

WINE GRAPES
1,000 ACRES
CASE STUDY

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Background

On the U.S. west coast, managing pest control for 615,000 acres of wine grapes poses significant operational and environmental challenges.

Growing pains currently facing air-blast sprayers.

- ▶ Labor shortages
- ▶ Fuel prices
- ▶ Increased regulation
- ▶ Tank refill time
- ▶ Water use efficiency

This leads to higher costs and time-intensive applications.

In contrast, OnTarget sprayers offer a modernized approach designed to **optimize resources, improve efficiency, and enhance environmental stewardship.**

1,000 Acres- One Season Comparison		Air Blast	OnTarget Sprayer
Sprayer Tank Size	(Gallons)	300	300
Ground Speed While Spraying	(Miles Per Hour)	2.75	3.50
Water Used Per Acre	(Gallons)	100	20
Row Width	(Feet)	8	8
Boom Configuration	(# of Rows)	1	1
Fuel Consumption	(Gallons Per Hour)	5.25	2.75
Percentage of Label Rate Actually Used	(% Per Acre)	100%	100%

Trial Operation		
Average Spray Applications Per Season	#	10
Cost of Fuel	(\$ Per Gallon)	\$4.25
Cost of Material	(\$ Per Acre)	\$75
Cost of Labor	(\$ Per Hour)	\$20
Field Size	(Acres)	1,000
Percentage of Label Rate Actually Used	(Acres)	100%

Total savings with OnTarget Sprayers:

\$153,880

Time

Air Blast  **7,170 Hrs**

OnTarget  **3,635 Hrs**

3,535 Hours Saved

Water

Air Blast  **1,000,000 Gallons**

OnTarget  **200,000 Gallons**

800,000 Gallons Saved

Fuel

Air Blast  **\$121,640**

OnTarget  **\$38,460**

\$83,180 Saved

Material

Air Blast  **\$750,000**

OnTarget  **\$750,000**

\$0 Saved

Labor

Air Blast  **\$143,400**

OnTarget  **\$72,700**

\$70,700 Saved



Time Savings Details

	Air Blast Sprayer	OnTarget Sprayer
Time Per Row	5.5 Minutes	4.3 Minutes
Time Required to Spray Field Once	378.1 Hours	295.6 Hours
Tank Fills Required to Spray Field Once	334	67
Time Required to Fill Tank Once	30 Minutes	30 Minutes
Total Fill Time	167 Hours	33.5 Hours
Acres Sprayed Per Hour	1.8 Acres/Hr	3 Acres/Hr
Acres Sprayed Per Tank	2 Acres/Tank	15 Acres/Tank
Total Acres Sprayed Per Season	10,000 Acres	10,000 Acres
Total Time Spent Filling Per Season	545.1 Hours	329.1 Hours
Total Time Spraying Per Season	5,500 Hours	3,300 Hours



Water Savings Details

	Air Blast Sprayer	OnTarget Sprayer
Sprayer Tank Fills Required	334	67
Water Required for One Field Pass	100,000 Gallons	20,000 Gallons



Fuel Savings Details

	Air Blast Sprayer	OnTarget Sprayer
Gallons of Fuel Required for Field	2,862 Gallons	905 Gallons
Cost of Fuel Per Acre	\$12.16	\$3.85
Total Cost of Fuel for One Field Pass	\$12,164	\$3,846
Total Acres Sprayed Per Season	10,000 Acres	10,000 Acres
Total Cost of Fuel Per Season	\$121,640	\$38,460



Material Savings Details

	Air Blast Sprayer	OnTarget Sprayer
Total Acres Sprayed Per Season	10,000 Acres	10,000 Acres
Average Material Cost Per Season	\$750,000	\$750,000



Case study

Wine Grapes
1,000
Acres



Make the Switch™

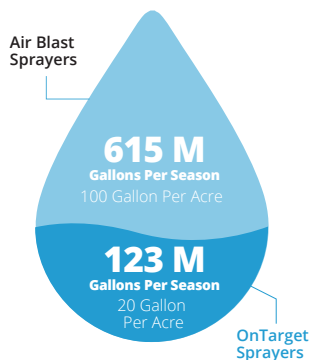
Unlock Massive Savings for the U.S. West Coast Wine Grape Industry!



01

Water Savings

492 M
Gallons Saved
Per Season

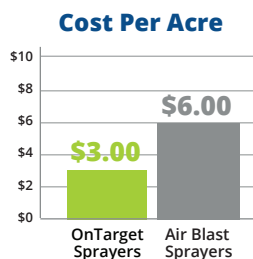


02

Fuel Efficiency

\$59 M
in Fuel Costs

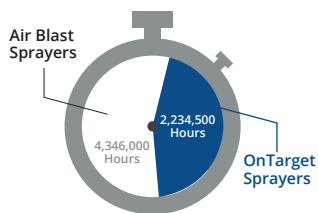
This reduction minimizes emissions and operational expenses, directly benefiting both the environment and the bottom line.



03

Labor Reduction

2.1 M
Hours Saved
Per Season



APPLICATION TIMES

\$42 M
Savings

04

Overall Cost Savings

\$101 M
Per Season

These savings demonstrate the financial viability and operational benefits of transitioning to OnTarget technology.





Conclusion:

The OnTarget Transformation

By switching to OnTarget sprayers, U.S. west coast wine grape growers can significantly cut resource consumption, lower costs, and achieve sustainability goals. Out performing traditional sprayers, OnTarget technology enhances scalability, maximizes financial savings, and establishes itself as an essential tool for modern wine grape farming.



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We extend our sincere gratitude to the following contributors to this case study:

- The Nebraska Tractor Test Laboratory for their rigorous testing and data.
- All the growers and clients using Air Blast and OnTarget Sprayers for their valuable feedback and real-world applications.
- Researchers at USDA ARS and UC ANR for confirming grower standards and providing critical validation.
- The OnTarget Sprayer calculator team for their efforts in showcasing performance differences.