New wine packaging – screw caps, bags, and boxes oh my!

If you've been purchasing wine lately you may have noticed some changes in the way wines are being packaged for sale. Along with the classic glass bottles and real corks there are now "technical" corks, plastic corks, screw cap bottles (threaded metal tops), plastic bottles, aluminum bottles, polymer bags encased in boxes, printed polymer bags without the box, and Tetra Pak® boxes (similar to juice boxes). What happened? Why are people putting wine into all these different containers and sealing them with different widgets? Part of the answer has to do with some much-needed innovation in the wine industry, and part of the reason is due to sustainability and U.S. consumer trends.

Let's tackle the changes to traditional bottle packaging first. Corks have been used to stopper wine bottles since around the 17<sup>th</sup> century, when technology and manufacturing advanced to the point where corkscrews were readily available. Corks have been around so long because they make a great closure: inexpensive, leak-proof, relatively long-lasting (30-50 years), and they sound great when pulled from the bottle. The problem is some 1-3% of corks are contaminated with a mold which gives the wine the smell of a dank basement. This rightfully upsets winemakers who work very hard to make wines which don't smell like a dank basement. Some enterprising Australians started packaging high quality wines with screw caps in the late 1970's to eliminate the possibility of cork taint, and a new wine packaging trend was born. Plastic or "synthetic" corks are also gaining market share again after some early issues with these closures (rapid aging of wine and sometimes impossibly difficult removal) have been fixed. Cork producers are now fighting back with new technologies which reduce the incidence of cork taint and new products such as agglomerated, or "technical" cork. Special processing for agglomerated cork (ground cork dust pressed and glued together) has been devised to remove any moldy smelling aromas from the cork dust before it is glued together. Cork producers are also marketing their products as more natural and sustainable than the manmade alternatives. Cork forests are carbon sinks and harvesting cork bark from the trees does not harm them.

Glass bottles are also receiving some competition from new packaging strategies. Glass is an excellent inert container for storing wine, but is also one of the heaviest of packaging materials (50% of total package weight, vs. 5-15% for other containers). Glass requires a fair amount of energy to produce and is not ideal for recycling because of the weight involved in transporting it. Winery owners and winemakers are increasingly concerned about the amount of energy it takes to make, package, and ship wine from both an economic and environmental perspective. Glass producers have responded by offering "eco" bottles, which are lighter in weight and may also be made with recycled material. Other recent options are aluminum bottles containing a special coating to protect the wine, plastic bottles similar to those used for packaging water, and Tetra Pak® boxes (cardboard with a waterproof plastic coating). And although bag-in-box wines have been sold in the U.S. market since the 1980's, consumer choice is increasing with higher quality wines being packaged in bag-in-boxes. Another recent arrival is wines packaged in sturdier plastic bags with interesting graphics and an integrated handle (no box). The bags provide acceptable short term storage and limit aging of the wines once the spigot has been opened, which has always been a problem with bottled wine.

Screw caps used to be the sole domain of bottom shelf jug wine and Boone's Farm, and boxed wines were what my aunties sipped their White Zinfandel out of during the family reunions of my youth. So it's understandable that folks might be hesitant to try some of these new packages. But fear not, high quality wines are now regularly packaged with a screw cap, especially in New Zealand, Australia, and here in Oregon. With an increasingly number of quality producers, boxed wines also need no longer be relegated to the bottom shelf.

Consumers should understand that bagged wines and wines packaged in plastic bottles are not meant for long term storage, but research shows that most wine buyers consume the wine they purchase within 48 hours anyway. Wines bottled in screw capped glass, on the other hand, have generally been viewed as quite acceptable for very long term storage. Keep in mind, though, that all wines no matter what the packaging are sensitive to temperature and will age more quickly, and perhaps not taste as interesting, if stored above 70°F.

So, you can feel secure in tucking away some high quality screw capped Oregon Pinot Noir and anticipate enjoying its evolution over the next five to twenty years. But the next time you're headed to Music on the Half Shell, going for a camping expedition up the North Umpqua River, or even just sitting on the back porch and enjoying the summer sunshine, instead of glass consider bringing along a wine in one of these interesting new wine containers to enjoy.