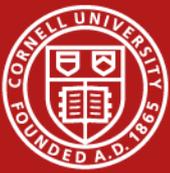


Cornell University  
Cooperative Extension  
Finger Lakes Grape Program



# Vineyard Establishment Costs

Hans Walter-Peterson  
Finger Lakes Grape Program



# Acknowledgements



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# Acknowledgements

## Grower Panel:

Dave Stamp (Lakewood Vineyards)

Mark Wagner (Lamoreaux Landing Wine Cellars)

Dave DeMarco (Seneca Shores Winery)

Matt Doyle (Doyle Vineyard Management LLC)



# The Nature of Investing in Vineyards

- Large upfront costs
- Relatively long “payback” periods (payback is the no. of years that are required to recoup your investment)=>implies cash flow “problem”



# The Nature of Investing in Vineyards

Profitability is extremely reliant upon choice of varieties, sites, and level of management

Good sites + Good management + appropriate varieties = profitability



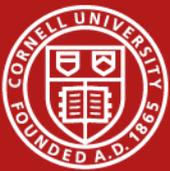
# Key Elements of Study

- 50 planted acres (54 acres total)
- Four vinifera varieties:
  - Chardonnay
  - Riesling
  - Pinot noir
  - Cabernet Franc
- VSP Trellis system; 9' x 6' spacing



# Key Assumptions in 2010 Study

Land Price		\$5,000/acre
Skilled Labor		\$19/hr (incl. fringe)
Unskilled Labor		\$12/hr (incl. fringe)
Yields	Pinot noir	2.6 tons/acre
	Cabernet Franc	3.3 tons/acre
	Chardonnay	3.3 tons/acre
	Riesling	3.4 tons/acre
Quality Practices		Leaf removal Cluster removal



## “Year 0” Costs (\$/acre)

Install Tile Drainage	\$4,110
Herbicide Application	\$ 20
Soil Sampling	\$ 8
Amendments (lime, fert)	\$ 182
Prep (plowing, discing, stones)	<u>\$ 77</u>
	<b>\$4,396</b>



# Year 1 Costs (\$/acre)

**Total \$/acre = \$8,264**

## Major costs:

Purchase vines (\$2,621)

Laser planting (\$788)

Trellis Construction (\$3,648)





# Year 2 Costs

**Total \$/acre = \$876**

Major costs:

Weed Control (\$225)

Vine replacement (\$117)

Dehilling soil (\$88)

Pruning/tying (\$85)





# Year 3 Costs

**Total \$/acre: \$1,858**

Major Costs:

Pruning/Tying (\$488)

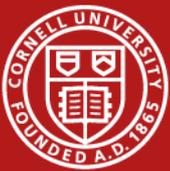
Pesticide apps (\$316)

Weed Control (\$235)

Hill up/takeaway (\$139)

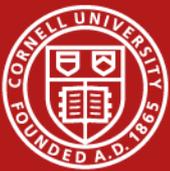
**Harvest (\$250) !!!**





# Total variable costs (\$/acre)

	Expenses	Revenue	Net
Year 0	\$4,396	\$0	(\$4,396)
Year 1	\$8,264	\$0	(\$8,264)
Year 2	\$876	\$0	(\$876)
Year 3	\$1,858	\$1,325	(\$533)
<b>Total</b>	<b>\$15,394</b>	<b>\$1,325</b>	<b>(\$14,069)</b>



# Total establishment costs/acre

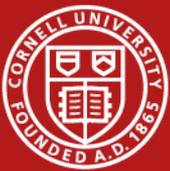
Variable costs	\$15,394
Fixed costs (\$923/yr x 3 yrs)	\$ 2,769
Int on cumulative costs	<u>\$ 1,954</u>
Total costs	\$20,117
Year 3 revenue	<u>-\$ 1,325</u>
<b>Net costs/acre</b>	<b>\$18,792</b>





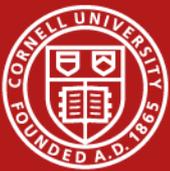
“How do you make a small fortune in the  
grape & wine business?”

$\$18,792/\text{acre} \times 50 \text{ acres} =$   
 **$\$939,600$**



# Grape Prices in 2010

	<b>Chardonnay</b>	<b>Riesling</b>	<b>Pinot Noir</b>	<b>Cab Franc</b>
2006	\$ 1,332	\$ 1,528	\$ 1,654	\$ 1,575
2007	\$ 1,375	\$ 1,628	\$ 1,675	\$ 1,560
2008	\$ 1,299	\$ 1,565	\$ 1,663	\$ 1,328
2009	\$ 1,238	\$ 1,417	\$ 1,532	\$ 1,242
2010	\$ 1,233	\$ 1,443	\$ 1,571	\$ 1,264
<b>Mean:</b>	<b>\$ 1,295</b>	<b>\$ 1,527</b>	<b>\$ 1,619</b>	<b>\$ 1,394</b>
<b>Modeled:</b>	<b>\$ 1,200</b>	<b>\$ 1,300</b>	<b>\$ 1,600</b>	<b>\$ 1,200</b>



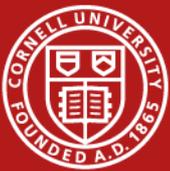
# Returns from mature vineyard (Years 4-25)

	<b>Pinot noir</b>	<b>Cab Franc</b>	<b>Chardonnay</b>	<b>Riesling</b>
Yield (tons/acre)	2.6	3.3	3.3	3.4
Price (\$/ton)	\$1,600	\$1,200	\$1,200	\$1,300
Total Receipts	\$4,160	\$3,960	\$3,960	\$4,420

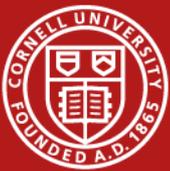


# Production Costs & Returns for Mature Vineyard (\$/acre)

	Pinot Noir	Cab Franc	Chardonnay	Riesling
Variable Costs	\$3,003	\$2,967	\$2,847	\$2,847
Fixed Costs	\$2,423	\$2,413	\$2,413	\$2,436
<b>Total</b>	<b>\$5,426</b>	<b>\$5,380</b>	<b>\$5,260</b>	<b>\$5,283</b>
Revenues	\$4,160	\$3,960	\$3,960	\$4,420
<b>Net</b>	<b>(\$1,266)</b>	<b>(\$1,420)</b>	<b>(\$1,300)</b>	<b>(\$863)</b>



	Pinot noir	Cab Franc	Chardonnay	Riesling
Profit/Loss	(\$1,266)	(\$1,420)	(\$1,300)	(\$863)
Breakeven Price (\$/t)	\$2,087	\$1,630	\$1,594	\$1,554
Breakeven Yield (t/A)	3.4	4.6	4.5	4.1



## Perspective on Profit (or lack of it)

Study includes three “opportunity costs”:

• Owner labor (36 hrs/ac x \$19/hr)	\$34,200
• Management (5% gross receipts)	\$10,300
• Capital (\$854,589 for 25 yrs @4%)	<u>\$34,184</u>
	\$78,684

These costs are included in our study, but do not represent cash outlays.



# Assumptions for 2013 Study

	2010	2013
Land Price	\$5,000	\$6,480
Grape Prices		
Pinot noir	\$1,600	\$1,650
Cabernet Franc	\$1,200	\$1,350
Chardonnay	\$1,200	\$1,250
Riesling	\$1,300	\$1,450
Skilled Labor (\$/hr)	\$19.00	\$20.00
Unskilled Labor (\$/hr)	\$12.00	\$13.50

THANK  
YOU!

