

The 2002 Vintage

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2002 is one of those vintages in which quality is linked, in part, to the dramatic changes in the year's weather—after a mediocre start, conditions greatly improved as the grapes reached maturity. The year will also be remembered for the size of the harvest, which was relatively modest in comparison to previous vintages, particularly those of the last decade.

The winter was a dry one—from October 2001 to the end of March 2002, measurements at the meteorological station at the Domaine de la Grande Ferrade in Villeneuve d'Ornon registered 311 mm of rain, while the average for winter precipitation for the past 20 years is 556 mm (Table I); similar levels of rainfall have not been seen since the winter of 1988–1989, when 301 mm were recorded.

Table I

Winter rainfall from October 1 to March 31

Period	Precipitation (mm)	Period (not legible)
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Average 1982/2002		
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Although October 2001 was warm, the months of November and December were cold, with average temperatures , respectively, 1.6° and 2.6° lower than normal. Afterwards, the first three months of 2002 were comparatively warmer than the norm, with temperatures 1.6° above average in January, 2.2° in February, and 2.2° in March.

Vines began producing shoots early due to the warm start to the year and new growth was in evidence throughout the region by the last week of March.

Like the preceding months, April was dry, with 25 mm less rain than normal (68 mm less than the average from 1992 to 2001). Temperature tended to be 1° higher than normal, which represented a marked increase for the month, although the average of 12.8° was in line

with the ten-year average of 12.9°. At certain times during the month, notable differences were observed between maximum afternoon temperatures above 20°, and minimum temperatures that were often below 0° in the hours before sunrise; localized incidents of frost were reported.

The appearance of flower buds was plentiful, indeed overly so, with various grape varieties showing inflorescence of great size and number on a scale similar to 2001, a year of notable abundance.

In May, although temperatures were identical to the average of 15.4°, rainfall was greater than normal (110 mm compared to 75 mm) and rainy days were more frequent: 20 days, of which five saw daily precipitation in excess of 10 mm. The last ten days of the month were the wettest, with 62 mm of rain. This significant precipitation coming at the onset of flowering certainly played a part in the coulure that was later observed; cool temperatures at the end of the month did not help matters either.

The month of June was warm (2.9° above average) and relatively dry (7 mm less than the norm). These average figures may well suggest that vines enjoyed favorable weather conditions, however, the volume of grapes produced was not as great as expected; in reality, the overall average blurs certain local weather developments. A closer look shows that although the first three days of June were dry and hot as the first flowers appeared, conditions quickly deteriorated, and from the 4th to the 11th, 27 mm of rain fell and average temperatures never rose above 15°. During the next ten days weather conditions improved, and the end of the month was cool with light precipitation. Thus it was that flowering occurred under more or less unfavorable conditions, and was slow and heterogeneous, quick and homogenous, and all the stages in between.

Taking into account a certain heterogeneity, the date of mid-flowering was difficult to determine. For the parcels of red grapes that served as points of reference, we have fixed a date of June 7, the same as for 2001.

Unfavorable weather conditions at the start of flowering led to the development of coulure and millerandage. Merlot was most deeply touched, especially those vines between 20 and 40 years old and those with viral infections. Cabernet Franc consistently showed signs

of being affected , but nonetheless managed to produce a decent amount of grapes. Cabernet Sauvignon, in general, succeeded in perfectly resisting any adverse effects.

Coulure led to overall production levels in the Gironde lower than for 2001. One detail must be noted: before flowering, the projected harvest promised to be sizable. Where action is not taken to control the amount of grapes per vine, the onset of coulure (a natural form of crop thinning) can result in grapes of good composition, and this was very much in evidence with the Cabernet Franc.

July was cool (0.7° less than normal), especially the first ten days; average temperature for the month was 17.3° (in 2001 the average was 20.7°), with moderate sun (243 hours, as opposed to a norm of 250 hours), and light rainfall (41 mm compared with an average of 48 mm). As regards rainfall, it must be noted that 75 percent of the month's total fell during the first ten days.

August was rainy and cool. We noted that red grape varieties reached mid-véraison on the 12th of the month. Phenologically, the grapes reached this stage of their development 3 to 4 days behind the average date for the last decade, but about 8 days in advance when considering the record of the past 30 years.

As Table II shows, weather conditions from April to late August were good, although showing a slight lack of sunshine compared to the past three years.

Table II

Weather conditions from April through August

Sum of average temperatures ($^{\circ}\text{C}$)

Number of days $T > 30^{\circ}\text{C}$

Sunlight (h)

Rainfall (mm)

[last column unreadable, but based on Table III, possibly:]

Number of days of rain $P > 0.5$ mm

As has been noted, August was rainy. However, as is often the case in the region at this time of year, the amount of rainfall varied from one vineyard region to another. This was particularly evident on August 19 and 20, when certain areas were touched by barely 5 mm of rain, while others experienced 60 to 70 mm. Following these heavy rains, some parcels of vines experienced a bursting of their grapes and the onset of Botrytis.

However, temperatures remained relatively cool (the average temperature in August was 20.1° compared to a norm of 21°), which restricted the areas in which rot developed; still, great pressure was felt and fears were well-founded for the affected parcels.

The first days of September were a continuation of the wet and cool weather of August. The consequently slow maturation and the developing zones of Botrytis, particularly among the Sauvignon and some Merlot, engendered widespread concern throughout the region.

Beginning on September 9, weather conditions changed considerably. Warmer temperatures arrived with relatively sunny and hot days; nights were cool, with a northeasterly wind rarely seen at this time of year. The development of gray rot stopped and ripening continued under favorable conditions. In certain vineyards grapes showed increased concentration due to an evaporation of water. This occasionally led to a withering of the berries, and although whole bunches were rarely affected, it was not uncommon to see the grapes towards the tip show a softness and a tendency to fall from the stalk.

The grapes were slowly making progress towards maturity when, on Friday, September 20 between 3:00 and 7:00 pm, violent storms appeared. They were of short duration, but occasionally accompanied by hail which struck several areas throughout the Bordeaux area. In certain places, several minutes of hail caused major damage, forcing growers to begin harvesting immediately. As is typical with storms of this type, rainfall was unevenly distributed among the region's vineyards, varying from several millimeters in some places to more than 80 in others.

Dry conditions quickly returned, accompanied by a steady wind that in most cases helped to eliminate the excess humidity which everyone feared would lead to new outbreaks

of Botrytis. This made it possible to wait for fuller maturity before harvesting the Cabernet Sauvignon.

As Table III shows, weather conditions after the first ten days of September through mid-October were very good, making the harvest easier.

Table III

Weather conditions from September 11 through October 10

Sum of average temperatures (°C)

Number of days $T > 25^{\circ}\text{C}$ $T > 30^{\circ}\text{C}$

Sunlight (h)

Rainfall (mm)

Number of days of rain $P > 0.5$ mm

Concerning the degree to which winemakers were able to control vinification, one must start by noting that musts were rich in sugar, especially so in numerous cases; this was due to the concentration resulting from the high temperatures and wind which characterized the days just before the harvest. As expected, these high levels of sugar led to difficulties in the alcoholic fermentation whose effects have since been resolved.

Acidity in the grapes was higher than has been seen in recent years. This was due, in part, to the concentration mentioned above, as well as average weather conditions in July and August which limited the burn-off of malic acid. In certain cases this resulted in a languishing malolactic fermentation, which delayed the opportunity for assessing the red wines and the start of their assemblage.

The first white grapes were harvested in satisfactory condition under very good weather around September 10. There was a subsequent deterioration in quality which necessitated greater care during later picking and the extraction of the must.

Sauvignon's success was particularly widespread; quality was more irregular for Sémillon. Currently, the white wines exhibit fruity aromas with good intensity and some freshness in their structure.

As for the red grape harvest, despite favorable weather several properties delayed picking because of the storm on September 20 and the sanitary condition of the grapes; the harvest finished around October 10, at least in the Médoc.

Among the great red wines, Cabernet Sauvignon certainly produced the best results, fully profiting from favorable conditions towards the end of maturation; they were able to achieve the great maturity this variety requires to bring out all its potential. These wines are rich, powerful and harmonious, with spicy aromas which impart a lot of elegance.

The Merlot probably benefited less from the year's weather. Despite higher degrees in the must, the expected brightness and body is not always present in the wines. This experience confirms the observation that Merlot does not always give its best when over-mature and excessively late-harvested.

Overall, the red wines of the 2002 vintage are quite successful—at least those made with grapes from vines that have been well-tended and are situated on suitable soils.

Another lesson that this vintage offers for red wines is the value in avoiding excessive extraction, not only when the quality of the grapes cannot support it, but also when the wines are destined to be enjoyed by the consumer in the two or three years following the harvest. In the less prestigious appellations producing the largest volumes, it has been observed that the wines are excessively hard and slightly bitter on the finish, with a tannic structure that may never become mellow with age. This observation does not mean that a good tannic structure was not achievable in the best wines; it all depended on harvesting suitably ripe grapes, which were in abundance in 2002.

As for the sweet white wines of Sauternes-Barsac, a fine development of noble rot was observed early on which permitted the production of several lots of great quality. Later, the growth of *Botrytis* became somewhat irregular, and in the end the quality of the wines will depend largely on the strictness of the selections; nonetheless, the results should be quite satisfactory.

Talence, March 14 2003