009–2011

Nut Type	2009	2010	2011	Change %
Almond	3,850	5,032	5,313	38%
Peanut	2,816	3,949	4,437	58%
Hazelnut	3,274	3,741	4,085	25%
Cashew	1,172	1,617	1,573	34%
Walnut	713	1,050	1,002	41%
Pistachio	449	607	717	60%
Pecan	695	942	866	25%
Macadamia Nut	324	444	454	40%
Other Nuts	685	904	878	28%
Global Nut Introductions	13,978	14,253	15,315	10%

Source: Innova New Product database and Sterling-Rice Group Global New Products Introduction Report, 2011.

Trade Stewardship (continued)

Trade Programs

Almond Board of California has prioritized market development activities by participating in many events to educate trade audiences about the **function, form and flavors** of California Almonds and **the quality, safety and stability** of California's Almond supply. Most recently ABC exhibited at Food Ingredients Europe, Food Ingredients China and the annual Institute of Food Technologists Conference. All three shows attract a global audience and are selected based on their ability to provide multiple media opportunities that work together to reach our trade audience.

India Trade Program

ABC has strengthened its commitment to support the almond industry in India with a formal trade conference in February 2012. The conference unveiled the country's new marketing strategy and communication campaign, which includes advertorials, PR efforts and television advertising. In an effort to share this information with the trade, along with information on other marketing endeavors, Almond Board utilized trade bulletins as an important communication tool.



2012 Institute of Food Technologies Conference in Las Vegas, Nevada. Chef John Csukor is whipping up a delicious recipe that includes almonds.



2012 India Formal Trade Conference.

PR Articles
The Almond Board of California continued to reinforce the health benefits of almonds in India through PR activities. The PR efforts generated the recognition of making a healthy and good quality diet more accessible to Indian people. On 15th February 2012, the Almond Board of California was featured in an editorial article published by highlighting their nutritional benefits. The article was also featured on the website for the event (Nestle) which supported almonds are beneficial for diabetes, heart, healthy and weight management. With the aim of positively influencing consumer behaviour and of increasing consumption, the Almond Board of California also featured almonds in a healthy and quick-to-prepare snack that helps maintain good nutrition.

All these efforts generated 90,36,142 impressions and resulted in 31 media mentions across Delhi, Mumbai, Bangalore, Ahmedabad, Jaipur, Lucknow & Ludhiana in publications like The Times of India, Indian Express, Hindustan Times, The Hindu, Indian Express, Times of India, The Daily News, The Indian Express, etc.

What's Trending
The Almond Board of California continues to attract attention. Viewers especially liked the ingredients listed and shared their appreciation through comments on various social networking sites like Twitter and YouTube. Here are some of the latest comments -

Television Advertising
Goddling down a bowl of salted almonds before going to school and studying the amount of salt we eat each day - almonds don't contain the quantities of salt but also the taste of nuttiness and helps from our childhood. The new California Almonds TV commercial captures these habits. Positioning almonds as the snack that we should eat every day is a great idea. I love the graphics and the music. It's a great idea. I love the graphics and the music. It's a great idea. I love the graphics and the music. It's a great idea.

Inside Scoop
After making a splash on the shelves, Almond Board of California plans to reach Indian viewers through the print medium. Keep your eyes open for a fresh new batch of almond advertorials, magazines and newspapers.

An example of the 2012 India trade eNewsletters.

Market Access

Almond Legislative Efforts

The California Almond industry faces increasing pressure associated with evolving regulatory requirements. Issues ranging from groundwater contamination and pesticide residues to export documentation and foreign duties impact the ability of growers and handlers to compete in a global environment.

The Almond Board's efforts have focused on providing fact-based information on the implications of these issues for the industry's long-term well-being by building alliances and leveraging research and technical data generated by other Board Committees. Key initiatives have included:

- Transitioning to formal EU recognition of pre-export certification for California Almonds
- Identification of regulatory or reporting relief associated with completion of California Almond Sustainability modules
- Working with U.S. government authorities to ensure consultations establishing global residue limits encompass almond production tools
- Education of export authorities on almond production and food safety practices
- Regular interaction with key state and federal legislative staffers, providing updates on California Almond research, shipments and contributions to the California economy

Background summaries, webinars and website expansion have been initiated to more thoroughly encompass legislative issues and export requirements, which together help California Almond growers, handlers and industry members better access global markets.



For more information, please visit: AlmondBoard.com/AlmondLegislativeReport.



California Almond Sustainability Program

There is no single sustainable way to grow almonds in California as each location has different resources and issues. However, documenting growers' thoughtfulness and efforts to be good stewards is critical to ensuring that almonds remain a crop of choice to grow in California. Thus, the California Almond Sustainability Program, based on grower self-assessments, has completed its third year.

Growers and handlers participate by attending workshops and assessing their management practices using a workbook of modules designed by peer growers and handlers, university experts and other authorities. Current modules cover Irrigation Management, Energy Efficiency, Nutrient Management, Air Quality and Pest Management. The ability to self-assess online was added this year.

Information gathered through the assessments will be used to tell the good story of California Almond production to regulators and select markets. This communication will show that almond producers use practices that make practical and economic sense while also protecting the people and environment of California.

The California Almond Sustainability Program is centered around the Cycle of Continuous Improvement, allowing growers to assess their practices, compare with grower peers, develop and implement new management practices and reassess periodically.



TO DATE, MORE THAN 800 CALIFORNIA ALMOND PRODUCERS HAVE PARTICIPATED IN A CALIFORNIA ALMOND SUSTAINABILITY WORKSHOP. MORE THAN 500 GROWERS HAVE COMPLETED ONE OR MORE MODULES.
(ABOUT 8% OF CALIFORNIA ALMOND GROWERS)

To learn more about the California Almond Sustainability Program and how you can participate, contact Kendall Barton at kbarton@almondboard.com or 209.343.3245.

California Almond Sustainability Program (continued)

With the increased participation, it is now possible to start assessing what practices almond growers are using in their operations. A statistical analysis of the results to date found that results are representative of what almond growers are doing across the state with 95% confidence.

Of the orchards assessed, 67% have a microirrigation system (drip or microsprinklers), 17% are flood irrigated and 16% use sprinklers (note: this is on a per orchard basis).

In 81% ($\pm 4\%$) of the orchards assessed, fertilizer amounts were calculated based on yield estimates, historical yields and replacing nutrients removed with the harvested nuts.

In 88% ($\pm 4\%$) of the orchards assessed, leaf samples were taken for nutrient testing to inform fertilization management.

In 58% ($\pm 6\%$) of the orchards that used groundwater for irrigation, the water was tested for nitrate content. Of those that did, 56% ($\pm 7\%$) accounted for the nitrogen in the irrigation water in their fertilization.

The self-assessment questions allow an understanding of why a particular practice is not used. For example, 29% ($\pm 6\%$) of the operations have had an energy audit conducted; of those that did an audit, 68% ($\pm 11\%$) have implemented over half of the audit recommendations. However, 50% of the operations indicated they hadn't tried having an energy audit done, and 9% indicated they weren't aware of the concept of an energy audit. Thus, additional outreach to growers on resources for energy audits and what they entail can be pursued to contribute to the cycle of continuous improvement in sustainability.

The almond definition of sustainability: "Sustainable almond farming utilizes production practices that are economically viable and are based upon scientific research, common sense and a respect for the environment, neighbors and employees. The result is a plentiful, healthy and safe food product."

To learn more about the California Almond Sustainability Program and how you can participate, contact Kendall Barton at kbarton@almondboard.com or 209.343.3245.



Almond growers working on sustainability modules at an Almond Board of California workshop in April 2012.

Sustainability Module

For this orchard or facility, the following methods were used to develop and implement energy management plans:

NOT APPLICABLE
I HAVE CURRENTLY TRIED IT
I HAVEN'T TRIED IT
NOT FAMILIAR WITH THIS

ENERGY AUDITS AND PLANNING — ELECTRICITY

14	In the past five years, the operation was audited by a qualified expert (e.g., utility representative or paid consultant) to identify opportunities to improve electric energy efficiency. (If not, skip to question 19.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	Using results of the audit, the operation developed an energy management plan and budget for short- and long-term (e.g., 1-, 3- and 5-year) improvements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The format of the self-assessment, as seen in these sample questions, provides information about why a practice is not used, allowing for decisions on education, outreach and research.

Industry Relations

California Almond growers and handlers are dedicated to environmental stewardship, almond quality and food safety, family tradition and constant improvement both on and off the farm. ABC's Industry Relations (IR) programs are committed to providing almond growers, handlers and allied industry members with all the tools needed to make informative decisions that affect the bottom line and the future of California Almond production.

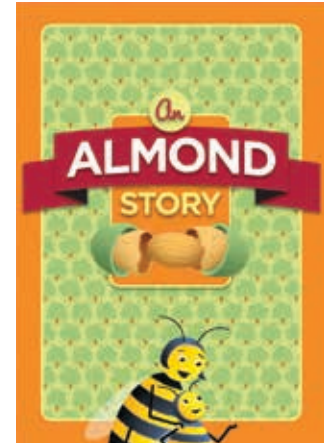
In addition to traditional communications, including the *California Almonds Outlook* newsletter, *The Handle*, Twitter, monthly grower emails and guest articles in *Western Farm Press*, we are engaged in ongoing programs and special projects including the following:

- California Almond Sustainability Program
- California Agriculture Leadership Program
- Almond Achievement Award
- UC Cooperative Extension Pomology Farm Advisor Internship
- Ag in the Classroom
- The Almond Conference

To learn more about becoming involved in these programs or to receive industry materials, contact IndustryEvents@AlmondBoard.com. Follow us on Twitter [@AlmondBoard](https://twitter.com/AlmondBoard).



2011 Almond Achievement Award winner Ned Ryan.



Elementary school students can learn about the lifecycle of California Almonds through the animated video or interactive activity book.



The Almond Leadership Program trains future almond generations.

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2012 CENSUS OF AGRICULTURE

YOUR VOICE. YOUR FUTURE. YOUR RESPONSIBILITY.



USDA Gearing Up to Count the Nation's Farmers and Ranchers

Organizations like Almond Board of California and rural communities all over the United States recognize that farmers and ranchers work hard each day so that we have healthy and nutritious food on our plates. How do you tell that story so that millions of people with no farm background truly understand where their food comes from? One of the ways to frame the discussion is to provide facts and figures as an educational tool and a way to describe the important work of the nation's farmers and ranchers.

The census, which is conducted every five years, provides a means to keep up with emerging issues and measure changes in agriculture. The almond industry is one of the fastest growing sectors of California's agricultural industry. The Census will provide NASS with updated acreage information, allowing the California Field Office to confirm the estimated increase in bearing acreage since the last Census in 2007.

The 2012 Census of Agriculture will begin soon. Close to 3 million report forms will be mailed to the nation's farmers and ranchers in late December 2012. Well over 100,000 forms will be mailed to farms and potential farms in the Golden State. The Census gives farmers and ranchers a chance to have their voices heard. It produces information on land use and ownership, production practices, income and expenditures, and many other important topics at national, state, county and even zip code levels.

We urge all to participate in the Census. After all, the Census is your voice, your future and your responsibility.

You can find more information about the Census and make sure you are counted by visiting us on the web at www.agcensus.usda.gov.

Contact Vic Tolomeo, California State Director, USDA's National Agricultural Statistics Service for more information.

Victor_Tolomeo@nass.usda.gov

