



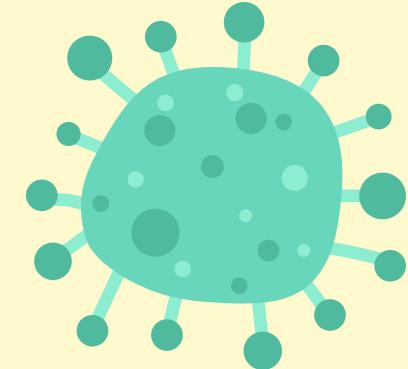
# COMPUTER VISION ENABLED APPLE YIELD IMPROVEMENTS

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# Current Challenges



**Optimizing Harvest  
Timing**



**Finding Disease  
Outbreaks**



**Reducing Labor  
Costs and Shortages**



# Our Solution

Capable of Diagnosing Ripeness  
to Optimize Harvest Timing

Capable of Diagnosing Disease  
Symptoms to Minimize Spread

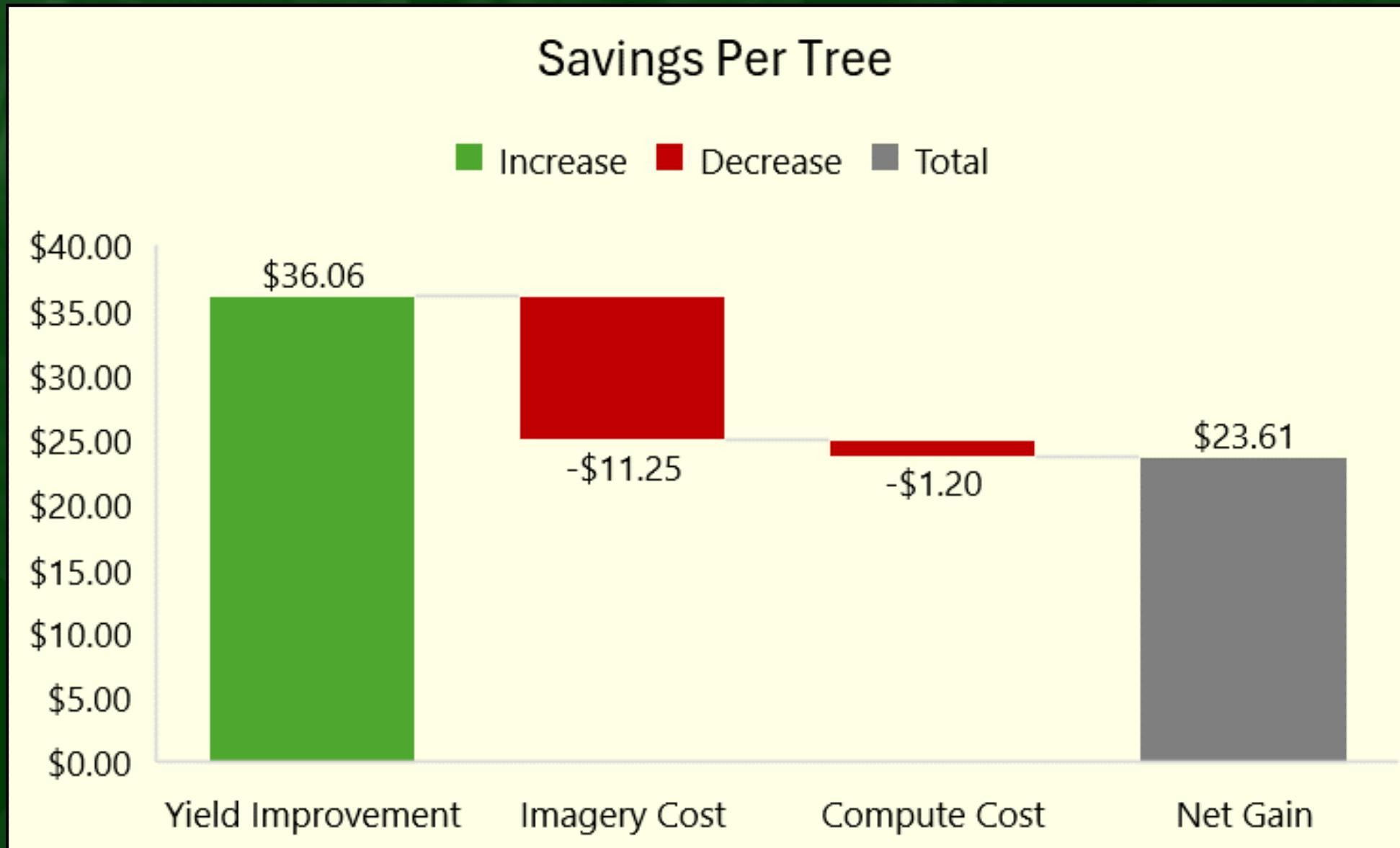


# Demo

[Demonstration Link](#)

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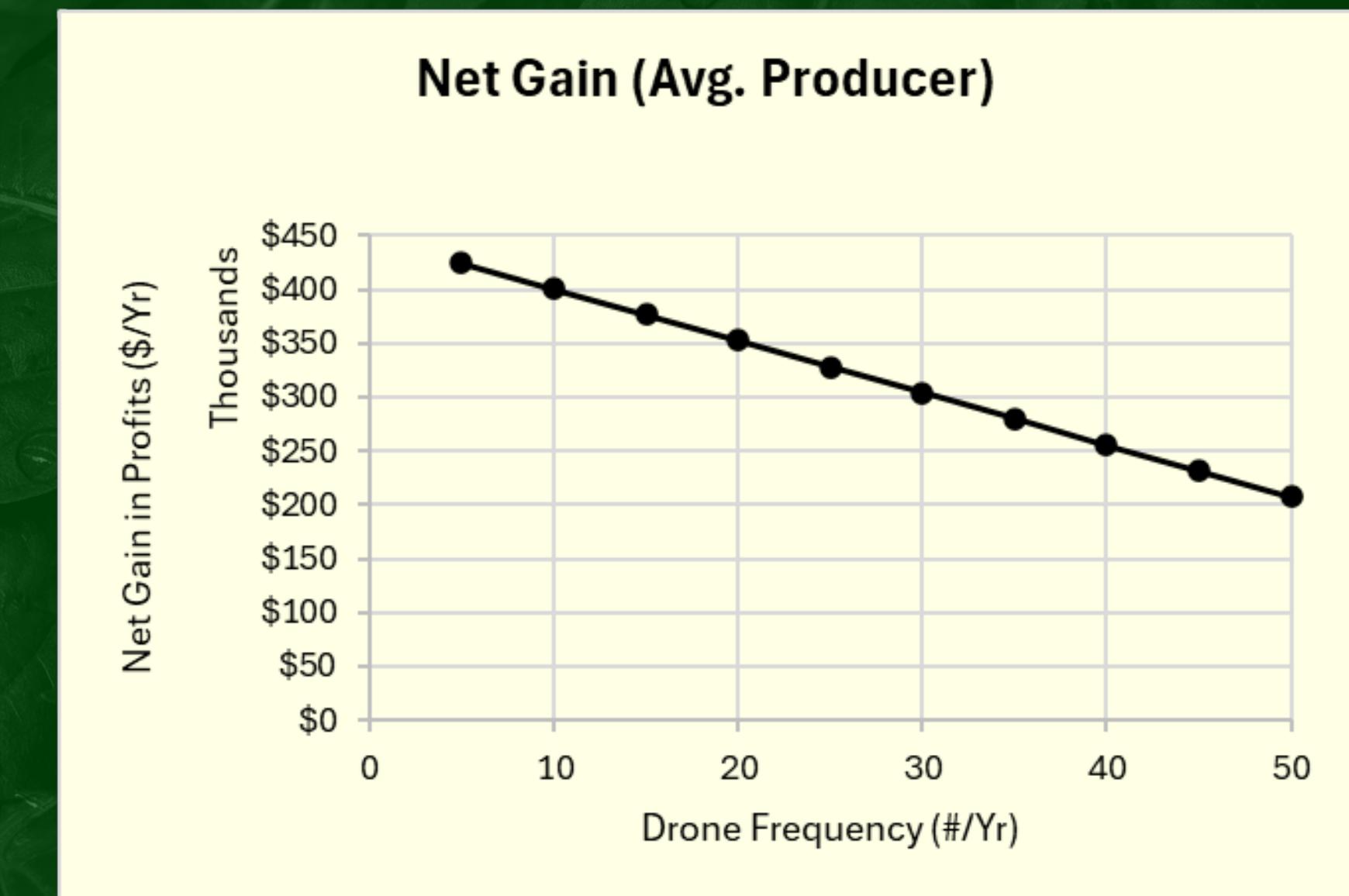
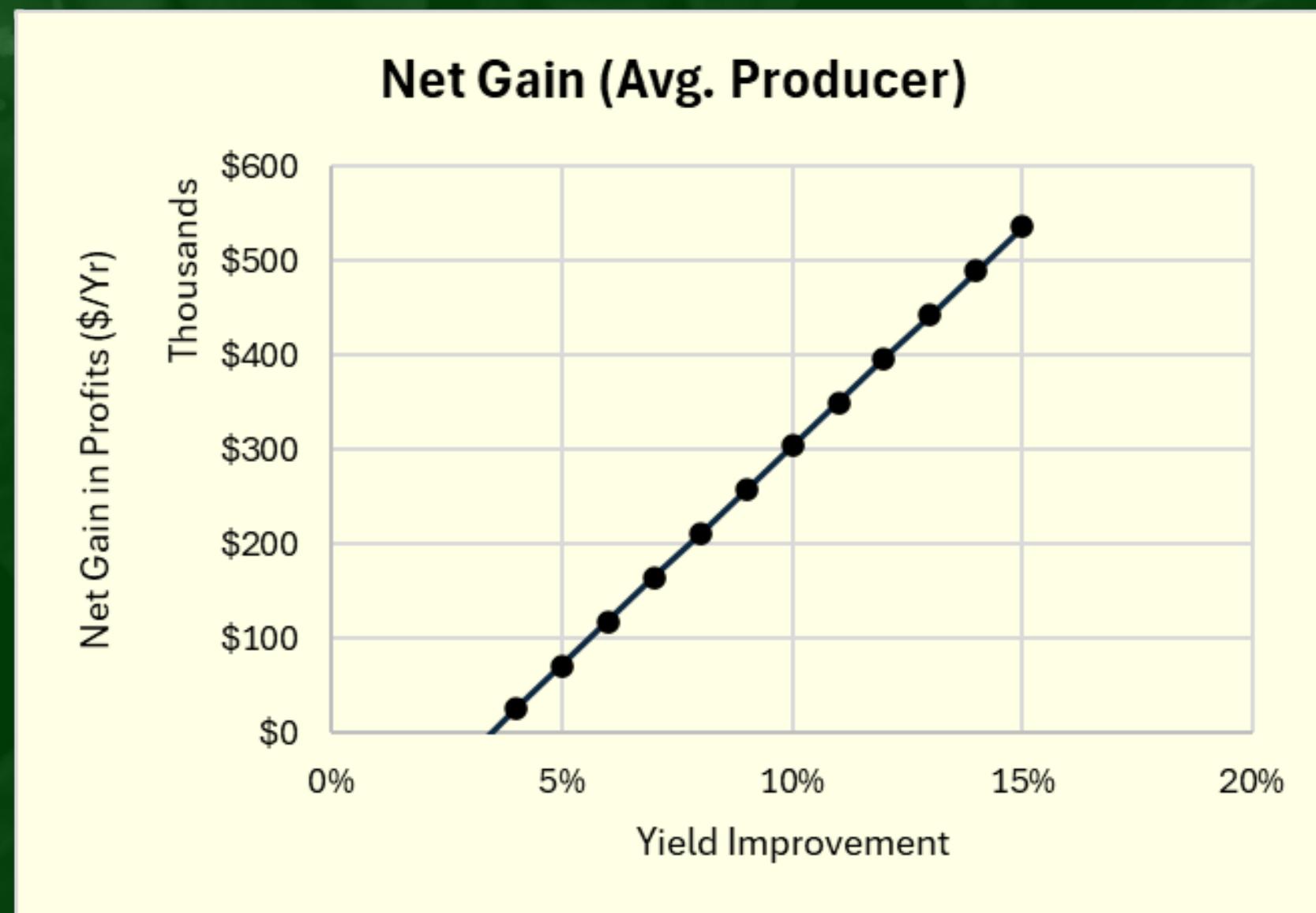
# Impact for Producers



- Assumes 10% yield improvement
- Assumes drone footage 30 times per year at current cost
- Average U.S Producer owns 12.9k Trees
- Net Profit Rise of ~\$304k /Yr

# Key Risks

Largest Uncertainties are Yield Improvement and Drone Frequency



# Appendix

# Major Assumptions

Core Assumptions		
Assumption	Unit	Value
Yield Improvement	% Increase	10%
Drone Survey Frequency	Times/Yr	30
Price Assumptions		
Assumption	Unit	Value
Apple Price	\$/lb	2.15
Compute Cost	\$/Credit	\$0.02
Drone Imagery	\$/Acre	\$75
Dron Imagery	\$/Tree	\$0.38
Production Assumptions		
Assumption	Unit	Value
U.S Apple Producers	Companies	5,000
Annual Apple Production	Bushels/Yr	240,000,000
Acres of Land for Apples	Acres	322,000
Production Per Acre	Bushel/Acre/Yr	745.3416149
Trees per Acre	Tree/Acre	200
Production Per Tree	Bushel/Tree/Yr	3.73
Production Per Tree	Lb/Tree/Yr	167.70
Revenue Per Tree	\$/Tree	\$360.56
Average Trees Per Producer	Trees Per Producer	12,880
Compute Assumptions		
Assumption	Unit	Value
Image per Tree	Unit / Tree	60
Credits Per Image	Unit / Tree	1