Co-Ferments Come of Age in the Northeast: Increasing the Demand for Local Fruit

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Vière is a French word for a co-fermented alcoholic beverage made from wine (vin), fresh grapes, or grape skins and beer (bière). It is also known in Europe and the United States as Co-Ferments, Vierre, Grape Ale, or Oenobeer. Because New England and the Mid-Atlantic States grow quality fruit and make quality beers, ciders, and wine, Vière and other Co-Ferments are a perfect match for our area. This article details for our readers, who are primarily apple, berry, grape, and stone fruit growers, emerging trends in wine, beer, and cider production and how our growers can capitalize on the increased demand for fruit for alcohol production. In addition, many New England and Mid-Atlantic fruit growers are diversifying their farm operations to establish free-standing cideries, breweries, wineries, and distilleries. This trend of establishing alcohol production facilities on their farms is helping to increase year-round income; create more demand for the fruits that we grow; attract new customers to our farms who will purchase beer, cider, wine, and these hybrid co-ferment beverages; and offer our U-Pick and farm stand customers with more products to buy.

The author of this article cultivates 19th century Hudson Valley and Boston's North Shore Heritage grape varieties and other cool climate grape varieties that can be grown sustainably. Casscles cultivates over 90 different Heritage and cool climate grape varieties that are winter hardy, fungus disease resistant, productive, and make quality alcoholic beverages. He assists grape growers who want to grow their grapes more sustainably and which can cope better with our changing climate. These climatic changes are now substantially reducing our ability to make a living in farming. Casscles is a winemaker at Dear Native Grapes Winery of Walton, NY

and is interested in promoting Heritage grape varieties to produce new styles of alcoholic beverages.

The production of vière and other Co-Ferments demonstrates a trend in the alcohol beverage industry that is witnessing the inter-mixing and merging of different styles in the production of wine, beer, and ciders. For years, beer makers on both sides of the Atlantic added cherries, raspberries, and currants to beer to broaden their flavor profiles. Currently, these same brewers are experimenting with adding apples, grapes, berries, and stone fruits to their beers and ciders. The manufacture of beer, cider, and wine used to be placed into separate and distinct categories, but these categories are now merging as the boundaries between them become less defined.

Simultaneously, with the blurring of boundaries of beer, cider and wine, producers are introducing more "natural" beers such as 'sours'; beers that contain 'brett' (a yeast strain called brettanomyces), volatile acidity (also known as VA or vinegar), and other bacteria that ten years ago would have been considered as an offputting smell or flavor. In addition, beer makers have been experimenting with making cloudy beers such as 'hazy' IPAs; beers flavored with pineapples, grapefruit, and ginger; and gose-style beers that are wheat, barley, oats, and rye-based beers, flavored with coriander, other spices, or oranges and limes. Producers are experimenting with the kinds of fruits and grains that they use to make these hybrid beverages and with cultivated and wild yeasts and other bacteria they use to ferment them.

In the New England and Mid-Atlantic wine industry, we are seeing winemakers add fruits other than grapes to their wines. Further, some winemakers are now devoted to making "natural wines" from organic grapes

with minimal interventions such as not adding commercial yeasts, sulfur, or sugar. Examples of some of these "natural" wines include Pet-Nats and Piquettes. These natural wines are similar in appearance, body, and flavor profile to the new cloudy and fruit-forward beer styles mentioned above. Hence, we are seeing the merging of similar styles in the making of beer, wine, and cider.

Pet-Nats and Piquettes are becoming popular with younger drinkers and are one of the few growth sectors in the wine industry. For our purposes, it is a new place that our fruit growers can sell their fruits or use already processed fruits again to make beer, cider, or wine. This is especially the case for cider, because by adding fruits other than apples, this expands the kinds of ciders that can be produced. In the production of beer, vière may become a growth market for those who have surplus apples, grapes, or other fruits and are seeking new markets to sell their fruits. In producing vière, anywhere from twenty to forty percent of its volume is raw fruit, pomace, or wine added to this malt beverage, hence the volume of fruits needed by a cidery or brewery are sizable. The other benefit for fruit growers is that such cideries and breweries can accept produce that has no other home during the Fall and quickly convert them into co-fermented ciders and beers within three to four months for sale.

Since vière is a relatively new kind of beverage in the United States, it is a fun time for East Coast fruit

and hops growers and alcoholic beverage makers who are making these Co-ferments. This past Thanksgiving, Subversive Brewery of Catskill, New York, released its Heritage Grape Ale, made from grapes grown by this author. The grape varieties included are Baco Noir and Heritage grape varieties that were bred by 19th century Mid-Hudson Valley and Boston's North Shore hybridizers such as Agawam, Bacchus, Black Eagle, Delaware, Eumelan, Jefferson, Massasoit, and Lindley. The base beer of this grape ale is a very simple recipe of pilsner malt, local flaked wheat, and low amounts of hops that was fermented jointly with these very fruity heritage grape varieties. Brewmaster Zane Coffey stated that "this recipe gives just enough character to provide a backbone for the beverage, while not overwhelming the delicate character of the grape. This ale has a lovely ruby/purple color similar to a wine spritzer, its body is very light, and the carbonation makes the fruit character pop out of the glass."

Russell Orchards and Winery of Ipswich, MA is a 120-acre fruit farm that grows apples, pears, stone fruits, and berries. Doug and Miranda Russell produce hard apple cider and fruit wine. The Russell family produces nine different styles of hard cider and perry, some of which are flavored with fruits that they grow such as raspberries, pears, blueberries, and blackberries. In addition, they make traditional fruit wines and blended fruit wines, such as strawberry/lilac and strawberry/rhubarb. This multi-faceted farm operation complements its country store, winery, wine/cider tasting room, and



Agawam, a hybrid bred by ES Rogers of Salem, MA.



Baco Noir does well in Co-ferments, imparts lots of black raspberry and berry flavors.



Delaware is used a lot in Coferments and grows well and can be grown organically.

bakery. The Russell's have a U-Pick operation so that local families can enjoy the outdoors as they harvest agricultural produce and conduct educational farm tours for local school children.

Andre Latour of Brewery LaHoff of Climax, NY made a vière, called Isabella Hudson Harvest Ale. This co-fermented vière is a wheat ale brewed with Hudson Valley white wheat with the addition of Isabella grapes. 'Isabella' is a Heritage grape variety found in the garden of Isabella Gibbs of Brooklyn, NY in 1816 by William Prince, the famous nursery owner of the Linnaean Botanic Garden of Flushing, NY. Isabella is making a comeback on the East Coast, but for years it has been widely grown in Moldovia, Ukraine, India, and Brazil. Isabella has found a home in a wide range of places due to its winter hardiness, ability to withstand high temperatures, fungus disease resistance, high productivity, and heavy grapey and musty flavors. The brewmaster Andre Latour believes that his Isabella Hudson Harvest Ale is popular because "It appeals to beer enthusiasts and wine drinkers alike. It's a beer that almost drinks like wine. As you imbibe, you are able to explore the unique characteristics of both wine and beer simultaneously."

There are several breweries, cideries, and wineries in New England that are making Co-ferments. Two Roads Brewing of Stratford, CT makes several beers with grapes, pumpkins, cherries, and raspberries. This brewery also sponsors its "Area Two Experimental Brewing" Program that Co-ferments its beers with wild yeasts and cherries, black currants, cranberries, peaches,

and blackberries. Allagash Brewing of Portland, ME operates a brewery and cidery that makes a wide range of beers, ciders, and sour ales that contain apples, grapes, raspberries, cranberries, cherries, apricots, and strawberries. Some of these beers are fermented with wild yeasts or bacteria or aged in wooden barrels as is commonly done with wine.

Shacksbury Cidery of Vergennes, VT makes complex, vinous, organic ciders that blur the lines between cider and wine. In their ciders, they use generous amounts of grapes such as La Cresent, Leon Millot, Baco Noir, and Frontenac. ZAFA Winery, located on Isle La Motte, VT makes carbonated fruit wines, and co-fermented wines that contain apples, grapes, and peaches. With its Co-Cellars Project, it explores various approaches to fermenting apple cider, other fruits, and grape varieties such as Seyval Blanc, Catawba, and Concord, and how these Co-ferments meld with apple cider and wild yeast strains.

At Return Brewing of Hudson, NY, brewer JD Linderman is making a vière, called Pastel Palace, which has as its base beer a sour ale with strawberries. The cool climate grape varieties added include Burdin 6055, Annie Noir, Le Colonel, Verdelet, and Concord. All of these grape varieties are winter hardy, fungus disease resistant, productive, and can be grown sustainably. Linderman believes that his vière is "a nuanced, bright, easy drinker that people will have a lot of fun sharing bottles of." Co-formulator Mikey Lenane added that "the blend is pretty remarkable - the base beer had strawberry refermented directly into it, but the bright



Jefferson, JH Ricketts hybrid Lindley, ES Rogers hybrid from Newburgh, NY lots of quava and soft labrusca flavors.



from Salem, MA, might be of interest in New England.



Red currants grow well in New England, especially in lower damp soils, great in Co-ferments.



Pet nat from Dear Native Grapes, they used Catawba and Niagara that are commonly used for Coferments.



Empire State developed by JH Ricketts of Newburgh, NY, around 1878



Verdelet has a reputation of not being winter hardy and susceptible to fungus diseases, I have not found that to the be case

fruitiness of the grapes makes for a far more intense strawberry taste than we had originally thought possible."

What is so exciting about making vière in New England and the Mid-Atlantic states is that our producers are open to making this beverage in many ways with many different fruit varieties, malts, and cultured and wild yeasts and bacteria. These Co-ferments have many different flavor profiles, so the flavors and texture of our vière beverages is broad. In addition to the large number of fruit varieties that are used, each beer maker has a different approach in making their base vière, be it a pilsner, ale, kolsch, IPA, lager, bitter, or Hefeweizen. The same is true for apple and pear ciders which can be made into many different styles which can then produce a nuanced Co-ferment.

Denny Brownell of HeartsbyTrue Cidery, Catskill, NY, is creating his own style of an apple cider-based vière. As with beer, there are many different styles of hard cider that can be made. Here too, each base cider can be very different due to the apple varieties and the yeast strain used to ferment these apples. Brownell concentrates on obtaining hand foraged wild apples and pears which he lets ferment with wild native yeasts that are present on the fruit he has gathered. In years past, Denny has added sour cherries to his ciders. This year, to his base apple cider, Denny added fresh Baco Noir grapes. This co-fermented cider will be barrel aged and ready for consumption within the next six months.

Ιn New Jersey, Kane Brewing of Ocean, NJ, has a "Field Oak" & Spontaneous and Saison beer project, where they ferment with wild yeasts and bacteria and add locally grown red &black currants, raspberries, blackberries, blueber-

ries, cherries, strawberries, plums, peaches and various sorts of grape varieties to their beers. In addition, like wine producers, they have a program where they barrel age their heavier stouts, barley wine, and imperial brown ales. This brewery cooperates with the Bellview Winery of Landisville, NJ, which produces black currant, cranberry, and blueberry wines, in addition to its hardy hybrid grape wines made from Chambourcin, Vidal Blanc, and Cayuga White.

There is a movement by some in the fruit growing community to integrate different businesses into their farm operations. Just as this trend is occurring, we are seeing independent brewers, cidermakers, and winemakers merge their practices to produce vière and other Co-ferments that integrate different grains in beers with fruit, pomace or wine; ciders that also include various fruits to broaden the number of their offerings; and wines that blend fruits other than grapes into their wine products. This is an exciting time for East Coast fruit growers and alcoholic beverage makers be they making wine, beer, cider, vière, or another co-ferment by the combination of different cultured and wild yeasts, bacteria, and kinds of grape varieties or other fruits in the production of many different styles of vière.



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