PHOTO BY DAVID LEALE

The**ART**of Storing Wine

PHOTO BYJ IM GEBBEN
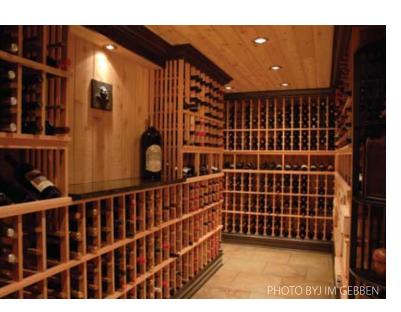
BY TODD NEEDHAM

According to the California Wine Institute, approximately 750 million gallons of wine is consumed in the United States every year. Wine lovers long for a decent wine cellar in which to store their treasures. The problem is, most people don't really know anything about storing wine and wine cellars. To know how to store wine is to understand it as a product.

How did somebody figure out that if a grape was crushed and the juice fermented, wine would result? The answer – nobody knows. The history of wine is a cloudy one; wine came into existence at least before 6000 B.C. Frankly, wine was a good substitute for bad drinking water. In ancient times, there was no such thing as good drinking water. Since people wanted something to drink with their meals, wine was a good alternative. Wine was also used to disinfect cuts and was a favorite cure for sore throats.

Wine drinking was a popular thing – but only for the elite. The common people drank crude palm wine, or beer. Then winemaking spread throughout the Mediterranean. As the centuries passed, the art of winemaking spread north.

As time moved on, the consumption of wine moved right along with it. The 17th century ushered in the use of glass bottles, the invention of the cork, the corkscrew and other accessories. During this time, improved production techniques also created more palatable wines.

The storage of wine underground began because of its benefits. Wine caves naturally provide dark, moist, and cool space—key to the storage and aging of wine. While most wine produced today is meant

for relatively quick consumption (with much being consumed within 24 hours of purchase), there are many times when it may be set aside for long-term storage. Wine is one of the few commodities that can improve with age but can also rapidly deteriorate if kept in inadequate conditions.

Today, the four factors that have the most direct impact on a wine's condition are:
1.) Light
2.) Humidity
3.) Temperature
4.) Vibration

LIGHT BAD. DARK GOOD.

Direct light, whether it be sunlight or incandescent, can adversely react with phenolic compounds in the wine and create potential wine faults. Delicate, light bodied white wines run the greatest risk from light exposure and are often packaged in darkly tinted wine bottles that offer some protection from the light. Wines packaged in clear, light green and blue colored bottles are the most vulnerable to light and may need extra precautions for storage.

KEEP THE CORK WET: LAY IT DOWN!

A degree of humidity is required in order to keep wines with cork enclosures from drying out. Even when wine bottles are stored on their sides, one side of the cork is still exposed to air. If the cork begins to dry out, it can allow oxygen to enter the bottle, filling the ullage (refers to the unfilled space in a container of liquid) and possibly causing the wine to spoil or oxidize. Excessive humidity can also pose the risk of damaging wine labels, which may hinder identification or

PHOTO BY JIM GEBBEN

hurt potential resale value. Some say that 75 percent humidity is ideal, but there is very little significant research to definitively establish an optimal range. There is a fine-line between humidity and rain. I think 70 percent is just fine and easy to achieve. Concern about humidity is one of the primary reasons why I recommend that wine should not be kept in a refrigerator since the refrigeration process often includes dehumidifying, which can quickly dry out corks.

DON'T COOK YOUR WINE!

The average guy who is turning over his wine doesn't need to worry too much, but the serious collector needs to care. Wine is very vulnerable to changes in temperature, with temperature control being an important consideration in wine storage. If the wine is exposed to high temperatures (in excess of 77 °F) for long periods of time, it may become spoiled or "cooked" and develop off flavors that taste raisony or stewed. Fifty-five degrees is the optimum temperature for the long haul, but if you're in the $10 to $30 per bottle range, no matter. You will (or should) drink the wine soon and a few months will not matter.

WINE NEEDS ITS REST.

For the serious collector, vibration is an issue because it disturbs sediment in older vintages. To age properly, wine needs to be left alone.

I suggest avoiding movement of the bottles if possible. If you've got more than $20,000 in wine, hire a professional to move the cellar when relocating or buying someone's inventory.

Another consideration can be security (most often from your teenagers) since wine can be considered a luxury good with value on the after-market. Historically the long-term storage of wine was handled by wine merchants but since the mid 20th century the task of handling and storing wine has increasingly fallen to consumers.

Industries relating to specialty wine storage facilities and the construction of home based wine cellars have emerged to cater to the storage needs of consumers. Most wine racks are designed to allow a wine to be stored on its side. With this orientation, the cork is more likely to stay moist and not dry out if it is kept in constant contact with the wine. Some wineries package their wines upside down in the box for much the same reason.

Since the end of the 20th century, there has been growth in industries relating to wine storage. Some of these industries focus on the construction of custom home wine cellars and wine caves designed to meet your specific needs and available space, while others produce smaller wine accessories, such as racks and wine refrigerators. Wine is a natural, perishable food product. When exposed to heat, light, vibration or fluctuations in temperature and humidity, all types of wine, including red, white, sparkling, and fortified, can spoil. When properly stored, wines can maintain their quality and in most or many cases improve in aroma, flavor, and complexity as they age.

Your wine cellar can go anywhere in the house as long as it is insulated and properly cooled. Remember: the greatest wine ever made is the one you like the best. Cheers! ❏