



VALLEY VINEYARDS
FAMILY OWNED SINCE 1970

THREE GENERATIONS OF WINEMAKING

Cellar Tour

Welcome to the winery at Valley Vineyards. We are the third largest grape grower in Ohio with 27 varieties of grapes. Sixty percent of our grapes are white and forty percent are red. We harvest from late August to the end of October, using a majority of the grapes in our own winery. Each year we produce about 20 different estate-grown varietal and proprietary wines, many of them award winning.

Crush Pad

All our grapes are hand harvested into containers called lugs, which hold 35 pounds each. They're brought in from the vineyards on a trailer, and from there they are loaded into the stemmer/crusher where the first step is to remove the stems. After that, the grapes can be left whole or crushed in varying degrees before being pumped into the press or a fermenter.

White Grapes:

White grapes are crushed and pumped directly into the press. After pressing, the juice is pumped to the cold room to settle overnight.

Red Grapes:

Red grapes are crushed and pumped into fermenters where cultured wine yeast is added. The reds will stay in the fermenters for one week to one month depending on the grape variety. The reds sit on the skins in order to extract the color, tannins and phenolics out of the skins. The skins float to the top, so a hand punch is used to push the skins down under the juice 4 times a day. (If red grapes were pressed right after crushing, you would have a white or pinkish juice.) When the reds are ready, they are pumped into the press. After pressing, they are red wine and are pumped into stainless tanks in the cellar to settle. After settling, they are moved into barrels for malolactic fermentation.

The Press

Our press holds four tons of grapes. As the air bladder inside the press expands, it gently presses the grapes against a screen to squeeze out the juice. Using the maximum pressure, we can actually press the grapes dry. The skins and seeds that remain are then spread out on the fields as natural compost.

Cold Room/White Wine Fermentation

The back of the room (kept at 28-30° F) is used for settling the white grape juice and for cold stabilization. The front of the room (kept at 55° F) is used for fermenting. After

settling overnight, the clear juice is racked off the sediment into tanks in the front of the cold room, where yeast is added. The juice then ferments for one to three weeks. The cooler temperature keeps more fruitiness and retains the delicate flavors of white grapes. As fermentation progresses, the yeast will settle to the bottom of the tanks and the wine can be racked off to other tanks in the cellar.

Testing Lab

We begin testing our grapes before harvest to determine their ripeness. The grapes are analyzed for sugar and acid levels, pH and flavor. As the grapes ripen the sugars increase, the acids decrease and the flavors become more balanced. At harvest time, the same tests are run on the juice from each press load of grapes to help the winemaker create the best wine. After fermentation, tests are run for alcohol, acid, pH, residual sugar and sulfite levels.

Fermentation Process

Most grape juice has a sugar level of about 20%, which ferments to 11% alcohol - a nice table wine. Some American varieties, including Concord, Niagara and Catawba, measure around 15% sugar, so more is added to create an alcohol level of 10%.

When yeast is added to the juice, it converts the sugar into alcohol and the by-product is carbon dioxide. An airlock on the fermenter allows the carbon dioxide to escape but keeps bacteria and other impurities from entering.

Cold Stabilization

Before bottling, all white wines are cold stabilized. The wine is pumped to tanks in the cold room and held at 28° F for two weeks. This causes the tartaric acid and potassium to combine and form potassium bitartrate crystals, which settle out of the wine. If we don't do this, your bottle of wine would form crystals when you put it in the refrigerator. This process also softens the taste of the wine by lowering the acid level.

Tanks

The winery has a variety of tanks for creating wine.

- Large stainless - 1900 gallons
 - Tall silo - 600 gallons
 - Small stainless - 343 gallons
 - Wood casks - 238 gallons, very old and used only for storage because they no longer impart oak flavors.
- Racking valves are located above the sediment (lees) for pumping off clear juice or wine.

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Barrels

Barrel = 60 gallons or 25 cases of bottles

All our barrels are handmade and toasted over open fires* to create the perfect flavor for our white wines. They are used for five to seven years at which point most of the oak flavors are extracted, and then they are used for our reds and eventually sold for other uses. Several different aged barrels are used for each wine to allow for blending consistency from year to year. American oak is used for Seyval, Chardonnay and red hybrids, while French oak is used for the Cabernets.

Seyval

This white wine is fermented in barrels instead of the cold room. After fermentation is complete, the wine is left on the yeast (*sur lie*) for nine months. The yeast dies and breaks down, giving back nutrients and imparting biscuit-y (or toasty) flavors to the wine. Each barrel is stirred every two weeks to keep the yeast in contact with the wine.

Red Hybrids

Chancellor, Chelois and Foch are red French hybrid grapes. The wines from these grapes are blended together after 18 months of barrel aging to make our Hillside Red, a dry red wine.

*Primarily medium toast

Malolactic Fermentation

Our dry wines are put through a secondary fermentation. After the primary yeast fermentation, a culture is added to the wine that converts the malic acid to lactic acid. Lactic is a much softer acid, so it tempers the feel of the wine in your mouth. Malolactic fermentation adds complexity and buttery flavors to the wine.

Bottling

In the bottling process, wine is pumped to the second floor of the building and flows down, via gravity, to the filler. About seven people are needed on the bottling line. The steps are:

1. Set up bottles on the table
2. Fill bottles
3. Insert corks
4. Add labels*
5. Add capsules to seal corks
6. Secure capsules
7. Box and stack

Custom Labels

For a small fee, personalized labels can be added to the backs of bottles. Please call ahead of time to place your order.

Honey Mead Wine

This is the only non-grape wine that we make at Valley Vineyards. We start with 50-gallon drums of pure honey from an Ohio supplier, and then we add water until we have a liquid with 20% sugar content (to achieve 11% alcohol). This is fermented until the sugar is gone (dry), then sweetened with more pure honey to a final level of 15% sugar.

Ice Wine

We leave Vidal grapes hanging on the vine until late November when we can usually count on freezing temperatures. Once the grapes are frozen, they are loaded into the press as whole berries. Since the water in the grapes is frozen, the juice that is pressed out is highly concentrated in sugars and flavors. Whereas most juice contains 20% sugar, the ice wine juice is 36-40% sugar. This juice is fermented to 10.5% alcohol. The fermentation is stopped at this point so the wine has a natural sugar level of 15-16% sugar. The yield from the juice is about 60 gallons per ton versus the normal yield of 100 gallons per ton. Thus the cost for a bottle of ice wine is higher.

Glossary

estate-grown - Wine made and bottled by a single property.

fermentation - The biochemical process by which enzymes secreted by yeast cells convert sugar molecules into alcohol and carbonic gas.

lees - Sedimentation that accumulates in the bottom of a tank or barrel during the fermentation of a wine.

malolactic fermentation - A secondary fermentation of wine in which a culture is added that converts malic acid to lactic acid to soften the taste and add complexity.

phenols (phenolics) - The most important factor affecting wine quality, flavor and stability and primarily derived from the skins, stems and seeds. There are two groups of phenols: flavanoids that contribute to the flavor and mouth feel and non-flavonoids.

proprietary - The wine is a blend of grapes. For example, Valley Vineyards' Hillside Red, Valley Blush, Reliance, Aurora and Cayuga wines.

sulfites - Occur naturally in wine and are added to stop fermentation at a desired time. They may also be added to prevent spoilage and oxidation.

sur lie - Wines that have been kept on their lees and not racked or filtered before bottling. The process enhances fruit flavors, adds yeasty dimension and imparts liveliness and freshness.

tannins - Various phenolic compounds found naturally in wine that come from the skin, seeds and stems. They can also be picked up from the casks. They are harsh when young but add depth to the flavor and are crucial to a wine's ability to age.

varietal - The wine contains 75% of the grape named on the label. For example: Cabernet Sauvignon, Cabernet Franc, Seyval, Chardonnay, Vidal, Catawba, DeChaunac, Concord, Niagara, Blue Eye.