



Moorhead Farms in Erie



The independent vineyard in the U.S. appears to be going the way of the dinosaur but there are always the stubborn holdouts that find a way to adapt and succeed. On a recent visit to the Erie region in Pennsylvania and western New York, Denise Gardner, extension enologist and I visited Moorhead Farms in North East and were reminded of the day when growing grapes was enough to provide for a family. Any success this vineyard has had is all about John and Cindy Moorhead and their son, Mike, who together manage a diverse farm that has supplied grapes to local wineries for many years. It's hard to know exactly what their secret to success is, suffice to say they are savvy, smart, serious, and possess great communication skills. Perhaps above all, they are nice and trustworthy people. Their reputation in the local wine industry is rock solid and they work really hard to keep their customers happy. One remarkable quality that contributes to their success is their adaptability and willingness to try new ideas and practices in the vineyard. Viticulture has changed a lot over the years but John has always changed with it and rolled with the punches, like winter injury, drought and disease. Erie is on the upswing now but it has been a long row to hoe to establish a successful wine region and they stuck with it.

We walked through the vineyard which is immaculately maintained. Mike does much of the day to day work in the vineyard, which includes spraying with a mammoth Korvan 4012 over-the-row multi-purpose harvester that can spray both sides of three rows in a single pass. The low/high spray head positions lift the skirt of the vine and blows material into the canopy. It's an intimidating machine. If I was a fungal spore and saw this thing coming I sure would get the heck out of the way. The tractor is equipped with GPS and other monitoring equipment that can track the spray program. On a full canopy they are applying 60 g/a of water. Varieties are segregated into spray blocks based on susceptibility. For harvesting, Mike says the picking head is so gentle on the canopy they can't tell which rows have been picked. Needless to say, they are moving more towards mechanization due to a shortage of labor.



John and Cindy began farming all Concord grapes in 1957 and ten years later began to plant wine grapes. Currently they have 22 different varieties of grapes and begun growing hops for a growing micro-brewery market. They also grow table grapes, brambles and something call Pie-Blu. There is wisdom in not putting only grapes in the farm's basket. Diversification of crops lends stability to the bottom line.



Most of the vineyard is on 9' x 7' spacing and trained to either VSP or 4-arm Kniffen. The vines appear very comfortable in this configuration and spacing. The Kniffen actually looks like VSP except the fruit zone is spread out upwards. Rootstock is primarily 3309 contributes to vine balance in the gravel and clay soils. The canopy is well manicured using a machine hedger and the fruit zone is moderately exposed. Cover crop covers the vineyard floor and vine rows are managed with 1-2 applications of Roundup and gramoxone. Yields are part of the vine balance equation and appear

to match the winemaker's desired wine quality goals. John is very aware of the relationship between yield and quality and pays close attention to crop load on each variety. Dornfelder, Noiret, Vidal, Cayuga and many hybrids grow alongside Riesling, Chardonnay, Cabernet Sauvignon, Merlot and other *vinifera*. Dornfelder, a *vinifera* cross from Germany has found a welcome place in the vineyard and tasting rooms of the area. It is a vigorous vine grown on VSP with yields in the 3.5-5.5 t/a range. It makes wines with deep color and fruit flavors and is very cold hardy. The own-rooted Chambourcin looked particularly healthy with very little ozone stippling. He said that he uses Pencozeb and that helps keep the leaves healthy. They have learned that the Merlot and Cabernet Sauvignon are particularly cold tender and have experienced freeze injury in four of the past five years. They are constantly renewing vine parts but even so, there are gaps in the trellis. A significant investment will be made in the vineyard's future with the installation of two Frost Boss wind machines from New Zealand to protect two areas of the vineyard with Cabernet Sauvignon and Merlot.



Nicely balanced Cabernet Sauvignon vine

The Moorheads are leaders in the wine industry in Erie. They are well respected for the quality of their fruit and business. I think they are an outstanding example an independent vineyard that is successful because they have been able to adapt to market realities and adopt new practices over the years. They successfully combine the ability to do business and make friends in a small wine industry which is largely because of their personalities and ability to communicate. During our visit we talked a lot about grower and winery relationships. Because of the Moorheads, we didn't have to discuss the topic in the abstract. Here we have an example of a family farm that works well with the local wineries and ideally allows both businesses to be content and successful.

You can learn more about Moorhead Farms at <http://www.moorheadfarms.com/index.html>.



Denise and I visited a dozen vineyards and wineries and met with growers, winemakers and the staff of the Cornell and Penn State research stations. There is a lot going on up there. A wine makers' roundtable discussion was well attended and focused on Bordeaux red varieties. With Chris Gerling, the extension enologist at Cornell, and Denise present there was a lot of good discussion about the wines brought to the session by winemakers. The focus is on identification of wine flaws with an emphasis on prevention but also remediation. Given the importance of the

grapes to wine quality the vineyard and grower are also included in the conversation. In my experience, this is a great way to learn and push wine quality. It also gives winemakers a larger view of wines in the region and helps them to calibrate their own quality position against their neighbors. Bob Green and Mario Mazza organize the roundtable and it meets regularly. Contact them if you want more information or go to the Lake Erie Regional Grape Program website.

Growing grapes and making wine is a very technical endeavor. But I think I learned that is as much about personal relationships and the ability to work as a team to make the best wine that will allow everyone to be rewarded. The best growers and wine makers understand this.

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