

# CELLARING OF RED WINE TO IMPROVE ENJOYMENT

## Part I: The life of Wine, chapter 3

It is frequently said that wine, especially the red variety, improves with age. In the first two chapters on *The Life of Wine* it was brought out that wine begins its life at the end of Primary Fermentation in a chemically reduced state. Reduced wine tastes bad. Slow gradual movement from a reduced state to a partially oxidized state improves the flavor. Bottle closure allowing slow influx of oxygen as time passes facilitates this. Excessive oxidation finally kills a wine.

Sure, sounds easy! But how long need these *SLOW* changes go on and when are they ideal? And what kind of storage conditions can help or harm. Not to over think this, but maybe it is called cellaring because a cellar is the ideal place. But we don't all have "cellars" and modern construction has made basements more like "upstairs" with higher temperatures, less humidity, but fewer SPIDERS.

Wine experts agree that *TEMPERATURE STABILITY* not absolute temperature, is the single most important factor. When temperature rises, wine in a corked bottle expands, creating pressure which forces miniscule amounts of wine out around the cork. When it temperature falls the wine contracts, and miniscule amounts of air (with 20% Oxygen) are sucked back in. Daily temperature cycles less than 1 degree Celsius are optimal. The more temperature cycles a year, and the bigger the cycles, the quicker oxidation occurs.

In our living areas, home thermostats raise temperature when we are present and lower it when we aren't. In the kitchen, stoves, ovens, and refrigerator cooling coils release heat. In basements, furnaces, hot air ducts, hot water heaters, water pipes, and concrete walls on sunny sides are heat sources. All of these situations produce large temperature cycles. Closing off air flow, and insulating from both the outdoors, and the rest of the house reduces the magnitude of these cycles. Water has fairly high heat inertia, so storing many bottles together damps the rate of temperature change and helps smooth out the cycles.

Mechanically cooled storage units have a built in temperature cycle because thermostats turn the cooling equipment off and on based on up and down temperature change of 2 or more degrees.

Absolute temperature is less of an issue, but because the speed of chemical reactions doubles with every 10 degree C rise, temperature too low (below 50 F) or too high (above 80 F) may cause undue slowing or speeding of maturation.

Other factors? Avoid excess light which can produce undesirable chemical reactions.

Motionless storage allows sediment to fall to one side of the bottle sometimes even adhering to the side, as those harsh, puckery tannins gradually polymerize and precipitate. Wine can be carefully poured off into a decanter leaving the yucky, gritty sediment behind.

To determine the ideal time for wine maturation, make initial estimates based on how the new wine tasted, and modify based on your observations as it ages. Wine containing more natural preservatives (alcohol, acids - malic, lactic, citric, etc., sugar; and tannins), will last longer. But the fruit extract must be abundant enough to outlast the mellowing of harsh acids and tannins. Experienced wine tasters know that length of fruit persistence on the palate is the best judge of fruit which will persist longer in ageing, while accessible up front fruit usually fades more quickly. As month and years pass, occasionally shine a light through a bottle, to see if sediment is forming, a sure sign of some progress. Also red wine changes color as it matures, generally going from violet tinted red through brick, to orange tinted and finally brown, and this can be a clue. Ultimately a bottle must be risked, the cork pulled, and the ultimate tester, your nose and palate, go to work. If it's fully mature, decant JUST before drinking, only to separate it from its sediment, so further oxidation does not occur. If still young tasting, then decant well before serving as we learned in our last education lesson on aeration, decanters and devices. A new device, CORAVIN, allows one to judge ageing progress, without risking a bottle. A long fine needle is inserted through the cork, the bottle is pressurized with totally inert argon gas, and an ounce or two of wine is removed for tasting. If the wine is not yet ready to drink, the remaining content of the bottle is unaltered, the cork will seal itself, and the bottle put back in the cellar for later enjoyment.

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