

ALMOND BOARD OF CALIFORNIA

ANNUAL REPORT
ALMOND
ALMANAC
2018

ANNUAL REPORT

WELCOME

The Almond Board of California's Almond Almanac is an annual year-end report that provides a glimpse into what makes up the California almond growing and processing community. The report provides a comprehensive overview of the Almond Board's programs and how we support almond growers and processors in California. This includes the achievements programs have made toward meeting ABC's mission and vision.

The Almond Almanac provides the latest statistics about California almonds. The statistical analyses found in the report are prepared on a crop-year basis, spanning August 1 through July 31, and include both current and historical information about almond production, acreage and varieties, as well as shipment and market information. The statistical content is compiled using 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, Pacific Region Field Office.

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VISION

California almonds make life better by what we grow and how we grow.

MISSION

Expand global consumption of California almonds through leadership in strategic market development, innovative research and accelerated adoption of industry best practices.



ALMOND ORCHARD 2025 GOALS

In addition to growing a healthy food that people love, the California almond community aims to produce an economically, environmentally and socially responsible crop for California. Recognizing our local role in California agriculture and global role as a powerhouse in almond production, the almond community has committed to four improvement goals. Adopted by ABC’s Board of Directors in June 2018, these goals build upon ongoing improvement efforts.

BY 2025, THE CALIFORNIA ALMOND COMMUNITY COMMITS TO:

FURTHERING REDUCTION



REDUCE THE AMOUNT OF WATER USED TO GROW A POUND OF ALMONDS BY 20%

Over the past two decades, almond farmers have successfully reduced the amount of water needed to grow a pound of almonds by 33% via improved production practices and adoption of microirrigation technology.¹ While almond farms have made great strides in efficiency, further improvements are underway.

INCREASING ADOPTION



INCREASE ADOPTION OF ENVIRONMENTALLY FRIENDLY PEST MANAGEMENT TOOLS BY 25%

Responsible almond farming requires protecting the crop and trees from bugs, weeds and disease through an integrated pest management approach. This means using tools and techniques like beneficial insects, habitat removal, mating disruption and, when necessary, pesticides. Through research we’re looking for ways to better manage harmful pests.

OPTIMIZING USE



ACHIEVE ZERO WASTE IN OUR ORCHARDS BY PUTTING EVERYTHING WE GROW TO OPTIMAL USE

Almonds grow in a shell, protected by a hull, on a tree—products traditionally used for livestock bedding, dairy feed and electricity generation. Changing markets for these coproducts are spurring innovation for higher-value uses, both economically and environmentally, with promising leads in the areas of recycled plastics, fuel, beer and more.

REDUCING IMPACTS



REDUCE DUST DURING ALMOND HARVEST BY 50%

California almonds are harvested by shaking the nuts to the ground where they dry naturally in the sun before being swept up and collected, a process that can create dust in our local communities. To address this nuisance, the almond community is taking short- and long-term steps to reimagine how we harvest.

¹. University of California, 2010. Food and Agriculture Organization of the United Nations, 2012. Almond Board of California, 1990–94, 2000–14.

2018 Milestones

It was a big year for the Almond Board of California. Looking at the year in review, these are the programs, achievements and challenges that shaped the California almond industry.



ALMOND ORCHARD 2025 GOALS:

ABC's Board of Directors approved goals focused on improvement in the areas of water, pest management, zero waste and harvest dust!



10TH ANNIVERSARY:

With 153 graduates to date, the Almond Leadership Program² turned 10 this year.



THREE NEW CAMPAIGN LAUNCHES:

New integrated advertising campaigns launched in the U.S., Mexico and Italy.



CREATING COPRODUCTS BUZZ:

High profile articles and videos, netting 18 million views, on the industry's work on optimizing innovative uses for hulls and shells.



A BIG CELEBRITY ENDORSEMENT:

Unsolicited endorsement from A-list celebrity Duchess Meghan Markle.



SUSTAINABILITY PROGRAM EARNS GLOBAL RECOGNITION:

The California Almond Sustainability Program was the first nut-specific program to be benchmarked to FSA 2.1 and one of only two U.S. sustainability initiatives that achieved a gold level of equivalence by the Sustainable Agriculture Initiative Platform.



45TH ANNIVERSARY:

Launched in 1973, the Almond Board's farming research program³ celebrates 45 years of progress and innovation.



UNEVEN GLOBAL TRADE LANDSCAPE:

In 2018, California agriculture has been affected as key foreign trading partners have erected retaliatory tariffs.

1. See page 3 for detailed information on the Almond Orchard 2025 Goals.
2. For more information on the Almond Leadership Program, see page 19.
3. See page 12 for more on ABC's farming research program.

2019 Driving Forces

Looking ahead to 2019, there are **five strong cultural and food trends** that are propelling California almonds forward.

1 FOOD AS MEDICINE:

People are looking at food in a new way—as medicine. With healthy fats, protein, fiber and natural deliciousness, almonds are viewed as healthy by consumers.

HEALTHY FATS | PROTEIN | FIBER

2 INCREASED DEMAND FOR PLANT-BASED PROTEIN:

With many people choosing to increase plant-based protein consumption, almonds are well positioned as a natural plant-based source of nutrition.

44% OF ADULTS WANT TO INCREASE PLANT-BASED PROTEIN INTAKE¹

3 "SNACKIFICATION" OF SOCIETY:

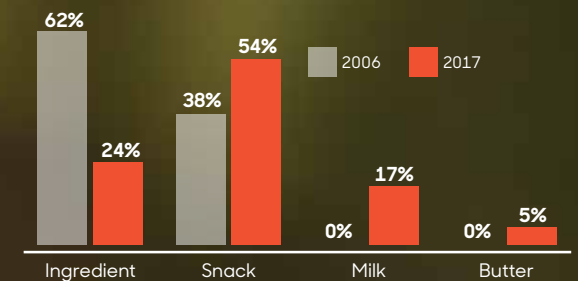
With consumers' need for convenience, as well as shifting consumer attitudes around eating preferences, there is a newfound proliferation of snacking in the U.S. and around the world.

94% OF ADULTS SNACK ON A DAILY BASIS²

4 INNOVATION DRIVES NEW PRODUCTS:

Innovations in almond products and forms over the last decade have changed the way almonds are used.

SHIFT AWAY FROM INGREDIENT TO SNACK + MILK



Source: Nielsen Analysis: Retail Product Movement, 2017.

5 GROWING GLOBAL MIDDLE CLASS:

New opportunities for almonds exist as the rise of the middle class global movement continues. Also almonds have different core benefits that are being highlighted around the world.

SKIN + BEAUTY IN ASIA | MENTAL ACUITY IN INDIA | LIFESTYLE IN THE WEST

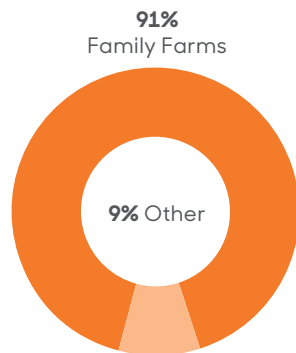
1. DataEssential. 2. Mintel, "Snacking Motivations and Attitudes" U.S., May 2017.

About Our Community

FARMERS

The California almond growing community is driven by **family farmers**.

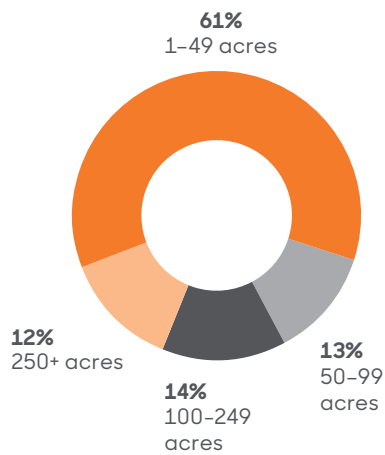
According to the most recent USDA Agricultural Census, there are around 6,800 California almond farms. Many are owned and operated by third- and fourth-generation farmers who live on the land and plan to pass it on to children and grandchildren.



ORCHARDS

Nearly **75%** of California almond farms are **100 acres or less**.

California's almond farmers, both small and large, take a long-term view of success with respect for the land, natural resources and local communities. Every almond farmer recognizes that growth must be matched by an unprecedented commitment to environmental responsibility.



Source: USDA 2012 Census of Agriculture.



100 HANDLERS

process California almonds. Many are also **family owned and operated**.

DESTINATIONS

DOMESTIC

2017/18 domestic shipments marked the **largest in history at 735 million pounds**.

At 33% share of shipments, **the U.S. remains the #1 global destination** for California almonds.

INTERNATIONAL

2017/18 export shipments went to more than **90 countries**.

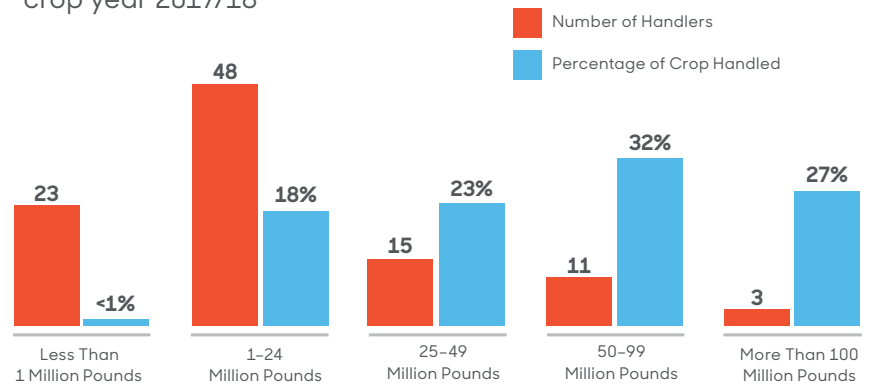
Spain was the #1 export market.

For the ninth year in a row, more than **one billion pounds were exported**.

The top ten export markets represent 71% of total export shipments.

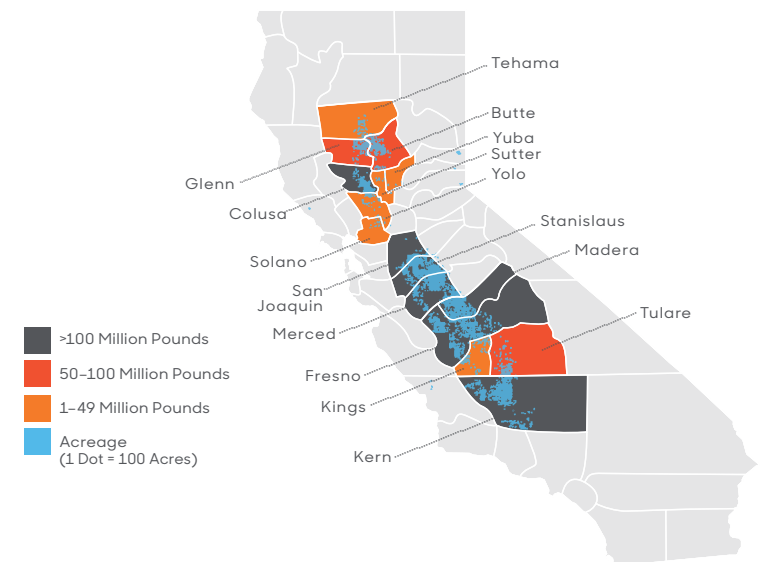
Distribution of Crop by Handler Size

crop year 2017/18



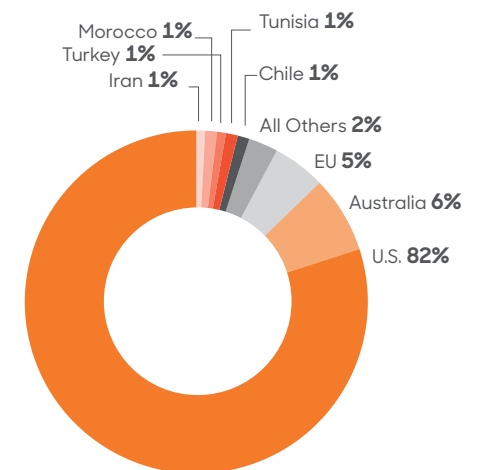
Where Almonds Are Grown

production by county | crop year 2017/18



World Almond Production

crop year 2017/18

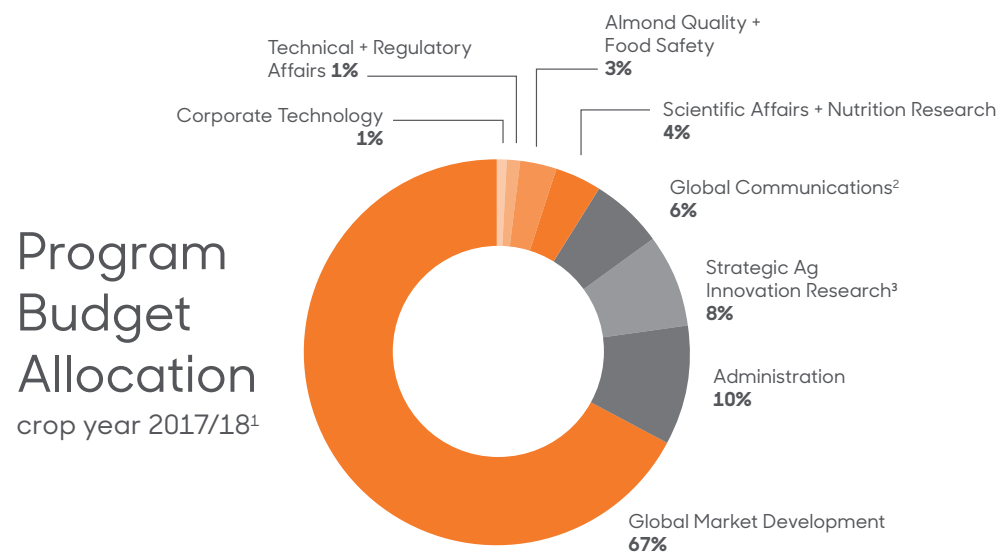


Source: Almond Board of California, Almond Board of Australia and International Dried Fruit Council.

ALMOND BOARD OF CALIFORNIA Programs + Budget

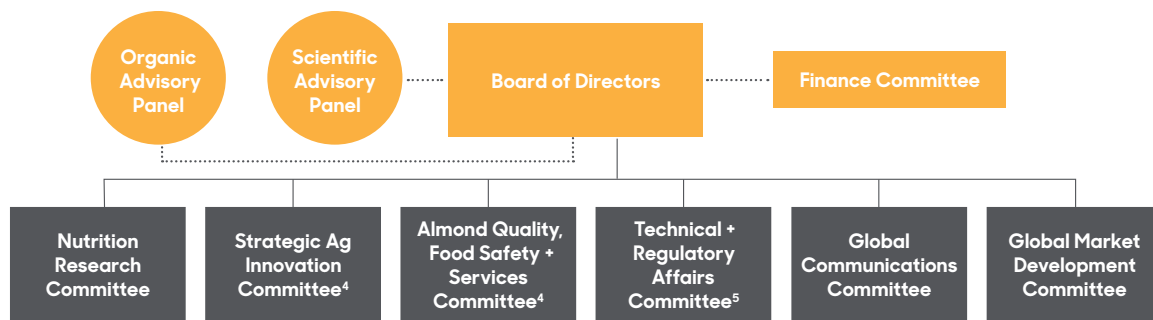
The Almond Board of California's programs are funded by an assessment placed on each pound of almonds grown in California. Each year, the ABC Board of Directors, made up of both growers and handlers, approves the budget allocation for each program area.

ABC programs support growers by developing global market demand for almonds as well as conducting research that helps improve our farming and processing practices. These areas are defined in the Program Budget Allocation chart below and program details can be found throughout the Almanac.



Program Budget Allocation
crop year 2017/18¹

Committee Structure



1. Totals may not add up due to rounding. 2. The Global Communications area encompasses funding for Reputation Management and Industry Communications. 3. The Strategic Ag Innovation Research area encompasses funding for Production Research, Environmental Research, Accelerated Innovation Management Initiatives and Crop of Choice Initiatives. 4. See page 9 for working groups that support this committee. 5. Ag Regulatory Subcommittee reports to the Technical + Regulatory Affairs Committee.

Innovation Through Research

Rooted in research and founded in fact, the Almond Board of California supports the almond community by investing in independent scientific research.

NUTRITION RESEARCH COMMITTEE

Founded: 1995
Investment to date: \$28.3M
Projects funded: 107
For more about nutrition research and almonds' impact on human health, see pages 10–11.

ALMOND QUALITY+ FOOD SAFETY COMMITTEE

Founded: 2001
Investment to date: \$8.9M
Projects funded: 112
See page 16 for more on almond quality and safety.



STRATEGIC AG INNOVATION COMMITTEE

Founded: 1973
Investment to date: \$43M
Projects funded: 427
For more about agricultural innovation, see pages 12–15.

WORKING GROUPS

Biomass

WORKING GROUPS



Since 1973, ABC's research-focused committees have guided the investment of \$80 million to build a foundation of knowledge on almonds' impact on human health, ensuring food quality and safety and increasing farming efficiencies while minimizing environmental impacts.

Together these programs help California almond farmers and processors provide almond lovers around the world with a safe, wholesome and sustainable product.

NUTRITION RESEARCH:

Exploring New Frontiers

With established almond health benefits in the heart health, blood glucose regulation and weight management areas, the time is right to explore new research frontiers.

**BEAUTY FROM THE INSIDE OUT****Did You Know?**

- Aging increases skin dehydration, resulting in wrinkled appearance.
- Oil glands in facial skin secrete oils—in part from the foods you eat—to help maintain skin hydration.
- Researchers hypothesize that almonds—rich in good fats, polyphenols and vitamin E—may help improve the appearance of fine lines and wrinkles over time.

The Almond Board of California funded a clinical study investigating potential benefits of almond consumption in reducing facial wrinkle appearance in older women with Scandinavian (aka “fair”) skin type. Stay tuned for study results.

**COGNITIVE PERFORMANCE****Did You Know?**

- Age-related cognitive decline can be decelerated.
- Foods beneficial for heart health often also benefit the brain.
- Researchers hypothesize that the healthy nutrient profile of almonds that contributes to heart health may also help improve cognitive performance in older adults.

The Almond Board of California funded a 12-week randomized, controlled clinical study to investigate the effects of almonds on major cognitive domains, such as attention and concentration, executive function, working memory (short-term information storage—just long enough to complete a specific task), secondary memory (longer-term storage of information) and spatial memory (storage of information about one’s environment and spatial orientation), in older adults. Study results are under analysis.

1995–present
**Commitment to
 Nutrition + Health
 Research**

>105 PROJECTS INVESTIGATING
ALMONDS AND HEALTH

>160 PUBLISHED STUDIES

**HEART HEALTH:**

22 Research Projects
 32 Scientific Publications to Date

**DIABETES AND METABOLIC SYNDROME:**

19 Research Projects
 15 Scientific Publications to Date

**WEIGHT MANAGEMENT, SATIETY
AND GUT HEALTH:**

25 Research Projects
 42 Scientific Publications to Date

**OTHER AREAS OF RESEARCH:**

- Skin Health
- Cognition
- Gut Microbiome
- Composition and Calorie Count

AGRICULTURAL RESEARCH:

Building the Farm of the Future

California's almond farmers are committed to responsible stewardship of the land for the benefit of our families, communities and everyone who loves to eat almonds. Supporting that commitment is 45 years of investment in research to improve and evolve farming practices while minimizing environmental impacts.

A STRATEGIC APPROACH

Almond Board-funded agricultural research is directed by the industry, for the industry. Guiding research investment are seven distinct workgroups, each composed of growers, processors and/or relevant industry stakeholders. Based on research priorities set by the Strategic Ag Innovation Committee, the workgroups review research proposals and track progress within their respective focus areas.



BIOMASS

Exploring new value-added uses for almond hulls, shells and woody biomass



SUSTAINABILITY

Guiding the California Almond Sustainability Program and related optimizations



PEST MANAGEMENT

Considering pest biology to develop new approaches to control insects, weeds and disease



ORCHARD, TREE + ROOTSTOCK

Including orchard configuration, tree training, rootstock and variety breeding



IRRIGATION, NUTRIENTS + SOIL HEALTH

Improving water, fertilizer and soil management to meet orchard needs and reduce impacts



HARVEST

Re-envisioning almond harvest to reduce dust without impacting efficiency



POLLINATION + BEE HEALTH

Supporting honey bee health research and informing bloom-specific practices for optimal yields

Did You Know?

Research findings are shared with farmers and processors via articles, toolkits, videos, events and more. See pages 18-19 for how it happens.

Committed to Honey Bee Health

The decline in honey bee health has been linked to **five complex factors** and the California almond industry has and continues to help address each one.



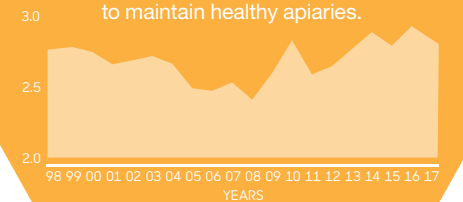
HELPING HIVES

To provide additional food sources for honey bees before and after almond bloom, ABC encourages farmers to consider planting bee pastures near or within almond orchards.

Since 2013, almond farmers have planted over 27,000 acres of bee pasture through Project Apis m.'s Seeds For Bees program.⁴

THE NUMBER OF U.S. HONEY BEE HIVES REMAINS STEADY.³

However, beekeepers still experience significant in-season losses and must work harder to maintain healthy apiaries.



U.S. Bee Hives, in millions

Just like almonds are a nutritious snack for us, almond pollen is important to bee diets too!

It contains all 10 of the essential amino acids bee diets require⁵ and hives routinely leave stronger after pollinating almonds.⁶

1. California Almond Sustainability Program. August 2018. 2. Gene Brandt. Vice President. American Beekeeping Federation. 3. USDA-NASS. Honey Production Report. 1998-2018. 4. Billy Synk. Director of Pollination Services. Project Apis m. November 2018. Represents total plantings from 2013-present. 5. USDA-ERS. Land Use, Land Cover and Pollinator Health: A Review and Trend Analysis. July 2017. 6. Ramesh Sagili. Department of Horticulture, Oregon State University.

Doing More With Less

California almond farmers are focused on responsible and efficient use of water, a precious and limited resource in California.

NEARLY **80%** of almond orchards use efficient **MICROIRRIGATION**.¹ Far **ABOVE THE 42% AVERAGE** for California farms overall.²

SINCE 1982, ABC HAS FUNDED **210 WATER RESEARCH PROJECTS**

WATER-SAVING TECHNOLOGIES like microirrigation have helped farmers **REDUCE** the amount of **WATER** it takes to grow **EACH POUND OF ALMONDS BY 33%** OVER THE PAST 20 YEARS.³

675K ACRES of California almond orchards have moderately good or better soil **suitability for groundwater recharge**.⁴

ALMOND IRRIGATION IMPROVEMENT CONTINUUM

While almond farmers have made great strides in irrigation efficiency, there's always room for improvement. The Almond Irrigation Improvement Continuum, created by irrigation experts, is a roadmap for California almond farmers to accelerate adoption of research-based water-efficient practices and technology.

Supported by dedicated ABC staff, the Continuum is a detailed how-to guide focusing on five key areas: monitoring irrigation system performance, soil moisture and plant water status, calculating orchard water requirements and measuring applied water. **More at Almonds.com/Irrigation**



1. California Almond Sustainability Program. August 2018. 2. California Department of Water Resources. California Water Plan Update 2013: Volume 3, Chapter 2. 3. University of California, 2010. Food and Agriculture Organization of the United Nations, 2012. Almond Board of California, 1990-94, 2000-14. 4. Land IQ. Groundwater Recharge Suitability Analysis. November 2015.

Seeking Optimal Uses

Almonds grow in a shell, protected by a hull, on a tree. Traditionally, these coproducts have been used as livestock bedding, dairy feed and transformed into electricity. However, **changing markets and increased production have led the almond industry to investigate new uses.**

Guided by ABC's Biomass Workgroup, new research is exploring a variety of options for these materials, aiming to identify optimal uses that will bring both environmental and economic benefits. While some possibilities, like food-grade applications, will take longer to research and develop, others are already well on their way to becoming viable options.



WHOLE ORCHARD RECYCLING

MATERIAL: WOODY BIOMASS

At the end of their productive lives, whole almond trees are ground into small chips and disced into the soil. Preliminary research has found benefits like increased soil organic matter, water infiltration and carbon sequestration.



FEEDSTOCK PRODUCTION

MATERIAL: HULLS

Almonds' sugary, fibrous hulls can feed animals big and small, particularly in the emerging world of insect farming. Black soldier fly larvae, a feedstock for poultry and aquaculture, can be raised on an almond hull diet.



RECYCLED PLASTICS

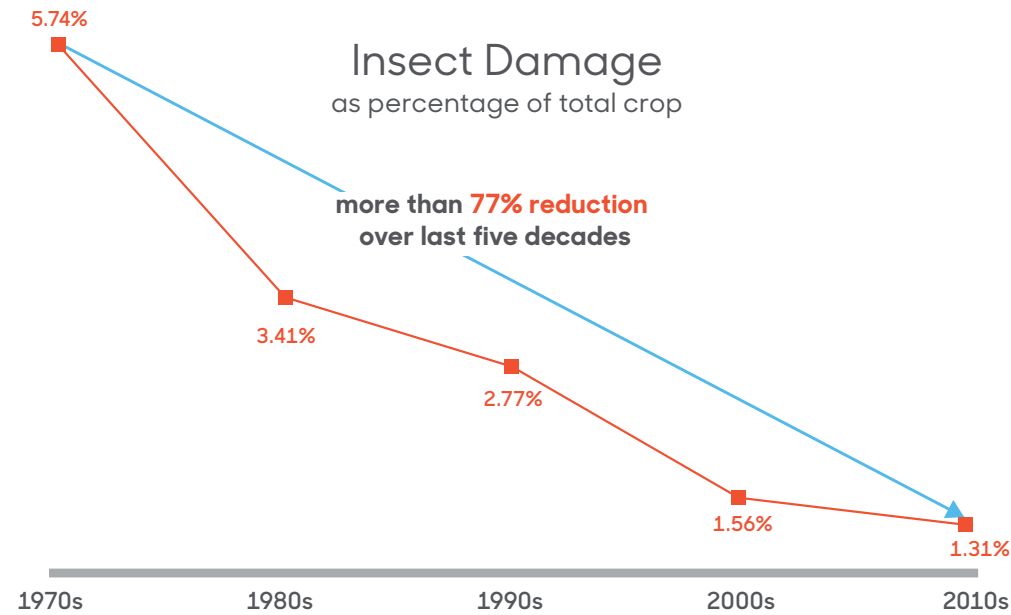
MATERIAL: SHELLS

When transformed to a charcoal-like powder through torrefaction, almond shells can serve as a strengthening agent and colorant for post-consumer recycled plastics. Applications include pallets, gardening pots and more.

ALMOND FOOD SAFETY:

Long-Term Commitment to Quality

California almond growers work hard to maintain the quality of their almonds. One way they do this is through the management of insect damage, important to reducing inedible nuts and impacts on farmers' bottom line.



Insect damage averages are at **historic lows of less than 2%**, a significant decrease from the 1970s, where values once reached 9% and averaged close to 6%.

Given the seasonal differences that can affect farming from year to year, different factors impacting insect pressure exist. Such was the case during the 2017/18 crop year with conditions during the growing season that created challenges, leading to elevated insect levels just slightly above the recent historical lows.

Taking notice, growers renewed and focused their efforts for the current crop, which shows a reduction of insect levels more in line with historic lows. See page 42 for more information.

CONTINUED IMPROVEMENT

- ➔ **GROWERS** remain diligent in utilizing existing and new tools to help maintain almond quality, reducing both insect damage and aflatoxin.
- ➔ **HANDLERS** continue to invest in technologies to remove insect damage and associated aflatoxin from the crop.
- ➔ **ABC** is committed to continued investment in food safety research, including work on insect and aflatoxin control measures.

LEARN MORE ABOUT OUR COMPREHENSIVE FOOD SAFETY PROGRAM AT ALMONDS.COM/GROWERS AND ALMONDS.COM/PROCESSORS

Global Technical + Regulatory Affairs

Shipping to more than 100 countries around the world calls for a dedicated focus on trade issues and strong relationships with key stakeholders.

Engagement by producers, shippers and importers to find solutions to these important issues is critical. The Almond Board integrates research, technical expertise and relationships to address this rapidly changing market environment.



Over the past two years, the global trade environment has become more complex than it's ever been. The most visible examples are retaliatory tariffs in China and Turkey, but those are only part of the challenge. Technical and sanitary/phytosanitary barriers are the real concern—more complicated to prove, harder to resolve. These can include aflatoxin controls, hygiene, labeling, quality standards and mandatory certificates.

ABC has leveraged USDA staff, technical experts and market contacts to address challenges, maintaining trust and clearing the way for unimpeded almond shipments.

- ➔ EU PreExport program has been maintained, despite higher aflatoxin rejections
- ➔ Overview of almond production and controls presented to Japanese authorities
- ➔ Comments provided to WTO and U.S. government on trade agreements and almond impact

GLOBAL COMMUNICATIONS:

How We Grow

Programs and Resources for Growers + Handlers

Did you know the Almond Board of California is here to do more than just promote almonds? Much of our work is dedicated to providing targeted resources to those involved in growing and processing almonds.

One focus is communicating and disseminating agricultural research to growers and handlers, so they have what they need to make key decisions to be successful. Another key component of what we do is help communicate our story to people outside of agriculture. Today, more than ever, consumers around the world want to know how their food is grown and the Global Communications department shares the innovative, practical and forward-thinking work almond growers and handlers are doing directly to support the long-term success of the almond industry.

INDUSTRY RELATIONS AND COMMUNICATIONS

We communicate ABC research and program information with all those involved in growing and processing almonds through a variety of channels—events, workshops, field-ready resources, tools and programs. In 2019 we are launching two new newsletters—*How We Grow* and *In the Orchard*. *How We Grow* will be distributed every other month and provide focus on where we're going and how we can achieve our goals collectively. *In the Orchard* is a weekly electronic newsletter that provides relevant and timely news for industry members to support critical decision points.

Reaching those involved in growing and processing almonds

WORKSHOPS + EVENTS

On-farm demonstrations, expert lectures and peer-to-peer sharing provides participants with opportunities for learning, collaborating and networking. Almonds.com/UpcomingEvents

RADIO ((•))

Weekly interviews provide updates on everything from new tools for growers to upcoming events and reminders of best practices.

IN THE ORCHARD: WEEKLY ENEWSLETTER

Quick updates for growers and processors, including best management practices, programs and events to get involved in.

YOUTUBE

A hub for all Almond Board-produced videos about almonds, industry education, consumer outreach and more: AlmondBoardofCA

FACEBOOK

Follow us @ [AlmondBoardofCalifornia](https://www.facebook.com/AlmondBoardofCalifornia) as a way to stay in touch.

THE ALMOND CONFERENCE

The Almond Conference is the largest gathering of almond community members. It is an opportunity to connect with exhibitors and experience the latest almond production practices, research findings and industry trends over three days of practical insights with take-home applications. AlmondConference.com



GETTING INVOLVED AT THE ALMOND BOARD

SERVE ON A COMMITTEE:

More than 100 almond industry members volunteer on board-appointed committees, subcommittees and working groups to further the work of Almond Board of California.

ALMOND AMBASSADORS:

Share your story about growing and processing almonds through social media, orchard and processing tours, media interviews and speaking opportunities.

ALMOND LEADERSHIP PROGRAM:

The Almond Board of California offers a one-year leadership program that inspires and prepares almond community members by joining a network of leaders who meet the challenges of a changing industry. More than 150 graduates to date! Almonds.com/AlmondLeadershipProgram



CALIFORNIA ALMOND SUSTAINABILITY PROGRAM:

Tailored for the almond industry, CASP was established in 2009 to educate participants about responsible farming practices, facilitate continuous improvement and inform research priorities. It has evolved today to encompass nine educational self-assessment modules, two research-based calculators supporting on-farm decision making, and regional workshops featuring expert lectures and peer-to-peer sharing.

In addition to the direct benefits to participants, collective information from the program contributes to telling the story of how California almonds are grown.



RESEARCH-BASED RESOURCES



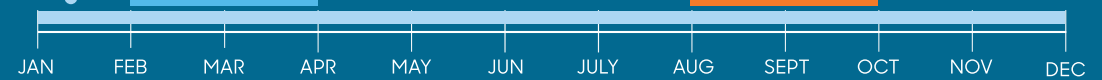
PRODUCE SAFETY TOOLKIT
FSMA produce safety guide for almond growers. Almonds.com/FSMA



ALMOND IRRIGATION IMPROVEMENT CONTINUUM
Tools for growers to understand and implement the fundamentals of irrigation management. Almonds.com/Irrigation



STOCKPILE MANAGEMENT
Best practices for stockpile management to prevent contamination. Almonds.com/StockpileManagement



HONEY BEE BEST MANAGEMENT PRACTICES
Field-level guidelines for maintaining a healthy crop and healthy pollinators. Almonds.com/BeeBMPs



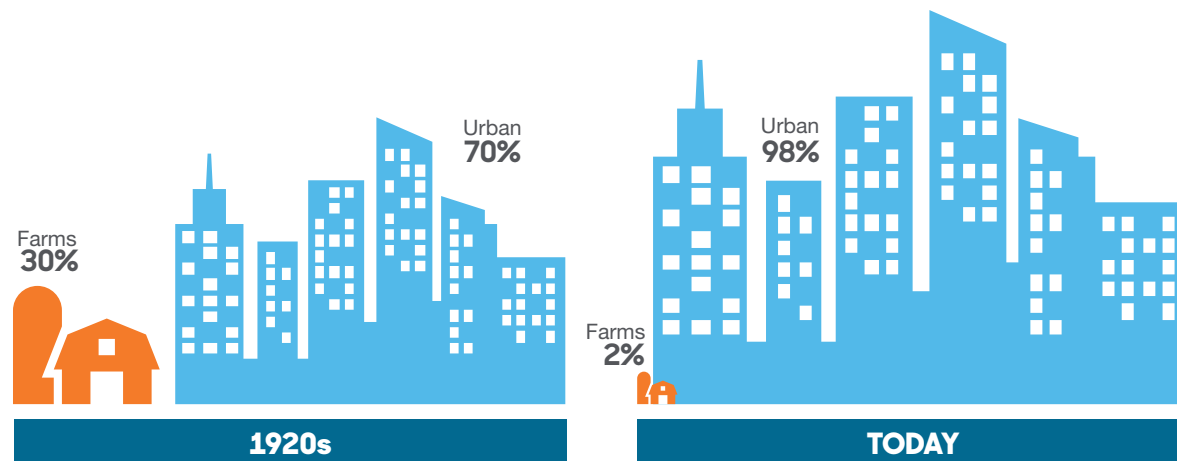
MANAGING DUST AT HARVEST
Considerations in preparing for and during almond harvest to improve local air quality. Almonds.com/HarvestDust

THE ALMOND CONFERENCE
Must-attend event for all involved in the almond industry. Discover how we grow our orchards, our industry and our future. AlmondConference.com



These resources and more can be found on Almonds.com/Growers and Almonds.com/Processors

Connecting Farm to Fork



A century ago, 30% of Americans lived on farms.
Today it's less than 2%.

This shift has decreased awareness of agriculture, but recent trends are motivating consumers to reconnect with their food. In fact, 73% of U.S. consumers surveyed want to learn more about how almonds are grown!

While health and versatility are core to consumers' love of almonds, sharing the responsible practices used to produce them is a key opportunity. With many consumers unaware that almonds grow on trees, sharing the basics of the annual almond lifecycle helps build trust and credibility.



TELLING OUR STORY

This summer, ABC launched a new section on its website providing visitors a place to learn about the almond community's work in the orchard and beyond. Visit the new site today at Almonds.com/GrowingGood.



Did You Know?

2018 marks year two of *Growing Good*, ABC's annual sustainability publication.



WANT TO HELP SPREAD THE WORD? FOLLOW @ALMONDBOARD ON TWITTER FOR THE LATEST.

1. Consumer Sustainability Tracker, Sterling-Rice Group, June 2018.

Global Market Overview

The Almond Board of California is charged with identifying the markets across the globe that will provide the greatest return on investment to the almond industry. We then develop and execute marketing campaigns to build demand in those regions.



Building Demand in 2018

THREE NEW MARKETS LAUNCHED
 Mexico, Japan and Italy

THREE NEW ADVERTISING CAMPAIGNS LAUNCHED
 U.S., Mexico and Italy

FIVE MARKETS WITH OVER 10% GROWTH IN SHIPMENTS
 China/Hong Kong +16%, India +19%, Italy +18%, Japan +11%, Mexico +20%

14.3 BILLION IMPRESSIONS EARNED BY MARKETING PROGRAMS GLOBALLY

ALMONDS: A SNACK FIT FOR A ROYAL

The royal wedding was one of the most buzzed about events of 2018—not just in the UK, but around the world. So when duchess-to-be Meghan Markle cited almonds as one of her go-to foods, ABC public relations teams wasted no time in capitalizing on the opportunity to share this story. Coverage appeared in the UK, U.S., Canada, Mexico and India, totalling more than 25 million impressions!

RECORD YEAR: SHIPMENTS IN THE U.S. WERE AT 735 MILLION POUNDS VS. 676 MILLION POUNDS IN FY 2016/17.

SHIPMENTS TO CANADA ROSE BY 2.8 MILLION POUNDS TO 58.3 MILLION VS. 55.5 MILLION IN FY 2016/17.



United States

Active Since 1999
FY 2017/18: 735 Million Pounds

REACHING AND IMPACTING CONSUMERS IN A CROWDED SPACE

The U.S. is one of the most cluttered and fast-paced media markets in the world. For almonds to stand out as the perfect snack, marketing programs focus on surrounding busy consumers throughout the day, wherever they are, when they're in the mindset for a healthy snack to tide them over until their next meal.

Market Summary

Reaching: Consumers, Health Professionals, Food Professionals



Canada

Active Since 1999
FY 2017/18: 58 Million Pounds

REACHING BUSY CONSUMERS

Much like we see in the U. S., for almonds to stand out as the perfect snack, marketing programs focus on surrounding busy consumers throughout the day, wherever they are, when they're in the mindset for a healthy snack to tide them over until their next meal.

Market Summary

Reaching: Consumers, Health Professionals, Food Professionals



LAUNCHED A NEW INTEGRATED MARKETING CAMPAIGN: Encouraged consumers to snack on almonds to help them “Own Your Everyday, Every Day.”



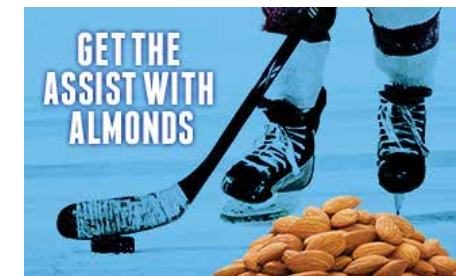
FOOTBALL: Leveraged football season for wide reach among our male target to choose almonds as a snack.



ALMOND MILK: Conducted integrated marketing about the versatility and benefits of almond milk.

SUSTAINABILITY STORY: Continued to share the story of the almond community's commitment to continuous improvement.

LAUNCHED NEW ADVERTISING CAMPAIGN: New advertising targeted to health professionals. The campaign was adapted from the new consumer campaign.



LEVERAGING THE U.S. PROGRAM: Adapted the new U.S. campaign for a very similar Canadian consumer. The new campaign encouraged the target to snack on almonds to “Own Your Everyday, Every Day.”

HOCKEY: Leveraged hockey season in Canada for wide reach as the campaign launched.



Mexico

Active Since 2018
FY 2017/18: 22 Million Pounds

APPEALING TO AMBITIOUS WEEKDAY WARRIORS

Our consumer insight in Mexico was that almonds' attributes match those that busy, successful, urban consumers want in a weekday snack when they're juggling many priorities and need to stay focused. Almond Board's integrated marketing program launched in April to reach these targeted consumers.

Market Summary

Reaching: Consumers, Health Professionals



“IPONTE ALMENDRA!” CAMPAIGN LAUNCH: Launched the Almond Board's first marketing presence with an integrated campaign, “iPonte Almendra!” with advertising, a media roundtable and deliveries to influential health professionals.

LIFESTYLE INFLUENCERS: Partnered with healthy lifestyle Instagram influencers to show how almonds are relevant to the targets' lives.



ALMONDS WERE THE #1 NUT IN NEW PRODUCT INTRODUCTIONS IN EUROPE FOR THE THIRD YEAR IN A ROW.¹



Europe

UK, FRANCE, GERMANY AND ITALY

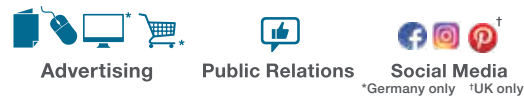
Active Since 2008
FY 2017/18: 583 Million Pounds

STAYING AHEAD OF EVOLVING SNACK CULTURE

Consumers are demanding more from their snacks. Tastes good and good for me are no longer enough. Good for the planet is just as important. Our marketing campaigns show customers across the UK, France, Germany and Italy how almonds check all the boxes and fit seamlessly into their daily snacking routines.

Market Summary

Reaching: Consumers, Health Professionals, Food Professionals



UK

SNACKING GOOD

FIT FOR A "PRINCESS": ABC capitalized on an insight that Meghan Markle snacks on almonds for their health and beauty benefits and the UK team developed a story that went global.



A BLOOMING BEAUTIFUL SNACK: To spread the word of how almonds are grown, the team in the UK worked with food artists to bring our sustainability story to life. A specific focus of the campaign was the industry's commitment to honey bee health.

1. Innova Market Insights, Global New Product Database, 2016.
2. 2017 Consumer Attitudes, Awareness and Usage (AAU) Study, Sterling-Rice Group.



France

NATURE DOES THINGS WELL

GOOD FOR ME, GOOD FOR THE PLANET:

The team in France leveraged its Nature Does Things Well ad campaign by taking six leading consumer media and influencers to a California almond orchard. They witnessed the industry's commitment to responsible farming practices firsthand and shared what they learned via social and earned media.

IN FRANCE, SIGNIFICANT GROWTH IN TOP-OF-MIND AWARENESS: Since launching our snacking strategy in France, top-of-mind awareness has gone from 1% to 29% among consumers²



Germany

SNACK THE CALIFORNIA SUN

HARNESSING THE POWER OF CALIFORNIA'S SUN: First-ever advertising campaign launched in October 2017. Impactful messaging showcases almonds as a "rich yet light energy-giving snack." The campaign includes breakthrough TV, print, digital, in-store and social.

STRONG HERITAGE: With Germany's strong heritage of baking and marzipan the goal is to grow demand for almonds as a snack.

ALMONDS #2 SNACK: Almonds have risen to the #2 position in snack nut consumption frequency, edging out walnuts and hazelnuts, while gaining on peanuts.



Italy

ENERGY TO RECHARGE

ENERGY TO RECHARGE CAMPAIGN LAUNCHED: ABC entered the Italian market in 2018. The integrated campaign launched in October 2018 and includes TV and digital advertising, PR and social media.

LEVERAGING HEALTH PROFESSIONAL INFLUENCERS: We partnered with the Italian Dietetic Association, ANDID, to help educate consumers and health professionals about the health benefits of almonds. Health professionals are an important influencer audience in Italy as many Italians look to them for nutritional advice.



SHIPMENTS TO INDIA GREW 20% IN FY 2016/17, REACHING 200 MILLION POUNDS.

CHINA/HONG KONG SHIPMENTS ACHIEVED RECORD HIGH, OVER 16% GROWTH COMPARED TO FY 2016/17.



India

Active since 2010
FY 2017/18: 200 million pounds

IMPORTANT ALMOND MARKET WITH STRONG TRADITIONAL CONSUMPTION

Rooted in tradition, almonds are a significant part of the Indian culture. While this continues to be a key focus of our marketing communications, we're building on the opportunity to grow new consumption occasions.

Market Summary

Reaching: Consumers, Trade



Advertising



Public Relations



FAMILY CONSUMPTION CAMPAIGN:

Leveraging tradition and the beliefs consumers have of almonds, ABC aired a family consumption TV advertising campaign. The campaign aims to celebrate traditional consumption as well as educate consumers on additional health benefits of almonds, giving them more reasons to believe.

FESTIVAL CAMPAIGN: This TV advertising campaign celebrates the strength of relationships expressed through the kind of gifts given to loved ones. The campaign aims to further increase the gifting of almonds during the festive season while positioning almonds as the gift of good health.

HEART-HEALTH BENEFITS: The ABC team leveraged the findings of an ABC-funded heart-health meta analysis conducted in India. ABC distributed a press release and conducted media interviews to share the outcome of the meta analysis. This work resulted in 39 million impressions.

REACHING COLLEGE STUDENTS: To increase almond consumption among young people, ABC worked with nutritionists to present almond nutritional information at seven different universities. In addition, the nutritionists were interviewed by key media, resulting in 6.7 million media impressions.

AWARENESS OF ALMONDS GREW SHARPLY¹: In five years, India's top-of-mind awareness of almonds jumped 14% from 31% (2011) to 45% (2016), with an additional 12% jump from 2016 to 2017.

1. 2017 Global Perceptions Study, Sterling-Rice Group.



China

Active since 1999
FY 2017/18: 170 million pounds

DIFFERENTIATING ALMONDS THROUGH BEAUTY

The modern Chinese woman is the power behind China's booming economy, and she's going nuts for beauty. By leveraging the California origin and vitamin E story, we are able to differentiate almonds from the competition by topping her beauty wish list.

Market Summary

Reaching: Consumers, Food Professionals



Advertising



Public Relations



Social Media



Nutritionist Komal Patel gives a talk on the importance of healthy living



In an interactive session at Department of Life Science, Gujarat University, renowned nutritionist Komal Patel spoke to students about the importance of healthy living in today's fast paced life. During the talk, she highlighted the importance of incorporating small changes in your life like eating a handful of almonds every day and working out regularly to help maintain a healthy life. She also went on to explain how

heart.
A handful of almonds are a convenient, on-the-go snack that can be eaten anywhere, at any time of the day. Carry these nuts with you in your college backpack to munch on between classes or keep them on your desk to nibble on while studying.
Speaking at the event, Komal Patel said, "As it has become increasingly difficult to keep up with our



FOLLOW THE SUNSHINE: This campaign, now in its second year, aims to educate consumers on the Badanmu name and the California origin of almonds. ABC partnered with six different retail brands, executed three waves of the campaign, resulting in more than 460 million impressions.



SKIN BEAUTY IS A KEY DIFFERENTIATOR: Skin beauty continues to be a key differentiator for almonds in China. Our campaign in China brings this connection to life through TV, digital, social media and PR programs.



TRADE EDUCATION: Two rounds of trade roundtables were held in Shanghai, where ABC staff was able to educate and share information about almonds.



2018 CHINESE NEW YEAR: An integrated marketing campaign provided ABC a uniquely meaningful role during this important holiday to make almonds a top-of-mind snack. The campaign was featured on the #1 e-commerce platform, Tmall.

South Korea

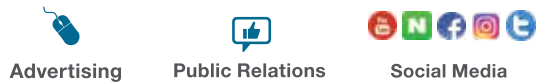
Active since 2011
FY 2017/18: 51 million pounds

ALMONDS, MY BEAUTY SECRET

While the popularity of almonds has increased, there is still room to educate consumers around specific almond benefits to differentiate them from other products. With beauty benefits in foods becoming more important to Korean women, it is critical to strengthen the linkage of almonds as a beauty snack by sharing the vitamin E content and weight-management benefits.

Market Summary

Reaching: Consumers



THIRD CONSECUTIVE YEAR: The South Korean market continued the momentum behind its successful “Almonds, My Beauty Secret” campaign to educate consumers on the vitamin E and weight-management attributes almonds provide.

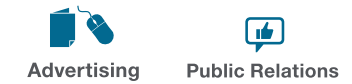
BEAUTY INFLUENCERS: Partnered with five prominent beauty influencers to create six videos sharing why they use almonds in their beauty routine. The campaign resulted in 4.9 million impressions and 1.8 million video views.

Trade Marketing + Stewardship

ALMONDS AS AN INGREDIENT STILL GOING STRONG

Program Summary

Active since 2002
Reaching: Food Professionals



ALMONDS INSPIRE PRODUCT DEVELOPERS AROUND THE WORLD:

The trade program educates and inspires snack product and chocolate manufacturers to drive more almond inclusion in new and existing products. One of the key platforms for reaching this target is through trade shows where ABC showcases aspirational and innovative almond prototypes as well as conducts one-on-one meetings with food professionals. The ABC trade stewardship program is active in Europe, Asia and North America.



Japan

Program Relaunch: 2018
FY 2017/18: 79 million pounds

ABC MARKET RELAUNCH WITH “E NE! ALMONDS” CAMPAIGN

Since ABC’s return to the Japanese market in 2018, the focus has been on building relationships with manufacturers and suppliers to inspire almond usage via our industry knowledge and consumer research. In addition, media outreach sharing our new “E Ne! Almonds” campaign reinforces vitamin E benefits of almonds to customers.

Market Summary

Reaching: Consumers, Trade



“E NE! ALMONDS” CAMPAIGN LAUNCH:

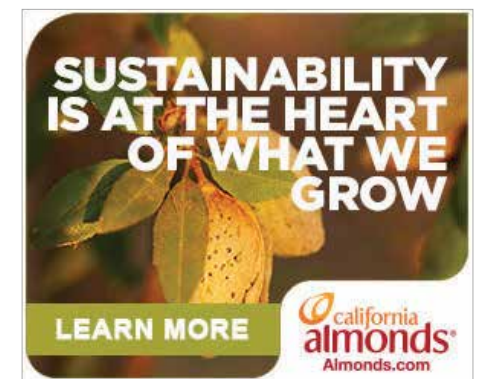
ABC reentered the Japanese market with a media relations campaign to reinforce the vitamin E in almonds. The campaign started in February 2018.

ANNOUNCEMENT REESTABLISHING ABC:

ABC hosted a booth at FOOD EX Japan 2018, Japan’s largest food show, to announce ABC’s reentrance in Japan. 800 food professionals visited the ABC booth. In addition, Almond Board President and CEO, Richard Waycott, was invited to the Japan Nut Association (JNA) Annual Meeting as a guest speaker to educate the trade on the almond market.

TRANSPARENCY IN SUSTAINABILITY:

For large and small brands alike, articulating a sustainability story is of growing importance to them and to their consumers. In 2018, ABC proactively reached out to the food manufacturing industry to educate them about the almond industry’s commitment to continuous improvement and programs and resources supporting that journey. This initiative generated interest from manufacturers wanting to learn more and garnered positive attention from trade media sources.



ALMOND FORMS DRIVE INNOVATION:

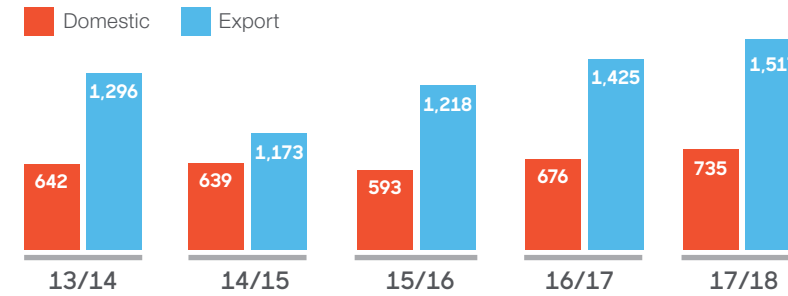
The versatility of almonds in their many forms has made them an ideal ingredient across a range of categories to create new products that meet consumer desires for plant-based, clean-label, gluten-free and dairy-free products.



World Destinations crop years 2013/14–2017/18 | million pounds

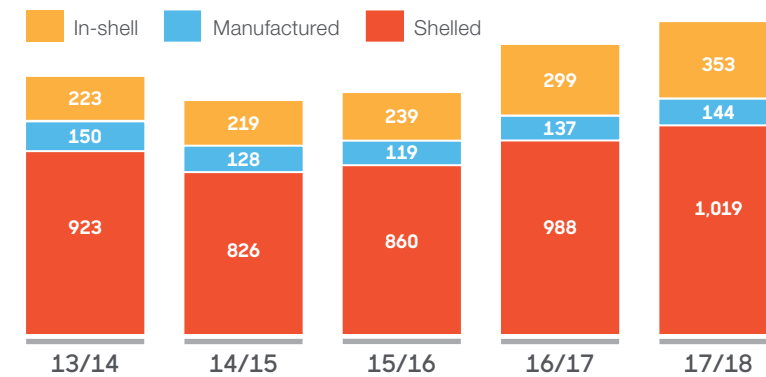
Destination	2017/18	2016/17	2015/16	2014/15	2013/14	
Americas						
North America	Canada	58.30	55.51	44.65	38.78	40.67
	Mexico	22.17	18.47	17.42	16.60	14.53
	TOTAL NORTH AMERICA	80.50	74.00	62.12	55.48	55.20
Latin America/Caribbean	Argentina	2.31	1.64	0.51	0.97	1.21
	Brazil	3.81	2.67	1.24	2.07	4.03
	Chile	6.50	7.27	3.93	7.65	10.06
	Colombia	3.44	2.25	1.75	1.88	1.80
	Costa Rica	0.81	0.66	0.69	0.43	0.00
	Peru	2.11	1.81	0.97	1.06	1.42
	Trinidad	0.69	0.38	0.56	0.51	0.62
		TOTAL LATIN AMERICA/CARIBBEAN	20.88	17.35	10.36	15.58
	TOTAL AMERICAS	101.38	91.34	72.48	71.05	76.27
Asia-Pacific						
Northeast Asia	China/Hong Kong	169.78	150.77	141.66	128.13	144.82
	Japan	78.80	71.15	61.31	65.87	75.85
	South Korea	50.84	54.45	46.23	53.48	53.50
	Taiwan	9.61	11.46	9.33	10.93	12.69
	TOTAL NORTHEAST ASIA	309.04	287.93	258.53	258.41	286.86
Southeast Asia	Indonesia	3.38	2.63	2.81	2.68	2.14
	Malaysia	7.02	5.62	6.37	4.16	5.96
	Singapore	4.08	3.57	3.33	3.65	3.50
	Thailand	5.19	3.97	4.12	4.00	4.15
	TOTAL SOUTHEAST ASIA	75.35	59.15	39.25	33.53	34.40
South/Central Asia	Afghanistan	1.38	0.00	0.00	0.00	0.00
	India	199.52	167.08	126.45	123.69	102.16
	Kazakhstan	7.77	0.00	0.26	0.59	0.31
	Pakistan	11.82	20.80	12.81	2.64	2.62
	TOTAL SOUTH/CENTRAL ASIA	221.83	193.44	140.10	127.01	105.44
Australasia/Oceania	Australia	3.82	3.54	2.77	4.54	4.01
	New Zealand	3.36	3.29	3.80	4.02	3.34
	TOTAL AUSTRALASIA/OCEANIA	7.22	6.84	6.58	8.56	7.34
	TOTAL ASIA-PACIFIC	613.45	547.36	444.45	427.52	434.04
Europe						
Western Europe	Belgium	20.76	19.50	20.12	19.91	20.78
	Denmark	8.23	7.42	7.28	8.24	9.06
	France	29.21	27.83	23.25	20.12	23.03
	Germany	134.33	130.21	102.81	122.15	126.82
	Greece	10.27	9.02	7.80	7.02	8.97
	Ireland	0.60	0.55	0.71	1.77	0.13
	Italy	68.38	58.14	57.72	42.52	53.47
	Netherlands	52.04	51.51	46.84	43.26	45.34
	Norway	6.43	5.44	6.56	5.41	4.48
	Portugal	2.46	1.77	1.43	1.34	2.39
	Spain	203.36	210.63	201.10	153.06	193.40
	Sweden	7.31	5.66	6.70	6.24	6.68
	Switzerland	4.82	3.60	7.90	6.82	8.60
	United Kingdom	34.08	34.37	32.45	29.18	27.86
	TOTAL WESTERN EUROPE	583.04	566.45	523.31	468.04	532.32
Central/Eastern Europe	Bulgaria	2.19	2.11	1.86	2.09	2.94
	Croatia	2.15	1.87	1.13	1.59	1.62
	Czech Republic	1.84	2.11	1.41	2.32	2.70
	Estonia	11.45	6.28	3.85	1.81	1.41
	Latvia	5.52	1.55	0.62	1.15	1.95
	Lithuania	4.22	3.23	1.80	3.41	4.15
	Poland	3.83	2.93	1.82	1.53	1.89
	Romania	0.71	1.10	0.67	0.48	0.00
	Russia	1.34	1.15	0.44	0.93	32.51
	Ukraine	1.75	0.77	0.53	0.63	2.17
	TOTAL CENTRAL/EASTERN EUROPE	36.91	25.65	15.97	18.83	55.48
	TOTAL EUROPE	619.95	592.10	539.28	486.87	587.80
Middle East/Africa						
Middle East	Bahrain	1.50	1.15	0.94	0.69	1.03
	Cyprus	1.21	1.12	1.06	0.95	1.29
	Iraq	0.96	0.00	0.50	0.00	2.38
	Israel	8.75	10.49	8.72	7.14	6.35
	Jordan	9.49	10.17	8.60	6.43	8.51
	Kuwait	3.72	4.27	3.62	2.88	2.48
	Lebanon	6.35	5.46	6.76	4.86	5.15
	Qatar	2.10	0.00	0.39	0.62	0.26
	Saudi Arabia	14.74	20.83	14.19	13.54	14.27
	Turkey	51.74	53.46	37.15	36.59	52.70
	United Arab Emirates	63.54	64.37	57.32	98.07	86.08
	TOTAL MIDDLE EAST	164.28	173.59	139.37	171.87	178.16
North Africa	Algeria	5.28	9.93	8.33	6.02	6.40
	Egypt	2.25	1.91	5.73	3.27	3.98
	Morocco	3.66	0.00	0.01	0.00	0.00
	TOTAL NORTH AFRICA	11.84	14.58	17.74	10.87	13.82
Sub-Saharan Africa	South Africa	5.68	5.57	4.47	4.77	5.05
		TOTAL SUB-SAHARAN AFRICA	5.89	5.87	4.73	4.95
	TOTAL MIDDLE EAST/AFRICA	182.01	194.04	161.83	187.69	197.45
Total Shipments						
	Total Export Shipments	1,516.79	1,424.83	1,218.05	1,173.14	1,295.57
	Total U.S. Shipments	734.73	675.96	593.19	639.40	641.81
	TOTAL GLOBAL SHIPMENTS	2,251.52	2,100.79	1,811.24	1,812.53	1,937.38

Domestic + Export Shipments crop years 2013/14–2017/18 | million pounds



Source: Almond Board of California.

Export Shipments by Product Type crop years 2013/14–2017/18 | million pounds



Source: Almond Board of California.

Top Global Destinations crop year 2017/18 | million pounds



Source: Almond Board of California, July 2018 Position Report.

Shipments by Region

crop year 2017/18

36%
North America

27%
Asia-Pacific

26%
Western Europe

11%
Other*

Source: Almond Board of California.
*Middle East/Africa, Central/Eastern Europe and Latin America
Note: Totals may not add precisely due to rounding.

Position Report of California Almonds

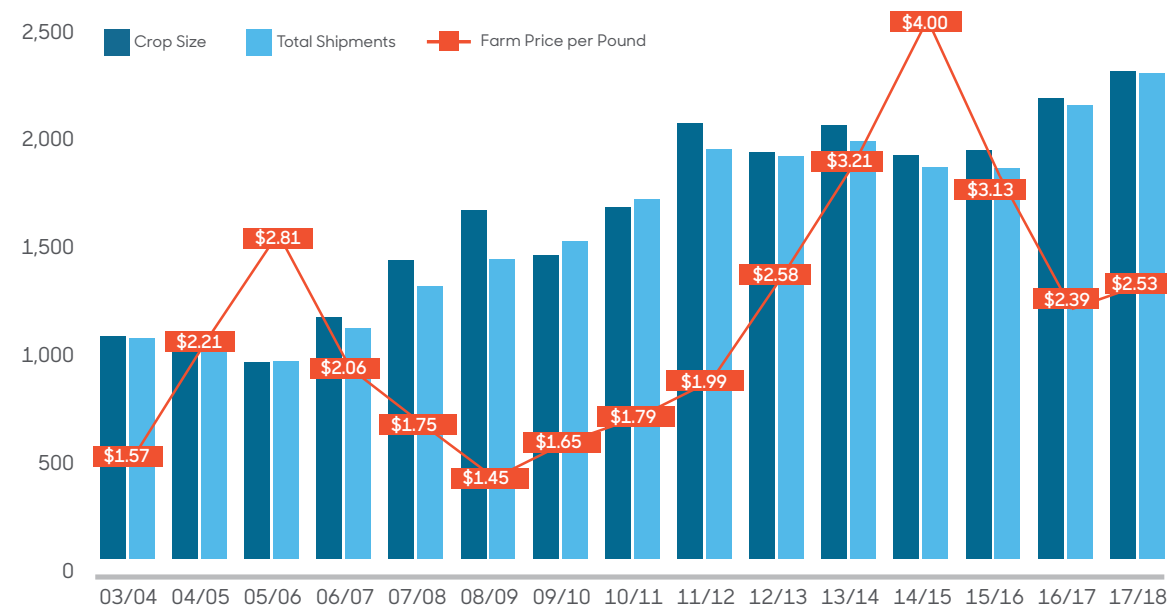
crop years 1999/00–2018/19* | million pounds

CROP YEAR	REDETERMINED MARKETABLE WEIGHT	CARRY-IN	RESERVE	TOTAL SALABLE SUPPLY	DOMESTIC SHIPMENTS	EXPORT SHIPMENTS	TOTAL SHIPMENTS	SALABLE CARRYOVER
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	1,848.4	335.2	N/A	2,183.6	588.4	1,278.0	1,866.5	317.2
2013/14	1,970.0	317.2	N/A	2,287.2	641.8	1,295.6	1,937.4	350.6
2014/15	1,838.6	350.6	N/A	2,189.2	639.4	1,173.1	1,812.5	376.6
2015/16	1,846.6	376.6	N/A	2,223.2	593.2	1,218.0	1,811.2	412.0
2016/17	2,087.4	412.0	N/A	2,499.4	676.0	1,425.0	2,101.0	398.7
2017/18	2,211.9	398.7	N/A	2,610.6	734.7	1,516.8	2,251.5	359.0
2018/19*	2,401.0	359.0	N/A	2,760.0	792.0	1,608.0	2,400.0	360.0

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

Historical Crop Size + Shipments vs. Farm Price

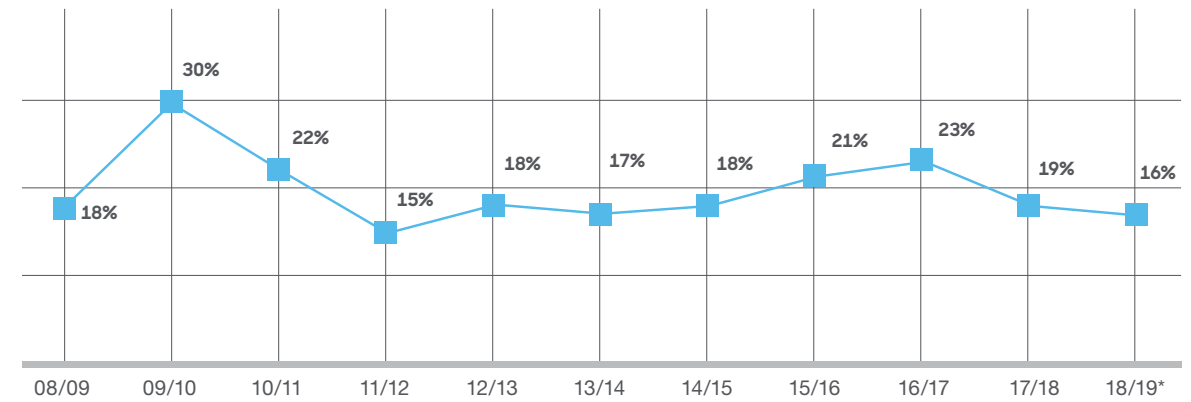
crop years 2003/04–2017/18 | million pounds



Sources: Almond Board of California; USDA, NASS/PRO.

Carry-In as a Percentage of Prior Year Shipments

crop years 2008/09–2018/19*



Source: Almond Board of California. *Forecasted.

California Almond Crop Estimates vs. Actual Receipts

crop years 1999/00–2018/19* | million pounds

CROP YEAR	OBJECTIVE FORECAST	HANDLER RECEIPTS	LOSS AND EXEMPT	REDETERMINED MARKETABLE WEIGHT	LBS. REJECTS IN RECEIPTS
1999/00	830	829.9	34.4	795.5	9.3
2000/01	640	698.4	26.0	672.4	15.7
2001/02	850	824.1	29.3	794.8	16.7
2002/03	980	1,083.7	20.2	1,063.5	8.2
2003/04	1,000	1,032.9	21.8	1,011.1	19.8
2004/05	1,080	998.0	25.2	972.8	14.5
2005/06	880	911.7	23.0	888.7	16.0
2006/07	1,050	1,116.7	28.9	1,087.8	24.0
2007/08	1,330	1,383.0	24.7	1,358.3	17.2
2008/09	1,500	1,614.6	42.7	1,571.9	13.9
2009/10	1,350	1,405.9	26.9	1,379.0	19.6
2010/11	1,650	1,628.2	27.9	1,600.3	18.1
2011/12	1,950	2,020.4	40.5	1,979.9	16.1
2012/13	2,100	1,884.0	35.6	1,848.4	23.1
2013/14	1,850	2,009.7	39.0	1,970.7	21.0
2014/15	2,100	1,867.9	29.3	1,838.6	23.4
2015/16	1,800	1,894.4	47.8	1,846.6	25.3
2016/17	2,050	2,135.7	48.3	2,087.4	26.0
2017/18	2,250	2,260.5	48.6	2,211.9	54.8
2018/19*	2,450	†	49.0	2,401.0	†

Source: Almond Board of California. Objective Forecast provided by USDA, NASS California Field Office. *Estimated. †Not available at time of publication.

California Almond Acreage + Farm Value

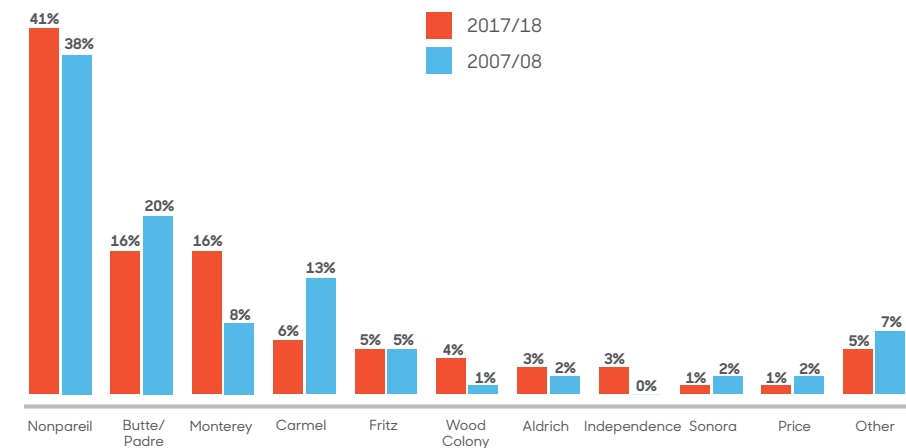
crop years 2008/09–2018/19*

CROP YEAR	ACREAGE			FIRST YEAR PLANTINGS	AVERAGE TREES PER ACRE	YIELD		VALUE IN DOLLARS		
	BEARING	NON-BEARING	TOTAL			BEARING ACRE YIELD (LBS.)	PRODUCTION* (MILLION LBS.)	FARM PRICE	FARM VALUE (\$1,000)	VALUE PER BEARING ACRE
2008/09	710,000	115,000	825,000	34,222	107	2,300	1,615	\$1.45	\$2,343,200	\$3,300
2009/10	750,000	90,000	840,000	30,634	108	1,880	1,406	\$1.65	\$2,293,500	\$3,058
2010/11	770,000	85,000	855,000	26,500	108	2,130	1,628	\$1.79	\$2,903,380	\$3,771
2011/12	800,000	75,000	875,000	29,560	111	2,540	2,020	\$1.99	\$4,007,860	\$5,010
2012/13	820,000	110,000	930,000	25,197	112	2,300	1,884	\$2.58	\$4,816,860	\$5,874
2013/14	850,000	120,000	970,000	26,846	112	2,360	2,010	\$3.21	\$6,384,690	\$7,511
2014/15	870,000	170,000	1,040,000	30,386	114	2,150	1,868	\$4.00	\$7,388,000	\$8,492
2015/16	920,000	240,000	1,160,000	34,124	114	2,070	1,894	\$3.13	\$5,868,750	\$6,379
2016/17	940,000	300,000	1,240,000	27,079	116	2,280	2,136	\$2.39	\$5,052,460	\$5,375
2017/18	1,000,000	330,000	1,330,000	22,722	117	2,270	2,260	\$2.53	\$5,603,950	\$5,604
2018/19†	1,070,000	‡	‡	‡	119	2,290	2,450	\$	\$	\$

Source: USDA, NASS/PRO. Note: Almond Board does not track prices. *Production numbers provided by Almond Board of California. †Estimated as of July 5, 2018. ‡Acreage statistics will be available in April 2019. §Value statistics will be available in July 2019. First year plantings figures have been revised since initial publication.

Top Ten Almond-Producing Varieties

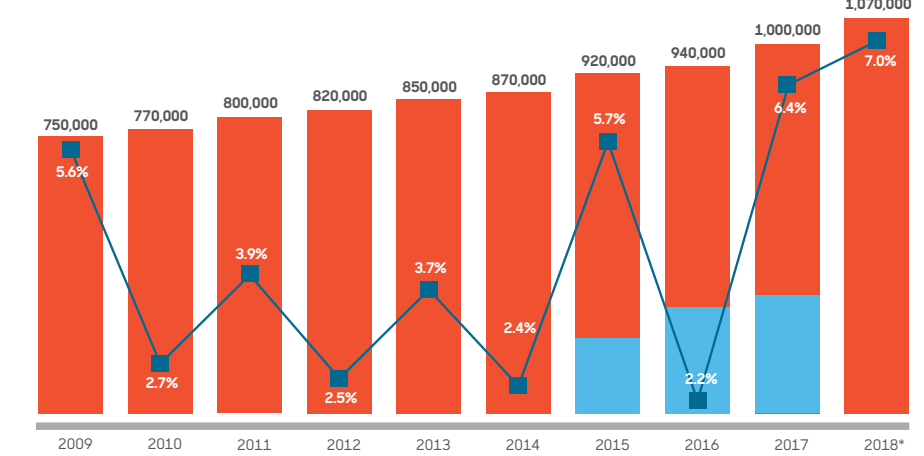
crop years 2007/08 vs. 2017/18



Source: USDA Incoming Receipts. Note: The varieties Butte, Padre and Butte/Padre are combined under Butte/Padre.

California Almond Acreage

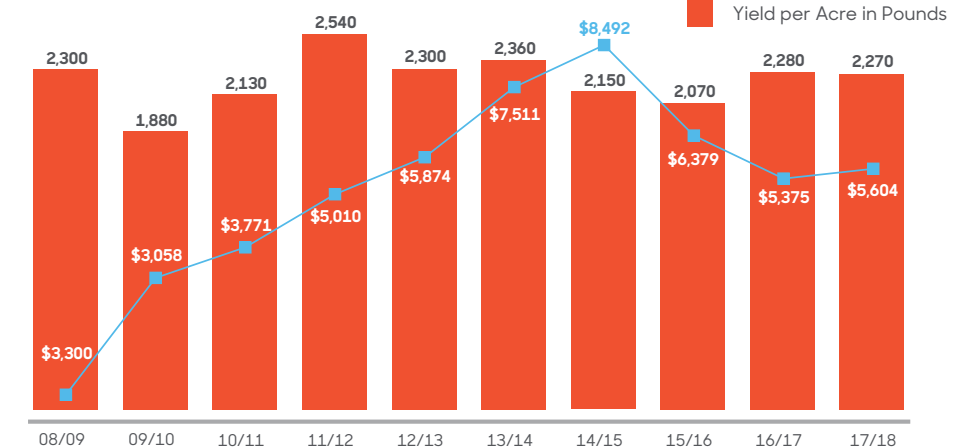
crop years 2009–2018*



Source: USDA, NASS/PRO 2017 Acreage Report. *Estimate; non-bearing Acreage Report available in April 2019.

Crop Value + Yield per Bearing Acre

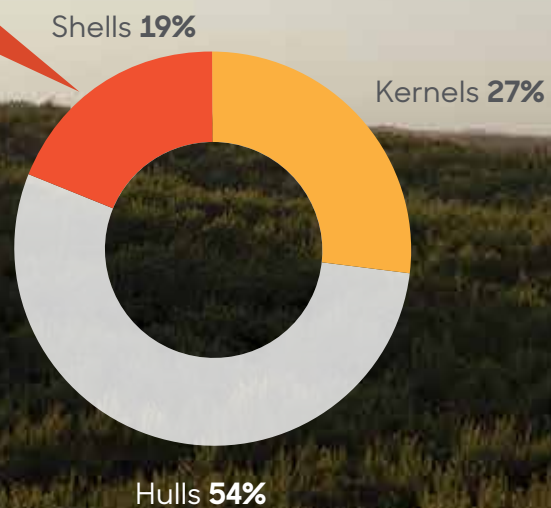
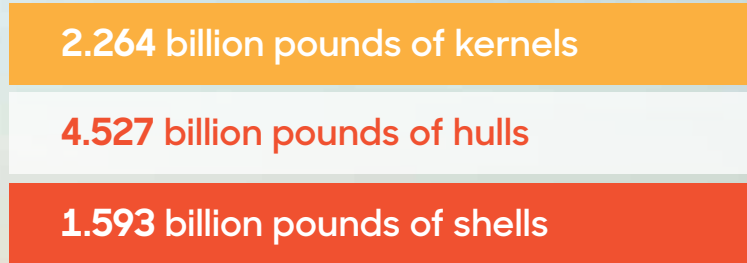
crop years 2008/09–2017/18



Source: USDA, NASS/PRO 2017 Acreage Report.



crop year 2017/18
Almond Tree Fruit Weight



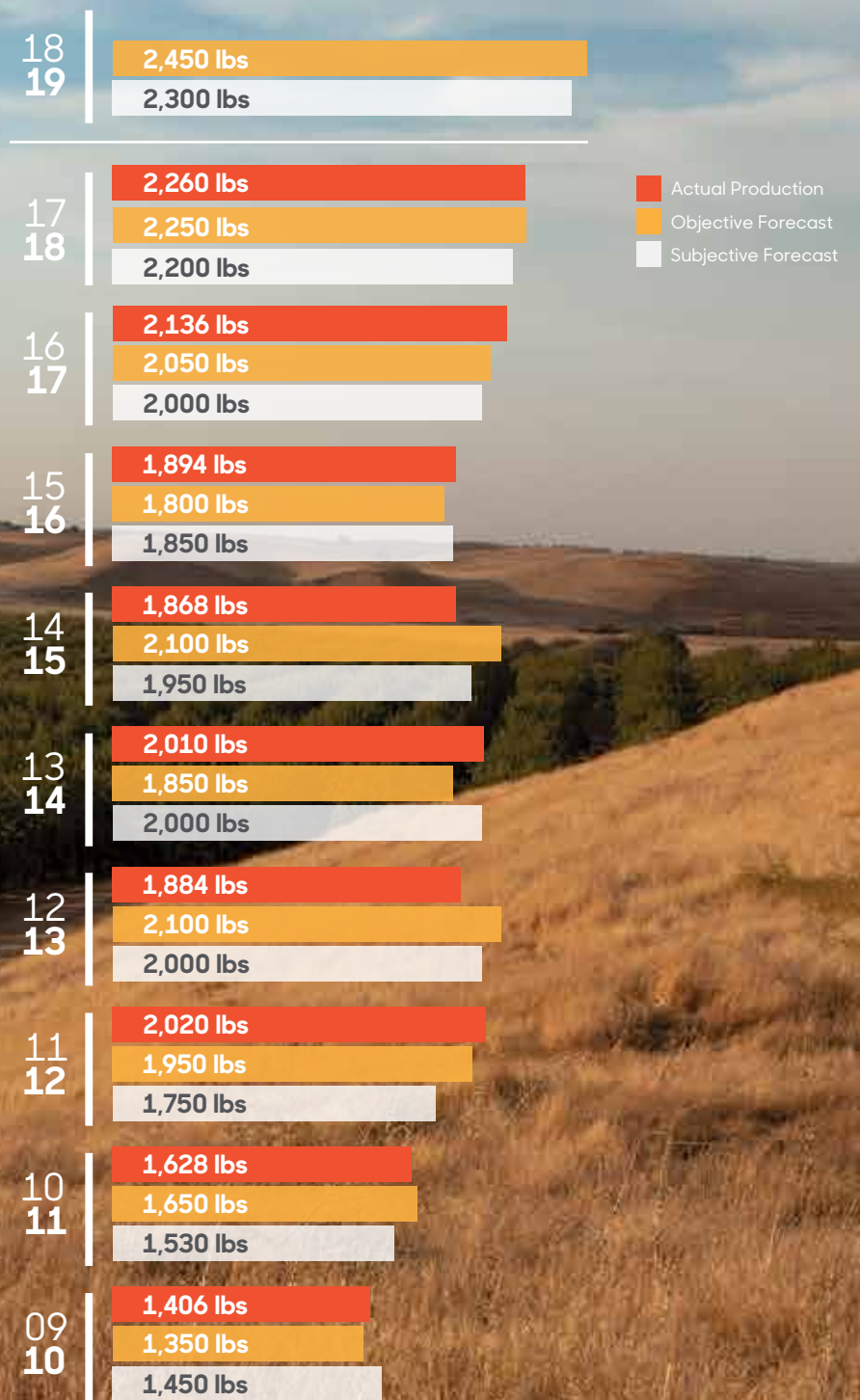
Source: Kernel Weight—USDA Incomings received by Almond Board of California. Shell and Hull Estimations—Almond Alliance of California. August 2018.

The California almond industry generates **104,000 jobs** across California and **contributes \$11 billion to the state's GDP.**

Source: University of California, Agricultural Issues Center. The Economic Impact of the California Almond Industry. December 2014.

crop years 2009/10–2018/19 | million pounds

California Almond Forecasts vs. Actual Production



Source: Almond Board of California, USDA-NASS California Field Office.

California Almond Production by County

crop years 2007/08–2017/18 | million pounds

COUNTY GROWING REGIONS

CROP YEAR	NORTHERN						CENTRAL				SOUTHERN				TOTAL		
	BUTTE	COLUSA	GLENN	SOLANO	SUTTER	TEHAMA	YOLO	MERCED	SAN JOAQUIN	STANISLAUS	FRESNO	KERN	KINGS	MADERA		TULARE	ALL OTHERS
2007/08	66.7	66.2	51.8	4.3	5.6	11.4	10.0	172.9	75.2	223.3	253.8	271.0	17.9	125.3	26.7	1.4	1,383.6
2008/09	56.9	86.0	48.6	4.1	5.3	9.7	10.4	187.3	82.1	240.6	322.2	354.3	23.4	142.7	36.2	1.0	1,611.0
2009/10	49.2	75.7	52.7	3.7	5.2	10.9	12.4	156.7	70.7	198.8	281.9	317.9	20.6	112.3	32.6	1.2	1,402.6
2010/11	47.1	83.0	55.8	4.4	4.9	11.7	13.6	164.2	68.0	202.5	344.2	403.5	29.9	149.7	42.4	1.6	1,626.6
2011/12	49.0	85.5	59.7	5.1	6.9	11.9	17.9	216.7	87.9	269.7	443.0	472.6	39.0	206.1	44.5	1.6	2,017.2
2012/13	50.9	85.1	57.9	5.4	7.0	12.5	18.1	201.4	91.5	261.8	413.6	393.4	30.7	203.5	49.1	2.1	1,884.1
2013/14	56.0	103.6	69.7	6.0	7.3	14.7	22.5	213.8	95.9	284.9	398.1	427.2	32.6	216.9	55.8	1.9	2,006.9
2014/15	55.2	90.2	58.7	5.1	7.7	13.3	18.1	198.2	94.3	274.4	370.5	390.3	31.9	202.9	57.0	1.9	1,869.7
2015/16	57.4	109.7	75.4	6.0	7.4	16.0	27.3	188.7	97.2	260.7	376.5	366.1	32.4	215.2	53.9	2.3	1,892.1
2016/17	54.3	104.0	68.9	6.2	8.3	17.4	28.0	222.3	104.9	291.0	433.2	433.2	40.3	242.6	73.9	2.1	2,130.6
2017/18	52.1	112.9	72.6	8.4	8.7	18.6	39.7	223.7	108.7	303.2	494.4	429.5	43.6	264.0	80.9	2.4	2,263.7

Source: USDA Form FV193, Report of Inedible Content of Almond Receipts.

California Almond Receipts by County + Variety

crop year 2017/18 | in pounds

COUNTIES	PERCENTAGE CROP	NONPAREIL	BUTTE/PADRE	MONTEREY	CARMEL	FRITZ	WOOD COLONY	ALL OTHERS	ALL VARIETIES
NORTHERN									
BUTTE	2.3%	22,605,258	8,433,958	3,072,727	4,500,340	637,664	332,513	12,507,087	52,089,547
COLUSA	5.0%	50,817,944	17,306,136	13,228,342	9,633,970	6,700,035	3,829,598	11,428,622	112,944,647
GLENN	3.2%	35,658,336	11,193,818	4,232,174	7,527,744	1,073,838	1,118,124	11,797,499	72,601,533
SOLANO	0.4%	3,797,379	1,312,153	693,388	439,873	7,045	93,271	2,062,835	8,405,944
SUTTER	0.4%	3,020,549	2,090,541	754,555	501,086	46,517	547,118	1,732,888	8,693,254
TEHAMA	0.8%	8,837,062	3,209,664	725,544	2,450,205	0	557,108	2,824,375	18,603,958
YOLO	1.8%	17,949,358	5,201,795	5,405,025	2,446,417	687,420	2,475,138	5,558,247	39,723,400
YUBA	0.1%	607,586	31,398	85,199	91,043	33,762	103,477	394,438	1,346,903
OTHERS	0.0%	168,914	67,322	3,047	11,101	0	0	185,873	436,257
TOTAL:	13.9%	143,462,386	48,846,785	28,200,001	27,601,779	9,186,281	9,056,347	48,491,864	314,845,443
CENTRAL									
MERCED	9.9%	84,842,376	40,872,955	27,271,393	17,238,520	9,304,506	8,390,482	35,826,545	223,746,777
SAN JOAQUIN	4.8%	43,058,139	17,350,390	5,805,362	13,849,252	4,357,897	2,074,673	22,174,350	108,670,063
STANISLAUS	13.4%	117,108,703	48,971,073	24,483,060	35,768,875	10,503,043	10,597,664	55,785,385	303,217,803
OTHERS	0.0%	192,724	0	52,801	16,019	16,859	0	307,994	586,397
TOTAL:	28.1%	245,201,942	107,194,418	57,612,616	66,872,666	24,182,305	21,062,819	114,094,274	636,221,040
SOUTHERN									
FRESNO	21.8%	200,883,526	86,526,632	100,300,937	13,424,654	18,785,286	29,434,717	45,072,112	494,427,864
KERN	19.0%	174,578,758	70,074,186	99,381,878	9,370,011	36,977,326	8,154,362	31,000,618	429,537,139
KINGS	1.9%	15,678,551	9,503,608	9,670,219	695,828	2,117,920	591,123	5,387,851	43,645,100
MADERA	11.7%	108,571,241	40,142,032	52,062,011	12,458,773	10,411,972	10,797,929	29,574,615	264,018,573
TULARE	3.6%	33,179,242	9,674,512	18,361,238	1,371,985	5,975,333	2,236,491	10,150,369	80,949,170
OTHERS	0.0%	3,166	2,177	2,191	0	5,736	2,313	0	15,583
TOTALS:	58.0%	532,894,484	215,923,147	279,778,474	37,321,251	74,273,573	51,216,935	121,185,565	1,312,593,429
GRAND TOTAL	100.0%	921,558,812	371,964,350	365,591,091	131,795,696	107,642,159	81,336,101	283,771,703	2,263,659,912

Source: USDA Form FV193, Report of Inedible Content of Almond Receipts.
 Note: The varieties Butte, Padre and Butte/Padre are combined under Butte/Padre.
 Northern and Central subtotals have been revised since initial publication.



Did You Know?

California's Central Valley is one of the few places in the world—and only place in the U.S.—with an ideal almond-growing climate.

2017 | millions USD

California's Top Ten Valued Commodities

\$6,560 Dairy Products

\$5,790 Grapes

\$5,600 Almonds

\$3,100 Strawberries

\$2,530 Cattle, Calves

\$2,410 Lettuce

\$1,590 Walnuts

\$1,050 Tomatoes

\$1,010 Pistachios

\$939 Poultry

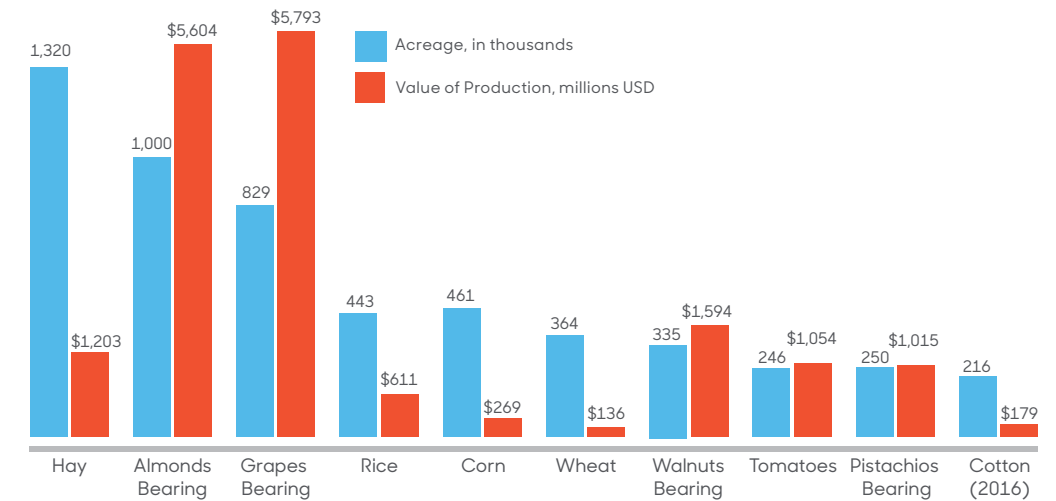
Did You Know?

California is the leading U.S. state for cash farm receipts, accounting for over 13% of the nation's total agricultural value.

Source: California Department of Food and Ag/Statistics <https://www.cdffa.ca.gov/Statistics>

Top Ten California Crop Acreage

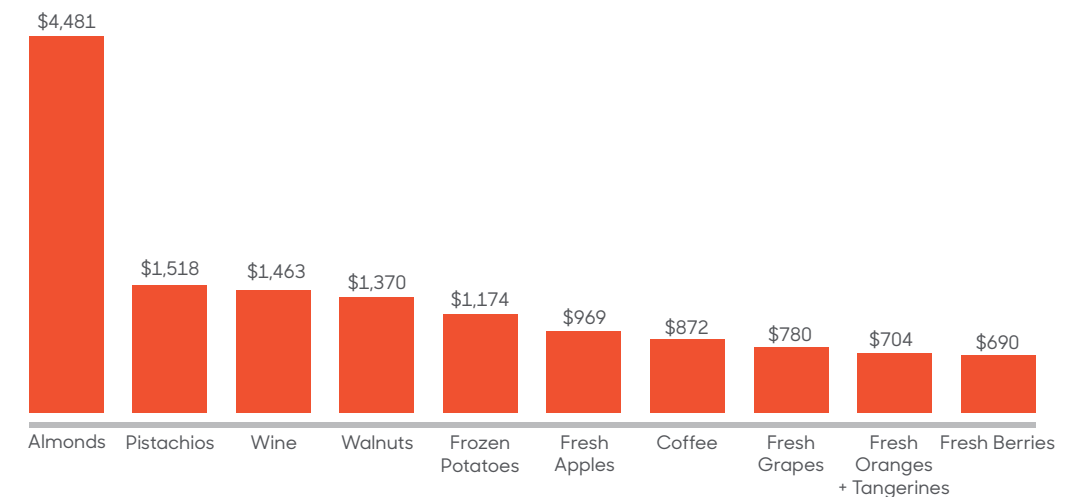
2017*



Source: USDA, NASS. *Calendar year January through December 2017. Value based on farm-gate prices.

Top Ten U.S. Specialty Crop Exports by Value

2017* | millions USD



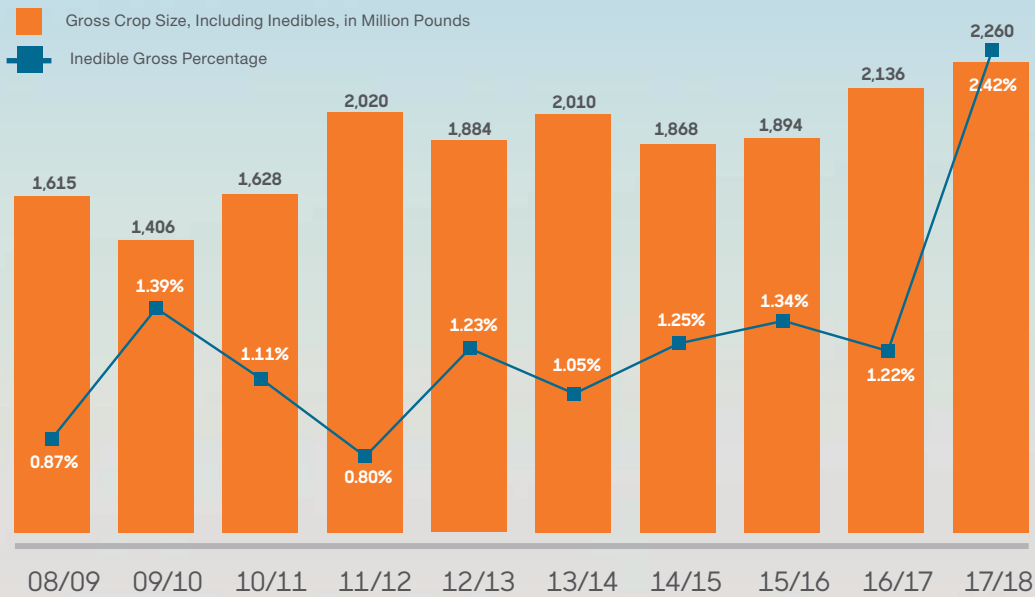
Source: USDA Foreign Agricultural Services Global Agricultural Trade System. *Calendar year January through December 2017.

Totaling over 400 commodities, more than $\frac{1}{3}$ of U.S. vegetables and $\frac{2}{3}$ of fruits and nuts are grown in California.

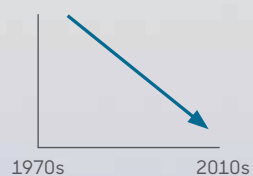


California Almond Crop-Size History + Inedible Percentage

crop years 2008/09–2017/18



Source: Almond Board of California.



The percentage of inedible almonds has dropped drastically over the decades, from an average of 5.74% in the 1970s to 1.31% in the 2010s.

A big reason for the reduction is research and industry adoption of winter sanitation, a process where almonds left on the tree after harvest are removed, eliminating habitat for crop-damaging pests. See page 16 for more.

U.S. TREE NUT CATEGORY

U.S. Production + Imports of Competing Nuts

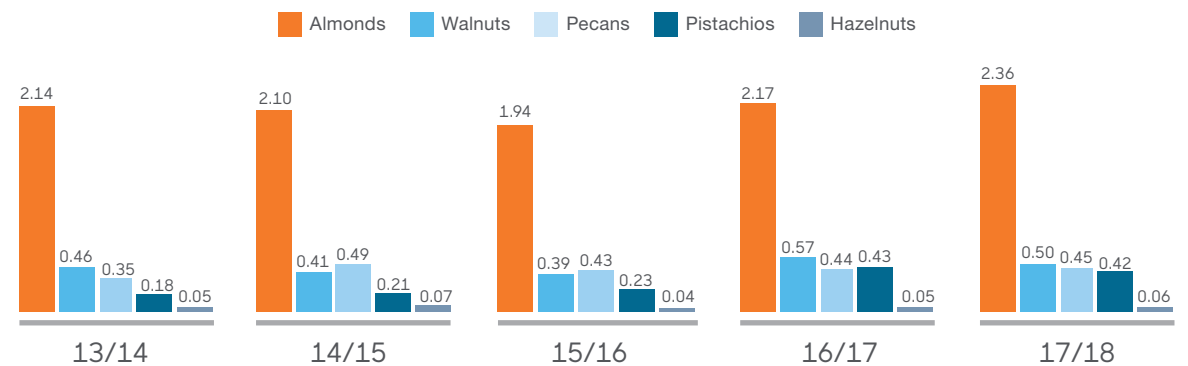
crop years 2008/09–2017/18 | million pounds (shelled basis)

CROP YEAR	ALMONDS		WALNUTS		HAZELNUTS		PECANS		PISTACHIOS		MACADAMIA NUTS		ALL TREE NUTS	
	Crop	Imports	Crop	Imports	Crop	Imports	Crop	Imports	Crop	Imports	Crop	Imports	Crop	Imports
2008/09	1,358.3	4.2	396.4	2.1	26.7	10.0	98.2	61.9	135.4	0.9	22.7	51.0	2,037.6	130.07
2009/10	1,571.9	5.6	387.9	3.4	38.1	8.1	132.0	83.2	174.8	1.3	19.1	59.2	2,323.7	160.76
2010/11	1,379.0	8.1	441.5	0.5	21.8	10.9	140.4	88.5	250.1	0.5	18.2	89.4	2,251.1	197.82
2011/12	1,600.3	15.9	400.6	4.8	31.2	9.6	124.6	74.6	222.0	0.9	22.3	86.1	2,401.1	191.98
2012/13	1,979.9	39.4	442.1	8.4	28.4	15.2	140.8	79.3	278.3	1.2	20.0	111.1	2,889.4	254.68
2013/14	1,848.4	33.9	437.7	11.9	36.9	14.5	130.8	92.5	234.5	0.5	18.6	112.5	2,706.9	265.94
2014/15	1,970.0	31.2	506.1	21.2	26.1	10.9	128.1	104.0	246.3	0.9	20.9	133.8	2,897.5	301.87
2015/16	1,838.6	31.8	527.0	10.8	23.3	9.2	104.5	113.7	134.6	1.2	21.4	155.5	2,649.3	322.13
2016/17	2,135.7	26.6	552.9	15.7	35.1	11.5	128.0	132.6	446.3	1.3	19.1	137.6	3,317.0	325.39
2017/18*	2,260.0	32.5	546.5	12.7	24.3	13.8	136.1	136.0	226.9	1.6	22.3	171.9	3,216.0	368.54

Sources: USDA, Economic Research Service, Fruit & Tree Nut Situation and Outlook. Macadamia Nut import amounts are from USDA Foreign Agricultural Service's Global Agricultural Trade System. Almond crop amounts are from Almond Board of California's year-end Position Report. *Preliminary.

Domestic per Capita Consumption of Tree Nuts

crop years 2013/14–2017/18 | pounds per capita



Source: USDA, Economic Research Service, Fruit & Treenut Situation and Outlook. Almond Board of California.

Doing More Through Collaboration

Never have the challenges for agriculture or the need for a strong voice been greater. With so many factions vying for limited resources and regulatory changes, the Almond Board of California and the Almond Alliance of California have worked together successfully since 2013 to provide the California almond industry with opportunity to advocate for industry priorities. As the only two organizations in California established solely to support the almond industry, the Almond Alliance utilizes Almond Board research and expertise to support the policy changes they advocate to leaders in California and Washington, D.C.

BETTER TOGETHER

The Almond Board of California, as a federal marketing order, is prohibited from lobbying, but can educate and provide important fact-based information on a wide range of almond industry issues. The Almond Alliance utilizes the data produced by the Almond Board of California in its legislative and advocacy efforts.

12 REGULATORY COMMENTS SUBMITTED

- Pesticide Reviews, Standards of Identity for Milk, Dust, CV Salts, FARMER Program

30 LETTERS TO MEMBERS

- FSMA, Farm Bill, Trade, Standards of Identify for Milk Water

A SUCCESS STORY

With retaliatory tariffs placed on almonds in key markets, the Almond Alliance partnered with industry advocacy groups to have almonds added to trade mitigation programs. ABC worked alongside the Alliance, providing data to support their efforts. As a result, California almonds were added to the commodities granted direct payments due to trade damages.

Almond Board Resources



Technical Kit

Provides up-to-date information on almond varieties, forms, handling tips and USDA standards and grades



USDA Almond Grades Poster

An instant look at almond varieties and sizes, almond forms and USDA standards and grades



Almond Almanac

Annual year-end report that provides an overview of almond statistics and ABC programs



Growing Good

Overview of almond sustainability, industry programs and initiatives
Almonds.com/GrowingGood



The Almond Conference

Annual event offering insights and research updates on all aspects of growing, processing and marketing almonds
Save the date: December 10-12, 2019
AlmondConference.com



Research Update + Database

An annual publication featuring one-page summaries of each ag research project underway. Access 40+ years of production and environmental research in the form of reports, summaries and posters
Almonds.com/ResearchDatabase



Almond Leadership Program

A year-long program covering all facets of the California almond industry through seminars, tours, special projects and community service events
Almonds.com/AlmondLeadershipProgram



Ag in the Classroom

Teaching resources explaining how almonds are grown and processed, the history of California almonds and the many ways to enjoy the versatile nut
Almonds.com/AgInTheClassroom



eLearning Courses

Online learning courses covering the lifecycle of almonds, selecting the right California almond for your specific need and accredited CE course on almond production
Almonds.com/eLearning



California Almond Sustainability Program

Free online productivity tools and assessment modules to learn about best practices and regulatory requirements
Almonds.com/CASP

Online portal for California Almond Sustainability Program participants
SustainableAlmondGrowing.org



Industry Resource Directory

Connects farmers and processors to various members of the almond industry, from those working in alternative energy solutions and computer software/programming to county agricultural commissioners and insurance specialists
Almonds.com/ResourceDirectory



Blog

Sharing regular posts about almond sustainability, nutrition research and more
Almonds.com/Blog



Newsroom

One-stop shop for the latest news published by ABC
Newsroom.Almonds.com



Twitter

Almond news served up in 280 characters
[@almondboard](https://twitter.com/almondboard)



Facebook

A place for almond farmers and processors to stay in touch with ABC
[@AlmondBoardofCalifornia](https://www.facebook.com/AlmondBoardofCalifornia)



YouTube

Hub for all Almond Board-produced videos about almonds, industry education, consumer outreach and more
AlmondBoardofCA



LinkedIn

Learn about various ABC program initiatives and ABC career information
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Questions? Collateral requests?
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