

Harvest 101: Part One

Sperry Farms spans across 2,000 rolling acres in Merced and Stanislaus counties. With more than 1,200 of those acres planted to nine almond varieties—Nonpareil, Carmel, Monterey, Sonora, Butte, Fritz, Aldrich, Wood Colony and Independence—the farm's roots, and the Sperry family's on it, date back five generations to the 1800s.

But as Brian Wahlbrink, Sperry's CFO and a co-owner along with founder Jeff Sperry and CEO Wes Sperry, puts it, he's "a complete transplant."

"I'm the official son-in-law," Wahlbrink concedes. "I'm from Southern California originally, a surfer and a business major, and I moved up here in 2005 when I married into the family." So the rhythms of the almond harvest didn't exactly resonate with him—at least not at first.

But that has changed. "I've spent a lot of time in the field since '05," Wahlbrink says. That—not to mention his service as a member of the Almond Board of California's Board of Directors—gives him a valuable perspective on how the California almond harvest happens, and how it's changing for the good.

So we sat down with Wahlbrink in this two-part Q&A to discuss what to expect not just from almond harvest 2018, but from 2050, as well.

In broad terms, what are the steps in the almond harvest? **WAHLBRINK** | The main components of harvest are mechanical shaking, on-ground drying, sweeping and picking up.

What goes into each step?

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WAHLBRINK | The first variety that we harvest is Nonpareil. We knock them down earlier in the year because they usually have an extended drying period. After shaking the almonds from the trees, we'll let them dry under the tree for three or four days. Then we push them out, leave them in the open in the row and let the sun dry them for another day or two. This is when those 100-degree days help.

Once they're at the correct moisture, the sweeper will come through to pull them into tighter rows called windrows, and that's when they're ready for pickup by the harvester.

Once they're picked up, the harvester dumps them into shuttle carts that go to the load station. There the almonds get dumped onto an elevator which uses a conveyor belt to dump them into a waiting semi-trailer. Then off they go to the huller-sheller where nuts' protective outer layers are removed.



Q When does harvest begin?

Q How do you prepare the orchard for harvest, and when does that start?

How else does mowing help?

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WAHLBRINK | Well, because our farm is further east in the valley and up into the foothills, it's a little hotter and drier. So we're usually one of the earliest in our area in the Central Valley to start harvest. Normally, the first week of August we get going.

WAHLBRINK | Right from bloom, you're working on orchard-floor harvest prep, ensuring the floor stays smooth and free from holes where nuts can get stuck at harvest. IF that happens, it means extra passes and difficulty picking up the crop. It's a year-round process, and the more you stay on top of it, the easier it is. For example, we like to keep about a 6- to 8-foot-wide band directly under the trees clear of weeds. Everywhere else, we try to promote growth through composting and mowing.

WAHLBRINK I We do a lot of mowing the center of the rows to help water percolate into the ground. That keeps the ground open so it doesn't get sealed off. Also, keeping grass in the middle of the rows is a huge dust reducer. It's a fine line that you walk, though, because if you have too much grass, it'll get into the windrow and you'll wind up with almond-grass piles that slow your harvester down. Otherwise, though, the grass will eventually go brown, break down and go back into the soil.

WAHLBRINK | The trees will tell you. We'll actually send an "executive crew" to drive

different microclimates—on the top of the hills it's very dry and warm; on the bottom it's a lot cooler. So we have to be diligent about which orchard we're attacking first. We'll run the shaker through and if the almonds aren't coming off, we'll shut down, wait for them to dry a little more on the tree and try again. There is a perfect window between

block by block and walk through the rows. Because we're in the foothills, we have

How do you know when it's time to harvest?

Q Does this careful timing translate into almond quality?

Q How does food safety factor into harvest decisions?

Finally, what's your favorite part of harvest?

WAHLBRINK | Definitely. For example, if you miss your moisture window and the almond's too dry—under 4 percent moisture from the kernel side—the equipment that removes the outer hulls and shells can damage the kernel. This raises the potential for chip and scratch damage, which can result in lower grade products.

WAHLBRINK | It's huge for us. Orchard sanitation goes hand-in-hand with floor prep—making sure that the rows are clear of debris and ready for harvest. We send people weekly to make sure the orchards are clean and ready for the finished product.

WAHLBRINK | That's a good question. I think just the activity of it all—the organization and coordination of everything. It's a very hot and intense time, but it's also very rewarding, where everyone can come together in the field and see the results of all the work from the entire year. It's a very fun event.

Stay tuned for Part 2 to learn how the harvest is evolving!

too wet on one side and too dry on the other.



2 Q&ALMONDS