

# THE POLLINATION PARTNERSHIP



## HONEY BEES ARE VITAL TO AGRICULTURE

**1/3** of global food production volume relies on pollinators to some degree.<sup>1</sup>

**90** More than 90 crops are pollinated by commercial honey bees.

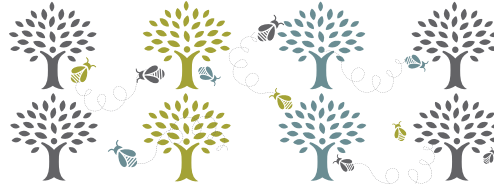
**\$18,000,000,000** per year = U.S. agricultural production supported by honey bee pollination.<sup>2</sup>

## ALMONDS AND HONEY BEES ARE ESSENTIAL TO EACH OTHER

### ALMONDS NEED HONEY BEES

Almond trees require cross-pollination between varieties, and orchards are planted with multiple almond varieties in alternating rows.

Honey bees are necessary to move pollen between varieties (and within flowers) to pollinate almond blossoms, which, when fertilized, become the almond kernels that we all love to eat.



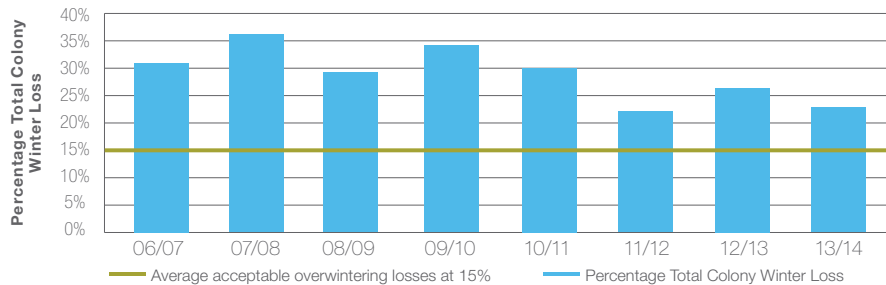
### HONEY BEES BENEFIT FROM ALMONDS

- Almond bloom is the first natural pollen source for bees after winter.
- Almond bloom pollen is very nutritious for honey bees.
- Honey bee hives grow stronger from almond bloom, and many hives are then split to grow beekeeper apiaries.

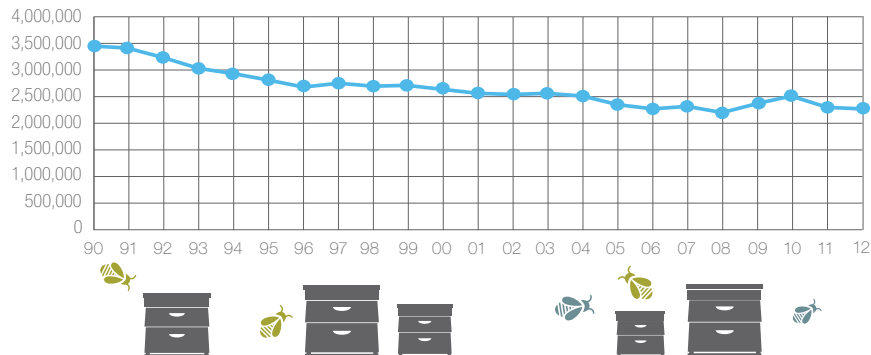
## HOWEVER, A DECLINE IN HONEY BEE HEALTH HAS PUT AGRICULTURE AT RISK

- The number of hives in the U.S. remains relatively stable.
- However, overwintering honey bee losses are of concern, requiring beekeepers to put in more work to maintain their hives.
- But all of us want better than just stable, we want healthier bees.

Managed Honey Bee Overwinter Losses in the U.S.<sup>3</sup>



Number of U.S. Honey Bee Colonies.<sup>4</sup>



## ALMOND BOARD OF CALIFORNIA IS COMMITTED TO IMPROVING HONEY BEE HEALTH

Almond Board of California (ABC) has and continues to fund more research on bee health than any other crop or commodity group.

ABC has funded research in pollination since 1976, investing almost **\$2,500,000** of almond industry dollars.

Honey bee health has been a focus since 1995, with almost **\$1,600,000** devoted to several different research areas (i.e., nutrition, stock improvement, pest/disease management, impact of pesticides, technical assistance for beekeepers).

ABC is a thought leader in honey bee health initiatives and engages with several government and private organizations, the research community and beekeeping associations.

And ABC recommends grower best practices for honey bee health through grower education programs. See [Almonds.com/Pollination](http://Almonds.com/Pollination) for more information.

### KNOW THE FACTS ON HONEY BEE HEALTH

The decline in honey bee health has been linked to a variety of complex factors, including those influenced by the activities associated with both beekeeping and crop production<sup>5</sup>:

- Varroa mites
- Lack of forage and nutrition
- Other pests and diseases
- Pesticide exposure
- Lack of genetic diversity in breeding

BASED ON THE RESEARCH, ABC DEVELOPS BEST PRACTICES FOR HONEY BEE HEALTH AND EDUCATES ALL POLLINATION PARTNERS



1. Klein, 2007. 2. USDA. 3. Apilary Inspectors of America and USDA-ARS Beltsville Lab. 4. USDA NASS Honey Production Report. 5. Honey Bee Health Coalition, 2014.