

Methodology

The Maryland Grape Growers Association (MGGA) developed the survey tool in April-May 2020 and the surveys (in three formats: PDF, Word and Excel) were sent to current MGGA and Maryland Wineries Association (MWA) membership lists from July-August 2020, and then again from November 2020-January 2021. The surveys were sent out through direct email and member newsletters and posted to organizations' social media accounts. The pause in attempting to get completed surveys was due to the harvest and winemaking season.

In all, 96 survey responses were received where respondents had more than 0.25 acres of grapes planted. Any respondents who self-identified as growing grapes in another state, as backyard/hobby grower, grew less than 0.25 acres, or did not grow grapes at all were not included in the final results.

The report is missing survey responses, which underscores the importance of industry-wide participation in future surveys. Accurate numbers are used for state research priority purposes, legislative efforts and funding determination.

External Impacts

Environmental variables, including weather, pests, disease, and chemical treatments, have the potential to negatively impact the vitality and productivity in vineyards. The industry is familiar with these challenges and approaches each growing season with plans to mitigate impacts from these external factors.

This report would be remiss if it did not discuss the impacts of weather, disease and pests on the 2018 harvest. In 2018 a mild winter, and extended periods of rain, led to a harvest season that was disastrous for the majority of grape growers. In fact, several wineries did not even make red wines in 2018.

Calendar year totals of 71.82 inches exceeded the previous record high in 2003 by close to 8 inches. Most areas of the state experience about 145 rainy days compared to a typical annual average of about 110. In September, the critical ripening month, it rained on six out of every 10 days, decreasing overall ripening and increasing disease pressure.¹

One large Eastern Shore grower stated that they had "80 inches or rain and lots of rotten fruit... we left a lot of fruit unharvested."² A Piedmont region grower reported their red grape harvest was reduced by 55%, and white wine harvest by 67%. A grower with vineyards in both Western Maryland and Northern Maryland reported a 50-60% loss, with the even larger problem being the poor quality of the fruit that was harvested³

Additionally, the 2018 harvest continues to have implications; several growers reported that the health of their vines was impacted due to 2018 weather, so they continued to see decreases in 2019, and even 2020, harvests of particular grapes. One grower reported losing 20% of their vines as a result of the 2018 weather.⁴

Herbicide drift also continues to be a major concern, with vineyard operators reporting serious impacts—including burn, no fruit set and even vine death—over the last three years. Drift impact from other farm operators, state and county contractors, and private contractors working for public utilities has been reported by vineyard operators in Frederick, Harford, Prince George's and Queen Anne's counties. The survey did not ask specifically about vineyard damage from weather or herbicide drift, so it is difficult to quantify the exact impact.

⁴ Quotes to MWA staff from Maryland winery owner



^{1 &}quot;2018 – A Vintage for the Record Books" document, Joseph A Fiola, PhD, University of Maryland Extension

² Quote from MGGA survey respondent

³ Quotes to MWA staff from Maryland winery owners

The Results

The grand total of acres reported was 899; 759.5 of which were fruit-bearing. It is likely that the actual acreage is higher. This speaks to a continued maturing of the industry as many vineyards are well-established and producing usable fruit; the approximately 139 acres that are not fruit-bearing could be 1) vineyards established within the past year or two, and/or 2) vineyards, or vineyard acreage, impacted from 2018 weather and disease damage.

MARYLAND GRAPE INDUSTRY STATISTICS ⁵						
	2001	2006	2008	2010	2014	2019
Non-Winery Vineyards	n/a	23	22	29	36	26
Wineries	12	26	33	46	71	110 ⁶
Vineyard Acres	212	431	535	601	858	899
Total Maryland Harvest Tons	n/a	656	637	949	1,748	1,834

Similar to states like Virginia⁷, 57% of our state vineyards are 10

5 2014 Maryland Grape Growers Association Vineyard Survey Report

- 6 2021 Comptroller of Maryland Alcoholic Beverages Statewide License List. Includes Class 3 and Class 4 wineries
- 7 2019 Virginia Commercial Grape Report. Prepared by SMS Research Advisors. April 2020.



acres or less, with only four vineyards reporting more than 25 acres. Twenty growers account for almost 60% of the state acreage, and all but four are licensed wineries.

Who is growing grapes in our state:

Of the growers who responded, 62% are licensed wineries; 27% are growers; and 11% are wineries in planning⁸.

Based upon the number of licensed wineries who responded to the survey, the majority (58) do not sell their grapes and use the fruit for their own production needs. Those that do sell their grapes do so by the ton (33 respondents), versus by the acre (1 respondent).

Of the 33 growers who sell by the ton, 18 are licensed wineries.

Maryland	2020 Acres (Fruit-Bearing and Non Fruit-Bearing)			
Vineyards	Commercial Grower	Winery in Planning	Winery	Total
Allegany	1.85	0	0	1.85
Anne Arundel	2	0	38.55	40.55
Baltimore	11.5	0	26.5	38
Calvert	2.5	0	7	9.5
Caroline	0	0	12.5	12.5
Carroll	2.4	5.1	31.55	39.05
Cecil	0	0	32	32
Charles	2.5	0	3	5.5
Dorchester	0	0	13.5	13.5
Frederick	0	10	243.5	253.5
Garrett	0	0	0	0
Harford	0	0	14	14
Howard	4	0	0	4
Kent	.5	0	14.5	15
Montgomery	13	.25	98	111.25
Prince George's	1.7	12.4	17.4	31.5
Queen Anne's	45	0	42	87
St. Mary's*	0	9.5	25	34.5
Talbot	5.25	0	7	12.25
Washington	24	2	81.5	107.5
Wicomico	0	0	14.5	14.5
Worcester	0	0	4	4

*St. Mary's growers who are members of Port of Leonardtown Winery, a cooperative winery, are listed under Licensed Winery acreage.

Where are grapes being sold?

Survey respondents indicated that in 2019, they sold more than 439 tons in Maryland, and just over 38 tons outside the state.

^{8 10} wineries in planning responded; there are 17 "in planning" members of the Maryland Wineries Association.



Fruit demand

In 2018 the General Assembly passed legislation - with support from MWA and MGGA - to require that all Class 4 wineries own, or have under their control, at least 20 acres of grapes or other fruit. If a winery is not able to meet that threshold, they were then required to ensure that at least 51% of the ingredients used in annual production were Maryland grown ingredients. This law goes into effect in 2023. This has created an increased demand from wineries for Maryland-grown fruit.

There are several direct mechanisms in Maryland to support the growth of vineyard acreage, including both state and regional programs:

- The State Department of Commerce Wineries and Vineyard Tax Credit
- MARBIDCO's Vineyard Planting Loan Fund, Value-Added Producer Grant Matching Grant, the Value-Added Producer Grant Capital Assets Option, Local Government Cost Share Grant
- SMADC's Revolving Loan Fund
- MGGA New Growers grants

Over the years these programs have helped expand statewide acreage, as well as support the growth of wineries, to meet the 51%, or 20 acres, requirement. As a result, for the past few years, MWA has encouraged that anyone considering a winery ensure that 1) they seriously consider establishing their own vineyards, and 2) identify growers who can meet their wine product goals and needs. This has led to newer wineries establishing vineyards from the very beginning, and also partnering with growers who will produce the varieties of interest to wineries.

Average Price per Ton (2018 & 2019 sales)

In 2019 Rigby Viniculture, in partnership with MWA, surveyed Maryland licensed wineries to identify the average price per ton that wineries paid for grapes in 2018.⁹ The MGGA statewide survey, on the other hand, included both 2018 and 2019 vintages. The overall results are similar to what the statewide survey indicated, although the higher average price from the statewide survey likely reflects the increased price growers were able to command during the 2019 harvest, which was overall of very high quality.

Average price per ton:

	Statewide Vineyard Survey	Rigby Viniculture/MWA Survey		
American	\$1,080	Not in the survey		
Hybrid	\$1,370	\$1,048		
Vinifera	\$2,095	\$1,938		

9 Rigby Viniculture report, "What the Maryland Wine Industry Wants and Needs." Based upon 2019 Maryland licensed wineries surveys. A breakdown of white wine and red wine varietals did not demonstrate a significant difference in the average price per ton. White vinifera averaged \$2,097/ton, and red vinifera averaged \$2,093/ton. There is a slight price difference between hybrid grapes, however. White hybrid averaged \$1,359, and red hybrid grapes averaged \$1,145.

Grapes are grown in 21 of the 23 counties; Frederick County leads the state in the production of fruit, followed by Washington, Queen Anne's, Montgomery and Anne Arundel counties. Similar to previous years, Frederick County continues to lead all other counties for vineyard acreage¹⁰.

Forecast: what's to come

Grape growers were asked about their intent to plant grapes in the next three years; the 46 respondents who planned to do so intend to add approximately 284 acres, representing 36 different varietals. The breakdown is as follows:

Varietal	Number of Respon- dents	
Cabernet Franc	18	
Petit Verdot	14	
Merlot	14	
Chambourcin	9	
Chardonel	8	
Albariño	7	[
Chardonnay	6	
Vidal Blanc	5	
Barbera	4	
Cabernet Sauvignon	4	
Pinot Gris	3	
Touriga Nacional	3	[
Traminette	3	
Colombard	2	
Malbec	2	
Teroldego	2	
Vignoles	2	
Viognier	2	

Varietal	Number of Respon- dents
America	1
Aromella	1
Blaufränkisch	1
Cayuga	1
Frontenac	1
Gamay	1
GR7 (Geneva Red: Cornell hybrid)	1
NY810315.17 (Cornell Cayuga White-Riesling hybrid)	1
Petit Manseng	1
Pinot Blanc	1
Regent	1
Riesling	1
Sauvignon Blanc	1
SK77-53 (Russian Varietal)	1
Souzão	1
Syrah	1
Tannat	1
Vermentino	1
Unsure of what they'll plant	1

The top ten varietals – highlighted in bold – very closely align with the Rigby Viniculture-MWA 2019 survey – "What the Maryland Wine Industry Wants and Needs" - of the varieties most in-demand

10 2014 Maryland Grape Growers Association Vineyard Survey Report



by wineries. The main exception is Chardonel, which had lower demand from winery respondents at the time of the 2019 survey.

The MWA survey indicated that the state's wineries demonstrated demand for an additional ~630 tons of Maryland-grown grapes.¹¹ This equates to a need for anywhere from 150-200 more acres of grapevines. Thirty-eight wineries (76% of respondents) stated that they were seeking to purchase Maryland-grown grapes.

Importance of Buying Maryland Grapes¹²

53% of winery respondents stated that it was "Extremely" or "Very" important to buy Maryland grapes, with 86% overall indicating a significant level of importance to purchase state-grown grapes. Below is what they were looking for.

	Number of Wineries	% of total
Extremely Important	4	8%
Very Important	22	45%
Important	16	33%
Some Importance	7	14%
Not Important at all	0	0
TOTAL RESPONSES	49	

Grapes most in-demand¹³

Top ten varieties in-demand

Varieties	Demand (in tons)	Percent of Total	Number of Wineries that want this grape
Cabernet Franc	97	15%	25
Vidal Blanc	64	10%	15
Merlot	61	9%	15
Cabernet Sauvignon	46	7%	12
Chardonnay	46	7%	11
Albariño	33	5%	10
Traminette	32	5%	6
Petit Verdot	30	4%	10
Viognier	30	4%	9
Chambourcin	25	4%	8
TOTALS	464	65%	

Others in demand:

- Rigby Viniculture report, "What the Maryland Wine Industry Wants and Needs." Based upon 2019 Maryland licensed wineries surveys.
- 12 Rigby Viniculture report, "What the Maryland Wine Industry Wants and Needs." Based upon 2019 Maryland licensed wineries surveys.
- 13 Rigby Viniculture report, "What the Maryland Wine Industry Wants and Needs." Based upon 2019 Maryland licensed wineries surveys.

Varieties	Demand (in tons)	Percent of Total	Number of Wineries that want this grape
Sauvignon Blanc	25	4%	6
Barbera	23	3%	11
Petit Manseng	22	3%	3
Pinot Gris/Grigio	19	3%	6
Riesling	17	3%	4
Tannat	16	2%	5
Malbec	13	2%	4
Chardonel	9	1%	3
Gruner Veltliner	8	1%	4
Lemberger/Blaufrankisch	7	1%	3
Chenin Blanc	6	1%	4
TOTALS	165	24%	

As evidenced by both the statewide vineyard survey and the Rigby Viniculture-MWA survey of varietal demand, grapes used to make both single-varietal wines and Bordeaux-style blended wines are the most sought after. The same can be said for the white wine grapes, which wineries make as single varietal wines, but also as blends.

Additionally, some of the varieties that growers intend to plant are ones both researched and recommended by Dr. Joe Fiola, the University of Maryland state viticulturist. His ongoing trials, and the regularly scheduled tastings at the annual MGGA conference, and MWA's cultivar tasting event in 2019, provide growers and winemakers an important opportunity to learn about a wide variety of grapes that have demonstrated potential, and success, in Maryland's diverse growing regions. The data collected through Dr. Fiola's research helps the industry strategize and evaluate risk when introducing new grape varietals to local vineyards.

Conclusion

Maryland's vineyard industry remains strong, though tonnage produced continues to fall far below winery demand. Every winery surveyed noted the importance of buying local grapes, with wineries seeking an nearly 500 tons of the top ten most in-demand varieties. Commercial plantings of Dr. Fiola's research trials have yielded strong demand by wineries for new varieties, illustrating that growers can incite—not just follow—demand for specific varities. More frequent surveying is critical to ensuring a clear picture of Maryland's grape supply and demand.



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