

OREGON WINE



SYMPOSIUM

February 3 & 4, 2025

Putting Your Vineyard on the Map: Using Spatial Data to Improve Efficiency

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PROGRAM
PRODUCER **oregon**
wine BOARD

TRADE SHOW
PRODUCER



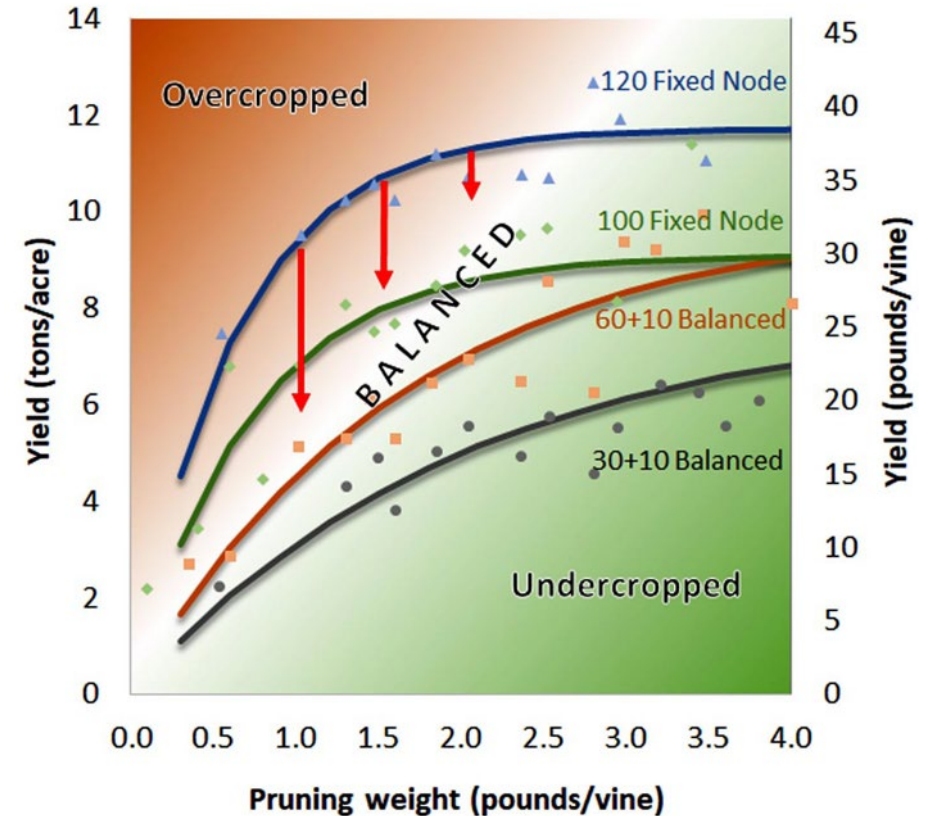
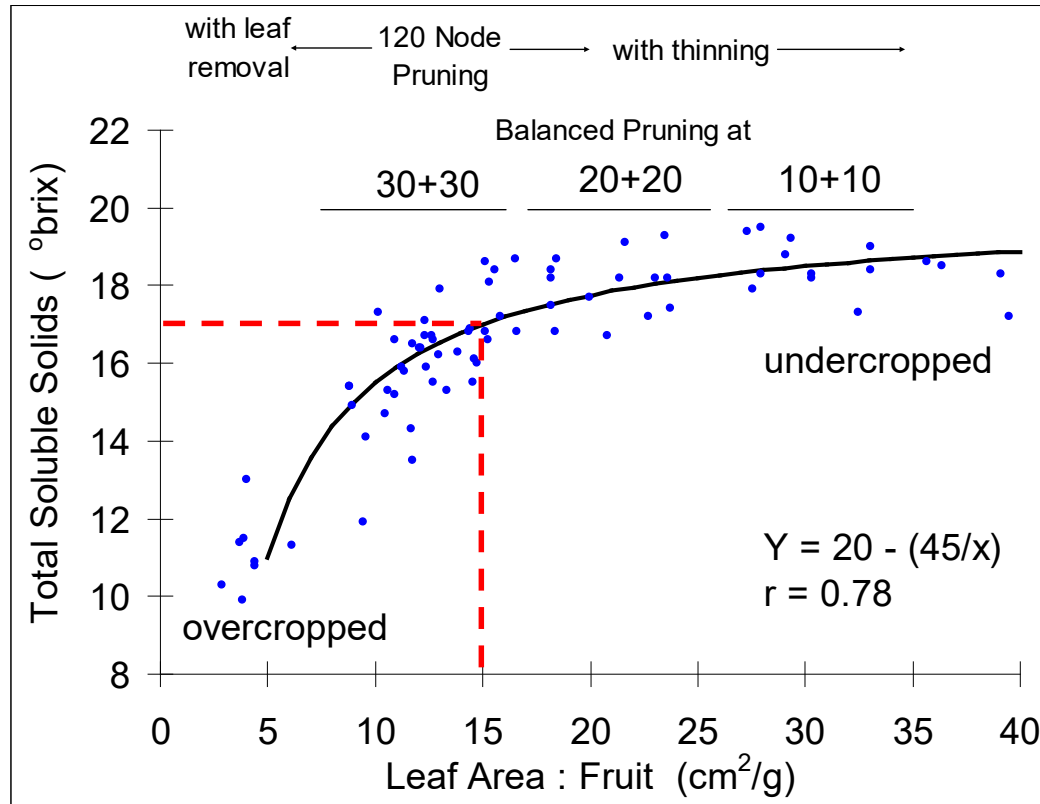
Oregon
Winegrowers
ASSOCIATION EST 1981



Vineyard efficiency is...



Vineyard efficiency is...

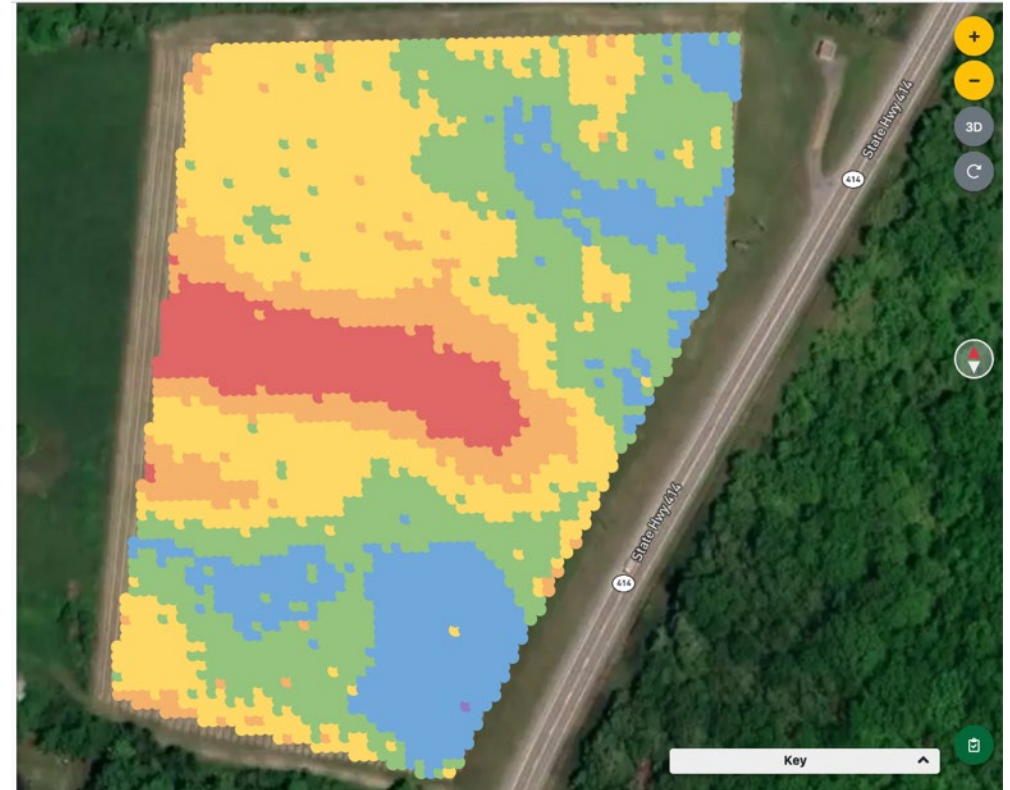


Vineyard efficiency

Vineyards are not uniform systems, but equipment (and people) often manage them uniformly. That's not optimal, a.k.a., efficient.

If you can measure the variation, then you can manage it to meet your goals.

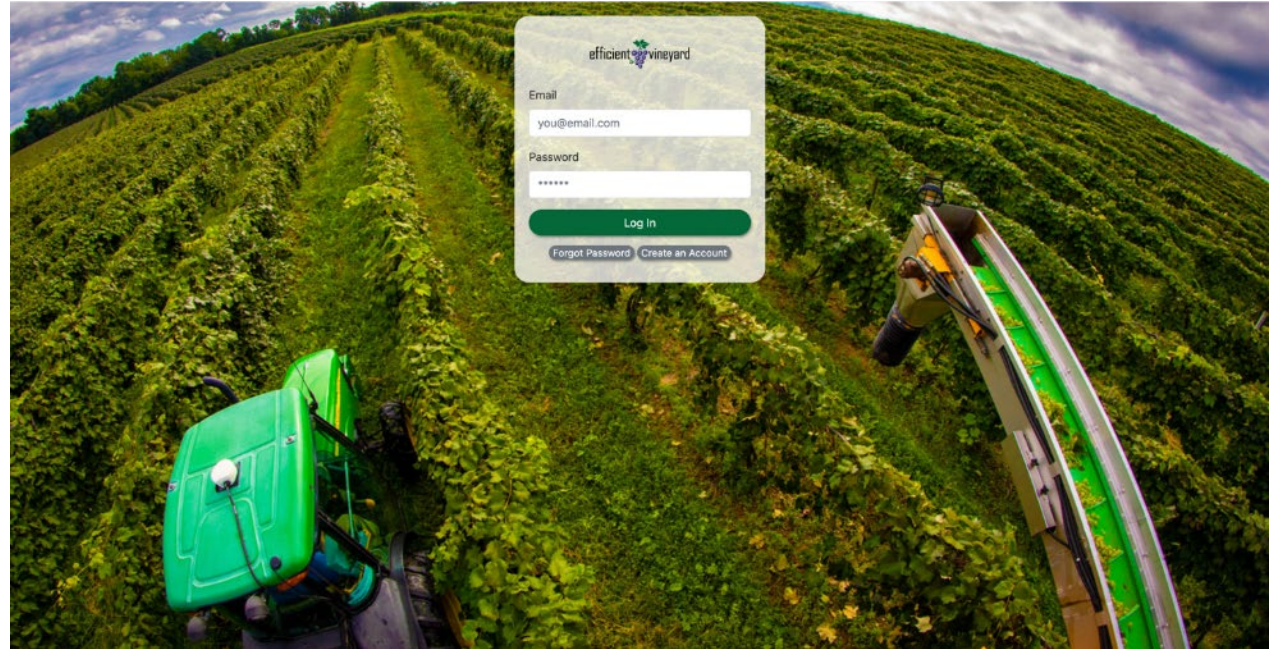
BUT HOW?



MyEV

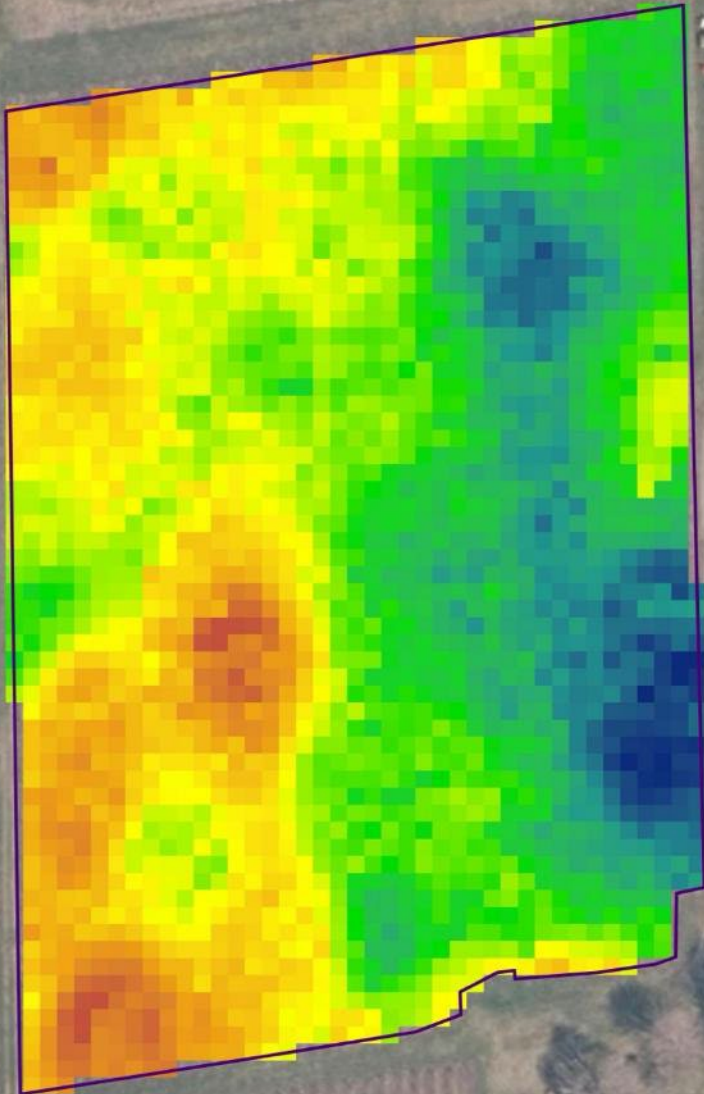
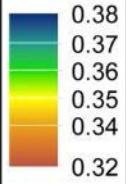


www.efficientvineyard.com





NDVI



May 20, 2019 (BB+12) -- Before Shoot Thinning

0 25 50 75 100 Feet

Proximal NDVI, May 20 Concord Vineyard

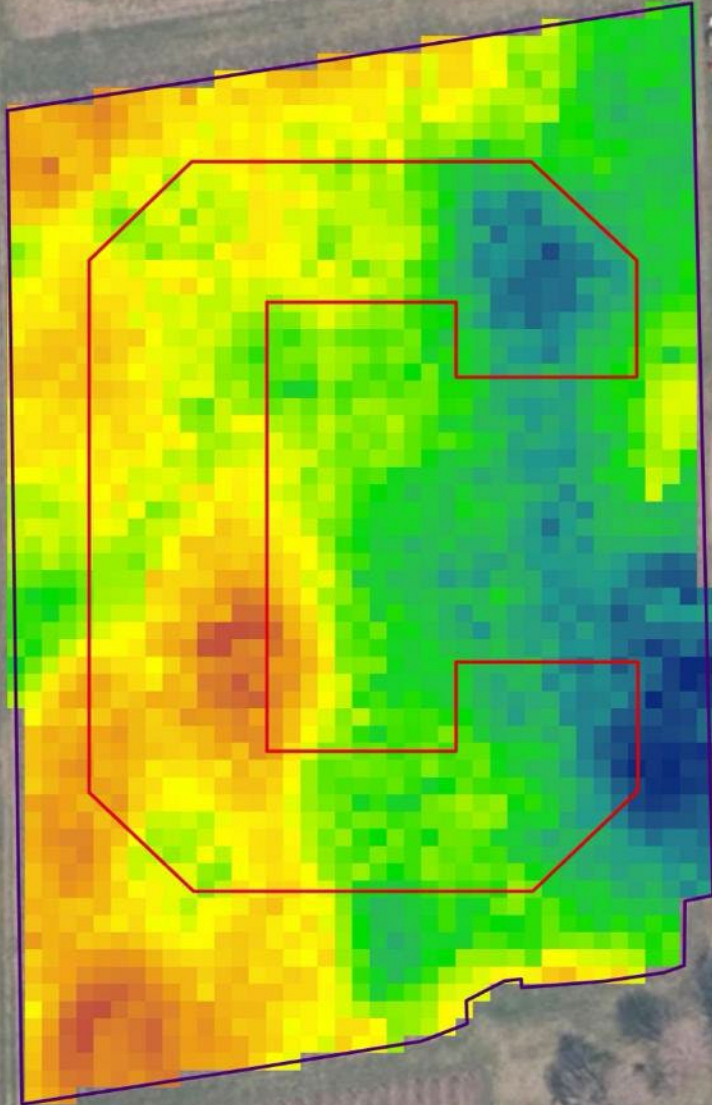
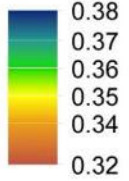
Cornell Lake Erie Research and Extension Lab

High wire, cordon trained, mechanical cane pruned with manual pruning follow-up





NDVI

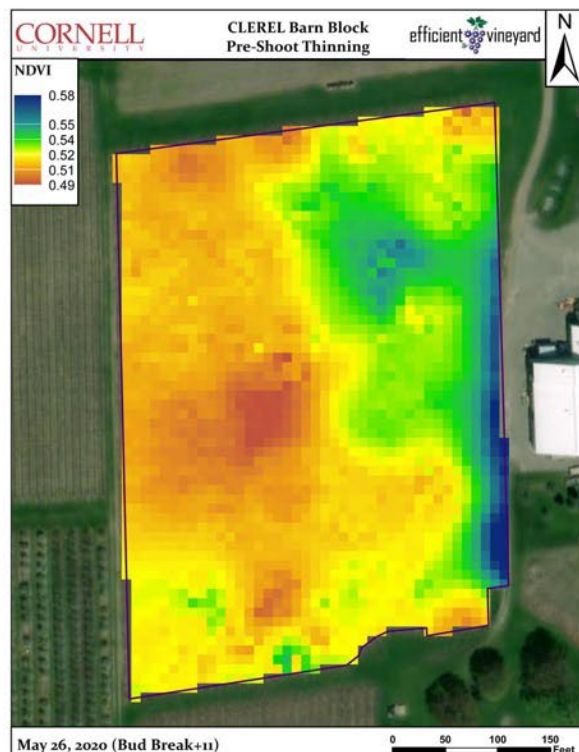


May 20, 2019 (BB+12) -- Before Shoot Thinning

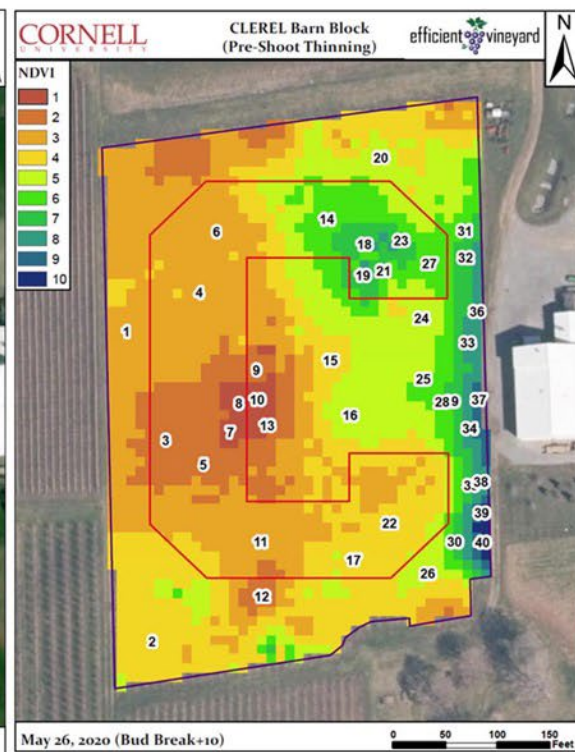
0 25 50 75 100 Feet

Go Big Red

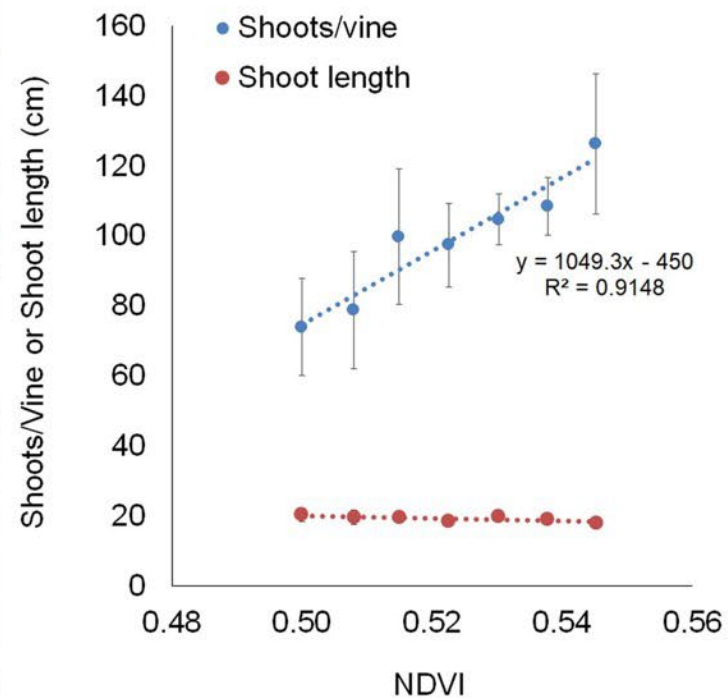




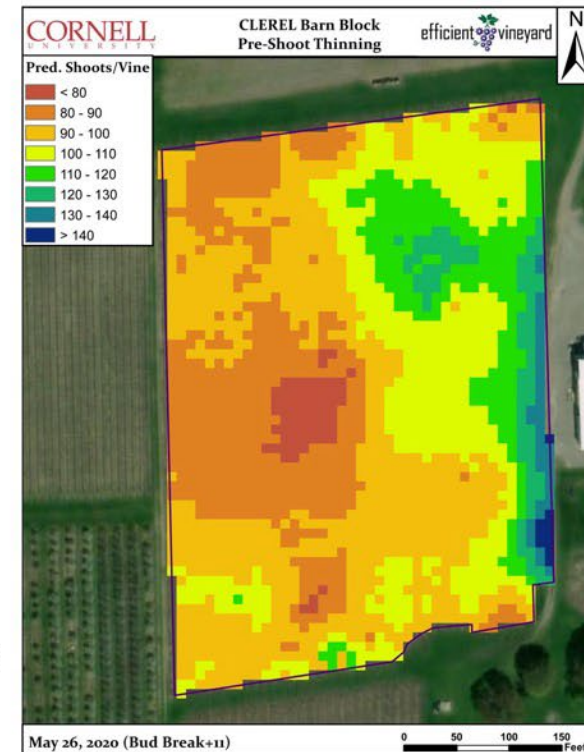
Reflectance sensor
(NDVI)



Directed Sample
Locations

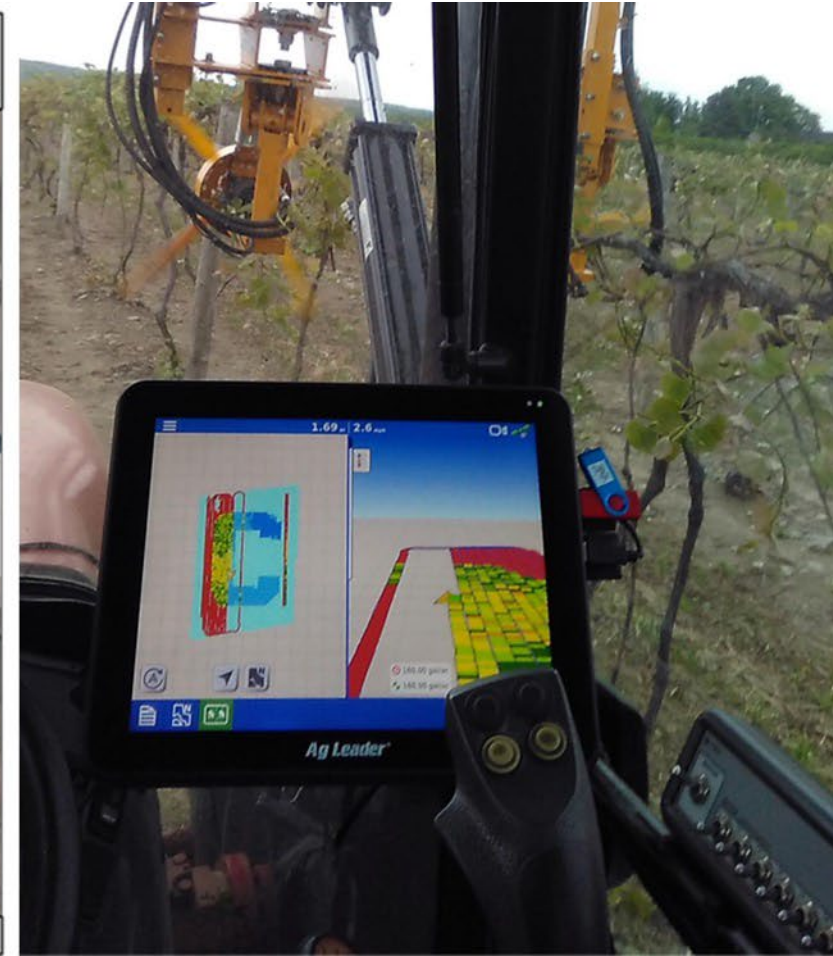
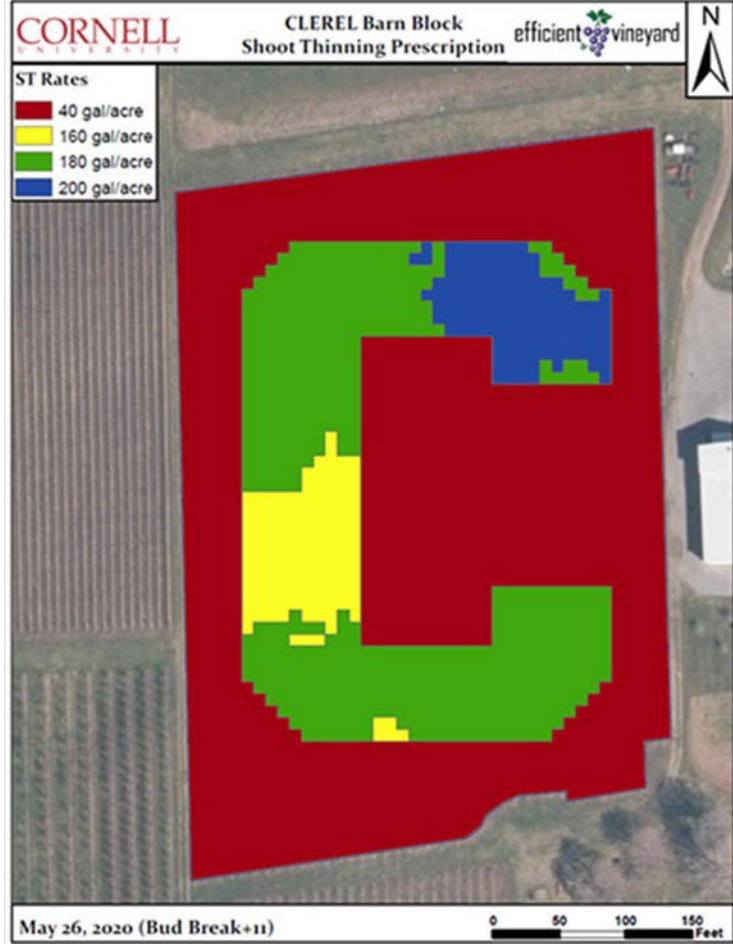
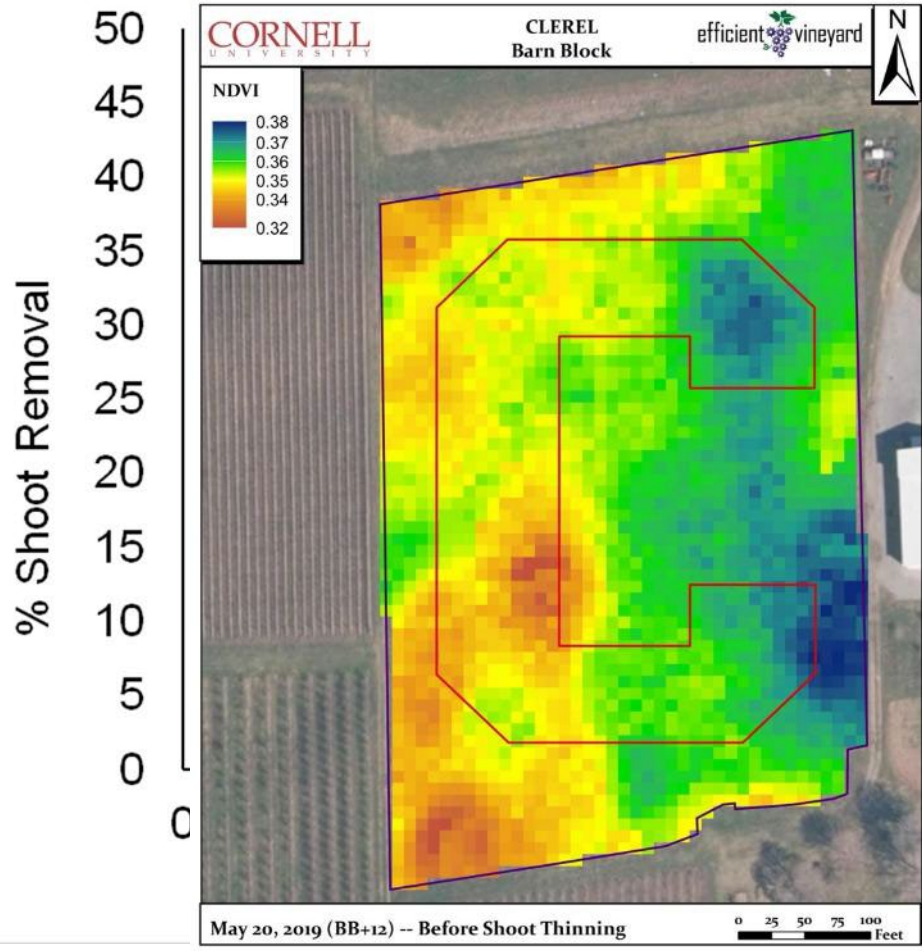


Calibration
Relationship

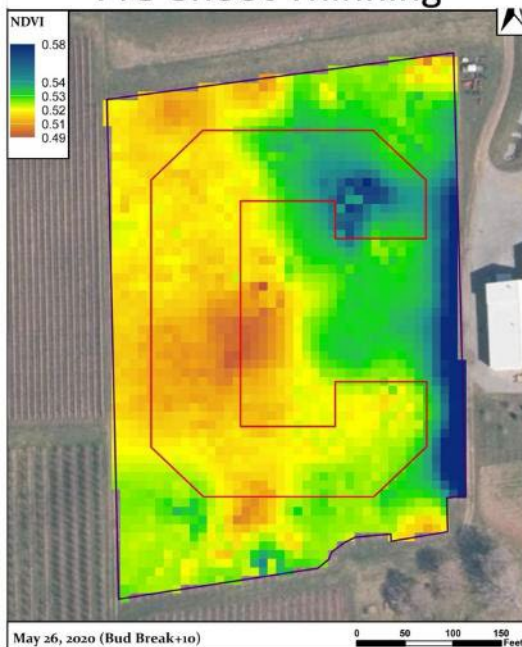


Translated Vit Map
(Shoots/vine)





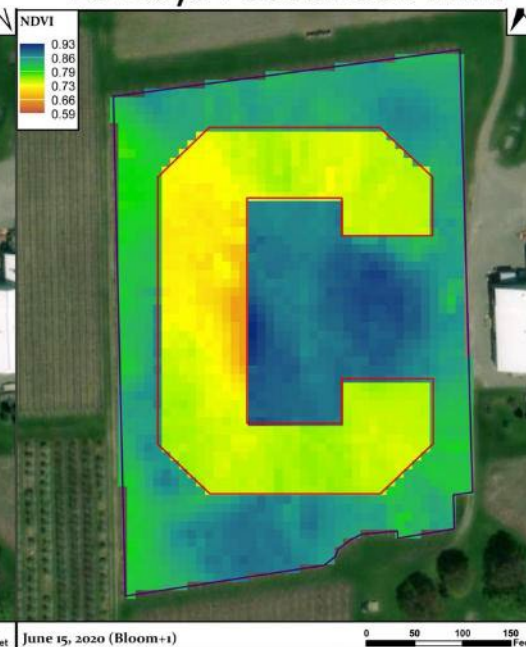
Pre-Shoot Thinning



4 Days Post Shoot Thin



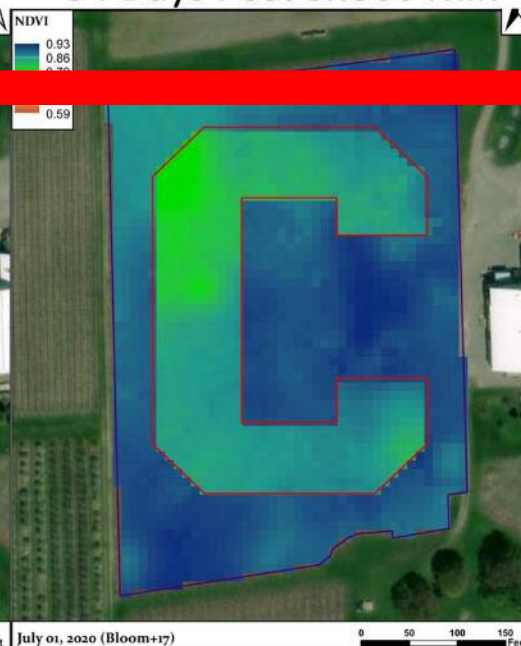
18 Days Post Shoot Thin



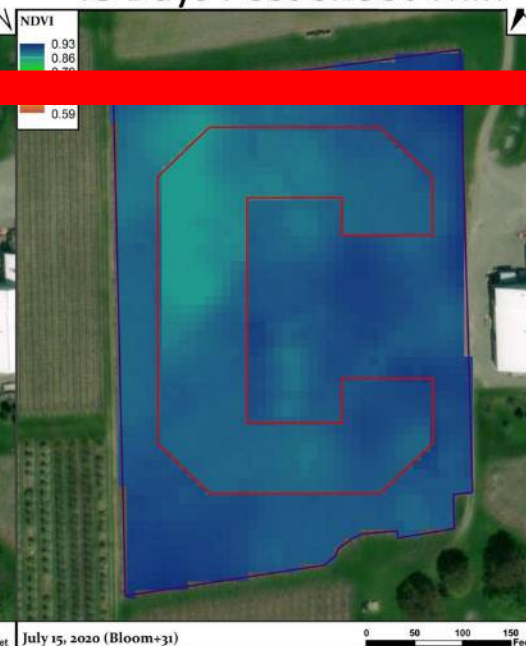
26 Days Post Shoot Thin



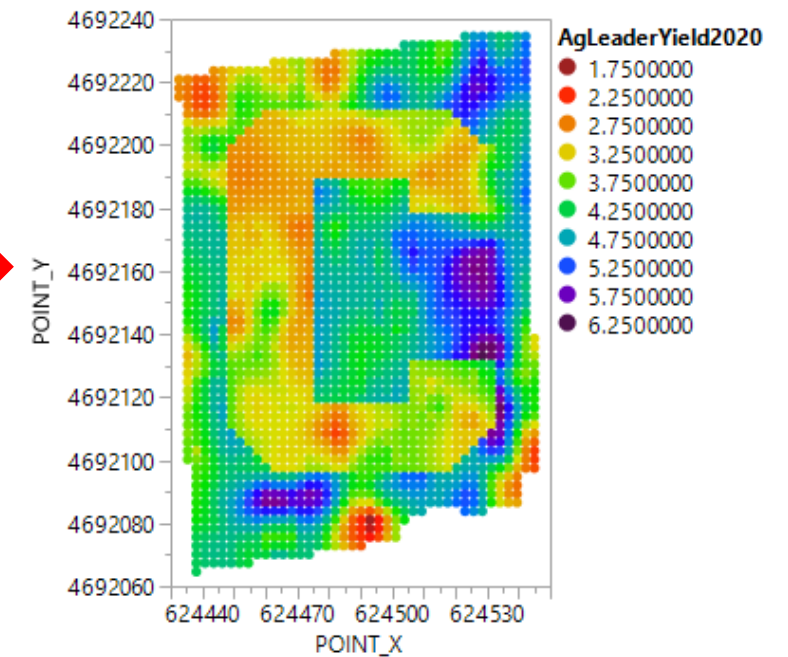
34 Days Post Shoot Thin



48 Days Post Shoot Thin



Bloom NDVI pattern
correlates with the
Yield pattern



New technology does nothing to change the fundamentals of viticulture:

- Balancing vegetative and fruit production
- Adequate light interception by leaves and fruit
- Proper pest, water and nutrient management
- Healthy environment for roots



Key Questions

What problem do I want to solve?

What information do I need to solve it?

How do I get that information?

How do I use that information to develop a solution?