



CALIFORNIA ALMOND INDUSTRY FACTS

Almond Board of California

Established in 1950, the Board administers a grower-enacted Federal Marketing Order under United States Department of Agriculture supervision, which operates under a board/committee structure similar to a non-profit industry association.

The Board represents approximately 6,800 almond growers and 100 almond handlers (processors). According to USDA's 2012 Ag Census, 91% of almond farms are family-owned and the majority of growers and handlers are multigenerational.

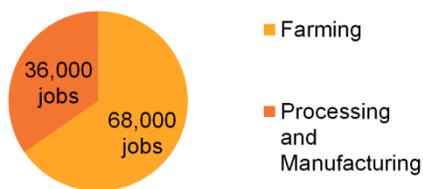
- The Board's **mission is to make California Almonds essential to customers and consumers worldwide through innovative research, market development, food quality and safety programs, and industry support**
- The Board's **vision is to bring great taste, health, and vitality to people around the world through the enjoyment of California almonds**
- The Board is financed through an industry assessment which supports research, quality/food safety programs, and market demand growth around the world

The Economics of Almonds

California Almonds are:

- California's #2 agricultural crop valued at \$5.9 billion in farmgate value in 2014. (*National Agricultural Statistics Service, NASS*)
- The almond industry generates more than \$21 billion in economic revenue and directly creates more than \$11 billion of added value (the measure of California's Gross State Product)
- The whole almond industry generates about 104,000 jobs statewide, ¾ of which are outside the almond industry
- Over 97,000 jobs are generated in the Central Valley of California - vital in a region that has long had high unemployment

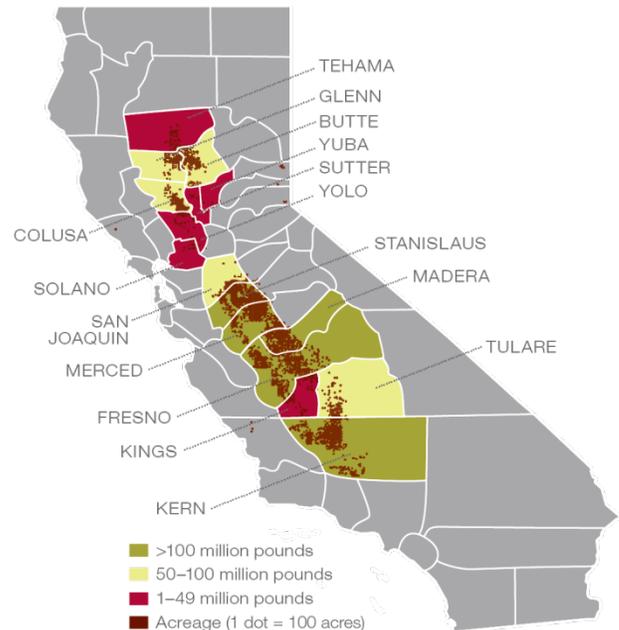
Employment Generation



(Source: *The Economic Impacts of the California Almond Industry*; UC Agricultural Issues Center)

Almond Production in California

Spanning 500 miles throughout the Central Valley, almonds support many rural communities



Pollination Overview

The pollen from almond blossoms of nearly all California Almond varieties is self-incompatible, requiring cross-pollination with other varieties to produce a crop. Even self-compatible varieties still require transfer of pollen within the flower. The single most important factor determining a good yield is pollination during the bloom period.

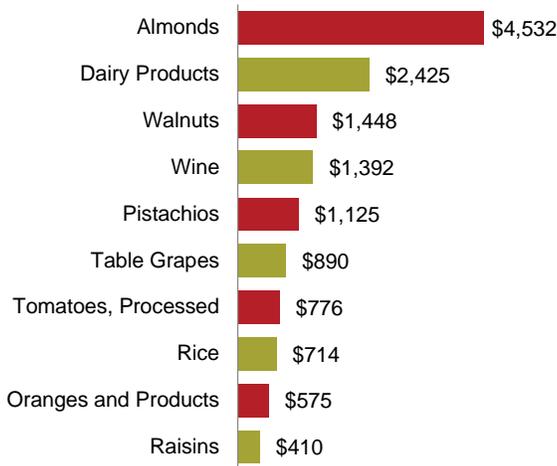
- About 1.6 million colonies of honey bees are placed in California Almond orchards at the beginning of the bloom period to pollinate the crop
- After almonds, honey bees move throughout the United States, pollinating over 90 other crops and making honey
- The Almond Board of California recently released a comprehensive, set of Honey Bee Best Management Practices (BMPs) for California's almond industry
- The Almond Board of California has taken a leadership position engaging and collaborating with universities, government agencies, nonprofits and beekeeping groups to communicate, educate and inform honey bee research, policy, education and outreach.



Almonds Around the World

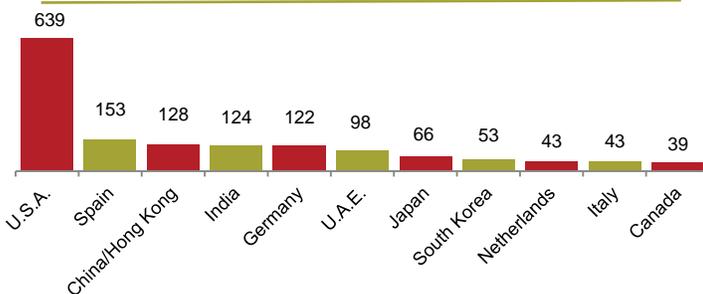
California produces about 80% of the world's almonds and 100% of the U.S. commercial supply. Almonds are California's #1 agricultural export.

Top Ten California Agricultural Exports 2014 (million \$) Source: California Department of Food and Agriculture



- Almonds are the U.S.' #1 specialty crop export
- 65% of the crop is exported to more than 90 countries worldwide
- Export shipments totaled 1.17 billion pounds in 2014/2015
- 2014 exports of \$4.5 billion created over 64,000 jobs (*USDA ERS Ag Trade Multiplier*)
- Almonds remain the #1 nut in global new product introductions since 2007 (*Innova Market Insights, Global New Products Database, 2014*)
- ABC supports ongoing programs in a number of markets including the U.S., Canada, China, the EU, India, and Korea

Top Shipping Destinations FY 2014/15 (million lbs.)



Almonds & Water 101

All crops need water to grow; California Almonds are focused on ensuring growers are using the latest technology and irrigation practices.

- 70 percent of almond growers use micro-irrigation systems and more than 80 percent use demand-based irrigation scheduling (*California Almond Sustainability Program Jan. 2014*)
- Over the past two decades, almond growers have reduced the amount of water it takes to grow a pound of almonds by 33 percent (*University of California. UC Drought Management, Feb. 2010*)
- Almond trees use about the same amount of water as other California fruit and nut trees (*Larry Schwankl, et al, University of California, Publication 8212, Feb. 2010*)
- Almond trees are growing three crops – the kernel we eat, hulls that are used for livestock feed and alternative energy, and shells which go to alternative farming uses like livestock bedding

California Almond Sustainability

California Almond growers are environmentally responsible and actively engaged in a wide variety of production practices that protect the environment.

Forty years of research funded by the ABC on orchard management, insect and pest management, variety development, tree nutrition and irrigation, diseases, and pollination have provided the tools to be better stewards of the land.

In 2009, the ABC launched the **California Almond Sustainability Program (CASP)** to document what has been practiced for decades in the almond industry:

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, nutritious, and safe food product.

Growers complete self-assessments which encompass eight modules:

- Irrigation management
- Nutrient management
- Air quality
- Energy efficiency
- Ecosystem management
- Financial management
- Pest management
- Workplace and Community

CASP is centered around the **Cycle of Continuous Improvement**. As each module is completed and submitted, the participant can view the results of the self-assessment, a comparison of that grower's performance with other participants as a percentage, and suggestions for improvement.

Assessments representing 18% of almond acreage have been completed.