

While there are many options and decisions to be made from vineyard to bottle, the basic steps to winemaking have not changed much over the past couple thousand years. In fact, turning grapes into your basic wine is a pretty straightforward process. You squish the grapes and let the yeast do the work. However, making a truly fantastic wine, the kind of bottle that transform the every day into a truly unique sensorial experience, is a different story. That's why we're here to help.

Creating a special wine requires making choices- some of them are small, but every one is important. If you make good decisions, avoid mistakes and respond quickly when nature throws you a curveball, then you're probably going to make a whole lot of people happy with your wine. We'll help you get there.

To make it easier, we've created the **Crushpad 30** - a list of 30 (more or less) winemaking decisions that help define the style of wine you want to make. The **Crushpad 30** walks you through each step of the winemaking process, from the varietal you'd like to work with, all the way through to toast level of your barrel. The **Crushpad 30** also provides an excellent communications tool to ensure that anyone helping you along the way is clear of what your goals are.

Developing your wine plan is an exciting process. However, if it's your first time, completing a wine plan can seem a somewhat intimidating task, even with the **Crushpad 30** close at hand. Don't worry. We're here for you. Our winemaking team is eager to answer questions and walk you through the process so that you can produce the wine you've always dreamed of. If you have any questions, simply give us a call and we'll be sure to take care of your wine plan needs.

Ready to make your own wine? Let's get started.

The 2008 **CRUSHPAD**TM 30 Red Wine Plan Companion

Your Name _____

Wine Name _____

Winemaker Name _____

How many barrels of this wine are you making? _____

Style Describe characters you would like to highlight or downplay in your wine.

Varietal

Which varietal will you be making? _____

Vineyard

From which vineyard will your fruit be sourced? _____

Alcohol Levels

Target Alcohol (13% - 15.5+%)

What percentage of alcohol would you like your wine to have? _____

Maximum Alcohol (13% - 15.5+%)

What is your preferred maximum percentage of alcohol? _____

Table wines in the U.S. generally contain alcohol levels ranging between 12% and 16%. The winemaker will aim for a particular percentage of alcohol depending on the style and varietal of wine they are working with.

Traditionally, climate and the ripeness level of the fruit at harvest determine the percentage of alcohol. Fully matured grapes, grown in warm weather, contain higher concentrations of sugar that translate to higher levels of alcohol. Conversely, cool cloudy weather patterns can prevent grapes from developing high sugar levels. Less sugar means the yeast has less food to eat, thus lower alcohol levels. Winemakers can make adjustments to achieve the desired percentage of alcohol. Amelioration is the process of adding water back to the must in an effort to lower the concentration of sugars the yeast have to feed on. This makes for a wine with a lower percentage of alcohol.

The level of alcohol in wine has an effect on how it plays on the palate. Lower alcohol California Chardonnays and Pinot Noirs, weighing in below 13.5%, are often likened to their Burgundian counterparts and lauded for their sophisticated elegance. Robust, full-bodied versions with alcohol levels reaching the 15% range, have been greeted with critical and consumer praise. Varietals with bold fruit and assertive tannins like Cabernet Sauvignon and Syrah can generally maintain structure at levels between 14% and 15%. Many Zinfandel producers push alcohol levels even higher, into the 16% range, with success. Extremely high alcohol percentages risk the danger of tasting hot on the palate and can mask the complexity of flavors otherwise present in the wine.

Wineaux Translation: Alcohol gives a wine body. Too little alcohol and you've got a wine that tastes thin and tannic. Too much and it's hot. Aim for the midrange to play it safe.

Amelioration

Ameliorate? Yes, achieve desired alcohol No Winemaker's Discretion

Amelioration is when water is added to a must in an effort to dilute the concentration of grape sugars. High sugar levels bring the potentials of high alcohol levels and fermentations that have difficulty completing to full dryness. High sugar levels are more common in areas like California, where sunshine is plentiful, grapes easily mature to full ripeness, and winemaking trends have shifted toward longer hang times for the fruit before harvesting.

Although there is a concern about dilution of the wine, it is important to note that most of the high sugar level in very ripe grapes is due to dehydration and adding water back merely restores the balance that was in the grapes.

Wineaux Translation: Ripe grapes have high sugars. To achieve a reasonable alcohol level, water is added.

pH Level

Target pH (3.3 - 3.8)

What pH would you like you wine to have? _____

Maximum pH (3.5 – 3.8)

What is your preferred maximum pH level? _____

The pH scale is designed to measure whether a substance is acidic or alkaline. The scale ranges from 1 to 14 with the value of 7 considered neutral. Substances below 7 are acidic, the lower the number, the stronger the acidity level. Wines generally have values somewhere between 3.0 and 4.0.

Acids are perceived as tart or prickly sensations on the palate and work to protect the wine's appearance while preventing bacterial growth. Generally speaking, lower pH wines pair better with meals. Wines with pH values between 3.2 and 3.4 tend to feature refreshing crisp acidity and bright colors. Many white wines fall into this range. Wines with pH levels between 3.5 and 3.7 offer a more lush, less lean mouthfeel and are common in Pinot Noir and reds grown in cooler areas. Those with pH levels at 3.8 and above can appear oily and rich, but may also be perceived as flabby and are prone to the development of harmful bacteria. Modern, flashy styles of Cabernet Sauvignon and Syrah often push pH levels up into this range.

Wineaux Translation: pH is the measure of the strength of acidity. Lower pH wines show better with food while higher pH wines can be more impressive by themselves.

Total Acidity

Target TA (.5 - .8)

What acidity level would you like your wine to have? _____

Total acidity (also referred to as titratable acidity) is a measure of the total acids present in wine. TA is related to pH but the concepts are not identical. While pH measures acid strength, TA measures the amount of acids present.

Acidity is perceived in degrees of tartness and decreases as the grapes become riper. Tartaric acid is the primary acid, but others such as malic and citric can be found as well. As the harvest date draws near, TA in the grapes drops (due to the respiration of malic acid). It is important to pick the grapes with enough TA or an adjustment will need to be made. TA is important, but somewhat less important than pH as most winemaking decisions (including acid additions) are based on pH, not TA.

TA values for table wines usually fall somewhere between 4.0 and 9.0 grams of acid per liter.

Wineaux Translation: Total acidity measures the amount of acid, while pH measures strength. Most winemaking decisions are based on pH and levels can be adjusted by adding tartaric acid.

Acid Adjustment

Acid Adjustment?

- Yes, achieve target range No Winemaker's Discretion

In warm weather growing regions where grapes are able to reach full maturity or where fruit is picked very ripe, the concentration of grape acids are reduced. Wines with low acidity levels can taste flabby, weak and often lack complexity. In an effort to create a greater balance between acidity, fruit flavors and tannins, the winemaker may choose to acidify the must.

Acidification helps accentuate fresh fruity characters while working to prevent the development of harmful bacteria. Tartaric acid, naturally found in grapes, can be added prior to fermentation to increase the concentration of acids in an effort to achieve more balance in the finished wine.

Wineaux Translation: Acid balance is required for a sense of freshness and to be food-friendly. If your acid is too low (again, common in very ripe grapes), add it.

Destemming

- % Whole Cluster** 100% Whole Cluster _____% Whole Cluster
 Winemaker's Discretion

Destemming is the process of removing berries from the stems. In the vineyard, grapes are harvested as whole clusters. When the fruit arrives at the winery, it is sorted for quality and can be sent through a destemming machine. The destemmer removes the fruit from stems with minimal rupture of the grape skins. Fermenting with whole berries creates a lighter-bodied style of wine that accentuates fruity characteristics.

Depending on the ripeness of the stems, the winemaker will choose the amount of stems, if any, to be included in fermentation. When green, stems can impart vegetal notes and accentuate bitter tannins. However, when used correctly, stems can add complexity to some wine styles. As the stems become more mature and brown, in a process known as lignification, they can contribute structure, weight and texture to certain varietals, most notably those made in a Rhone style.

If the stems aren't ripe, the winemaker may still be able to take action in order to achieve the characteristics associated with stem inclusion. Depending on the quality of the grapes, the winemaker can crush additional fruit or add tannins directly to the must to obtain the desired flavor and texture profile.

Several wine styles skip the destemming process altogether. This is typically done for white wines that undergo whole cluster pressing and some red wines, such as Beaujolais Nouveau, that are fermented whole cluster in an effort to highlight fruitiness and soft structure.

Wineaux Translation: High quality white grapes usually aren't sent through the destemming machine while most red wines are. Some red wines will keep a portion of whole clusters to emphasize fruit and structure.

Crushing

- % Whole Berry** 100% Crush _____% Whole Berry
 Winemaker's Discretion

After the grapes are sorted, they can be sent through a machine called a crusher. The crusher splits open grape skins to release a portion of their juice and expose the skins. This allows the juices have more contact with the grape skins during fermentation. Because the skins contain so many of the interesting color, flavor and tannin components, crushed berries result in much greater extraction. Crushing may break some seeds and release bitter compounds into the wine, so it is important to evaluate seed ripeness and crushing levels in the process.

Leaving whole berries limits juice/skin contact and creates a lighter-bodied wine emphasizing fruity characteristics. Depending on the fruit and style of wine being made, winemakers will often use a portion of whole berry and crushed fruit during fermentation to achieve the desired balance of fruit characteristics and structure.

Wineaux Translation: Crushed red grapes create more extracted styled wines than whole berries. White grapes are rarely crushed.

Sulfur Dioxide

SO₂ at Crush

Yes

Winemaker's Discretion

Sulfur Dioxide (SO₂) is commonly used during the winemaking process as a tool to prevent bacterial spoilage and oxidation.

Sulfur adjustments are typically made during key periods when the grapes or wine are at greatest risk for spoilage. For red wine, SO₂ is first added after the destemming/crushing process. During this initial stage, concentration levels of between 20 to 50 mg/L are used to inhibit bacterial growth and prevent wild yeast strains from starting fermentation. Because white wines rarely go through the destemming and crushing process, they have SO₂ added immediately after the grapes are pressed.

SO₂ is also added just after malolactic fermentation and is maintained at a level (e.g., 25 parts per million) throughout the life of the wine. SO₂ levels that are too high can increase the bitterness while bleaching color from a wine. Without SO₂, wines would typically oxidize and/or be attacked by microbes. Note that organically labeled wines do not use SO₂ and tend to not age more than a year or two.

Wineaux Translation: SO₂ is a necessary part of winemaking. 99.99% of wines made in the world use SO₂ to protect them.

Cold Soak

Cold Soak (0 - 5 days)

How many days of cold maceration? _____

After red grapes have been sorted and sent through the crusher-destemmer, they are kept around 10°C degrees for several days. The cool environment prevents spontaneous fermentation from taking place. During the cold soak, the grapes are punched down to increase extraction of color and other water-soluble phenolic compounds from the skins. The cold soak helps emphasize brighter fruit notes and darker color. It should not be used for grapes that have significant color and do not require an emphasis on fruitiness (e.g., some clones of Cabernet Sauvignon or wines that are too fruity).

Wineaux Translation: A cold soak will emphasize fruitiness and color in the resulting wine but is not appropriate for wines that are too fruity.

Enzymes

Use Enzymes?

- No Enzymes Color Enzyme
 Tannin Enzyme Winemaker’s Discretion

To achieve extraction in fermentation requires contact between the fermenting juice and the skins that tend to float to the top. The more contact and mixing up, the more extraction there is (think about a teabag in a cup of water). In small lot winemaking, especially with thick-skinned varieties as Cabernet Sauvignon, it can be difficult to get enough mechanical mixing to maximize extraction. Color or tannin extraction enzymes can be added during fermentation to help break down skins for more extraction without being too aggressive with the fermenting must (note that this is an especially good idea if the seeds are still a little green and tannic).

Wineaux Translation: High extraction goals, especially for thick-skinned varieties in small fermentation vessels, can more easily be met with enzyme additions.

Tannins

Tannin Addition?

- No Additional Tannin Add Additional Tannin Winemaker’s Discretion

Tannins are phenolic compounds present in skins and seeds of grapes. They are responsible for tactile sensations and are perceived as a drying sensation on the mouth and insides of the cheeks. The winemaker works to create a balance of fruit and textural components while minimizing the tannic elements associated with bitterness. Tannin levels vary widely by varietal (Pinot Noir has relatively little tannin, while Cabernet Sauvignon has a lot) and are influenced by the climate in which the grapes are grown.

Grapes grown in cool climates typically feature more muscular tannins, while warm climate grapes tend to have softer tannins that favor earlier drinking. Near the end of the growing cycle, grape tannins can soften – this is highly desirable in cool/mountain climate fruit, but may make warm/valley climate fruit a little too soft. If tannins are too soft, a wine can benefit from a tannin adjustment. Tannins can be added thru whole cluster inclusion (see above) or adding enological tannins that have been created from grape skins. Note that while oak barrels also add tannin, they tend to impart a “drying” tannin that will stick out unless balanced with enough grape tannin.

Wineaux Translation: For riper styles of wines where the grapes have softer tannins, tannin additions can help create a more structured, complex and age able wine.

Fermentation Vessel

Ferment Vessel

- Ferment Bin Oak Barrel
 Stainless Tank Winemaker's Discretion

A fermentation vessel is the container where maceration and fermentation take place. Stainless steel tanks, oak tanks, oak barrels and a variety of plastic bins are common fermentation vessels.

Plastic and stainless steel are practical for several reasons. Both can be easily cleaned and sterilized to prevent contamination from microbial growth. Because of their size, plastic bins are also handy when fermenting smaller amounts of grapes and can be placed in temperature controlled rooms or have plates inserted to control temperature. Stainless steel tanks can have thermostats and insulated jackets attached to control the temperature of the fermentation but are inefficient for small lot winemaking. Oak barrel fermentations are thought to smooth bitter tannins and create a softer more supple wine. However, they are expensive, difficult to clean and are prone to bacterial contamination.

Wineaux Translation: Whites are fermented in barrel or in stainless steel while reds are fermented in plastic bins, stainless steel or, increasingly, oak.

Yeast

Yeast

- Cultured Native Winemaker's Discretion

Which yeast strain will you be using? _____

Yeast is the catalyst for fermentation in wine production. A member of the fungi kingdom, this single-celled organism feeds off sugars present in grapes and produces alcohol and CO₂ as by-products of this process. In addition to creating alcohol, yeast strains can influence the aroma and flavor of wine.

There are many strains of wild or "native" yeast present on the grapes as they come from the vineyard. Some are good, some are dangerous to the wine. The winemaker can choose to ferment with these native yeasts for more natural winemaking. Proponents believe that the resulting wines are more complex but their impact on the finished wine is not predictable. Native yeast often creates more volatile acidity and stuck fermentations are not uncommon.

Alternatively, the winemaker can choose to use commercial cultured yeast that has been proven to have specific results in the finished wine. Proponents of cultured yeast strains point to a cleaner fermentation, control over the finished product and lower probability of stuck fermentations as advantages.

There are middle ground practitioners that start with native yeast and then add a large amount of cultured yeast near the end of the fermentation to ensure that it completes. Very little real-world research has been done to compare these techniques.

There are dozens of cultured yeast strains available depending on which varietal and style of wine you are creating. Please consult with your winemaker to help determine which yeast strain best suits your needs.

Wineaux Translation: Non-interventionalist winemakers will choose native yeasts, while those focused on consistency will choose cultured yeasts.

- Cap Management** Punch Down Submerged Cap
 Pump Over Winemaker's Discretion

The skins and seeds of grapes are included with the juice during red wine fermentation. As the fruit macerates and fermentation commences, the CO₂ created by the fermentation causes skins to rise to the top and form a cap. To extract color, tannin, and other flavor compounds present in the skins, the cap is broken-up and pushed back into the fermenting wine to increase contact between the skins, seeds and juice. Breaking up the cap also helps maintain the health of the fermentation by regulating the temperature and promoting microbial stability. The process introduces oxygen, which helps maintain a healthy fermentation. The three common techniques of cap management typically used are Punch Down, Submerged Cap and Pump Over.

Punch Down

Punch downs are a technique of cap management where a hand tool (or a pneumatic device for larger lots) that resembles a five-foot potato masher is used to push the cap back into the fermenting wine. This process typically takes three to five minutes and is performed twice to five times per day. This is an effective technique for thinner-skinned varieties but is very time-intensive and if not done gently, can break seeds, releasing bitter tannins into the wine.

Submerged Cap

Submerged caps are a technique of cap management in which a physical barrier is placed directly into the fermenting wine to keep the cap submerged beneath the surface while allowing gas to escape. This technique provides constant contact between the cap and the juice, so a continuous extraction can occur without the harsh tannins sometimes found using punch downs. Because submerged caps allow very little oxygen for the fermentation, they are often used in conjunction with pump overs to prevent hydrogen sulfide odors from developing.

Pump Over

Pump overs are a technique of cap management in which juice pumped from near the bottom of the fermentation vessel is sprayed over the top to break-up and keep the cap moist. Typically the operation is performed to allow at least one or two complete turnovers in the juice. During the height of fermentation, pump overs usually take place several times per day. The frequency decreases as fermentation nears completion and desired levels of extraction are reached.

Wineaux Translation: For red wines, keeping the cap mixed up creates more extraction. There are multiple techniques and even hybrid approaches.

Extraction Level

Extraction Goal Low Medium High Extreme

Many of the compounds responsible for a wine’s color, tannins and flavor reside in the skins, stems and seeds of the grape. Depending on the varietal and style of wine being made, the winemaker will employ different techniques to achieve the desired level of extraction. Decisions regarding fermentation temperature, cap management, crushing, destemming and the use of enzymatic additions help determine the level and type of extraction that will occur. Typically “extraction” refers to red wines.

A lower level of extraction results in a red wine that is lithe on the palate, has restrained color and more approachable bright fruit characteristics. These wines don’t require lengthy aging and are great for social occasions. A medium level of extraction brings more complexity, tannic structure and darker color. Some of the simple fruity aromatics (that come from the juice) are traded off for more complex aromatics that are only extracted from the skins of the grape. Highly extracted red wines are all about power – teeth staining color, heavy tannins and downplayed aromatics that sometime require several years of aging to be the most enjoyable.

Wineaux Translation: In winemaking, you can shoot for power, elegance or a compromise of the two.

Target Fermentation Temperature

- Cold (22° – 24°C) (72° – 76°F) Cool (25° – 29°C) (77° – 85°F)
 Warm (30° – 32°C) (86° – 90°F) Hot (33° – 36°C) (91° – 96°F)
 Winemaker’s Discretion

The fermentation temperature has an impact on the style of wine produced and the extraction level of color, tannin and flavor. White wines are usually fermented at cooler temperatures than red wines. The cooler temperatures decrease the activity level of yeast, resulting in a slower and longer fermentation that can last several weeks.

Red wines fermented at cool temperatures between 22°C and 24°C, display approachable fruit-forward qualities that are lighter in color. Fermentations between 24°C and 29°C bring forth a greater balance between fruit and tannin to create a more refined wine. Hotter temperatures between 29°C and 35°C speed up the fermentation and extract more, making for wines with more tannin and color extraction. If the fermentation becomes too hot, yeast cells can actually die off, resulting in off-flavors and a stuck or unfinished fermentation.

Wineaux Translation: Hotter fermentations favor bigger, more extracted wines while cooler fermentations favor more aromatic and elegant wines.

Pressing

Free Run/Press Fraction Target

Winemaker's Discretion

Free Run

Free run refers to the juice released from grapes during the crushing process. As the grapes are split, juice seeps from the pulp. Free run is also created from the weight of the grapes while they are sitting in a bin. Grape clusters on top gently press clusters at the bottom, causing the skins to split open and release juice.

After red wines have completed fermentation, free run juices are siphoned off and the remaining must is pressed.

Press Juice/Wine

The liquid obtained from pressing is referred to press fraction juice or press wine. Press fraction contains more grape solids and tannins than free run juices. The first press fractions are typically very high quality – comparable to free run, but may lack the necessary supportive tannin usually obtained with pressing. Medium press wines tend to have more structure and can be added to the free run if it is low in structure. As higher levels of pressure are applied, press fractions can exhibit more aggressive or bitter flavors as skins tear and seeds break. These hard press fractions are typically put into their own barrels and not blended in with the wine.

Wineaux Translation: All wines are pressed. Lighter pressings tend to have higher quality than harder pressings, but a blend of them may be necessary to create balance.

Malolactic Fermentation

Malolactic Inoc?

Inoculate

Native

Winemaker's Discretion

Malolactic fermentation, also referred to as secondary fermentation, uses bacteria to transform muscular malic acids (think green apple) into smoother tasting lactic acids (think milk). The process reduces the wine's acid content and helps create a creamier textural quality in the mouth. With the exception of very light styles, like Beaujolais Nouveau or Dolcetto, all red wines undergo malolactic fermentation.

Wineaux Translation: Nearly all red wines go through malolactic fermentation.

Vessel Type

- New Oak Barrel 50% Zebra Barrel 33% Zebra Barrel
 Neutral Barrel Stainless Steel Winemaker's Discretion

Stainless Steel

Stainless steel is used as a fermentation vessel for a variety of reasons. Steel is non-reactive, so unlike wood, it doesn't impart any flavors into the wine. This characteristic is beneficial for white wine styles and rosés that wish to accentuate crisp acidity.

Winemakers, who want to add more body to a white wine, can create a blend from juices fermented in stainless steel and oak barrels. The winemaker will set up trials containing different percentages of stainless/oaked wines until the desired weight and acidity level is achieved.

Stainless steel also has the benefit of coming in many sizes and can have insulation jackets and thermostats attached to better control the fermentation and aging temperatures. Steel vessels are easily cleaned, so build up of harmful bacteria is minimized.

Oak

Oak barrels are the traditional vessel associated with wine production. Oak imparts flavors and textural qualities that provide layers of complexity to a finished wine.

New oak is used to describe barrels that are being used for the first time in wine production. They impart a greater amount of sensory character to a wine as the charring inside the barrel is exposed to wine for the first time. The aromas and flavors are leached into the wine during the fermentation and aging process. Each time a barrel is used, the amount of flavors available will diminish.

Used oak is the term given to barrels that have already undergone wine aging. Depending on the varietal and style, the maker may choose to use a barrel that has already been used to age or ferment wine. A significant portion of the aromas and flavors that a new barrel can impart are no longer available in used barrels, so they are often chosen to provide more subtle wood character to wines during aging. After several uses, typically 3-4 years, the barrel no longer imparts any flavors and is called neutral oak.

For single barrel lots, Crushpad has created a "zebra barrel" which is a blend of new and used oak.

Wineaux Translation: New oak imparts more dramatic tones and is good for red wines with lots of tannins. Each time a barrel is used there are fewer characteristics imparted into the wine.

Barrel Rotation Program

- Yes No Winemaker's Discretion

When sitting in a new oak barrel for an extended period of time, wine picks up flavor and textural qualities from the wood. Our winemaking team can monitor the oak influence on your wine to ensure that it doesn't become over-oaked. The barrel rotation program may be used to move your wine into a neutral oak barrel once the desired level of oak characteristics have been achieved.

Wineaux Translation: If you are concerned about your wine being over-oaked, it is recommended that you use the barrel rotation program.

Oak

Oak Origin and Cooperage

- American French Winemaker's Discretion
 Other _____
 Which cooperage will be used? _____

French Oak

France is one of the main producers of oak barrels for use in wine. The forests are mostly located in the center of the country and barrels are named for the primary region the wood comes from, but may also be named for the specific forest the wood is harvested from. Two of the prized regions are Tronçais, a government owned forest north of Moulins and Bertranges in the Nevers region. Many of today's coopers tend to mark their oak "bois de centre" or "Center of France." Winemakers generally use French oak for its subtle contributions when making wines in a European style.

American Oak

Wood for American oak barrels is harvested primarily in the Midwest region of the country, from the states of Missouri, Ohio, Kentucky, and Arkansas. American oak is thought to impart more dramatic notes associated with the wood such as vanilla, dill and coconut. American oak species have a tighter wood grain due to an increase in tyloses, the woody growths that seal the pores in the growth rings. American oak barrels are less expensive than their French counterparts as the tighter grains allow the wood to be processed by sawing rather than splitting, resulting in less waste.

Eastern European Oak

Oak harvested from Hungary and Slovenia is increasingly becoming a more popular alternative to either American or French oaks. Oak from this region is considered to be very similar in character to French oak, with slightly more assertive wood tannins, but typically costs much less. The forests are located mainly in the provinces of Baranya, Somogy, Zala, Borsod-Abauj-Zemplen, Heves, and Veszprem.

Wineaux Translation: Oak can have a significant impact on a wine. French oak is associated with elegance. American oak is believed to impart power and Eastern European woods are considered a blend of the two.

Toast Level

Toast Level

- Light Toast (LT) Light Toast w/ Toasted Heads (LT TH)
- Medium Toast (MT) Medium Toast w/ Toasted Heads (MT TH)
- Medium Plus Toast (M+) Medium Plus Toast w/ Toasted Heads (M+ TH)
- Heavy Toast (HT) Heavy Toast w/ Toasted Heads (HT TH)
- Winemaker’s Discretion

Toast

During the construction of barrels, coopers heat the staves so that they can be shaped. This toasting process creates sensory characters in the wood that will be imparted into the wine during fermentation and aging. The cooper's individual style, along with the degree of toasting, determines the type and depth of characteristics that will find their way into a finished wine.

Toast Level (Low)

Lower toast levels impart more subtle characteristics associated with oak into the finished wine. The more restrained approach is ideal for many white wine varietals and lighter reds such as Pinot Noir.

Toast Level (Medium)

Barrels with a slightly higher toasting level will impart more smooth textural and distinct flavor characters into a wine. Some makers create dramatic full-bodied white wines using a medium level of toast. Medium toast imparts more complex sensorial elements to red wines aged in the wood. New textures emerge and aromas associated with spice, clove and wood play a more dominant roll.

Toast Level (High)

High toast levels in barrels are usually associated with big red wines like Cabernet Sauvignon, Syrah and Mourvèdre. The higher toast level compliments the assertive tannic structure of the grapes to bring forth some sweet characters that help smooth these grapes.

Wineaux Translation: Low levels of toast are best when trying to impart more subtle characters.

Fining

Fine Your Wine? Yes No Winemaker's Discretion

Fining is the process of clarifying and stabilizing a wine. A fining agent is mixed in to bind with particles suspended in wine that would make it appear cloudy when poured into a glass. Since fining agents are slightly heavier than wine, the bound particles precipitate out and settle to the bottom of the tank. Afterwards, the clarified wine is carefully racked off the settled material into a new vessel.

There are several types of fining agents commonly used to target specific goals. Bentonite is a type of clay used to remove protein compounds from white wines that can cause it to appear hazy. Protein based agents, such as casein and albumin found in milk and egg whites, can remove excessive tannins and astringent phenols and help clarify the color of a wine. Trace amounts of copper sulfate are sometimes used to remove aromas associated with reduction.

Excessive fining can strip a wine of body and color; so as with any adjustments, trials should be undertaken prior to adding.

Wineaux Translation: If the wine is cloudy or too tannic, then a fining is typically warranted.

Filtering

Filter Your Wine? Yes No Winemaker's Discretion

Filtering is employed to remove solid particles and improve the clarity of a wine. Filtration occurs when wine is pushed through a membrane where particles are trapped on the filter's surface.

Vigilant winemakers choose the size and style of the filter carefully so the complexity and character of the wine isn't compromised during the process. If excessive filtration is used, loss of tannic structure, flavors and color may occur.

Filtration occurs in graded stages. Initially, a coarse filter (called a "bug catcher") is used to remove larger particles before moving onto a finer graded filter that improves clarity to the desired state. Prior to bottling, white wines that have not undergone malolactic fermentation, are usually sterile filtered. Sterile filtration uses a very tight membrane to remove all yeast and bacteria from a wine to prevent a possible second fermentation from occurring in the bottle.

Many producers choose to have their wines produced without any filtration. Unfiltered wines tend to have more sediment and stand a slightly greater chance of being affected by harmful bacterial.

Wineaux Translation: If you decided to block malolactic fermentation, it's important to filter. Filtering also helps deliver brilliant color and increases microbial stability.

This section is for you winemaker to complete.

In Progress Complete