

For the sixth consecutive year, labor costs are on the rise for California farmers heading into the 2021 season.

Add to ongoing labor shortages another increase in minimum wage, not to mention stricter overtime regulations, and Golden State growers are again grappling with new ways to improve on-farm efficiencies with their work force.

That's where Fieldin's Smart Farm Control Center has helped **Ranch Management Company owner Billy Schuh**, providing the Fresnobased almond grower with the real-time orchard activity data he needs to improve efficiencies during spray applications and other cultural practices.

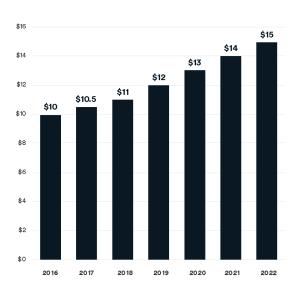
"It's amazing to see the shift in productivity," said Schuh, who has Fieldin monitoring for his operators and equipment used during spray and other mechanized activities. "We've seen a 25% increase in productivity, because with Fieldin we can now see where our tractors are, who the operator is. We can see what the acres per hour are. What the ground speed is. It's amazing what happens when you use data to set goals and make everyone accountable."

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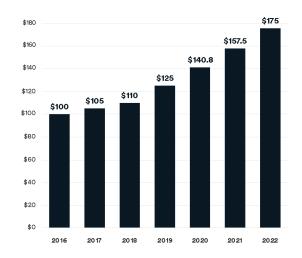
Billy Schuh

Ranch Management Company (Fresno, CA)

Annually Increasing Wage. Min CA



Spraying shift labor costs will have jumped from \$100 to \$175/shift since 2016



Source: State of California Dept. of Industrial Relations

Almond Operational Costs VS. Profit Margin



Source: UC Davis Agriculture & Resource Economics, NASS, USDA

"That's huge for me. If you take 25% off the top of what we pay our operators, it pays for the system in a heartbeat." From 2016-2022, minimum wage in California (for operations with 26 or more employees) will have increased by 50% percent.

On Jan. 1, 2021, minimum wage was raised for the sixth consecutive year to \$14/hour, and it's scheduled to increase to \$15/hour next season.

Overtime regulations have posed additional challenges for ag operations, which typically work longer days during the season with 9- to 10-hour shifts. Prior to this year, overtime kicked in at 9+ hours/day or 50+ hours/week. Beginning Jan. 1, 2021, OT pay kicks in at 8.5+ hours/day or 45+ hours/week, with a move to OT at 8+ hours/day and 40+ hours/week in 2022. Since 2016, this has led to a 75% increase in labor costs for 10-hour shifts -the most common spraying shifts for California operations.

Along with increased labor costs, California almond growers have seen spraying and other cultural costs increase by 184% since 1999, according to UC Davis Agriculture & Resource Economics. Harvesting costs have increased by another 56%, further shrinking profit margins.

Schuh said the actionable data and transparency Fieldin provides helps optimize spray applications and level soaring operating costsimproving peace mind and his bottom line.

"That's huge for me," he said. "If you take 25% off the top of what we pay our operators, it pays for the system in a heartbeat." Spray applications have traditionally been one of the industry's most expensive activities throughout the year, with tree and vine operations making 10-14 passes a year depending on crop type.

Using Fieldin's real-time data, Ranch Management improved coverage a by 25%, a boost in coverage from avg. 30.3 acres to 37.9 acres per shift. That's a cost savings of more than \$3.30/acre/pass on avg., or \$40/acre for an orchard with 12 passes in a year. "We're not doing this just for the fun of it," Schuh said. "I want to see performance. With minimum wage going up, and the 45-hour work week and overtime where it's at right now, we need to be better. This allows me to watch our guys, when they come to work, when they're in the orchards. They know when they hop in the tractor we're watching, so they get in and go and start working and get the job done."

See how Ranch Management Company increased spray acres per shift, and decreased annual costs per acre.

Increase in Sprayed Acres/10 Hr. Shift*



^{*}Spraying at 2.5 mph and 100 GPA

Decrease in Spraying Annual Cost/Acre



Additional Sprayed Acres

+7.6 Acres/Shift

for a 10 Hr. shift

Savings with Fieldin:

\$40/Acre

in spray labor costs alone

Using Fieldin's real-time data, Ranch Management Company was able to boost coverage in a shift from 30.3 acres to 37.9 acres, leading to a yearly savings of \$40/acre on spray applications alone.