Put a Cork In It!

(Number 42 in a series of highly opinionated articles about grapes and wine in El Dorado County)

A few years ago, during a lament on the hardships of bottling wine, I touched briefly on the archaic tradition of sticking a piece of tree bark in the top of a wine bottle to keep the wine from leaking out. The use of corks and alternative closures has received a lot of attention, as well as a lot of press lately, so let's look again at the ways and the reasons to seal wine bottles.

The Corkscrew, Please

First, a bit of technical trivia I can never resist describing. Have you ever wondered why, when you try to remove a wine cork from the bottle, half of it often breaks off and sticks in the neck of the bottle? Cork is an extremely unusual material, and is studied by every mechanical engineering student because of its unconventional properties. When you stretch most flexible materials (rubber bands are good examples), the material gets thinner the more you stretch it. Because of the unique way that the cells are connected in a cork, if you pull on it, it gets thicker! So, if the corkscrew is inserted only partway into the cork, it swells up, refuses to come out easily, and breaks off as you pull. There's a good side to this property, though, because if you can insert a corkscrew all the way to the bottom of the cork, you'll be compressing it instead of stretching it, and it will actually become slightly thinner as you pull. This is why most really successful corkscrews have long, spiral augers that actually come out through the bottom of the cork.

Taint It Awful?

The issue of "cork taint" (experts use the term "corked" wine, but you should know that refers a particular off-flavor in the wine, and not the condition of the cork) is one that has received a tremendous amount of attention recently. The gremlin is a chemical known as TCA (for 2,4,6-trichloroanisole), and we used to believe that it resulted just from the process of sterilizing corks with chlorine bleach. Cork suppliers years ago switched to non-chlorine bleaches such as hydrogen peroxide, only to find that complaints about "corked" wines didn't decline at all. In fact, industry studies show that between one and two percent of all wines have the foul mustiness of TCA detectable to the average wine consumer. Although harmless at the levels found in wine, for some unknown reason it is one of the chemicals to which humans are most sensitive—almost all of us can pick it up at a concentration of just five parts per trillion!

When the amount present is even lower, the problem is more insidious. Even when you can't actually smell the musty, cardboardy aroma of TCA, it can lead to a bottle that just doesn't smell or taste as fresh and as nice as the one you had at the winery, or the one you had at home before you brought this one to your best friends as a hostess gift.

More detailed studies have shown that bacteria can actually produce TCA in the bark of the cork oak before it is processed into the familiar cork cylinders that we use, and no amount of soaking, bleaching or other chemical processing can get rid of it all. But wait—it gets worse! No less a winery than the giant Gallo of Sonoma ("Winery of the Year," they say in all their ads) learned recently that almost all of its wines had detectable levels of TCA, regardless of the cork treatment. It turned out that simply using chlorinated cleaners within the winery created enough TCA to cause the problem in their wines—and we used to think that the more bleach you used, the better your wine would be.

As a result, there has been a recommendation of new procedures for wineries afflicted by the TCA scourge: no more chlorinated bleaching agents of any kind allowed on the premises, no more wooden pallets inside the winery, and no more case goods or other cardboard to be stored inside a building where wine is made or stored. Luckily, few small wineries have been affected, since it would be almost impossible for us to comply with these changes.

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So many vintners have gotten sick of having a beautiful $25 bottle of wine (or a $100 bottle—it plays no favorites) ruined with a 30-cent piece of tree bark, that they have searched for anything *other* than corks to seal the bottles. Leading the way is a vast array of "synthetic" corks, made from food-grade plastics of many colors and consistencies. The first attempts had their own special contribution to the wine—they left a kind of "petroleum" odor in the wines, to the delight of the natural cork companies who were quick to publicize it to their customers who were thinking of switching. Those problems are behind us, and enterprising manufacturers are now making synthetic corks that are colored and grained like real corks—the only real differences are that they don't spoil the wine, don't break up when you remove them, and never let the wine go bad when it's stored standing up on a grocery store shelf. Oh, and they're considerably cheaper and more uniform than natural corks. Imagine for a moment that these materials had been available all along, and someone was trying to convince you to switch to the "natural" tree bark version. Do you think that would be an easy sell?

The Screwcap Alternative

The ultra-snooty, the innovative, and the very weird wineries have developed their own solution to the problem: the screwcap (you'll have to decide which is which in what follows). The new screwcap, introduced by the Stelvin Company, is different from the ones that have been used for decades on low-priced wines—it is designed so that it includes a skirt that substitutes for the traditional foil capsule, as shown below.

[stelvin.jpg]

The biggest splash was made by the ultra-premium winery Plumpjack, which announced a few years ago that its most expensive wine would be packaged with a screwcap: the 1999 Limited Edition Reserve Cabernet Sauvignon was sold for $155 per bottle with the new closure, and sold out as promptly as any previous version. Other California vintners are trying the caps in a limited way—Downing Family Vineyards bottled a portion of its 2000 “Fly By Night” Zinfandel in the new bottles: "We're treating this as a market test," said John Downing, who thinks he will also bottle a few cases of Cabernet with screwcaps to track how the wine evolves. "Everyone has an opinion, but we have very few data points." Does it have the same, romantic allure as the traditional cork-and-foil finished bottle? Beauty is in the eye of the beholder, and you’ll have to make your own judgment on that.

[cap.jpg]

Uncorking Traditions

In addition to eliminating any possibility of taint from corks, the wine industry has endorsed the caps because they will seal securely, and completely prevent air from entering the bottle, no matter how it is stored. But the sentiment for steel over cork is by no means the same with consumers. In a recent British survey, 99% of respondents said they were positive or neutral about cork. By contrast, nearly 6 in 10 respondents said they did not like buying wine with screwcaps. The message is clear: many consumers are not ready to give up their corks.

The most aggressive adopters of the new cap have been wineries from down under: both Australia and New Zealand have a large number of wineries that have elected to forego corks altogether, although not everyone has bought in. The people who make Grange

Hermitage, the most-revered Australian red, have stated that a forty-year test will be required before they could consider changing over their flagship red. I hope to be around to report the results of the trial to you!

The new closure has even caused a minor controversy for editors of authoritative wine journals such as the Wine Spectator and the PVFA Turnout—there is no consensus yet if the correct form is two words or one (screw cap vs. screwcap), or even hyphenated (screw-cap).

Bonny Doon Winery, headed by the irrepressible Randall Graham, replaced all the corks in its Ca' del Solo Big House Red and Big House White with screwcaps. Randall says, in his inimitable tongue-in-cheek style, "Previous attempts by wineries to introduce screwcaps have not been met with unconditional love and acceptance." But he goes on to justify his new choice, "There is also the significant matter of convenience. One need possess neither a post-graduate degree in mechanical engineering nor superhuman strength and dexterity (or even a corkscrew, for that matter) to open the [screw cap] closure. Opposable thumbs will do." Finally, he has even provided the following "Top Ten" list of reasons for preferring screwcaps over corks (slightly edited from the version on his website):

10. Never pay corkage fees again
09. When celebrating significant occasions with one's colleagues (parole, commutation of sentence), often difficult to locate a corkscrew.
08. You will never again experience the heartbreak of 2,4,6-TCAoriasis.
07. Can begin conversational gambit with waitress with line, "Would you, er, unscrew my bottle?"
06. Perfect beverage for clothing-optional events.
05. Will never fall for the old "left-handed" corkscrew gag again.
04. Hard to find corkscrews down by the railroad tracks.
03. Great laugh as Martha Stewart tries to glue her collection of screw-caps into a wooden frame.
02. You can no longer be accused of being a cork sniffer.
01. You will never hear the phrase, "Put a cork in it!" again. Ever.