

California Winegrape Production

by Dale M. Heien

In 1976 a Paris wine merchant held a blind tasting pitting several California wines against the top French vintages. To the eternal chagrin of the (French) judges, the California wines were voted superior. Lost in the euphoria of the moment was the fact that this event marked the culmination of a long effort to achieve quality winemaking and grape growing in California. With new found pride in international recognition, winemaking and grape growing moved to the forefront in California. Consumers began to take a new interest in wine. This led to increased awareness of wine quality and its accompanying indicators, such as the area where the grapes were grown and which grapes were used to make the wine.

Up to this time, California had been known as a center for generic wine of consistently good quality and reasonable prices. These wines bore uninformative titles such as “Chablis” or “Burgundy”, which are simply winegrowing areas of

France. They were made from blends of various grapes, which for the white wines were mainly French Colombard and Chenin Blanc. Neither grape is known for strong varietal characteristics.

The groundwork for the “Paris Surprise” was laid by a group of Napa winemakers and wineries. These individuals and their associated wineries had been producing fine, but largely unrecognized, wines for some time. With recognition from the Paris tasting and the leadership of a handful of vintners and winemakers, the California wine boom began. It continues to this day. The new era also brought new titles—Cabernet Sauvignon and Chardonnay, to mention only the most prominent. Wines were named after the grape used to make the particular wine. This is in contrast to European wines which generally bear only the name of the winery. In Europe each winery typically makes only one wine, usually a blend of two

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or three varieties. In California, it is not unusual for a winery to produce several wines, each from a different grape.

In addition to wine grapes, California is also well suited to the cultivation of table and raisin grapes, in particular the Thompson Seedless. The Thompson Seedless can be marketed as a table grape, crushed or dried and sold as raisins. If crushed, it can be used in the production of wine or sold as grape juice concentrate, which is added to soft drinks and confectionery products. The concentrate market has been growing considerably in recent years and now plays an important, albeit fluctuating, role in the California grape economy.

Over the past twenty some years the California wine story has largely been one of a gradual upgrading of consumer tastes. This has led to the observation that Americans now drink 'less, but better'. Wineries have increasingly tied wine consumption to good food such as 'California' or 'Mediterranean' cuisine, travel, and family values. The areas better suited to the production of high-quality wine grapes have experienced rapid growth. Acreage in both the North and Central Coast areas has increased more than ninety percent since 1975, while acreage in the rest of the state has grown slightly more than twenty percent. Changes have occurred in the varieties grown, the areas where grapes are grown, the end uses for grapes, the way they are grown and how the wine is produced and marketed. The chart below gives some indication of these changes:

Area	1972	1997	% Change
Raisin Grapes	240,390	269,576	12.1
Table Grapes	65,830	76,717	16.5
Wine Grapes	137,210	328,882	139.5

It is clear from the chart that while raisin and table grape plantings have increased over these twenty-five years, wine grape plantings have increased much faster. Of more interest is the change in the composition of wine grape varieties grown.

From Table 1 it is clear that there is more concentration in terms of varieties today than in 1972. The top five varieties have 63% of the acreage in 1997 versus 44.5% in 1972. Chardonnay, the top ranking variety in 1997, had only 2.0% of the acreage in 1972. More importantly, due to the expansion in acreage, there is over twenty-five times the acreage in Chardonnay today compared to 1972.

While there are significant changes in the varieties planted and areas where they are grown, an equally impressive story lies in the viticulture techniques employed. In the early seventies, most vineyards were planted in rows ten or twelve feet apart. This prevented disease problems by allowing more air circulation, but had the drawback of wasting a good deal of (then relatively inexpensive) land. Also, large farm machinery, not intended for grape production, was more adaptable to wider rows. Current row spacing is much closer, depending on the trellis configuration. In the past, the trellis was a simple three-wire system: one wire for the irrigation hose; one for the cordon or vine; and the last, 'catch wire' for the foliage. Many vineyards were furrow irrigated and did not use drip irrigation. Today, sophisticated injection systems allow growers to dispense fertilizers through the dripper lines more efficiently and more accurately.

Current trellis systems are more elaborate and more expensive. Especially popular are quadrilateral trellises, where vines are grown up the stake, turned ninety degrees in both directions, and then split again so that they appear to be an 'H' pattern when viewed from above. This, and its many variants, allows more efficient use of expensive land. Also, it has been

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Table 1. Change in Varietal Acreage: 1972-1997

Variety	1972	Variety	1997
Carignane	11.8%	Chardonnay	19.8%
French Colombard	10.0%	French Colombard	13.9%
Zinfandel	9.4%	Zinfandel	12.4%
Grenache	6.9%	Cabernet Sauvignon	10.4%
Barbera	6.4%	Merlot	6.7%
Cabernet Sauvignon	5.3%	Chenin Blanc	6.5%
Chenin Blanc	6.2%	Grenache	3.4%
Ruby Cabernet	5.0%	Barbera	3.3%
Petite Sirah	3.4%	Sauvignon Blanc	3.0%



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demonstrated that excessive foliage prevents sunlight from reaching both the grapes and the leaves on the interior of the vine. Hence trellises are now designed with wires to guide the shoots as they grow during the season. This also enables trimming of the shoots so there is minimal shading. Leaf thinning is also done to give greater exposure to sunlight. The net result is better quality grapes with no reduction in yield.

Modern herbicides and pesticides have done a great deal to ease the burdensome work involved in maintaining a vineyard. New rootstock types have been developed. It is now possible to choose a rootstock having characteristics such as disease resistance or drought tolerance that match the soil and climate characteristics of the vineyard in question. Some growers are now experimenting with organic farming for grapes.

Current emphasis is on finding appropriate areas for growing new varieties, especially French Rhone varieties such as Syrah and Italian ones such as Sangiovesi. California appears to be gradually evolving toward the system that exists in France, where different areas are associated with specific grape varieties. Napa Valley has established a reputation for excellent Cabernet. The same is true for Chardonnay from the Carneros area in Napa and Sonoma counties. The foothill counties have long been known for fine Zinfandels. New areas such as Lodi-Woodbridge and the Central Coast, to mention only two, are also gaining recognition for certain varieties.

The California wine economy got another shot in the arm in November 1991 when the CBS show *60 Minutes* aired a section entitled “The French Paradox”. This show popularized the discovery, known to the medical research community for some time, that wine taken in moderation reduces the chance of coronary artery disease. Dissemination of this finding has boosted red wine demand and led to increased plantings of red wine grapes, especially Merlot, throughout the state. Moderate use of wine in a family setting with good food has long been the mantra of California vintners.

The fascinating history of California wine has been enriched by the achievements of dynamic and innovative individuals. The ascendancy to “world class” status in a relatively short time is remarkable, remembering that Europeans have been at winemaking for centuries. In an era when many yearn for excellence in this field, California winemaking is a clear example that it can be achieved.

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