

Industry Perspectives

# Wine and Wine Grapes



This Industry Perspective was prepared by AgWest Farm Credit's Wine and Wine Grapes Industry Team.  
Direct questions and comments to the Business Management Center by email at  
[CustomerFeedback@agwestfc.com](mailto:CustomerFeedback@agwestfc.com)

Disclaimer: This material is for informational purposes only and cannot be relied on to replace your own judgment or that of the professionals you work with in assessing the accuracy or relevance of the information to your own operations. Nothing in this material shall constitute a commitment by AgWest Farm Credit to lend money or extend credit. This information is provided independent of any lending, other financing or insurance transaction. This material is a compilation of outside sources and the various authors' opinions. Assumptions have been made for modeling purposes. AgWest Farm Credit does not represent that any such assumptions will reflect future events.

# Wine and Wine Grapes

## Table of Contents

Introduction.....	3
United States overview .....	3
Western U.S. perspective.....	3
Value chain.....	7
Drivers .....	8
Appendix A - Best practices .....	10
Appendix B - Glossary.....	12

## Introduction

Wine regions are generally broken out into two categories, Old World (European countries) and New World (everyone else). Old World countries still lead in global production, with Italy, France and Spain alone producing about half of the world total. While total planted acres have gradually declined in both New and Old World regions over the last decade, production levels have remained relatively stable.

### World Wine Industry Statistics 2023

Country	Vineyard Area (thousands of acres)	Production (millions of gallons)	Consumption (millions of gallons)
Spain	2,335	748	259
France	1,957	1,268	645
China	1,868	85	180
Italy	1,779	1,012	576
U.S.	969	642	880
Argentina	507	232	206
Chile	425	291	N / A
Australia	393	254	143
South Africa	301	246	119
Germany	257	227	505
World	17,797	6,269	5,838

Source: State of the World Viticultural Sector in 2023, OIV. Available statistics are preliminary and should not be considered final.

## United States overview

Following three decades of steady growth, total and per capita consumption of wine fell 18% from 2022 to 2023. Demographic trends and shifting consumer preferences have largely driven the decline (see Drivers section below for more information). California produces more than 85% to 90% of all wines, supplying 60% of all bottles sold in the U.S. and 88% of those exported. While average production levels have not changed over the last decade, there are significant year-over-year fluctuations that can range from being up or down about 10%. The next largest wine-producing region in the U.S. is the Pacific Northwest. Concentrated mainly in Washington and Oregon, the region has just over 100,000 acres of wine grapes and about 2,300 wineries accounting for approximately 7% of U.S. wine production.

### Western U.S. Wine Industry Statistics 2023

State	Vineyard acres	Bearing / Harvest acres	% Non- bearing acres	Grape production (tons)	Yield (tons/acre)	Total grape value (thousands)	Grape value (per ton)	Wineries (number)
CA	610,000	445,771	29%	3,685,000	6.04	\$3,883,990	\$1,054	6,200
WA	61,000+	N/A	N/A	158,974	2.61	\$245,138	\$1,542	1,050+
OR	45,999	40,313	12%	130,592	3.24	\$348,994	\$2,505	1,116

Sources: California: USDA NASS Grape Crush Report, USDA NASS Grape Acreage Report, Wine Institute; Washington: WA Wine Grape Production Report, WA Wine Fast Facts; Oregon: University of Oregon Vineyard and Winery Report; Idaho: Idaho Wine Commission, Wine Industry Fact Sheet. N/A: Data not available.

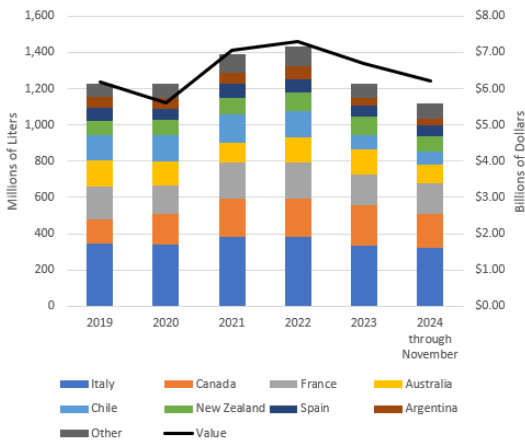
In 2023, the U.S. imported nearly \$6.7 billion in wine, split largely between white varieties at 27% of total, red varieties 26% and sparkling 25%. Italy is the largest supplier by volume at 27% of total, followed by Canada at 18%, France 14% and Australia 11% (see table below).

**Top foreign suppliers to U.S. in 2023**

Country	Value (millions of dollars)	Volume (millions of bottles)	Average \$ / bottle
France	\$2,500	221	\$11.29
Italy	\$2,120	445	\$4.76
New Zealand	\$598	136	\$4.40
Spain	\$364	84	\$4.35
Australia	\$269	188	\$1.43
Argentina	\$201	56	\$3.56
Chile	\$166	103	\$1.61
Portugal	\$119	31	\$3.79
Germany	\$79	21	\$3.70
Canada	\$71	300	\$0.24
World	\$6,684,000	1,586	\$3.91

Source: U.S. Census Bureau. Average bottle prices include bulk wines and are different than retail prices.

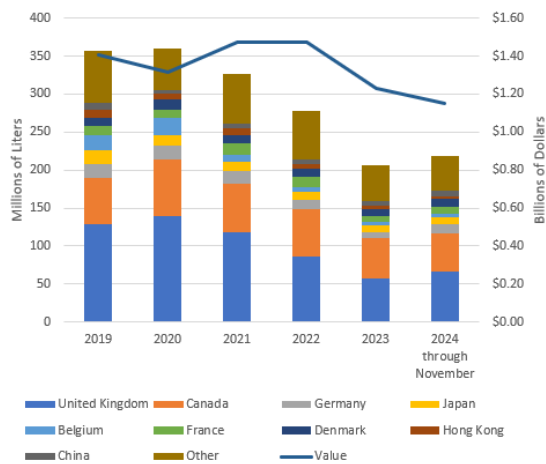
**Wine imports by country**



Source: U.S. Census Bureau.

Export levels were significantly less than imports at \$1.2 billion in 2023, and declined between 2020 and 2023 due in large part to falling demand in the United Kingdom. Year-to-date data as of November suggests a slight rebound in 2024.

**U.S. wine exports by destination market**



Source: U.S. Census Bureau.

## Western U.S. perspective

### California

California is the largest wine grape producer in the U.S. It has 152 American Viticulture Areas (AVAs) spread across six growing regions, the largest of which include the Central Valley, Central Coast and North Coast. Grapes are grown in nearly every county and make up about 610,000 acres. Unique climate and soil conditions allow for a large diversity in product styles and quality, ranging from premium in the North Coast, high quality and mid-priced wines in the Central Coast and value oriented in the Central Valley. The state produces slightly more red varieties than white. The highest production varieties are cabernet sauvignon and chardonnay making up about 30% of the total in 2023. Other common varieties include zinfandel, French Colombard, pinot noir, pinot gris, merlot, rubired and muscat of Alexandria.

*California's top wine producing areas and varieties, 2023*

Variety	Production (tons)	Weighted Avg. price (per ton)
<b>Central Valley (USDA Districts 11-13)</b>		
Cabernet sauvignon	300,800	\$620
Chardonnay	277,500	\$530
French Colombard	259,500	\$320
Pinot gris	174,800	\$550
Rubired	170,670	\$300
Zinfandel	161,100	\$500
<b>Total / Average</b>	<b>2,094,300</b>	<b>\$480</b>
<b>North Coast (USDA Districts 1-5)</b>		
Cabernet sauvignon	188,100	\$5,910
Chardonnay	134,900	\$2,430
Pinot noir	81,400	\$3,490
Sauvignon blanc	53,900	\$2,010
Merlot	25,800	\$3,310
Zinfandel	22,400	\$3,300
<b>Total / Average</b>	<b>571,200</b>	<b>\$3,840</b>
<b>Central Coast (USDA Districts 6-8)</b>		
Chardonnay	136,300	\$1,380
Cabernet sauvignon	134,700	\$1,650
Pinot noir	94,500	\$1,950
Sauvignon blanc	26,900	\$1,470
Merlot	26,800	\$136
<b>Total / Average</b>	<b>526,800</b>	<b>\$1,630</b>
<b>Yolo County (USDA District 17)</b>		
Chardonnay	67,700	\$670
Pinot noir	36,800	\$670
Pinot gris	24,400	\$630
Sauvignon blanc	23,700	\$570
<b>Total / Average</b>	<b>201,500</b>	<b>\$640</b>
<b>Southern California (USDA Districts 14-16)</b>		

French Colombard	32,300	\$330
Muscat of Alexandria	27,500	\$280
Rubired	26,400	\$320
Zinfandel	21,900	\$380
Chardonnay	17,900	\$620
Muscat blanc	16,700	\$520
<b>Total / Average</b>	<b>197,900</b>	<b>\$440</b>

Source: US Department of Agriculture (USDA), California Wine Grape Crush Report.

## Washington

Washington ranks second among the states in U.S. wine production. It has 19 AVAs and most plantings lie east of the Cascade Mountains. The state's four most abundant varietals – cabernet sauvignon, riesling, chardonnay and merlot – account for more than 75% of total acreage. Cabernet is the main variety grown while most other reds are used in blends. Washington, now boasting over 1,000 wineries, has gained fame for producing moderately priced, high-quality wines. The percentage of its wines scoring higher than 90 points by Wine Spectator exceeds France, California, Italy and Spain. Walla Walla Valley and Woodinville have been heavy traffic and destination hotbeds for Washington wineries. Boutique wineries have transformed Walla Walla into a destination town, while Woodinville is home to Chateau Ste. Michelle. Woodinville capitalizes on direct-to-consumer sales due to its proximity to the Seattle-Bellevue-Tacoma area.

### *Wine Grape Quantity Produced and Average Price for Washington, 2023*

Type	Variety	Production (tons)	Avg. price (per ton)
Red wines	Cabernet sauvignon	48,369	\$1,818
	Merlot	14,557	\$1,642
	Syrah	15,612	\$1,449
	Malbec	3,131	\$1,727
	Cabernet Franc	2,707	\$2,254
	Total Red	93,027	\$1,729
White wines	Chardonnay	22,149	\$1,086
	Riesling	24,357	\$1,437
	Sauvignon blanc	8,352	\$1,113
	Pinot gris	5,874	\$915
	Total White	65,947	\$1,079

Source: Washington State Wine Commission.

## Oregon

Oregon currently has 23 AVAs and unlike Washington, most of Oregon's vineyards are cultivated west of the Cascades. Western Oregon's climate favors cooler-season grapes like pinot noir and pinot gris. Notably, 60% of Oregon's grape production is Pinot Noir. Due to the state's cooler climate, particularly in the Willamette Valley where about 70% of Oregon's grapes are grown, grape yields are much lower than those in other western states. Oregon's wine industry is relatively young, with the first pinot noir vineyards planted only 60 years ago. Oregon's pinot noirs are recognized for high quality and demand for the state's wine has grown over the last decade. Currently, the state is home to over 1,100 wineries and most are relatively small. Many Oregon wine producers enjoy the location advantage of being near large population centers, which allows for a greater volume of direct sales. The elevated interest in Oregon vineyard/winery properties is a result of its reputation for quality, focus on pinot noir and appeal as a climate hedge due to its abundant water resources compared to other growing regions.

## Idaho

According to the Idaho Wine Commission, Idaho's vineyards encompass an estimated 1,300 planted acres. The state's wine output consists mainly of grape varietals that can withstand comparatively harsh winter conditions, as most of the growing areas are at high elevations. Idaho's leading varietals include chardonnay, riesling and cabernet sauvignon.

Idaho's wine industry is the newest in the Northwest. In 2007, Idaho's first AVA, Snake River Valley, was approved. The Eagle Foothills AVA, authorized in 2015, lies within the Snake River Valley. The newest AVA, approved in May 2016, is the Lewis-Clark Valley. Idaho currently has 75 wineries and produces on average 160,000 cases per year. Most of Idaho's wineries and vineyards are in the Snake River Valley, within an hour's drive of Boise. The remaining 50 are independently owned boutique wineries that rely primarily upon tasting room sales and local distribution to market their products.

## Value chain

### In the vineyard

Start-up costs are high in the wine/vineyard industry. New vines are supplied primarily by nurseries in California or Washington and once in the ground, vines become fully productive in about two to three years. In year one, the grower establishes vine root systems, irrigation and trellises. In year two, the irrigation and trellis systems are finished, and training of the vines begins. By year three, most vines can produce a harvestable crop.

Parts of the Northwest are especially susceptible to freeze, which can severely damage vines that must be cut back or removed. Rain can prolong harvest, but does not typically damage most grape varieties. Growers constantly manage for pests, mold/mildew and other diseases that threaten vines and grapes. Red Blotch, a disease that turns leaves red and reduces sugar accumulation in berries, has been pervasive in California vineyards and is now being reported in Oregon. While the origins remain unclear, the disease spreads through infected plant material and insect vectors. Smoke from wildfires can also cause problems by reducing photosynthesis (leading to lower yields) and leaving residues on grapes (resulting in undesirable sensory characteristics).

### Harvest

Vineyard managers measure Brix, the sugar level in grapes, to determine harvest timing. Harvest typically begins around August or September for white grapes, which are harvested before reds. Cabernet is the last grape harvested and is typically picked by October.

Grapes are harvested mechanically or by hand. For mechanically harvested grapes, machines hover over the vines, shaking them until the grapes fall. A conveyor belt on the bottom of the machine collects the grape clusters into a bin and transports the harvest to a storage cellar or directly to a crush facility. Harvesting by hand is more expensive, requiring more labor and time, and is not typically an option for bottles priced under \$20. In California, there is a trend towards more harvest mechanization, particularly for larger vineyards and certain grape varieties; however, hand harvest is still preferred for high-value and/or sensitive varieties like pinot noir due a need to handle grapes more gently and/or utilize steeper terrain. Some areas that maintain hand harvesting include Napa, Central Coast west side and Santa Ynez Valley. Washington vineyards are almost solely machine harvested, while in Oregon hand harvesting is more common.

Labor shortages, increasing wages and technological advancements will drive more vineyard owners to invest in machine harvesters, de-stemmers and precision pruners. There is a long-standing belief that hand harvesting leads to better quality wines. However, new optical-sorting machines on the harvesters or at the crush facility are more advanced and efficient at removing materials other than grapes (MOG).

### Wineries

Harvested grapes are sent to the winery for crush, aging and bottling. Fermenting starts during the crushing phase and will continue as the wine is aged. Sometimes oak chips are added to steel tanks to impart some oak flavors more cost effectively.

Grapes are pressed to remove skins before fermentation to make white wine. Grape skins are temporarily left on for red wines. This period of skin contact is also known as maceration or cold soaking. Winemakers adjust the maceration time to change flavors and color. When the maceration time is complete, the red wine is pressed to remove skins.

Once fermented, wines are transferred to bottles where they are aged so the flavors can fully develop. White wines age for only a couple of months, but reds need longer. Higher-end wines can age for several years before going to market.

### Marketing channels

A three-tier system was designed to track alcohol movement to minimize illegal production and sales. Under this system, a winery sells to a distributor, which in turn must sell to a retailer. With this system, wineries can work with a few distributors to get their wines on many different shelves and wine lists instead of having to work with numerous retail shops and restaurants.



Consolidation has been happening among distributors for 20 years and there are currently just over 1,000 nationwide. Due to tighter margins, individual distributors now carry more brands but devote less time to selling each brand. Because a winery with a broad product base can more effectively serve a distributor's needs than 10 different small wineries, the large winery becomes an attractive "one-stop shop." With distributors' focus on efficiently moving products, smaller wineries often find their product is a lower priority, so smaller brands are more difficult to find through retail outlets.

Attracting a distributor and getting placements in out-of-state restaurants and retailers is increasingly difficult, especially for small wineries. Out of necessity, small wineries are taking control of their marketing and focusing on the direct-to-consumer (DtC) channels. States are increasingly opening up DtC shipments to out-of-state wineries, thus expanding the DtC market.

Although the wine industry's distribution system is being modified, distributors largely control wine sales. Over 95% of U.S. wine sales are through distributors, either off-premise (retail) or on-premise (restaurants). DtC accounts for less than 5% of total U.S. wine sales. While still a small portion, DtC sales have shown double-digit growth for the last several years.

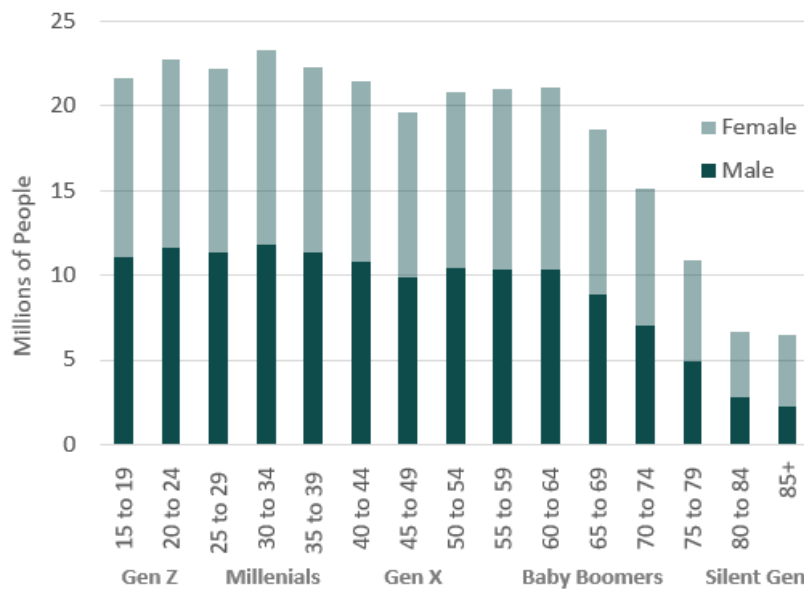
## Drivers

### Demographic trends

The U.S. population has several cohorts, each with its own consumer preferences. Baby boomers maintain the largest share of disposable income and were historically more willing than others to purchase higher-priced wines. However, they are consuming less as they enter retirement, become more health conscious and conserve their income. Generation X is now the largest consumer base of wine, yet the real growth opportunity is in attracting millennials given their higher population. This represents a significant change as millennials:

- Drink less overall than previous generations in large part due to health concerns.
- Have more options with craft beers, seltzers spirits, and cannabis.
- Respond to experience-oriented branding rather than status and family heritage.
- May be more willing to spend over \$20/bottle but have less discretionary income overall.

*U.S. Population by Age Class 2021*



Source: U.S. Census Bureau.

### Temperance movement

There is an increasing push among health organizations to both demonstrate the negative effects of drinking alcohol and promote policies that discourage consumption. The U.S. surgeon general recently announced alcohol consumption could cause cancer and advocated for container warning labels. The World Health Organization recently announced there is no safe level of alcohol consumption and is advocating for a portfolio of policy measures to address this. Recent claims stand in contrast to numerous studies showing light- to moderate-alcohol consumption is safe. The temperance movement goes back decades, but is only now making its way to broader public discussion and the long-term implications remain unclear.

## Consumer preferences

Consumer preferences constantly change. A few years ago, cabernets were the hot item while more recently, sparkling wine experienced a surge in demand. More recently, zero- to low-alcohol wines have gained in popularity among younger generations. Although difficult, staying on top of varietal preferences is imperative to match vineyard production to consumer preferences. Quality is also important as premium wines are currently fairing much better than their lower priced counterparts since a rapid rise in inflation in 2022 and 2023 disproportionately impacted low- to medium-income consumers.

## Marketing channels diversity

With greater competition from alternative spirits and shifting demographic trends, both online and onsite DtC sales have become a more important source of demand, particularly for smaller wineries and those located near large population centers. Wine consumption via DtC outlets steadily increased from 2014 to 2019, surged during 2020 and 2021 due to pandemic lockdowns, and has since declined notably. This decline reflects the broader industry downturn as well as falling tasting room visits. That said, wineries with diversified sales channels appear better able to withstand the current low demand environment.

## COVID-19 pandemic lockdowns

COVID-19 pandemic lockdowns resulted in:

- A significant drop in wine consumption, driven by lower restaurant sales.
- A shift towards retail and DtC sales.
- A build-up in inventory.
- Increased interest in non-glass packaging by consumers.
- Rising input costs and supply chain disruptions.

The industry is nearing the end of normalization, or the process returning to near normal market conditions following the lockdowns. Unfortunately, wine consumption remains below pre-pandemic levels while inventories and input costs remain elevated. Use of non-glass packaging continues to increase, though it remains a small share of total retail and DtC sales. It will take some time to fully understand if the pandemic lockdowns will have long-term implications for the industry.

## Buyer contracts for growers

The wine industry is currently in a downturn and wine grape markets are oversupplied. Growers without buyer contracts are having an increasingly difficult time finding a home for their wine grapes and often when they do, they are receiving prices below the cost of production. This trend is leading many growers in Washington and some in California to remove planted acres, not farm existing acres and/or exit the industry altogether. Those with contracts are faring much better than their counterparts; however, a large buyer in Washington canceled a significant portion of contracts in 2023 and again in 2024. Despite these occurrences, contracts provide greater stability and resilience in the marketplace.

# Appendix A

## Best practices

The following summarizes best practices common among successful vineyard and winery operations. For this discussion, it's accepted that most successful operations employ best industry practices in production to maximize product quality and economic return. Accordingly, the following discussion is confined to marketing and finance.

### Marketing

Successful **vineyard** owners:

- Carefully align their long-term strategic production goals with the practical needs of the winery and the general marketplace where that fruit will be marketed.
- Develop market alliances before the vineyard is designed and planted.
- Thoroughly consider critical factors around vineyard establishment (trellis type, irrigation system, plant spacing, elevation, row direction, soil type, slope orientation, rootstock, clones, AVA, site selection, etc.) that can profoundly impact quality, production and marketing throughout the life of the vineyard.
- Have a vineyard branding strategy and create additional value in the vineyard asset through effective marketing of grapes to reputable wineries.
- Broaden marketing to multiple wineries and strive to produce high-quality grapes that will merit vineyard-designated wines.
- Use long-term contracts with wineries to minimize marketing risk.
- Partner with reputable vineyard management companies that can help maximize fruit quality and raise the overall profile of the vineyard in the marketplace

Successful **winery** owners:

- Develop strong branding and marketing strategies.
- Craft a story around their brand that is authentic and durable in the marketplace, and that is further enhanced by the personality and energy of the owners.
- Genuinely enjoy people and marketing, and don't tire of telling their story repeatedly – an essential requirement of a winery owner.
- Have a distinct channel strategy and effectively develop all three traditional marketing channels (retail, wholesale and distributor).
- Align with reputable and financially sound brokers and distributors.
- Closely participate in the marketing process in all channels.
- Produce high-quality wines, differentiating their brand, not with the occasional high score or good review, but with consistently strong recognition year after year.
- Develop wines at multiple price points that will accommodate changes in market demand and normal variations in quality from vintage to vintage.
- Consider replacing wine brokerage relationships with in-house sales staff to gain better representation of the wines in the marketplace.

## Finance

### Successful **vineyard** owners:

- Resist the notion that appreciation is guaranteed over time on a land and vineyard investment (a common investor motive), and carefully manage vineyard costs to generate annual cash returns.
- Use long-term contracts to limit downside risk.
- Persistently look for ways to optimize production.
- Use crop insurance and other risk-management tools to minimize income volatility.

### Successful **winery** owners:

- Align with accounting firms that have a solid understanding of the unique accounting characteristics of the wine industry.
- Develop high-quality accounting systems that provide internal and external audiences with a clear understanding of accrual earnings and balance sheet health.
- Develop clear financial performance metrics that allow them to compare their operation to industry benchmarks.
- Are smart about deploying capital and focus capital resources, if limited, first on inventory and brand building, and then on the development of hard assets such as land, vineyard development and winery facilities.
- Maximize use of their winery capacity with their own production, or market their unused capacity by sharing space with another winery.
- Maintain health in their balance sheet, particularly liquidity, recognizing that the wine industry is highly cyclical.
- Adjust production levels annually to match annual sales and generally turn bottled inventory every 12 months.

## Appendix B

### Glossary

**American Viticultural Area (AVA) or appellations:** Geographical wine-grape growing regions in the U.S. Established at the request of wineries or other petitioners, the Alcohol and Tobacco Tax and Trade Bureau designates the boundaries.

**Boutique wineries:** Small, artisan and sometimes family-owned wineries.

**Brix:** A scale system used to measure the degree of sugar content of grapes and wine. Each degree is one gram of sugar per 100 grams of grape juice; table wine is usually between 20 to 25 Brix.

**Crush facility:** Processing facility where grapes are crushed to start the wine-making process.

**Direct to Consumer (DtC) and direct sales:** Marketing and selling directly to consumers, bypassing distributors and third-party retail locations. In the wine world this is often done through wine clubs, tasting rooms and other direct communication with the consumer.

**Distributor:** An agent who supplies goods to stores and other businesses.

**Fermentation:** Chemical breakdown of a substance by bacteria, yeasts or other microorganisms; the process for wine converts sugars to ethyl alcohol.

**Maceration:** Process of soaking crushed grapes, seeds and stems in a wine to extract color, aroma and tannins.

**Measurements:** The following table shows frequently used metrics in terms of liters and bottles.

Metric	Liters	Bottles
1 bottle	0.75 liters (750 milliliters)	1
1 case	9 liters	12
1 gallon	3.79 liters	≈ 5
1 hectoliter (hl)	100 liters	≈ 133
1 million hectoliters (mhl)	100 million liters	≈ 133.3 million

**New World wine:** Wines from countries or regions where winemaking was imported during and after the age of exploration; typically refers to the regions outside the traditional wine-growing areas of Europe.

**Oak barrels:** Wooden containers used to age and store wine. The most common oak barrels are either French oak or American oak. American oak tends to be more intensely flavored with more sweet and vanilla overtones since the grain is looser. French oak, which has a tighter grain, generates a sensation of light sweetness with fruity flavors. The most common size of a barrel holds almost 60 gallons. Oak barrels are the most expensive storage method and can be used only a couple of times before the flavoring effects wear off.

**Old World wine:** Wines from countries or regions where winemaking first originated, mostly refers to Europe and regions around the Mediterranean basin.

**Pre-productive:** When a plant is young and does not yet bear fruit.

**Steel tanks:** Containers used to ferment and store wine. Stainless steel tanks vary in size from a couple of gallons for home brewing up to 400,000 gallons (for reference, 800 gallons is about 4,000 bottles of wine). Steel tanks are ideal for temperature control during fermentation. They have a chamber surrounding the tank that holds coolant, which the winemaker can adjust.

**Sub-AVA:** An AVA within a larger AVA; see AVA definition.

**Tannin:** Naturally occurring polyphenol found in plants, seeds, bark, wood, leaves and fruit. In wine, it's the textural element that makes wine taste dry.

**Tasting room:** Part of a winery or brewery typically located on the premises. It's primarily used by guests to sample products.

**Trellis system:** A frame used to support climbing plants; helps to train the vine and canopy into an ideal shape for fruit growth, fruit ripening and harvesting.

**Varietals:** The types of grapes used in winemaking.