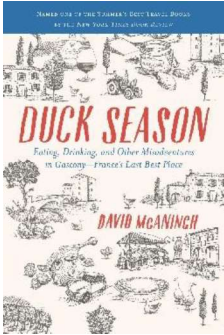


SNOW ON WINE

November 2020

"TIME IN A BOTTLE"



Most of you would agree that wine with tannin needs **time in a bottle** (apologies to Jim Croce) to mellow its harsh, astringent nature. Fortunately, tannin helps give us this time. It is one of the four preservatives (others being alcohol, acid & sugar^{1,2}) that can extend the life of a wine. Plus evidence suggests tannins may extend your life as well. In his book "Duck Season," author David McAninch recounts that Tannat is the prevalent grape for red wine only in central Gascony. It has the highest concentration of tannins found in grapes and is noted for its intense tannic pucker. Central Gascony also has the highest percentage of men over 90 years old, and lowest incidence of heart attack of any area of France,³ despite having a diet rich in cheese, butter, pork, duck, confit (slow cooking under duck fat) and near daily foie gras.

Tannins are phenolic and polyphenolic compounds and are not evenly distributed within the grape. They give astringency, weight, balance and the color to red wine. Phenolic acids are largely present in the pulp, and hence in both white and red wine. In white wine production the juice is pressed off the skin, seeds and stems prior to fermentation. Therefore Anthocyanins and stilbenoids in the skin, and other phenols (catechins, proanthocyanidins and flavonols) in the skin, seeds and stems, are found only in red wine. Whole grapes, and sometimes whole clusters, are crushed, then are fermented and macerated together and as tannins are extracted the juice gradually turns red. During barrel aging, wine absorbs tannin from the oak in barrels, especially vanillin, which imparts nice spicy and vanilla like flavors and a sweet sensation to both reds and whites.



As red wine spends **time in a bottle**, it changes. Color changing from dark reddish purple, through lighter red, to brick, then orangish, as astringency decreases, and mouth feel softens. At the same time sediment forms. These changes are a result of ongoing chemical reactions where the hundreds of different phenolic compounds (but most notably anthocyanins), combine with each other in various ways to form ever longer chains, or polymers. These polymers (or polyphenolics), besides having smoother and more pleasant mouth feel, are much larger molecules and by

nature less soluble so many precipitate as sediment. Don't be sentimental about abandoning this sediment in the bottle. Carefully decant the softened and mellowed wine which can then be poured free of tannic sediment.



And remember, by drinking often and deeply from red wine as Gascons do, you, like the Gascons, may well be preserved for extra years, allowing you to fully enjoy your cellar, rather than leaving it to your progeny.

REFERENCES

1. "What is acid" asked Adam? 'Bite this, your mouth will water', said Eve". Snow on Wine, Wineminder, Dec. 2019.
2. "About the Aging of Wine, Part I", Snow on Wine, Wineminder, May 2019.
3. "Duck Season, Eating, Drinking, and Other Misadventures in Gascony – France's Last Best Place", David McAninch, pp 21, 51-53, 58, 155-157, Harper Collins 2017



If I, could save time, in a bottle, the first thing that I'd like to do...