

# Commercial Grape Growing “Primer”

## 2014 Wineries Unlimited

### 13 March 2014

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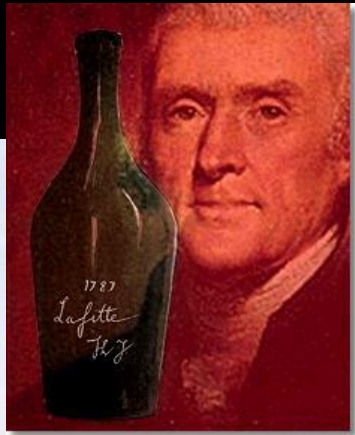
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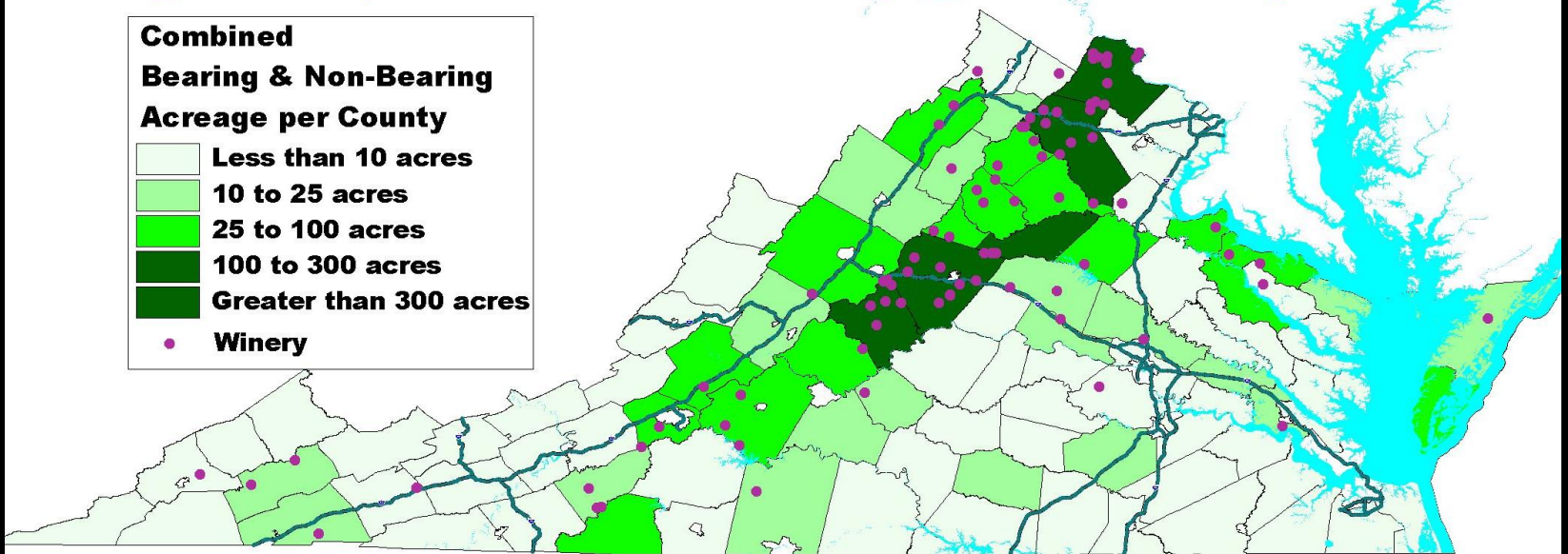
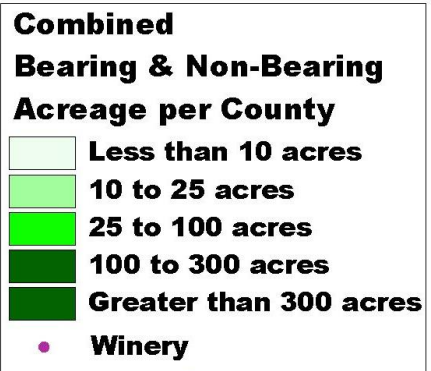
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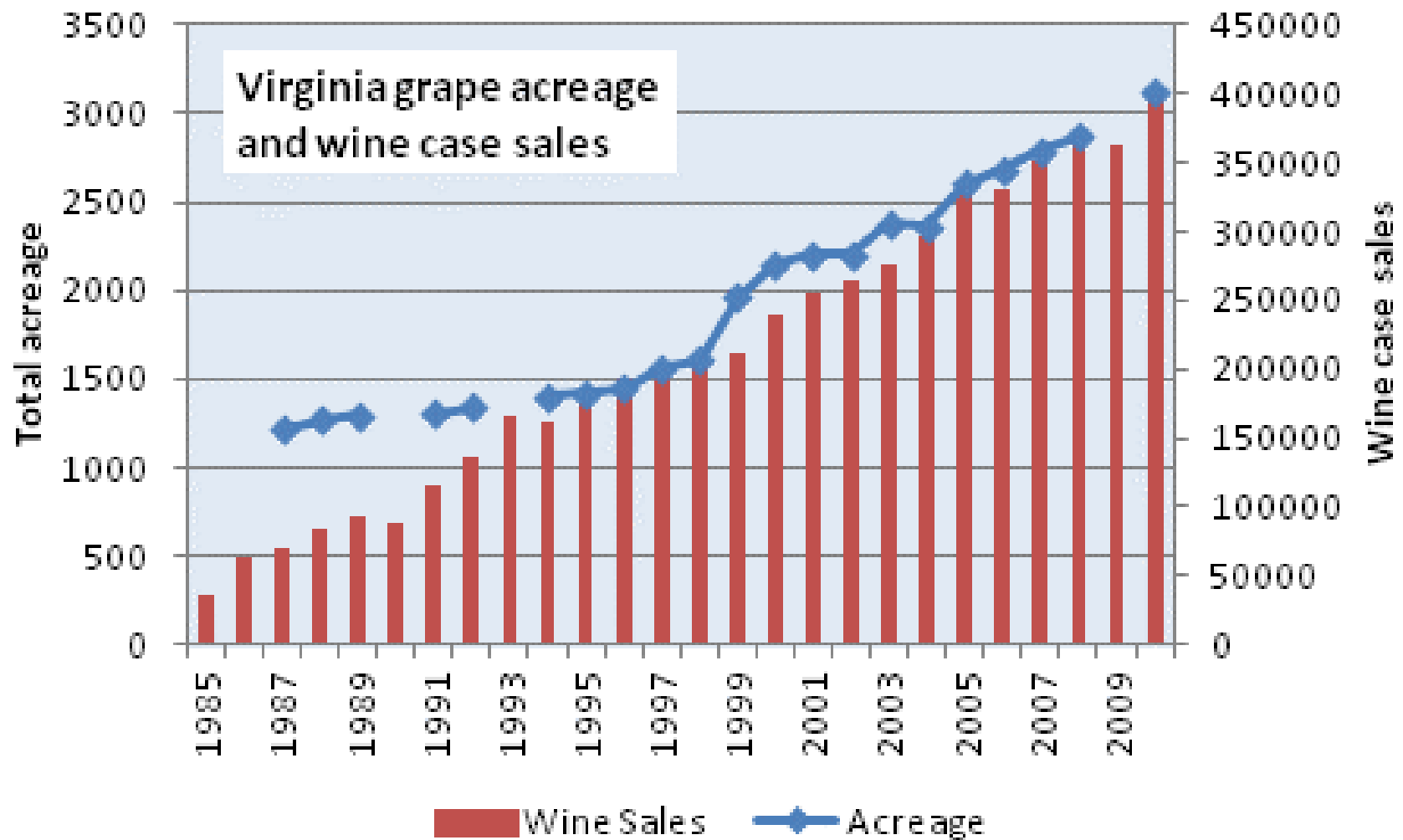


# A brief history of the Virginia wine industry

- 1625: Early colonial (Jamestown) effort
- 1770 ±: Thomas Jefferson, Monticello
- 1880: “Belmont Vineyards” one of largest in US
- 1916: State prohibition of alcoholic beverages (1933)
- 1979: Six wineries and < 300 acres of grapes
- 1980: Virginia farm winery bill passed
- 1985: VA Tech hires enologist and viticulturist
- 2005: Industry’s economic impact assessed at \$362M
- 2010: Industry’s economic impact assessed at \$712M
- 2014: About 3500 acres and >250 wineries

## Virginia Grape Production: Bearing and Non-bearing Acres





## Total grape acreage and wine grape production: 2010

	Bearing acres	Wine grapes (tons)
USA Total	940,700 (all)	7,040,100 (all)
California	482,000 (wine)	3,440,000 (wine)
Washington	34,000 (wine)	165,000 (wine)
New York	37,000 (all)	133,000 (all)
Oregon	16,500	37,000
Pennsylvania	13,600 (all)	64,000 (all)
Michigan	14,200 (all)	96,500 (all)
<b>Virginia</b>	<b>2,800</b>	<b>8,600</b>
Texas	3,300	6,200
Maryland	535	>1,000

Source: NASS, 2010, non-citrus Fruits and Nuts 2009 report

# Economic Impact of Wine and Grapes in Virginia in 2005 and in 2010

<b>Virginia Wine &amp; Grapes</b>	<b>2005*</b>	<b>2010**</b>
<b>Total economic impact</b>	<b>\$362 million</b>	<b>\$712 million</b>
Wages Paid	\$84 million	\$162 million
Retail value of VA wine sold	\$45 million	\$73 million
Farm Gate Value of Crops	\$8 million	\$10 million
Wine-Related Tourism Expenditures	\$57 million	\$84 million
Number of Grape Growers	262	386
Full Time Equivalent Jobs	3,162	4,877

## Sources:

\* MKF Research, LLC (2005)

\*\* Frank, Rimerman & Co., LLP (2010)

# Why did Virginia emerge as a wine industry leader in the mid-Atlantic region?

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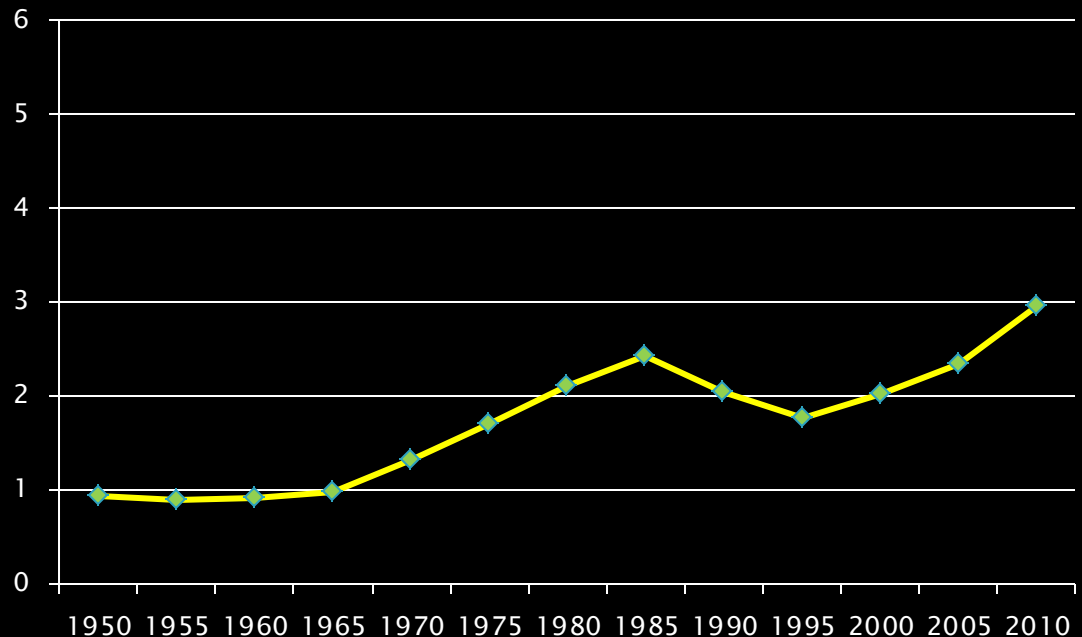
- Favorable meteorological climate
- Favorable legislative climate
- Research and Extension helped solve problems and educational voids
- Exemplary wine marketing efforts
- Proximity to affluent markets
- Growth occurred against a backdrop of increased interest in boutique wines
- Tourism was integral to industry's growth



# What is driving wine sales?

- National trends
- Agri-tourism
- Other social factors: lifestyle, broader selection of affordable, good wines, increased role of women making purchases

Per capita US wine consumption (gal/yr)

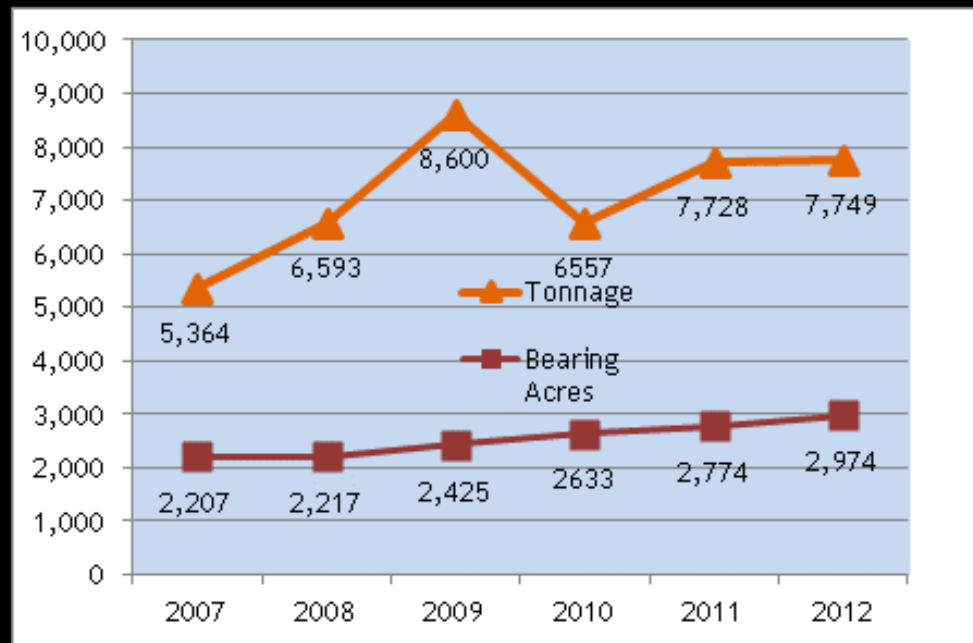


# Room for growth?

## Overview of Virginia Wine Industry Statistics

2004	2012	% Increase
• 78 wineries	• 231 wineries	+ 198%
• 2,360 bearing and non-bearing acres	• 3,376 bearing and non-bearing acres	+ 43%
• 308,708 case sales	• 484,982 case sales	+ 57%
• 3,700 tons produced	• 7,532 tons produced	+103%

NOTE: Virginia has seen significant increases in every aspect of wine making and sales. The least segment of growth has been vineyard expansion.



# Market opportunities ...

What is the demand for independently-grown grapes?

Wineries would have bought the following varietals if available:	# of Total Responses	Tons
<b>31 Total Varietals</b>	<b>148</b>	<b>860</b>
Viognier	28	241
Chardonnay	14	135
Petit Verdot	18	68
Pinot Grigio/Gris	6	45
Cabernet Franc	10	44
Norton	2	35
Merlot	5	34
Petit Manseng	7	27
Vidal Blanc	6	25
Tannat	8	21
Cabernet Sauvignon	4	18
Muscat	3	18
Albarino	3	17
Chambourcin	5	16
Riesling	3	16
Syrah	2	15
Chardonel	2	14
Grenache	2	13
Traminette	4	12

# Market opportunities ... winery development

Winery type	Authorizes	License fee
Class A farm winery	At least 51% of (fruit) must be grown on this farm and no more than 25% of (fruit) shall be grown outside Virginia	\$190 / year
Class B farm winery	75% of fruit obtained from within Virginia and no more than 25% originating outside Virginia. Must have operated a farm winery for at least 7 years before a Class B license can be issued.	\$3,725 / year
Winery	5,000 gallons or less annually	\$189 / year
Winery	More than 5,000 gallons annually	\$3,725 / year
Contract winemaking facility” (2013)	“... a licensed winery or farm winery that (obtains grapes) from a person holding a farm winery license and (makes wine) pursuant to an agreement with the farm winery licensee. .. wine (so) produced shall be considered to be wine owned and produced by the farm winery that supplied the grapes. The contract winemaking facility shall have no right to sell the wine but may charge the farm winery for its services.	No additional fee

## Challenges to grape production and wine quality in the mid-Atlantic's unique environment

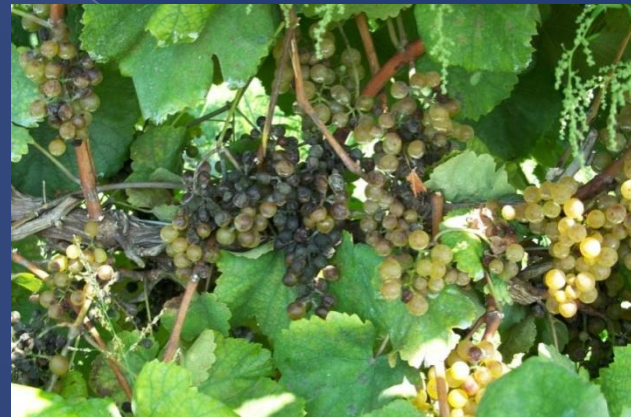
- ▶ High capitalization requirement for start-up
- ▶ Environmental risks:
  - Potential for spring frost and winter cold injury
  - Supra-optimal rainfall, soil moisture (e.g., 2011)
  - Warm/hot growing season
- ▶ High disease pressure; some unique diseases
- ▶ Technical challenges (vineyard and winery)
  - A lot of new entrants to industry and relatively few trained wine growers

The goal.....



# It's not always pretty.....

increased incidence of  
fungal diseases  
e.g., downy and powdery  
mildews, bunch rot



Attend meetings, learn from  
peers and specialists.  
Do not become complacent



Virginia Vineyards  
Association's annual  
technical winter  
meeting, February  
2013



A photograph of several wooden wine barrels stacked in a cellar. The barrels are made of light-colored wood and have metal hoops. The text "Thank you" is overlaid in a white cursive font in the center of the image.

*Thank you*