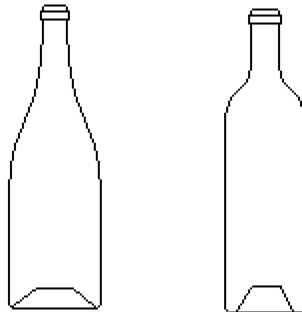
Bottling—A Dickens of a Time

It's the best of times, it's the worst of times. Bottling wine is the conclusion to the winemaking process—at least the part that the winemaker can directly influence, and with it comes a sigh of relief heard throughout the winemaking area. While fancy, rich wineries have their own bottling lines; others have to rely on a traveling bottling line in the trailer of a big rig that moves in for a day or two at a time, bottles as much wine as possible, then disappears to the next winery down the line.

Bottles, though, are funny things. If you say 'wine bottle' to the average person, they're pretty sure they know what you're referring to. If you say it to a wine snob, he might ask "Bordeaux or burgundy? Tall or tapered? Rhine or Mosel?" If you say it to a winery owner, he is likely to run screaming into the distance! The reason is the remarkable variety, the need for just the right number of just the right kind of bottles, and the difficulties of sealing and dressing the bottle so that consumers will be persuaded to take it home from the winery or store shelf.

What Shape Are We In?

To begin, there are two fundamental shapes of wine bottles: the bordeaux (or "claret,") which has straight sides and high shoulders, and the burgundy bottle, which has long sloping shoulders (see below).



Burgundy Bottle   Bordeaux Bottle

From these two basic shapes a myriad of variations has arisen, including bottles much taller than normal (and much too tall for your refrigerator shelves), bottles with tapered sides (apparently made that way so they will all fall down on the supermarket conveyor or when you try to pass them through a bottling line), ones with long necks, ones with

broad shoulders—even some that start out round at the top and become square at the bottom. And the colors! Champagne green (the standard); flint glass (colorless or 'clear'); "dead leaf," a kind of yellowish-green; antique green (brownish-green); "smoke," a bronzy kind of greenish-gray; and even pink or blue (or any other color you can imagine) are available today to enhance (or perhaps disguise) the wine.

While some free spirits use whatever bottle they decide has the right *karma*, many wineries base their bottle choice on the shapes that have been traditionally used for the specific type of wine they're bottling, to help the customer identify it. Usually, wines made of grapes originally grown in Burgundy or the South of France (chardonnay, pinot noir, viognier and syrah) are bottled in the sloping burgundy bottle, while those that originated in the North (cabernet sauvignon, merlot, sauvignon blanc, etc.) are packaged in bordeaux bottles. Italian varieties tend to go into bordeaux bottles, because the native bottles were similarly shaped even though brown in color, and since zinfandel *might* be Italian, it follows suit. Riesling and its relatives are frequently bottled in tall, slender rhine-style (sometimes called "hock") bottles--really just stretched out burgundies--which emulate the shape of German bottles (bottles from the area of the Rhine River are brown; green for the Mosel).

Drop Back Ten and Punt

Almost every other beverage is put into a container with a flat bottom. Why, then, do so many wine bottles have that silly "dimple" in the bottom (called "push-up glass" by the winery, but technically known as a 'punt')? When bottles were made by hand (well into the 20th century, it may be surprising to learn), the glassblower would use a pointed metal or carbon object to support the hot glass so it could be rotated to form a smooth cylinder for the bottle. This "point" was known in Europe as the word "punt," and the name stuck for bottles made to look like they might have been hand-blown. Someone, somewhere decided that wine looked more elegant in such a bottle, so wineries have been using this extra-cost option (it only costs about a nickel a bottle more than the usual 45-cent flat-bottom bottle, but it might cost you *a little* more) for people who like their wine to look "elegant." The stories you may have heard about the punt being there to catch the sediment, or to strengthen the glass, are interesting ideas but untrue.

Bottles 'R' Us

Unless you're Gallo, which is so large that they have their own bottle factory, one of the frustrations of getting the bottles to the winery is the <u>process</u> of buying them. There are only a few manufacturers of wine bottles, but instead of selling direct to the wineries, they operate through brokers, who try to pretend that <u>they</u> make the bottles. Different sizes and shapes of bottles are stacked on wooden pallets in different ways—one bottle may be 105 cases per 'stack,' a stack of another very similar bottle is 112 cases; a third might be 96 cases. Oh, and you usually have to buy full stacks only, so if you'd like to bottle 150 cases of wine in those nice, tall bottles that come 112 per stack, you wind up having to buy 224 cases, with 74 left over. One alternative is to have the supplier try to

locate a "partial" stack somewhere, but that may turn out to be someone else's rejects or cases that have been collecting dirt in the corner of a warehouse for a year or two. Small wineries have it even worse, because the brokers want to deliver full truckloads, so you might have to coordinate your shipment with one or more of your neighbor wineries to reach that magic level. Fortunately, those who use the same wine bottling truck usually bottle within a week of each other, so it's not that hard to do.

Without fail, the cases of empty bottles will fill up your entire winery, so you want to order as late as possible in order not to be crowded by empty glass during the long days and late nights of filtering and blending that occurs right before bottling. You don't want to wait too long, though, because the multiple parties involved in these transactions have a knack for 'miscommunications' that can leave you with the wrong amount or the wrong kind of bottles, and you'll need to allow a few spare days, just in case it happens.

Put a cork in it!

Assuming that the wine is not destined for a (shudder!) screw-cap bottle, the next chore is selecting a cork to seal the bottle. As we alluded to in the last article, a cork is nothing more than a carefully cut and processed piece of bark from a 'cork oak' tree. Because it's so delightfully "natural," it brings with it all the problems of nature. To sterilize the corks so they don't add bacteria to the wine, they're treated with a bleaching agent. It used to be regular chlorine bleach, but it turns out that one of the organisms living in the crevices of corks produces a substance that reacts with bleach to give a second compound called TCA (2,4,6-trichloroanisole for the chemists). It has an extremely unpleasant odor and can be detected by humans in concentrations of a few parts per trillion (that's less than a teaspoonful in all of Boondock Lake)! When a wine contains TCA, it's said to be "corked," and it's an experience to be avoided if at all possible. As a result, corks are now treated with non-chlorine bleaching agents like hydrogen peroxide, and some suppliers have begun to make corks out of compressed, granulated cork pieces that can be cleaned even more thoroughly. Even so, one of every two hundred bottles or so will still have some slight tinge of "corkiness," resulting in the advent of (gasp!) artificial corks. Made of PVA (polyvinyl acetate, which in slightly different forms makes both Elmer's glue and bubble gum today), they not only will never spoil the wine with TCA, but they have the added benefit of not drying out like natural corks. This means that when the bottles stand upright for a year or more on the supermarket shelf, the wine will not have suffered from the excess air that normally gets past a dried-out 'natural' cork. Best of all, these corks can be made in all colors to add yet another fashion statement to the wine!

Wine corks come in a bewildering array of sizes and grades, and there is no commonality of terms between suppliers. One vendor's extra-extra-first quality is another's Number 10, and a third's XXXP grade. The one thing that stays constant is that better corks cost more—from seven or eight cents each for the cheapest to thirty or forty cents for the very best. And, just to further complicate matters, there are different lengths (one and one-half inch for *very* ordinary wines, up to two and one-quarter inches for wines that some crazed winemaker thinks will need a decade or two to mature). And finally, there are different diameters to fit different neck sizes in the bottles, although almost all bottles made in this

country now use a #9 size.

Dressing Up

After you select exactly the right bottle in exactly the right color, then like any coordinated outfit, you have to properly accessorize it! That means adding a label with exquisite (and usually expensive) artwork, and the cap that covers the top of the bottle, called a 'capsule.' Labels can be self-adhesive or held on with good old glue, and they can be a single label, front and back label, or as many separate pieces as the label machine will allow. The frustrating part for the winery is that every label that's placed on a wine bottle has to be scrutinized and approved by the Alcohol, Tobacco and Firearms people in Washington D.C. Some of their observations are helpful, like making sure the alcohol content of the wine is properly listed (in letters no less than two millimeters yet not more than three millimeters high). They are even more helpful when it comes to the back-label description of how a wine tastes—a label was once rejected because the phrase ". . .displays very strong cherry flavors. . ." was feared to convey an impression about the alcoholic strength of the wine, and had to be re-written as ". . .displays very intense cherry flavors. . ."

The capsule can be made of (in increasing order of cost and quality): aluminum foil, heat-shrink plastic, a laminate of plastic and foil, or pure tin. Prior to 1992, some capsules were a mixture of tin and lead, which led to a scare about lead in wine (there really wasn't *any*), and when lead was banned from landfills, those capsules were eliminated by law in January, 1992. Regardless of material, the capsule is yet another opportunity for fancy dress, marketing messages or the winery logo to be put in front of the consumer as the wine is enjoyed. Lately, there has been a proliferation of uncapped bottles, sealing wax disks, clear seals and other attempts to distance a winery's product from the crowd, but these may be nothing more than another passing fad.

All of these issues might cause you to wonder why wineries still go through all the hassles associated with putting wine into its near-final resting place. The reasons they do are: a) they really do want to provide you with an attractively-packaged, pleasurable wine-drinking experience, b) the people who run the mobile bottling line are experienced, helpful and fun people who are skilled at using humor to take the edge off the winemaker's near-hysteria just before the finale of bottling, and c) it feels so good when it's finally over.

(This article was written during bottling and the traumatic days that preceded it. Please understand and try to forgive the whinings of a winemaker).