

USING EVERYTHING THE ORCHARD GROWS: OUR COMMITMENT TO ZERO WASTE

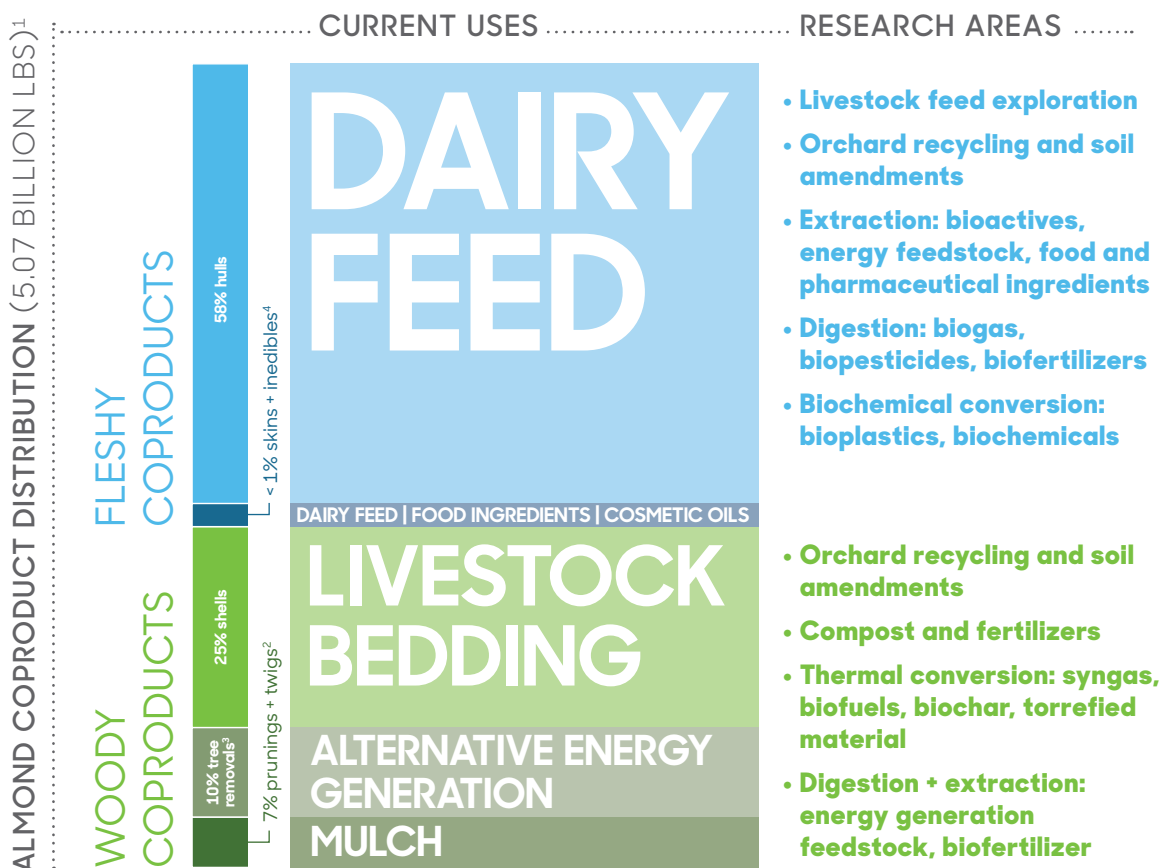
In addition to the almonds for which they are grown, almond trees also produce hulls and shells, which protect the nut during its development, as well as the woody biomass of the tree itself.

For decades, the California Almond industry has utilized these coproducts in a responsible, sustainable fashion, often yielding secondary benefits. However, recent market shifts are forcing changes to those traditional uses and spurring new interest in the highest value use of each almond coproduct.

With the help of the Almond Board's AIM research program, the almond community is stepping up research efforts to identify and understand all utilization options for almond coproducts. This research is needed to determine how to make all of the possible approaches described below usable under a wide range of circumstances and sort out potential regulatory issues.

UNDERSTANDING ALMOND COPRODUCTS

What are they? How are they used? Are there better uses? Read the table below to learn more about current and future uses of all almond coproducts.



DID YOU KNOW?

----> To best lead research and progress in this area, Almond Board of California has created a specialized task force. Launched in October 2016, the **Biomass Task Force** is a cross-functional group of almond biomass experts, industry members and allied stakeholders.

----> Along with investing in research, ABC is working closely with the Almond Alliance of California to provide relevant data to assist in its efforts as part of a broad coalition seeking state legislative and regulatory solutions to California's management of woody biomass.

1. USDA-NASS. 2016 California Almond Objective Measurement Report. July 2016. Brent Holtz. UCCE Cooperative Extension, San Joaquin County. 2015. USDA-NASS. California Almond Acreage Report. April 2016.
2. Almond prunings (5%) are removed from trees for cultural purposes and access reasons. Almond twigs (2%) are those that are shaken from the tree during the harvest process and removed from the orchard with the crop.
3. On average, almond orchards are economically viable for 25–30 years after which they are removed and often replanted. 10% is the portion of almond coproducts represented by woody biomass from removed almond trees in 2016, not the woody biomass that exists across the industry in the form of living almond trees.
4. Inedible almonds (0.4%) are those harvested but unfit for consumption. Skins (0.2%) are a byproduct of almond blanching.