

PENN STATE



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The Pennsylvania Wine Industry in 2011

The “modern” Pennsylvania wine industry began with the Farm Winery Act of 1968. Before prohibition there was a large wine industry in the state. Grapes were planted by William Penn in 1684 and there is evidence that the first commercial vineyard in the U.S. was planted along the Schuylkill River in Spring Mill near Philadelphia. Grapes migrated east to York County and then up to the shores of Lake Erie. Prohibition virtually eliminated vineyards from the state and recovery was very slow. There are currently about 12,000 acres of grapes grown in Pennsylvania. However, the majority of them are process grapes grown for juice and jelly products along a narrow strip of land on the Lake Erie shore. According to the 2008 National Agricultural Statistics Survey there are about 2,800 acres of wine grapes (compared to 500,000 acres in California and 35,000 acres in Washington), of those almost 75% are native and hybrid varieties. The eleven wine trails around the state give some geographic definition to the distribution of commercial vineyards and wineries and there are five American Viticulture Areas (AVAs) registered in Pennsylvania. Currently the southeast quadrant, from Adams County to Chester County and north to the Lehigh Valley is the fastest growing wine region but there are vineyards and wineries popping up like mushrooms in every part of the Commonwealth.

There are currently over 140 bonded wineries in operation in Pennsylvania, up from 45 in 2000. Together they produce about 1 million gallons of wine. Most wineries have their own estate vineyards but do not produce enough grapes to supply all of their needs so they purchase grapes from independent vineyards. They also buy significant amounts of most native and hybrid variety bulk juice and wine from bulk processors in the Lake Erie region, Wineries in Pennsylvania are allowed to purchase fruit from outside the state within a 350 mile radius of the winery location. Currently, almost all varieties are in demand as the wine industry continues to expand. Most wineries are small and all are family owned and operated. The largest winery produces about 85,000 gallons. Less than 2% of all wine consumed in Pennsylvania is home grown. Almost every drop of Pennsylvania wine is sold in the state. Wineries are retail-based businesses with an allowance for five satellite tasting facilities in addition to their home tasting room. Some of the larger wineries sell wines through the state liquor stores.

Recent plantings are dominated by the classic European *vinifera* varieties, especially in the southeast and south central regions. The most widely planted *vinifera* varieties are Cabernet Franc, Merlot, Cabernet Sauvignon, Pinot Noir, Chardonnay, Pinot Gris, Riesling and Viognier. French hybrid varieties include Chambourcin, Vidal, Seyval, Traminete, Cayuga White, Foch and Baco Noir. New cold hardy, short season varieties bred in Wisconsin and Minnesota such as Frontenac, La Crescent and Marquette have made wine growing possible in colder regions of the state.

The viticulture in Pennsylvania is highly variable due to differences in topography and climate. In the southeast, the series of hills in the Appalachian range define the climate with warmer and wetter weather south of the hills making *vinifera* culture possible but not without risk. Winter injury, particularly to late varieties like Cabernet Sauvignon, is a significant problem. North of the hills as elevations and latitude increase temperatures become cooler until the “frozen north” is reached where winter injury is the defining feature in growing grapes. Spring and fall frost has been a problem in all areas of the state. Soils are also extremely diverse from the shale soils along the hills to silt loams in the Chester-southern Lancaster areas and sandy-clay soils that predominate by Lake Erie. Perhaps the best place for high

quality wine production would be a strip of well-drained soil types extending from Northampton County through Lancaster to the fruit belt of Adams County just north of Gettysburg. Here, gentle south slopes with well-drained soils and a warmer climate are very accommodating to *vinifera* and hybrid varieties. Proper site selection is incredibly important to developing a successful vineyard. Please do your utmost to find a suitable piece of land for the grapes you want to grow. Most of the vineyards in Pennsylvania are small, averaging less than five acres, with the largest vineyard for wine grapes about 60 acres. The lack of infrastructure, critical mass, research and education support, investment capital, viticulture professionals are all significant challenges to quality and production. Other challenges are climate related including hurricanes, frost, drought, winter injury and significant growing season rainfall amounts. Disease and pests are a constant source of anxiety for growers.

The wine industry is small relative to other traditional commodity crops in Pennsylvania, but has a growing impact on the state's economy. A MKF Research study in 2009 found the total economic impact of Pennsylvania's grape and wine industries to be \$2.35B. However, there is only very modest state support for the industry through a \$100,000 grant that is administered through the Pennsylvania Department of Agriculture. An additional \$150,000 is dedicated to marketing and research projects from a \$0.15/gal charge on all wines produced in Pennsylvania. These funds are administered by the Pennsylvania Wine Marketing and Research Program, a commodity board based in PDA.

Penn State is also a partner to the wine industry with viticulture and enology extension services along with non-dedicated research is done in plant pathology, horticulture, entomology, crop and soil science and food science. A significant gap in the program is the lack of a research viticulturist and enologist. Denise Gardner is the Penn State Extension enologist based in food science at University Park. Research stations in Erie (northwest) and Adams County (south) have teaching and pathology research vineyards. Pennsylvania is part of the USDA-NE1020 wine grape variety project and will have variety/clonal trials in both locations. Grape pathology is perhaps the strongest area of research.

The Pennsylvania Wine Association (<http://www.pennsylvaniawine.com/>) represents the interest of the wineries and is mostly involved in marketing programs including two large wine festivals. Jennifer Eckinger is the executive director of PWA.

This is an exciting time to be involved in the growth and establishment of a serious wine industry and region in Pennsylvania. You will find a great people to work with and a very suitable terroir for wine making. But there are also significant challenges ahead for this wine industry to continue growing and succeed. It is necessary for every new vineyard and winery to produce a high quality product, no matter what type, style or price-point of its wines. The wine industry has a climate of consumer indifference to overcome. Every bad bottle of wine reflects poorly not only on the producer but every winery in the state. We are trying to change that image and create an industry with a strong and positive wine identity. We hope you will part of this movement. I look forward to helping you to realize your dream of owning a commercial wine vineyard.

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