# VIRGINIA 2017 COMMERCIAL GRAPE REPORT





This Year's Report Prepared By:
Van Wood, Ph.D.
Stephen Custer, Ph.D.
Kaitlyn Watson, M.B.A.
Brian Chibbaro
(All from VCU)



#### 2017 GROWING SEASON

Virginia's 2017 growing season was characterized by unusually high temperatures. According to the National Oceanic and Atmospheric Administration, Virginia's statewide temperate average was 57.3 degrees – making 2017 the state's fourth-warmest year since 1895.

Overall, Virginia's precipitation was a bit lower than average causing occasional flare-ups of dry conditions across the state which also contributed to a bumper crop statewide.

Yield per acre for this year's respondents was 23% higher than for 2016 respondents. Part of this increase is due to low yields last year, however 2017 reported yields were also 14% higher than 2015 respondents, a near normal year.

The unusually high temperatures and lower than average precipitation throughout the year gave bountiful harvests to many growers across the state.





SPECIAL THANKS TO ALL GROWERS WHO TOOK THE TIME TO PARTICIPATE IN THIS YEAR'S SURVEY!



#### ABOUT THE SURVEY

This year marks the second year the Virginia Commonwealth University School of Business managed the annual Commercial Grape Report (CGR) data collection and reporting on behalf of the Virginia Wine Board. Prior to 2016, the CGR was managed and produced by the Virginia Wine Board. Prior to 2010, the CGR was produced by NASS (National Agricultural Statistics Service).

Working with the Virginia Wine Board, the team from VCU developed a series of multiple-choice and openended questions with the intent of giving growers more of a voice in the survey, allowing them to describe some of the challenges they face growing and selling grapes, and giving them an opportunity to tell the Board ways they think it can better help them. Limited qualitative responses are included in this report; however all qualitative responses were read and considered by the Board as it seeks to find ways to provide more support to growers.

The 2017 survey, as well as the 2010 through 2016 surveys, drew upon exact data provided by Virginia grape producers. The information presented in this report was gathered through a survey of all known grape producers in Virginia. Data was collected during the months of October 2017 through February 2018 by mail, telephone and email. Information obtained for this survey is kept completely confidential. Only aggregate data is presented in this report.

Working with the Virginia Wine Board, the Virginia Vineyard Association, and the Virginia Winery Association, the number of growers surveyed in 2017 increased from 319 to 421. This yielded 22 more responses than 2016 (235 respondents versus 213 respondents) for a 59% response rate. Not all respondents answered all questions, so the response rate for some questions may be lower.

Direct comparison of year-over-year totals would be misleading since the years include different numbers of growers. However, there is an added analysis that looks at year-over-year comparisons using those responses that were common to 2015, 2016, and 2017.

The "median" response values for the various survey questions as well as "average" response values are provided. The median represents a value that divides the distribution of responses to any given survey question in half such that 50% of responses are lower than the median and 50% are higher. The average may be unduly influenced by extreme values, the median is not. If the average and median are nearly the same, the distribution is more or less symmetric with higher and lower values offsetting each other. If there is a large difference between the median and average, it means there is one or more extreme values or the distribution is skewed. Thus, both median and average values for response are provided in this year's report.

The totals reported in the following tables and charts may not equal the sums of individual variety types due to self reported information.

The grape growers' report represents an ongoing process in which we hope to have all Virginia grape growers participate in this important research in the future.

For further inquiries about the Virginia Wine Board, please contact Ms. Annette Boyd at 804.344.8200. For questions about this survey, please contact Dr. Van Wood, VCU Professor of Marketing, at 804.519.2022 or vrwood@vcu.edu.

# Grape Production, Acreage and Average Price by Variety

	Tons	Bearing	Non-	Average	Median	25th	75th
	Produced	Acres	Bearing	Price	Price	Percentile	
			Acres			Price	Price
Total	7761	2484		2161	2230		
Vinifera	5772	1959		2366			
Albarino	40	24		1988			2488
Cabernet Franc	994	321	77	2407	2289		
Cabernet Sauvignon	439		29	2385			
Chardonnay	1182	386	74	2297	2250	2000	2550
Gewurztraminer*	22	7	3	-	-	-	-
Malbec	40	17	6	2746			
Merlot	731	245	30	2408	2400		2700
Petit Manseng	206	62	14	2383	2333	2225	2700
Petit Verdot	589	193	44	2492	2500		2800
Pinot Gris/Grigio	137	48	4	1980	2000	1875	2313
Pinot Noir	53	26		2538	2500	2000	3113
Riesling	92	29	10	2289	2000	1967	2900
Sauvignon Blanc	111	40	18	2725	2675	2500	2900
Syrah	20	9	I	2167	2250	2000	2250
Tannat	106	31	6	2779	2710	2504	2900
Viognier	617	196	28	2462	2500	2350	2737
Other White Vinifera	131	34	6	2293	2000	1750	2775
Other Red Vinifera	118	44	18	2176	2050	1950	2517
Hybrid	1517	377	80	1497	1488	1242	1629
Chambourcin	428	104	21	1522	1500	1250	1625
Seyval	88	28	7	1317	1300	950	1693
Traminette	248	79	8	1406	1400	1308	1482
Vidal Blanc	582	123	24	1531	1548	1309	1666
Other White Hybrid	160	41	8	1472	1400	1358	1550
Other Red Hybrid	21	7	5	1000	1000	1000	1000
American	464	155	18	1729	1732	1255	2338
Concord	92	19	2	1116	1060	659	1630
Niagara*	177	32	0	-	-	-	-
Norton	182	91	12	1698	1700	1575	2269
Other White American*	9	3	0	=	-	-	-
Other Red American	8	8	2	1732	1732	1732	1732

<sup>\*</sup> Less than 5 growers supplied price information

# Grape Production and Acreage by District and County

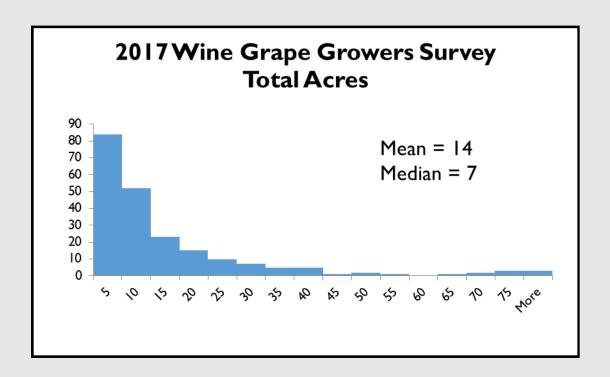
County		Tons Produced	Bearing Acres	Non-Bearing Acres	
State Total		7761	2484	521	
Northern	Fauquier	410	145	54	
	Loudoun	1298	503	103	
	Madison	57	19	3	
	Rappahannock	198	74	17	
	Rockingham	115	31	18	
	Other Counties*	682	231	48	
	District Total	2760	1003	243	
Western	Augusta	298	68	44	
	Rockbridge	120	28	3	
	Other Counties*	152	47	12	
	District Total	570	143	59	
Central	Albemarle	1317	390	86	
	Amherst	35	13	2	
	Nelson	820	212	14	
	Orange	994	239	12	
	Other Counties*	201	122	28	
	District Total	3367	976	142	
Eastern	All Counties*	232	111	13	
Southern	All Counties*	440	128	39	

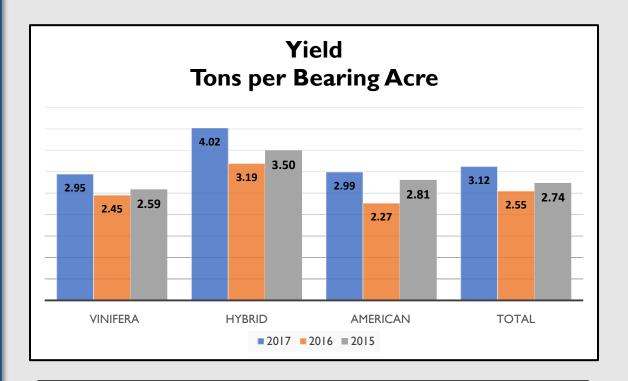
#### **VINEYARD SIZES**

The histogram below shows the distribution of respondents' vineyard sizes by total acreage. Virginia's wine grape growers are characterized as numerous small growers and a few very large ones. Sixty-four percent of respondents are less than 10 acres and 74% less than 15. The average and median vineyard size are slightly smaller than last year's respondents. This is not an indication of decreasing vineyard size, but the different respondent mix – more small vineyards captured this year.

It is safe to say the additional growers added to the survey and additional respondents tended to be smaller growers in 2017. The growers that responded this year but not last averaged 48% less acreage than those that responded both years and 68% lower tons of production. The lower production was mainly due to being a younger vineyard. New respondents reported 31% of their acreage as non-bearing while those that responded both years reported 14% non-bearing acreage.

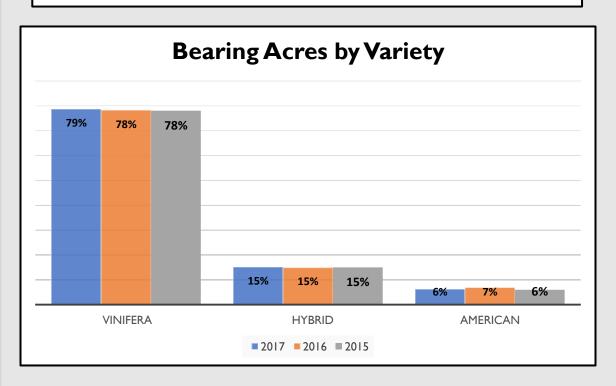
Based on the data that those who only responded this year were smaller than those that responded both years it is fair to assume that those that did not responded at all were as small or smaller. Thus the actual survey of the Virginia Grape growing industry covered considerably more of the industry's production than the 59% response rate implies.





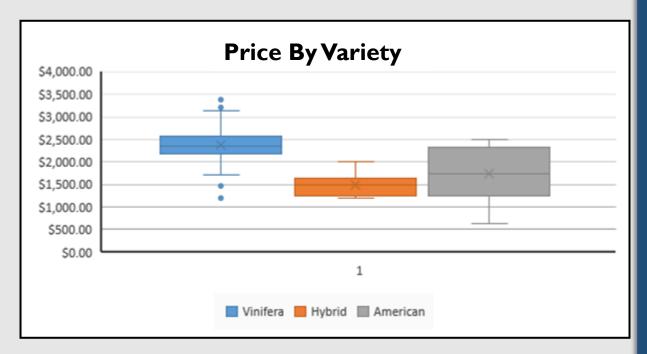
#### YIELDS AND VARIETAL MIX

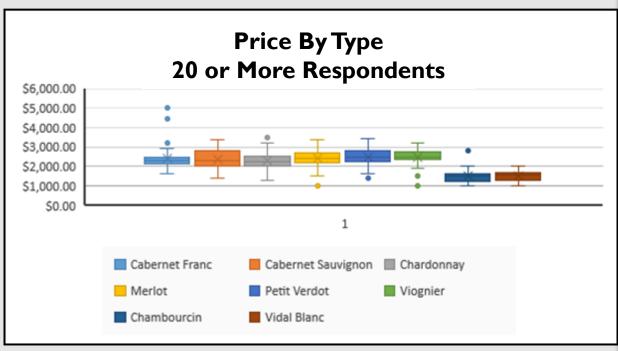
Yields were up across the board. Overall yields increased 23% over last year. This was due to significant crop loss due to weather in 2016 and a bumper crop this year. Comparison of yields from last year may be misleading due to the adverse weather in 2016. However, there was also a 14% increase in yield compared to 2015. The mix among varieties is unchanged over the last 3 years.



#### **PRICE**

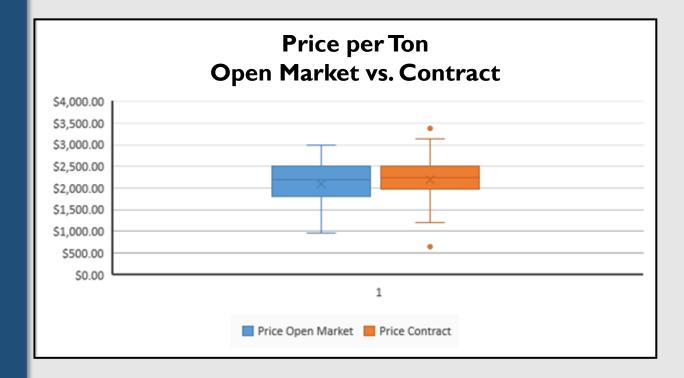
Price per ton was up for all varieties this year. Vinifera increased by 2.1%, Hybrid by 2.8% and American by 16%. The large increase for American may be due to the small sample (only 9 respondents). Again this year Vinifera yielded significantly higher prices than the other varieties. The charts below show the median (center line), 25 and 75 percentiles (box), and maximum and minimum excluding any outliers (horizon lines). The dots beyond the maximum and minimum are any outliers. The second chart shows the same things for all grape types for which there were at least 20 respondents.





# **PRICE**

There was no appreciable difference in price for open market vs contract.



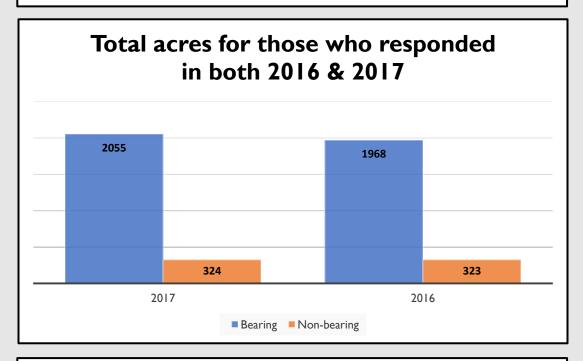


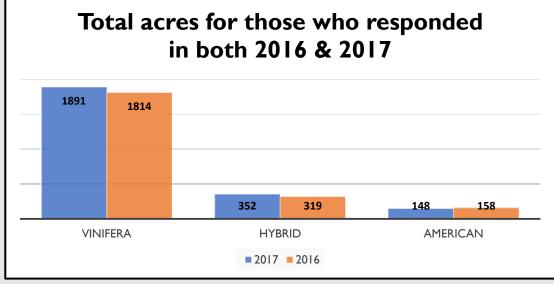
#### YEAR OVER YEAR CHANGE IN ACREAGE

In order to assess growth or decline in the amount of land devoted to wine grape production independent of differences in respondent mix, we looked at only those vineyards that responded in both 2016 and 2017. This gave an apples to apples comparison of the same exact set of vineyards. Although this gives an unbiased picture for these vineyards it does not reveal any growth or decline due to new vineyards entering the industry.

For this set of vineyards there was a 3.8% increase in total acreage. This is exactly the same rate of growth we reported last year. There was a 4.4% increase in bearing acres and no change in non-bearing acres.

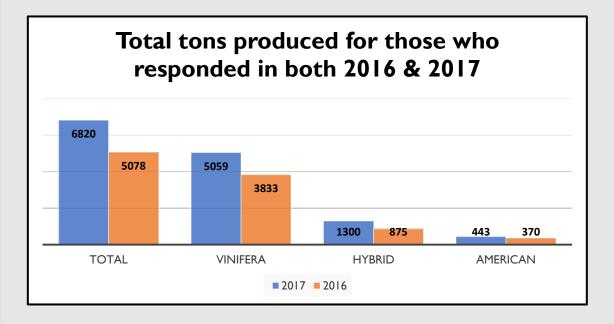
For growers that responded in both 2016 and 2017, Vinifera total acreage increased 4.2%, Hybrid 10.3% and American decreased by 6.5%





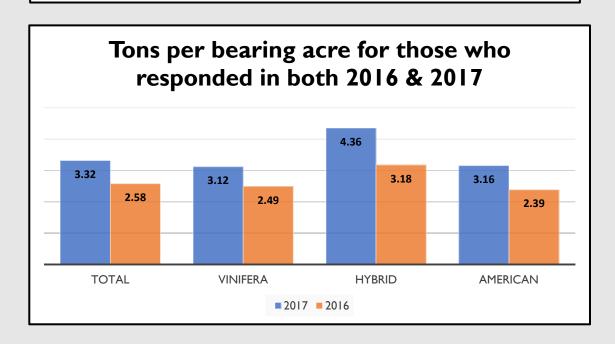
#### YEAR OVER YEAR CHANGE IN TONS PRODUCED

When looking at only growers that responded in both 2016 and 2017, the increased production was even more pronounced than when looking at all survey respondents. Total tons produced increased 34%. By variety: Vinifera up 32%, Hybrid up 48% and American up 20%.



#### YEAR OVER YEAR CHANGE IN YIELD

The yield increases for those that responded in both 2016 and 2017 also increased more than for the total surveys. The overall increase was 29%, Vinifera 25%, Hybrid 37% and American 32%.



# **QUALITATIVE QUESTIONS**

#### The biggest challenge I face growing grapes:



### The biggest challenge I face selling grapes:



#### **QUALITATIVE QUESTIONS**

# I'm satisfied with the number of varieties of grapes available for me to grow: (202 Respondents)

Strongly Agree - 40 growers (19.8%)

Agree - 100 growers (49.5%)

Neither Agree Nor Disagree - 37 growers (18.3%)

Disagree - 22 growers (10.9%)

Strongly Disagree - 3 growers (1.5%)

#### In the next five years I plan to: (212 Respondents)

131 growers (61.8%) plan to grow more tons of grapes.

73 growers (34.4%) plan to grow about the same tonnage of grapes.

I grower (0.5%) plans to grow fewer tons of grapes.

7 growers (3.3%) plan to stop growing grapes.

# I'm aware of activities the Virginia Wine Board conducts on my behalf outside of this survey: (207 Respondents)

Strongly Agree - 32 growers (15.5%)

Agree - 109 growers (52.7%)

Neither Agree Nor Disagree - 43 growers (20.8%)

Disagree - 18 growers (8.7%)

Strongly Disagree - 5 growers (2.4%)