

**“The job of the artist is always to deepen the mystery.”-Francis Bacon, *In Art***

## **Cooperage: An Ancient Art of Barrel Making**

**By: Becky Rochester, Wine Club/Direct Mail Manager**

Apart from the influence of sun, soil and climate, there are other factors that help the winemaker shape the flavor of wines. These happen in the early stages of a wine's life, mostly at the point of fermentation. Did you ever wonder why one Chardonnay tastes very buttery while another Chardonnay is very fruity and tropical? Much of how a wine tastes is a direct result of the type of vessel it was fermented in. The two most common vessels our winemakers use to ferment and/or age our wines are stainless steel and oak tanks or barrels (French, Hungarian and American). The use of oak barrels of various ages provides a broad spectrum of aromas, flavors and textures to the blend in much the same way as cooking with many ingredients improves the flavor of food. So what is the difference? There are many answers to this question, but first let's take a look at the wonderful art of barrel making, also known as cooperage.

process has changed very little. Most of the process is still done by the hands of a skilled cooper. Every season, when trees are felled, experts from the cooperage are on hand to select the best oak for use in the manufacture of barrels and casks. This selection is extremely important because it essentially determines the quality of the finished product.

The oak is examined both before and after being cut, and wood is selected based on many criteria, including tree shape and growing conditions. These factors determine the textural variety of wood fibers, the fineness of its grain and its tannin content. Tight grain and fine tannin content are found in the best wood. Most coopers tend to make barrels from white oak because it meets the requirements of porosity, strength, resilience, workability, weight and character.

Once the trees have been selected and felled, the logs must be hand split to preserve wood grain without breaking veins, essential to making impermeable barrels. The log is first split in two and then into quarters to obtain wood for the oak staves (called murrain). The French method involves hand splitting the staves, while the American method involves sawing the staves because its internal vessels are more thoroughly plugged with structures called tyloses. French oak having fewer tyloses, tends to leak if sawn. An advantage of sawing is that more staves can be made from each trunk. After splitting or sawing and planing, the stave wood is traditionally stored in tiers and exposed to air and water as the wood is naturally aged by weather. Through exposure to the elements, the wood is purged of impurities, undesirable odors and harsher tannins which might overpower the flavor of the wine. This aging process takes several years.

After aging, the stave lumber is cut to proper length, tapered at each end, beveled, planed on the outside and

### **Parts of a Wine Barrel**

*A wine barrel is made up of staves which have been shaped into a bulging cylinder and flat heads or ends. The staves are held in place by metal hoops, usually galvanized on wine barrels. The shape is designed so the barrel can easily be rolled. The curve, or Bilge, allows the barrel to be spun easily to control direction. Most barrels weigh between 125 to 140 pounds when empty. Six to eight hoops encircle the barrel spaced along the length. Wineries can specify the placement of the end hoops for placement on their storage racks.*



### **History of Barrel Making**

The art and science of barrel making, known as cooperage, is an ancient craft. It requires skill, intelligence and strength. Despite major advances in technology and machinery, the actual barrel making

slightly hollowed on the inside. After being inspected, they are given to the cooper for assembly. The cooper selects the best staves, assembling them inside a metal hoop that acts as a jig. This operation, so spectacular in its speed and precision, is known as "mise en rose" or "raising the barrel". Three metal hoops are forced into place, creating a solid hold on the staves, which are then dampened by the cooper. At this point, the "rose" or partially constructed barrel is placed over a small wood fire. During this step, the inside of the barrel is charred or "toasted". The amount of char has an effect on the wine aged in the barrel. Winemakers can select from light, medium or heavy toast. The toast decision is made based on the variety of grape and style of wine which will be aged in the barrel.



*An American oak barrel from Minnesota. It is medium toast.*

Wood fibers, rendered flexible by the heat and humidity, can now be bent using a winch to gradually arch the staves and tighten them to obtain the shape of the barrel. The staves are held trussed until metal hoops are in place. The ends of the staves must be trimmed and a "croze" or groove is cut in the staves to receive the barrel heads. Barrel heads are custom cut to fit the "croze", and assembled using dowels and river reed to make a perfect seal.



*A "croze" or groove is cut in the staves to fit into the barrel heads.*

To finish assembly, the cooper sets up his (or her) barrel, fits the heads into the "croze" and completes the final hooping with a large mallet. The barrel is tested for impermeability and if passed, the cooper finishes the barrel with final planing and sand papering to enhance the quality of the oak and the perfection of workmanship. It takes approximately eight man hours to produce a single wine barrel.

### **Types of Wood used for Wine Barrels**

French oak was once (and still is by many) considered the most desirable wood for making wine barrels. Allier, Limousin, Nevers, Tronçais and Vosges are the five primary forests in France that supply oak for wine barrel production. Each forest produces wood with very distinctive characteristics. Additionally, early experiments with American Oak were not successful as the oak flavor dominated the wine. At first the problem was believed to be the wood itself, but later it was discovered that the difficulties were caused by the way the wood was prepared and the barrel constructed. American oak barrels have improved dramatically due to adapting French cooperage practices, and American oak is now used world-wide and at many prestigious wineries.

So what are the differences? The main difference is the history, craftsmanship, price and various aromas, flavors and textures each bring to a wine by the various barrels. All have an average useful life expectancy of about five years. Sometimes wineries may continue to use the barrels for storage, but after this point the barrel will have lost most of its flavoring components. The average cost of a French oak barrel is \$1000, Hungarian oak is \$650 and American oak is \$500. Due to the high costs per barrel, some wineries prefer to get the barrels restored rather than purchasing new ones. Barrels can be restored by shaving away several layers from the inside of the staves and re-charring the wood or adding inner stave oak slates. This can extend the life of a barrel up to ten years, however the results are not the same as with new wood. BARGETTO WINERY cuts their used barrels in half and sells them as planters.

One-half of the blend for our 2005 Monterey County Sauvignon Blanc was fermented in a blend of French oak and American oak which gives the wine a creaminess and fullness. The other half was fermented and aged in stainless steel to maintain the crisp and fruity characteristics. We think it makes for a perfect "blend" and hope that you do too. Enjoy this wine in the next 1-2 years.

**References:** How Barrels are Made; [www.mastergardenproducts.com/barrelsmade.htm](http://www.mastergardenproducts.com/barrelsmade.htm)  
Cooperage-The Making of a Wine Barrel; [www.crafty-owl.com/cooperage.htm](http://www.crafty-owl.com/cooperage.htm)  
Wine Barrels, [www.cellarnotes.net/wine\\_barrels.htm](http://www.cellarnotes.net/wine_barrels.htm)  
Wine Sense-Classifying Wines; [www.winesenz.co.nz/classifyingwines.htm](http://www.winesenz.co.nz/classifyingwines.htm)

## Current Release

### 2005 Monterey County Sauvignon Blanc

Grapefruit and gooseberry are the dominant aromas that flow from this wine. It has a lovely aromatic nose with a rich mouthfeel. This is a great springtime wine.

-Michael Sones, Winemaker

#### Harvest

**Grapes:** 100% Sauvignon Blanc  
**Vineyards:** 100% Scheid Vineyards  
**Average Date:** 9/28/05  
**Brix:** 23°  
**Residual:** 0.2%

#### Wine

**Alcohol:** 13.5%  
**Total Acidity:** 0.65 grams/100ml  
**pH:** 3.55  
**Length of Barrel Aging:** 2 months in French & American Oak (50% of blend)  
**Malolactic:** 0%  
**Cases Produced:** 562

#### Total cost for 2 bottle release

CA UPS Direct Members	\$34.69
Out-of-State UPS Direct Members	\$34.90
Pick Up Members	\$24.19

Price reflects 20% Wine Club discount. MI, ND, NH, NY, TX, VA add applicable tax.  
(Retail price for this release is \$14 per bottle.)

## Next Release

### 2005 California Dolcetto

This Dolcetto comes from Santa Barbara where the weather is a little warmer than the Santa Cruz Mountains. The aromas of violets and cherry coupled with vanilla and oak are supported with a rich mouthfeel.

-Michael Sones, Winemaker

#### Harvest

**Grapes:** 95% Dolcetto and 5% Pinot Grigio  
**Vineyards:** 95% Lucas Lewellen & 5% California  
**Average Date:** 10/13/05  
**Brix:** 25.6°

#### Wine

**Alcohol:** 14.9%  
**Total Acidity:** 0.46 grams/100ml  
**pH:** 3.75  
**Length of Barrel Aging:** 9 months in French & American oak  
**Malolactic:** 100%  
**Cases Produced:** 750

#### Total cost for 2 bottle release

CA UPS Direct Members	\$41.60
Out-of-State UPS Direct Members	\$41.30
Pick Up Members	\$31.10

Price reflects 20% Wine Club discount. MI, ND, NH, NY, TX, VA add applicable tax.  
(Retail price for this release is \$18 per bottle.)



### **BARGETTO WINERY'S Clubs Corner** Here's what is going on in our other wine clubs...

**Regan Vineyards Wine Club Current Release:**  
2004 Reserve Santa Cruz Mountains Pinot Noir \$35

**Regan Vineyards Wine Club Upcoming Release (10/19/06):**  
2005 Santa Cruz Mountains Dolcetto \$20

**CHAUCER'S Wine Club Current Release:**  
2004 Bargetto Sierra Foothills Port (500ml) \$18

**CHAUCER'S Wine Club Upcoming Release (9/21/06):**  
2005 Santa Cruz Mountains Bella Dolce (750ml) \$14

### *Vintage Notes*

Stock up and save on your current release!

Buy 6 or more bottles of the  
2005 Monterey County Sauvignon Blanc  
and save 25%.

\$63 per half case.

\$126 per case.

That's only \$10.50 per bottle.

Retail price is \$14.

Offer ends 11/15/06.

### *Harvest Sale*

The 2006 harvest is underway! BARGETTO WINERY is celebrating with free shipping. In addition to your 20% Wine Club discount, any order over \$200 will be shipped for free.

# FREE SHIPPING

on orders over \$200.

Sale runs September 1- September 30, 2006.

# Food & Wine

## Thursday Night Music Series BARGETTO WINERY

6:00 p.m. to 8:00 p.m.

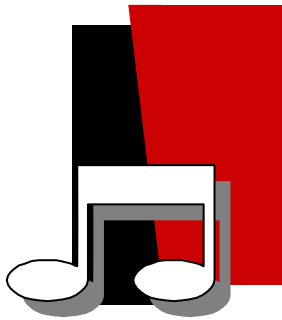
Unwind from the workweek and enjoy live music in our beautiful creekside courtyard. Wine and appetizers available for purchase.

**Thursday, September 7: Connected**

**Thursday, September 14: Double Shot**

**Thursday, September 21: Ben and Drew**

**Thursday, September 28: Talking Trees**



## Wine Club Harvest Party BARGETTO WINERY

Saturday, September 16, 2006

4:00 p.m. to 7:00 p.m.

Come celebrate the 2006 harvest with us. We promise you will have a good time. B.Y.O.B. (bring your own boots)! Grape stomp competition, barrel rolling relay, barrel tasting, live music and appetizers. \$10 per person. RSVP by September 8th.

## Wine Club Pickup and Pairing Nights Soquel Tasting Room

Friday, September 29, 2006

5:00 p.m. to 7:00 p.m.

We have extended our normal tasting room hours for our Wine Club Members so you can pickup and taste your current release and enjoy complimentary hors d'oeuvres.

Go to [www.bargetto.com/events](http://www.bargetto.com/events) to view upcoming events at BARGETTO WINERY.

### Penne Aglio E Olio with Chicken

#### Ingredients:

##### For chicken:

- 2 ea. boneless skinless chicken breast
- 1/2 c. sugar
- 1/4 c. salt
- 1 T. black pepper
- 1 t. garlic, minced
- 1 c. BARGETTO Sauvignon Blanc
- 5 c. cold water
- 1/4 c. canola oil (for cooking the chicken)

##### For pasta:

- 4 c. cooked penne pasta
- 1/4 c. extra virgin olive oil
- 1/4 c. garlic, shaved
- 2 ea. boneless chicken breast cut into 1/4 inch cubes
- 4 T. Italian leaf parsley, chopped
- 1 T. crushed red pepper flakes
- Salt and pepper to taste
- Parmesan, grated, to taste

#### Directions:

##### For chicken:

Combine all ingredients (except for oil) and brine for 1-2 hours. Remove chicken and discard brine. Preheat oven to 350 degrees. Heat oil in a large nonstick sauté pan over medium heat. When oil is hot, place chicken in pan and cook for 3 minutes or until golden brown. Turn chicken and cook an additional 3 minutes. Place on nonstick pan and cook in oven for 10 minutes. Remove from oven, put on plate and place in refrigerator for 20 minutes. Remove from refrigerator and cut into 1/4 inch pieces.

##### For pasta:

In large nonstick sauté pan over medium high heat, add olive oil and shaved garlic. When garlic just starts to brown add chicken, parsley and pepper flakes. Stir in cooked pasta and season with salt and pepper. Don't forget the cheese.

Serves 4.

For more recipes check out [www.bargetto.com](http://www.bargetto.com)

#### *Epicurean Notes*



Greg Flores studied culinary arts at The California Culinary Academy in San Francisco. Upon graduation, Greg worked his way up from Extern to Sous Chef at Café Marcella, a four star restaurant in Los Gatos, California. Greg has worked at several other restaurants in the Los Gatos area and is currently the Sous Chef at The 180 Restaurant. Greg is very familiar with BARGETTO wines and cooks with them often.

Have questions or comments for Greg?  
Email him at [gbflores1@hotmail.com](mailto:gbflores1@hotmail.com).  
(Put BARGETTO in the subject line.)

