



THE OFFICE OF AGRICULTURE

Marc Elrich
County Executive

Jeremy V. Criss
Director

MEMORANDUM

November 3, 2020

TO: Sidney Katz, President
Montgomery County Council

VIA: Jeremy V. Criss, Director
Office of Agriculture

FROM: Kristin A. Fisher, PhD, Contractor
Office of Agriculture

SUBJECT: Resolution 18-1265 Farm Alcohol Production Report

In October 2018, the Montgomery County Council adopted Resolution 18-1265 to request a biennial report from the Office of Agriculture (OAG) on the status of Farm Alcohol Production in the county. This report was to include an update on numbers of breweries, wineries, cideries, and distilleries in rural and agricultural areas, community feedback, community impacts, usage of locally-produced agricultural ingredients, the state of the local cultivation market, and economic impacts.

In the enclosed report, OAG is pleased to begin the process of documenting the growth and success of this industry. The county has four more farm alcohol production businesses today than were open two years ago, and all measured metrics on jobs, sales, visitors, and events have increased during that same period. OAG has also had the opportunity to document challenges faced by this industry in Montgomery County, and provide recommendations for making sensible and achievable improvements to the regulatory environment without compromising the intent of the Agricultural Reserve.

In a year when the effects of COVID-19 have plagued our news cycle with difficult and sometimes disheartening information, OAG is particularly proud to be able to share positive news from our farm alcohol production industry. These businesses have faced pandemic-related challenges like many others but are adapting to the new business environment and applying lessons learned to improve business operations moving forward. We look forward to your feedback and future support of this developing industry.

CC: County Executive Marc Elrich
Councilmember Hans Riemer
Marlene Michaelson, Council Administrator
Dale Tibbits, Special Assistant to the CE

The Status of Farm Alcohol Production in Montgomery County

Written by Kristin A. Fisher, PhD

Submitted by the Office of Agriculture

October 2020



Brookeville Beer Farm – Photo by Jackie Arnold 2020

This is the first report to the County Council on the history, current status, and future trends of the Farm Alcohol Production Industry in Montgomery County since the passage of applicable zoning text amendments in 2018.

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Brookeville Beer Farm – Photo by Jackie Arnold 2020

The History of Farm Alcohol Production in Montgomery County

Passage of ZTAs 18-03: Farm Alcohol Production – Standards, and 18-14: Farm Alcohol Production – Residential Zones

In October 2018, the Montgomery County Council enacted Zoning Text Amendment 18-03 to establish conditions under which alcohol can be produced and associated events can take place as an accessory use to farming in the Agricultural Reserve. Standards include production and acreage requirements; wineries and cideries must grow fruit used in alcohol production on at least 5 acres of the farm and have a minimum of 20 acres of grapes or fruit in cultivation on land owned, rented, or controlled by the producer, or source the majority of their grapes or other fruit from Maryland; breweries and distilleries must be sited on a minimum of 25 acres, grow at least 1 acre of ingredients on-site, and source a majority of their ingredients, if available, from regionally grown products. The ZTA allows tasting rooms as well as food production and outlines the size and number of allowed events and activities at the facility.

Also in 2018, the Montgomery County Council enacted Zoning Text Amendment 18-14 to add Farm Alcohol Production as a limited or conditional use allowed in certain Residential zones. The standards are the same as in agricultural zones, except that in RE-1 and RE-2 zones, breweries, distilleries, and wineries must be sited on a minimum of 25 acres, and sewer, water, and road access must meet certain requirements.

Regulatory Framework

The Department of Permitting Services (DPS) and the Office of Agriculture (OAG) jointly coordinate the administration of Farm Alcohol Production services in the county. DPS maintains information on the [DPS website](#) about the requirements for agricultural wineries, distilleries and breweries, and the [OAG's website](#) section on Regulatory Assistance links back to DPS's website to streamline coordination between the departments.

The [application for Farm Alcohol Production](#) is also located on the DPS website. When filled out by the applicant, the one-page form provides both DPS and OAG with the information necessary to determine whether the operation is allowed under zoning and requires a signature from both OAG and DPS. This also ensures that both departments are aware of new applications for farm alcohol production so that each can coordinate with the applicant on relevant questions, permits, or other activities. The application also provides a link to the Comptroller's Office, where applicants must obtain the appropriate alcohol license from the state.

Economic Impact of Breweries, Wineries, Cideries, and Distilleries

The craft beverage industry, which includes wine, beer, cider, and spirits produced both on and off the farm, is an economic force in Maryland. In 2016, Maryland's breweries had a total economic impact of over \$637.6 million, directly supported about 6,500 jobs, and had the potential to add about \$29 million in combined state and local tax revenues.¹ By 2018, the craft beverage industry had grown. That year, Maryland wineries alone were visited by over 167,000 visitors, generated more than \$2.65 billion in total economic impact, and supported over 22,000 jobs.² The value-added contributions of Maryland craft distilleries were worth over \$179 million,

the industry supported almost 1,000 jobs, and added over \$13 million in combined state and local tax revenues.² By 2019, 118 breweries were located in Maryland, up from 65 in 2016.² These metrics demonstrate that there is a growing market for craft beverages in Maryland, and therefore an opportunity exists for farm-based breweries, wineries, cideries, and distilleries to diversify into the farm alcohol production industry.

Some regional jurisdictions have embraced the craft beverage industry and promoted its success. Frederick County opened the first farm brewery in Maryland, Milkhouse Brewery at Stillpoint Farm, in 2013.³ Frederick also opened the first farm meadery, the first cidery, and now has the largest winery in Maryland.⁴ Frederick County is home to a total of five farm breweries, a farm distillery, two farm cideries, and thirteen wineries.³ Loudon County, Virginia, has an even more established industry with 55 farm-based wineries, vineyards, farm-based breweries, and farm-based distilleries. In 2018, Loudon farm-based wineries, breweries, and distilleries brought more than 466,000 local visitors and 324,000 tourist visitors⁵ and generated an estimated \$30.7 million in revenue⁶. Loudon's agritourism industry generates over \$400 million per year, which includes the businesses mentioned above.⁵ The potential impact of farm alcohol production in Montgomery is clear. Residents seek out these establishments and enjoy purchasing and consuming locally produced beverages. As a result, this industry has the potential to attract visitors, produce local revenue, fill full- and part-time jobs, and diversify farm-based businesses in the Agricultural Reserve. Though Montgomery County is behind adjacent Frederick and Loudon Counties in embracing and promoting the growth of on-farm breweries, wineries, and distilleries, we are now striving to meet the growing demand for this industry within our county and apply lessons learned from the successes of our regional counterparts.



Windridge Vineyards - Photo by Isabelle Carbonell 2020

Progress since 2018

Partnerships between alcohol producers and local farmers

In December of 2019, the OAG sent out a survey to the twenty-four licensed wineries, breweries, cideries, and distilleries in the county, located in both urban and rural areas. The purpose of the survey was to evaluate the extent to which these establishments were already purchasing local products for making alcoholic beverages, the potential unmet demand for local products, and other ways to bring this industry into cooperation with local farmers. OAG received eight completed surveys for a 25% response rate:

- The results of the survey indicated that five producers were currently growing all of their own ingredients or purchasing ingredients from local farms. Three of these were interested in sourcing more ingredients from local farms; the other two were already producing everything they needed on their own farms.
- Three survey respondents were not sourcing ingredients locally but were interested in doing so.
- Those who were already purchasing ingredients locally obtained apples, pears, and other fruits, as well as malted grains from a malting facility in Howard County.
- Those who were interested in purchasing local ingredients identified barley, wheat, hops, grapes, apples, stone fruits, and berries as products-of-interest. One respondent who was very interested in purchasing local products highlighted the need for a local malting facility for grain and processing for hops to facilitate their use in beer production.
- Four respondents were composting spent pomace and grains from winemaking or beer brewing, three were providing the waste products to farmers for animal feed, and one was distilling them. Four respondents were interested in either starting new partnerships with farmers to pick up the pomace and spent grains for use in animal feed, or expanding existing arrangements.
- The survey respondents were enthusiastic about exploring ideas for partnering with local farmers, selling local products in tasting rooms and on-farm events, offering pop-up events like biergartens, and finding shared opportunities to sell products.

The survey responses indicated an interest on the part of the industry to partner with local farmers to source ingredients for beer, wine, cider, and spirit production. This opportunity to bring alcohol producers together with farmers is being explored and promoted by OAG as a way for county farmers to diversify their operations and support other local businesses.

Promoting Farm Alcohol Production businesses

The Annual Farm Tour & Harvest Sale, scheduled for the fourth weekend in July each year, is one of OAG's most effective events for promoting farm businesses. In 2019, the Farm Tour

celebrated its 30th anniversary with nineteen farm businesses participating. Those businesses included a farm winery, a cidery, and a brewery. The Farm Tour is often the busiest and best sales day for participating farms, attracts between 5,000 and 10,000 visitors each year, and is an opportunity to introduce county residents to FAP businesses.

In addition to being included on the Farm Tour, farm breweries and wineries will be featured on the OAG’s agritourism [website](#) (currently under construction) so interested residents can easily identify the venues that are open to the public, link to individual farm websites, and learn more about each operation. OAG also created the “Grape & Grain Tours” (Appendix A), which were featured in the fall 2020 issue of *Plenty* magazine, a quarterly print and digital magazine that features businesses, activities, and stories from the Agricultural Reserve. The “Grape & Grain Tours” are two separate self-driving tours within the Agricultural Reserve, where readers can choose to visit three farm wineries, four breweries, or easily combine both into a comprehensive tour of the Ag Reserve's craft beverage industry. The [Grape & Grain Tours](#) are also located on the OAG’s website for easy and on-going access. The creation of agritourism “trails” was a recommendation of the Agritourism Study Advisory Committee, and OAG looks forward to further supporting this initiative as more businesses open to the public.

Economic data for Farm Alcohol Production in Montgomery County

In Montgomery County, we are still developing metrics to assess the economic contribution of the Farm Alcohol Production (FAP) industry. Our initial data is drawn from a September 2020 FAP survey (Table 1; Appendix B) that was sent to the ten existing FAP businesses in the county. We received 10 responses, for a 100% response rate. As the industry continues to evolve, OAG will accumulate more data on the economic contribution of this industry.

Table 1: Economic data for Farm Alcohol Production industry in Montgomery County

	2018	2019
Licensed wineries	2	4
Licensed breweries	3	4
Licensed cideries	1	2
Tasting room seating capacity		473
Full-time jobs	27	49*
Part-time jobs	91	160*
Gross sales	\$2,892,054	\$4,529,298*
Number of visitors	>2,000**	>28,000**
Events	2	7

*Captures some data from 2020

**Incomplete data

Over the past two years, the industry has experienced impressive growth (Table 1). The county has added four FAP facilities and likely doubled the number of part- and full-time jobs supported by the industry. Gross sales are up by at least 50% to over \$4.5 million, and the number of visitors has increased markedly. While these data show an increasing trend in FAP economic metrics, it is not complete. Moving forward, OAG will identify the best time of year to distribute surveys to participants to obtain the most complete financial information (e.g., align with end of

tax year or quarterly reporting), possibly survey the industry each year instead of once every two years, and clarify survey questions to constrain the period of reporting. OAG is also using Salesforce to improve tracking of the industry's business trends and generate meaningful reports. These improvements in OAG's techniques will improve the comprehensiveness of data collected.

The Future of FAP in Montgomery County

As demonstrated by statewide data on the craft beverage industry, as well as activities in adjacent Frederick County, Maryland and Loudon County, Virginia, farm alcohol production has enormous potential to draw both local and regional visitors, create jobs, and generate tax revenue. These small businesses provide opportunities for farm diversification, whether in terms of on-site farm alcohol production facilities or diversifying crops to grow ingredients for this industry. These kinds of opportunities for farm diversification are essential to the continued prosperity of agribusinesses in Montgomery County, as farmers respond to market conditions to keep their businesses profitable.

OAG is aware of two additional wineries, three distilleries, and three farm breweries in the conceptual or planning phases that are expected to open in the next two years. To better track interest in this industry, OAG began documenting inquiries received regarding the Farm Alcohol Production industry. As of the submission date of this report, OAG has received the following inquiries since February 2019:

- 17 requests for assistance; 14 of these requests were from individuals not already engaged in the FAP industry;
- 5 inquiries regarding beer, 5 regarding wine, 1 regarding cider, 5 regarding spirits, and 1 general inquiry;
- Questions from 3 established businesses, 10 inquiries about starting farm alcohol production on specific properties either under ownership or for sale, and 4 general inquiries from industry representatives or individuals.

In addition to the potential for farm alcohol production itself to help farmers diversify their operations and remain profitable, there is increasing interest from both farm-based and urban breweries and wineries to purchase ingredients locally. The results of the December 2019 Farm Alcohol Production Marketing survey (Appendix C) illustrated this interest. Alcohol producers are seeking local sources of specialty corn varieties like "Bloody Butcher" corn and rye for the production of spirits as well as fruits, herbs, hops, and barley for beer production. A growing market for these ingredients further diversifies the options available to farmers when they plan crops schedules to maintain farm profitability. Farmers, like all business people, respond to market forces and meet demand for new products when the economics are favorable for their businesses. When farmers have options to diversify their farms and maintain or increase profits, our agricultural sector is more resilient to unforeseen challenges.

Items to address in support of the future growth of this industry

The September 2020 FAP Survey (Appendix B) reflected some of the difficulties encountered when farmers attempt to enter the Farm Alcohol Production industry in Montgomery County. For example, when asked how OAG could further support the start-up, expansion, and/or diversification of the industry, we received the following responses:

“Make it easier to acquire food permits, building permits, etc. These regulatory challenges are the biggest impediment to doing business in the county.”

“...continue to provide guidance to farmers with regards to government regulations, licensing, and red-tape that present constant challenges to business operations in Montgomery County.”

These sentiments have been mirrored in dozens of conversations OAG has had with industry representatives. In addition, the county’s Agritourism Study recognized the difficulties faced by businesses seeking to enter the agritourism industry and recommended that a program be developed “within the Montgomery County Department of Health and Human Services, Licensure and Regulatory Services Division, to specifically serve agritourism businesses and assist with applications, plans, review and approval processes, fees, permitting and licenses for the county and state. Consider waiving or reducing fees for new agritourism businesses.” As a result of this feedback, OAG compared the regulatory hurdles and associated costs with starting a FAP business in Loudon County, VA versus Montgomery County, Maryland. The difference in start-up expenses differed by more than two hundred thousand dollars (Table 2).

Table 2: Comparison of FAP business start-up requirements and costs in Loudon and Montgomery Counties

Loudon County, VA	Montgomery County, MD
<ul style="list-style-type: none"> - Site is a minimum 10 acres; - Health Department Approval of plans for public, non-community well; - New or upgraded septic system by applicant’s professional engineer; - County zoning permit required with hand-drawn plan to include setbacks, well and septic, parking areas (no parking standards wither material or amount), and a signed affidavit that the building use is agricultural; - Health Department on-site locational clearance inspection for new construction prior to issuing permit; - County Grading Permit required for any land disturbance activity over 5,000. Adds 10-14 days to permit review/approval; - Shared access easement must not restrict use. 	<ul style="list-style-type: none"> - Wineries and cideries must grow fruit used in alcohol production on at least 5 acres and have at least 20 acres of fruit in cultivation on lands owned/rented/controlled by producer; - Breweries and distilleries must be sited on at least 25 acres, grow at least 1 acre of ingredients on-site, and source ingredients locally; - Commercial building permit required (Ch. 50); - Subdivision – unplatted lot (Ch. 50); - Forest Conservation (Ch. 22A); - Erosion & Sediment Control and Stormwater Management (Ch. 19); - Fire and Safety (Ch. 22); - Road Dedication (Ch. 49); - Electrical, Well & Septic, ADA Compliance, Life Safety, Green Building Certification (Ch. 8); - Development Impact Tax (Ch. 52).
\$3,000-5,000	\$275,000

In addition to removing or reducing the cost of starting a FAP business in Montgomery County, the OAG has identified several key items to address to support the future growth of this industry.

Amendments to Chapter 50 – Subdivision

When farmers want to expand into agritourism, such as Farm Alcohol Production, they may be required to obtain a commercial building permit (CBP). For example, the construction of a tasting room at a winery recently required a CBP. A CBP then triggers other code requirements, each with its own associated fees and costs. Subdivision under Chapter 50 triggers Forest Conservation under Chapter 22A as well as Erosion and Sediment Control and Storm Water Management under Chapter 19. Subdivision also triggers Fire and Safety under Chapter 22, Road Dedication under Chapter 49, Green Building Certification under Chapter 8, and the Development Impact Tax under Chapter 52. The Office of Agriculture has worked with property owners in cases where these associated fees and costs have exceeded \$100,000. For most agribusinesses looking to diversify an operation with thin margins of profit, this kind of investment is cost-prohibitive. OAG recommends amending Chapter 50 to waive the requirements of Subdivisions in the Agricultural Reserve when the use of the commercial building will be considered farming or accessory to farming as defined under Chapter 59 - Zoning.

Amendments to Chapter 52 – Development Impact Tax

To help alleviate the financial burden currently borne by agribusinesses seeking to expand into the agritourism and Farm Alcohol Production industry, the OAG recommends exempting these uses from the Development Impact Tax. This kind of consideration is not unprecedented; Bioscience Facilities are exempt from the Development Impact Tax. As agriculture is arguably the first bioscience that existed in the county, it follows that agricultural uses should be added to this existing use and be exempted from the same tax. If this is not possible, a reduced Development Impact Tax for agribusinesses is warranted. FAP establishments do not have the same impacts to county infrastructure as retail businesses in urban parts of the county. Their customer flow is generally more variable over the course of the year and slows down in winter months compared to down-county retail businesses and restaurants, and they do not have the same sewer and water impacts as urban establishments since they are often on well and septic rather than city sewer and water systems. As their impacts are less and their profits are lower, they should not be expected to meet the same standards and expense of the current tax structure.

Continuity in County Code

Because Chapters 50 and 52 are linked to many other chapters in the Montgomery County Code (e.g., Chapters 8, 19, 22, 22A, and 49), OAG recognizes the importance of ensuring that any changes made to the code are reflected in related chapters. It is imperative that Montgomery County makes the path toward economic growth through new and expanded agribusinesses clear and free of contradictions. Our goal is to make business-friendly improvements in Montgomery County are reflected in a clear and comprehensive regulatory framework.

Recommendations from the Agritourism Study Advisory Committee (ASAC) Report

In January of 2020, the Planning Board remitted an [Agritourism Study](#) to the Montgomery County Council that made several recommendations for expanding opportunities for agritourism, including farm alcohol production, in the County. For example, the report recommended supporting existing and future agritourism activities through improved processes for agritourism businesses, determining how and where to provide restrooms, parking, and other supporting facilities for visitors to the Ag Reserve, exempting agricultural buildings used for agritourism from certain permit requirements, and establishing an interagency workgroup to review relevant changes to the Montgomery County Code to refine, enhance and support agritourism activities including permitting, allowances for on-site sewage facilities, parking, access, and signage.

The report also addressed how to establish and clarify standards for allowing events at agritourism venues. Events are important components of many agritourism venues, bringing visitors to farms to participate in activities and purchase products. The ASAC provided recommendations for allowing events in the Ag Reserve and at agritourism venues, including Farm Alcohol Production facilities. Currently, the restriction on events is based on frequency rather than the scale or impacts of such events. Among other things, the committee discussed linking the size of the property to the size of the allowed event as is done for equestrian facilities and including standards for special events in the AR zone. Following up on this report will be important for making headway toward a more vibrant agritourism and farm alcohol production industry in Montgomery County.



Windridge Vineyards - Photo by Isabelle Carbonell 2020

Increased staff support for the Office of Agriculture

OAG is charged with promoting agriculture as a viable component of the County’s economic sector through providing regulatory, marketing, and technical assistance to county farmers, serving as a liaison between the agricultural community and County government, preserving farmland as a resource for future agricultural production, and supporting agricultural education and outreach. During the 2018-2019 reporting period, OAG provided these services through the work of only 3.5 full-time positions and one part-time contractor. OAG staff is dedicated to providing high quality service, building relationships with the agricultural community, and improving businesses conditions for agribusinesses. The following quotes from the 2020 FAP Survey illustrate the success of our efforts:

“The Office of Agriculture has been tremendous in its guidance for our startup, from assisting us in interpretation in laws and regulations to instruction on how to properly maintain a farm/agriculture. Thank you sincerely, we would not be able to pursue our dreams without you!”

“Continue to work with DPS, MNCPPC, and the County Council/Executive to showcase the cultural, social and economic value of farm alcohol production. Unfortunately, some of the biggest challenges to starting a business in Montgomery County come from within the local government. The Office of Agriculture provided key information, guidance and support which made it directly possible for the establishment of our Farm Alcohol Production operation. Without such, our operation, and the benefits it provides to the local community (and economy), would most likely not exist.”

“The Office of Agriculture has been a wonderful resource that we truly appreciate.”



Elder Pine Brewing & Blending Co. – Photo by Jackie Arnold 2020

The 100% response rate on the 2020 FAP Survey also illustrates that these businesses know and trust OAG to use the sensitive and specific business and financial information requested in the survey to support the industry moving forward. However, OAG is continually asked to do more to support a more diverse and profitable agricultural sector and will need increased staffing to meet these demands. For example, a contract employee rather than a permanent employee wrote this Farm Alcohol Production report because OAG (now staffed by only 3 full time positions) simply has too many demands on staff time. The growth of the agritourism industry in the county, including FAP, is an incredible opportunity for economic growth in the Agricultural Reserve, and OAG has been identified as a key contributor to many initiatives outlined in the Agritourism Study. However, current staff resources focus mainly on regulatory support in Montgomery County because of the unclear regulatory environment that must be navigated during business start-up, operation, and expansion. Over the next two years, OAG would like to provide training opportunities and workshops for growing specialty crops associated with FAP, expand our existing partnership with the University of Maryland Extension and Montgomery Soil Conservation District to promote conservation on new FAP properties, contribute to the many initiatives outlined in the Agritourism Study, and provide greater marketing and promotional assistance to FAP. To aspire to the success demonstrated by the number of FAP businesses, visitors, and revenue generated in Loudon County, and considering the significantly different regulatory environments in each county, OAG feels strongly that staff support must be increased to 5.0 FTEs. Additional professional staff devoted to marketing of our county agribusinesses would allow OAG to promote this industry and maximize its economic contribution to the county.

Table 3: A Comparison of Farm Alcohol Production Business Metrics in Montgomery and Loudon Counties

	MONTGOMERY COUNTY	LOUDON COUNTY, VA
NUMBER OF BUSINESSES	10	55
ANNUAL VISITORS	>28,000	800,000
ANNUAL REVENUE	\$4.5 MILLION	\$30.7 MILLION

Conclusions

The year 2020 has been anything but a typical year for agribusinesses in Montgomery County. Amidst the global coronavirus pandemic, Maryland farm alcohol producers have pivoted their businesses to produce hand sanitizer for community members, deliver products directly to consumers or at curbside pick-up locations on the farm, and redefine the way they do business on-site. They have risen to the challenge, and as a result, farm alcohol producers in Montgomery County are surviving the current business environment. The pandemic has also provided opportunities to learn lessons about how to adapt to a changing business landscape. For example, breweries and wineries have expanded their business offerings by applying for food service licenses, which allows them to be treated as restaurants and operate at 50% capacity inside tasting rooms during pandemic restrictions. Some of these changes have been beneficial to businesses and are likely to remain in post-pandemic times. Nevertheless, this kind of test on a

fledgling industry in the county is difficult, but with support from county leaders and county agencies, farm alcohol producers are negotiating these changes successfully.

As we learn more about the growth of this industry in Montgomery County, OAG will refine the data we collect so that we can both understand the development of the industry and define its importance to the local economy. Already clear is that the Agritourism sector, of which Farm Alcohol Production is part, is a growing industry. These businesses have unique potential contributions to Montgomery County in the form of “quality of life” opportunities for residents to get outside, learn about agriculture and the nationally recognized Agricultural Reserve, and enjoy rural activities in a highly urbanized county. They also have more traditional contributions to make in terms of revenue generated, taxes collected, and jobs created. However, as we learn more about this industry, the county must be ready to embrace changes to support these businesses as being fundamentally different from urban retail and restaurant establishments. The recommendations provided in this report to amend key chapters in the County Code will go a long way towards improving the regulatory environment faced by this industry. Further support to agritourism, as outlined in the Agritourism Study, and well as increased staffing of the OAG, will help create a hospitable business environment in Montgomery County. Our goal is to attract FAP businesses to the Ag Reserve, not lose them to neighboring counties like Frederick and Loudon County Virginia, where the importance of this industry is recognized and its continued prosperity is ensured by a supportive and affordable business start-up environment. Though Montgomery County is not at the forefront of Farm Alcohol Production, we are in a position to learn from colleagues in neighboring counties and apply lessons learned early in the development of our local FAP industry, improve the programs, services, and support we offer here, and ensure a vibrant local farm alcohol production industry develops, and its economic benefits are realized, within our borders.



Lone Oak Farm Brewing Co. - Photo by Jackie Arnold 2020

References

- ¹Maryland Bureau of Revenue Estimates. (2017). Economic Impact of the Craft Beer Industry in Maryland. Retrieved from https://www.marylandtaxes.gov/divisions/comp/Comptroller_Initiatives/Craft_Beer_Economic_Impact_Study.pdf
- ²Grow & Fortify. (2020). Value-Added Agriculture in Maryland: An Economic Analysis. Retrieved from <https://www.dropbox.com/s/xd7fekhlfnrcqli/Grow%26Fortify-ValueAddedAgStudy.pdf?dl=0>
- ³Frederick County Office of Economic Development. (2020). *Homegrown Frederick: Breweries*. <http://www.homegrownfrederick.com/breweries>
- ⁴Frederick County Office of Economic Development. (2020). *Craft Beverages*. <http://www.discoverfrederickmd.com/craft-beverages>
- ⁵Magnini, V.P. The Economic Impacts of Agritourism: Loudon County, Virginia. 2018. Institute for Service Research. Retrieved from: https://assets.simpleviewinc.com/simpleview/image/upload/v1/clients/loudoun/REPORT_Loudoun_County_s_Agritourism_Sector_2018_Economic_Impact_1d3f46cd-8967-4744-a1e3-eff811d36c30.pdf
- ⁶Loudon Times-Mirror. Nov 25, 2019. "Report: Agritourism in Loudon County generated more than \$400M in '18". Retrieved from https://www.loudountimes.com/business/report-agritourism-in-loudoun-county-generated-more-than-400m-in-18/article_f4ec1b80-0f87-11ea-aec8-b3c52becd218.html

Appendices

A – Grape & Grain Tours

B – December 2019 Farm Alcohol Production Market Survey Results

C – September 2020 Farm Alcohol Production Survey Responses

Wineries

Wine has been enjoyed by cultures around the world for thousands of years, but how did it make its way to Maryland, and when did it become popular in the DMV?

In 2007, a team of UCLA researchers discovered evidence of the oldest (4100 BC) winery in Ancient Armenia. However, wine wasn't introduced to our little corner of the world until 1619 when the French began importing French grapevines and cultivating wine in Virginia. Although winemaking made its way up and down the Eastern Seaboard, it took another 100+ years for it to become popular in this area. When Thomas Jefferson was appointed as the Minister to France in 1785, his travels abroad exposed him to Bordeaux wine, with which he fell in love. Convinced that this quality of wine could be produced in the U.S., Jefferson returned with French grape cuttings and aspirations of cultivating exquisite wines in VA. To see the full historical timeline exploring the globalization of wine, visit VinePair's article, "[How Wine Colonized the World.](#)" We're now discovering that land in Montgomery County's Agricultural Reserve has "the potential to yield brilliant wines", as noted by distinguished geologist, Ernest "Bubba" Beasley in 2016 when exploring the soil characteristics and topography of farms in the area.

According to the [Maryland Wineries Association](#), Maryland has 98 wineries that together have an economic impact of \$200 million. Montgomery County is home to three farm wineries and are featured in this self-driving tour. There are also 3 new farm wineries in the planning and/or construction phases that will be added to this tour once their tasting rooms are open!



Image: ArtTower/Pixaba

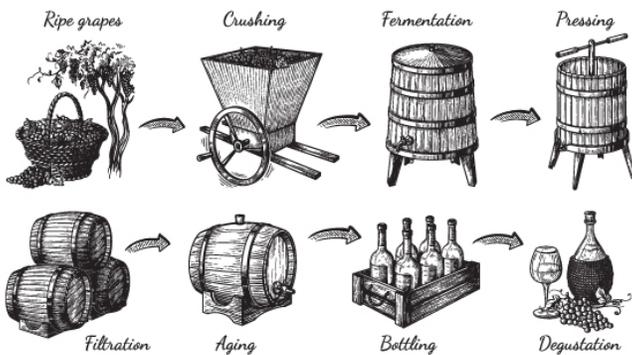
SELF-DRIVING TOUR

From 270 N from Gaithersburg:

1. Take 270N 11 miles to Exit 22/MD-109S
2. Follow 109S for 3 miles and turn right onto Comus Road (1.6 miles)
3. [Sugarloaf Mountain Vineyard](#) is located at 18125 Comus Road
4. Turn right out of SMV (0.8 miles)
5. Turn left onto Sugarloaf Mountain Rd (0.5 miles)
6. Continue onto Mt. Ephraim Rd (2.4 miles)
7. Turn left onto MD-28E/Darnestown Rd (9.9 miles)
8. [Windridge Vineyards](#) is located at 15700 Darnestown Road.
9. Turn left out of Windridge Vineyards onto Darnestown Road (1.1 miles)
10. Take a slight left onto MD-107/Whites Ferry Rd (0.2 miles)
11. Turn left onto Sugarland Road (1.5 miles)
12. Turn left onto Montevideo Road (1.2 miles)
13. [Rocklands Farm Winery](#) is located at 14525 Montevideo Road.
14. **Return to Gaithersburg** by turning left out of Rocklands Farm Winery and following Montevideo Road 1.1 miles to River Road. Turn left.
15. Follow River Road as it becomes Seneca Road (3.7 miles)
16. In Darnestown, turn right onto Rte. 28 (2.5 miles)
17. Turn left onto MD-124N/Quince Orchard Rd (2.7 miles)
18. Turn right onto MD-117 (0.3 miles) and follow signs to I-270.

*Entire route is approximately a 1 hour and 15-minute drive without stops.

Winemaking process



BREWERIES

Whether or not Ben Franklin was correctly quoted as saying that "Beer is proof that God loves us and wants us to be happy", you will find several farm-based breweries in Montgomery County that full-heartedly believe in the sentiment! Modern-day beer enthusiasts can credit their favorite beverage to the experimentation of interested drinkers from thousands of years ago. The world's oldest-known barley beer dates from 3400 B.C. and was identified from remnants in archaeological artifacts excavated in Iran. Since then, researchers have worked to uncover the role of beer in ancient cultures; from its use as payment to workers constructing the pyramids in Egypt to its inclusion in dozens of drinking vessels buried with King Midas in Turkey. For millennia, different cultures have experimented with the process of extracting sugars from various combinations of grains and fermenting them with wild or



SELF-DRIVING TOUR

Domesticated yeasts. For a more in-depth guide through the fascinating history of beer, read the Smithsonian's article, "[The Beer Archaeologist](#)".

Today, brewers in Montgomery County and Maryland as a whole continue this storied tradition, producing beers that reflect seasonal preferences as well as the availability of locally sourced ingredients. These efforts are gaining popularity among residents of Maryland; in 2016, the Maryland Bureau of Revenue Estimates reported that the craft beer industry in Maryland had an overall economic impact of \$637.6 million and supported or created 6,541 jobs. In Montgomery County, we are excited to share this driving tour of our first four breweries that are open for business and look forward to adding more as they finish the conceptual and development stages! Cheers!



From Olney:

1. From the Olney-Laytonsville Rd (Rt 108) north approximately 2.5 miles to [Lone Oak Farm Brewing Company](#), located at 5000 Olney-Laytonsville Road.
2. Leave Lone Oak Farm by turning right onto MD-108 take an **immediate left** onto Zion Road.
3. Continue straight on Zion Rd (0.6 miles).
4. Turn right onto Brookeville Rd (2.2 miles)
5. Turn left onto MD-97/Georgia Ave (0.7 miles) to 20315 Georgia Ave.
6. Turn right onto Bordly Dr. [Brookeville Beer Farm](#) will be on your right.
7. Leave Brookeville Beer Farm and turn right on Georgia Ave (2.2 miles).
8. Turn left onto MD-650 N (1.4 miles)
9. Turn right into [Waredaca Brewing Company](#), located at 4017 Damascus Road.
10. Leave Waredaca and turn left to head south on MD-650 (.04 miles)
11. Turn right onto Howard Chapel Road (0.2 miles)
12. Turn right onto Sundown Road (0.4 miles) and proceed to [Elder Pine Brewing & Blending](#), located at 4200 Sundown
13. Leave Elder Pine and turn left onto Sundown Rd toward Zion Road (3.2 miles)
14. Continue onto Brink Road (1.5 miles)
15. Turn right onto MD-124N/Woodfield Road (2.2 miles)
16. Turn left onto Watkins Road (1.4 miles)
17. Continue straight onto Wildcat Road (.05 miles) and then turn left into [Doc Water's Cidery](#), located at 22529 Wildcat Road.
18. Leave Doc Water's Cidery by turning left onto Wildcat Road (1.1 miles)
19. Continue straight onto Davis Mill Road (0.9 miles)
20. Turn left onto Blunt Road (1.9 miles)
21. Turn right onto Germantown Road (1.6 miles) and follow signs to I-270.

* Entire Route is approximately a 50-minute drive without stops
mileage noted is approximate

Appendix B – December 2019 Farm Alcohol Production Market Survey Results

<p>1. Do you currently purchase any ingredients for your beer/wine/spirits from local famers?</p> <p>If yes, which ones?</p> <p><i>Apples, pears, other fruits occasionally</i> <i>Malted grains on occasion from Dark Cloud Malting in Howard County</i> <i>All sourced from own farm</i></p>	<p>Yes 3</p>	<p>No 5</p>
<p>2. Do you have any interest in considering the use of locally produced ingredients in your beer/wine/spirits?</p> <p>If yes, please circle all that apply:</p> <p>Specialty heirloom corn varieties like “Bloody Butcher” red corn - 0 Barley - 3 Wheat - 3 Hops - 3 Grapes - 4 Apples - 3 Stone fruits (peaches, plums, nectarines, cherries) - 5 Berries - 4 Other: <i>Must be cost-effective</i> <i>Very interested, need local malting for grain and processing for hops, not easy to use unprocessed hops</i> <i>All grapes grown for use on the farm</i> <i>All sourced from own farm</i></p>	<p>Yes 4</p>	<p>No 1</p>
<p>3. What do you currently do with pomace and/or spent grains?</p> <p>Waste - 0</p> <p>Compost - 4</p> <p>Provide to farmers for animal feed - 3</p> <p>Other: <i>Distill</i></p>		
<p>4. If not currently doing so, would you be interested in allowing farmers to pick up pomace and/or spent grains to use for animal feed?</p>	<p>Yes 4</p>	<p>No 1</p>
<p>5. Are there any other partnerships that you are interested in exploring with local farmers?</p> <p><i>Selling locally produced items in our tasting room; on-farm events</i> <i>Always open to ideas!</i> <i>Pop-up opportunities – like a pop-up biergarten</i> <i>Shared opportunities to sell our products</i></p>		

Appendix C – September 2020 Farm Alcohol Production Survey Responses

Thank you for taking the time to fill out this survey on Farm Alcohol Production in Montgomery County. The information you provide is anonymous and will be used by the Office of Agriculture for the Bi-Annual Report on Farm Alcohol Production that must be remitted to the County Council this fall. The report will document the status of farm alcohol production in Montgomery County since the passage of ZTA 18-03 in 2018, which defined the regulations for alcohol production and sales on farms in the Agricultural Reserve. Your responses to this survey are essential to document the importance of farm wineries, breweries, distilleries, and cideries in Montgomery County. We estimate that it will take fewer than 20 minutes to complete the 15 questions included. Please provide as much detail as you can, and provide an estimate, if necessary, in place of skipping a question. Your assistance is greatly appreciated!

In what year did you start your winery/brewery/spirits business?

2004 – 1 response

2011 – 1 response

2015 – 2 responses

2017 – 1 response

2018 – 2 responses

2020 – 3 responses

What type of alcohol do you produce?

Wine – 3 responses

Beer – 5 responses

Cider – 2 responses

Spirits – 0 responses

What is the total seating capacity of your tasting room?

350 outdoor only – 1 response

100 – 1 response

97 – 1 response

89 – 1 response

49 – 3 responses

40 – 1 response

0 – 2 responses

How many full-time employees did you have in 2018? How many in 2019?

0 – 2 responses

one in 2018, three in 2019

4 full time in 2020

6 and 6

1 in 2018, 2 in 2019

4 in 2018. 7 in 2019

3 in 2018 4 in 2019

We had 2 employees in 2019 while under construction and 10+/- employees in 2020.

12 and 13

How many part time employees did you have in 2018? How many in 2019?

36 in 2018 and 40 in 2019

We had 3 part time employees in 2019 and 20+/- part time employees in 2020.

zero in 2018 ten in 2019

0

24 part time in 2020

30 and 30

4 in 2018, 10 in 2019

0 in 2018. 3 in 2019

2019 (2 part time employees)

21 and 21

What are your gross sales per year in 2018? In 2019?

0 – 2 responses

1.1 mm

NA. Opened in 2020

\$800,000 and \$1,000,000

\$27,000 in 2018, \$185,000 in 2019

\$85, 054 in 2018. \$794,298 in 2019

2018: 880k and 2019: 950k - this year will be dramatically lower

No sales in 2018/2019. We opened in 2020. To date our 2020 sales are over \$500,000.

How many visitors did you have in 2018? How many in 2019?

0 – 2 responses

zero in 2018 don't know in 2019

NA. Opened in 2020.

thousands but, I don't know exactly

Unknown

2,000 in 2018, 11,000 in 2019

0 in 2018. 7313 groups (1 or more) in 2019

No visitors in 2018/2019. Since opening in 2020 we have had ~10,000+ visitors.

How many businesses sell/carry/distribute your products?

2

1

10+

60

All sold retail off the farm or at festivals.

109

this has dramatically contracted since covid only in a handful of places now. Used to be probably 80 places and now is probably 20.

10+

0

aprox 100

How many events did you host at the farm in 2018? In 2019?

None – 5 responses

NA. Opened in 2020.

2 and 4

0 in 2018. 3 in 2019

we did not host any "events" as brewery. the farm hosted 2 events for equine/ag industry each year.

No events have been hosted due to the County's COVID-19 restrictions.

Please list the types of events you hold at the farm:

Parties

We intend to host private and corporate events of less than 100 persons

None, our tasting room is not yet built so we only sell at farmer's markets.

no events at this point

Farm Bureau Dinner, Maryland horse Council Dinner

We hope to hold weddings, corporate and private events in the future; post COVID-19.

none yet

n/A

One harvest-themed celebration and a few dog rescue fundraisers

Birthdays, weddings, corporate

Please list local farms from which you source ingredients:

List of current and intended vendors: Sugarloaf Mountain Vineyard, Cherry Glenn Farm, Homestead Farm

Our orchard and Harding's Orchard in Smithsburg, MD

Hope to source from Butler's & Lewis

None.

Sourced from our own farm

None currently, in discussion with local farms for 2021

we grow our own, larriland, sharps at waterford farm, butlers, chesapeake malting, dark cloud malting (not current), pleasant valley, black locust

Lewis Orchard, Mullinix, Perdue Agribusiness, Terry Oland.

none yet

Butler, Bella Vita, Sharp farm, Baugers

How many acres are devoted to growing ingredients for wine/beer/cider/spirits? (Please specify acres of each in your answer)

22 acres of grapes for winemaking.

7 acres apples

3 current, 12 under planning

16 acres of apples for cider

Approximately 3, up to 5 in 2021.

1 acre for ingredients and we have 15 beehives which access many acres

~3 acres current, ~16 acres planned.

29 acres grapes for wine

wine 7 acres

5

**How much of the land used to grow ingredients for your products is owned versus leased?
(Please specify acres of each in your answer)**

All owned – 6 responses

9.5 of the vineyard acreage is owned

3 acres owned, 4 acres leased

100% leased.

4 acres owned 3 acres leased

If you brew beer, what is the total amount (by volume or weight) of barley used for your beer production? Please include units of volume or weight.

N/A – 5 responses

Estimate 70,000lbs per year

~8,000lbs in 2019

450-700 pounds per batch and approx 80 batches a year

Approximate weight used in 2020 to date: ~48,000 pounds.

100,000

How can the Office of Agriculture further support the start-up, expansion, and/or diversification of winery/brewery/distillery/cidery businesses in the County?

I can't think of anything. They have been very helpful and responsive.

Work with county govt to allow more events of larger size (post Covid-19).

Make it easier to acquire food permits, building permits, etc. These regulatory challenges are the biggest impediment to doing business in the county.

The Office of Agriculture has been tremendous in its guidance for our startup, from assisting us in interpretation in laws and regulations to instruction on how to properly maintain a farm/agriculture. Thank you sincerely, we would not be able to pursue our dreams without you!

This year it was cheaper to source local fresh fruit from howard county than montgomery county. still no high quality local malted barley.

The Office of Agriculture can further support through continuing to provide guidance to farmers in regards to government regulations, licensing, and red-tape that present constant challenges to business operations in Montgomery County. Continue to work with DPS, MNCPPC, and the County Coucil/Executive to showcase the cultural, social and economic value of farm alcohol production. Unfortunately, some of the biggest challenges to starting a business in Montgomery County come from within the local government. The office of agriculture provided key information, guidance and support which made it directly possible for the establishment of our Farm Alcohol Production operation. Without such, our operation, and the benefits it provides to the local community (and economy), would most likely not exist.

Simply be the go to place for answers and assistance as we go through the process of starting up, so far the Office of Ag has been a wonderful resource that we truly appreciate.

Keep and promote Jeremy Criss. He has been an outstanding advocate for the industry