

### « The 2013 Vintage : Some pleasant surprises... »



Everything, or almost everything, that can be said has probably already been said about the 2013 vintage. After the uninspiring weather in spring, 2013 had been criticized and written off early by practically everyone. Having rightly or wrongly been proclaiming the "vintage of the century" year after year, in 2013 we are going to see a return to a style which we thought climate warming had made a thing of the past. As with any "challenging" year, the understanding of the vintage's particular characteristics and the subsequent decisions taken by the wine producers will have amplifying effects. The gestating wines will tell all in due course but, as we come out of the harvest, an objective insight was needed into the genesis of this vintage which we expect to give some pleasant surprises, in both white and red wines.

## A late year, the like of which has not been seen in 20 years...

Winter 2012-2013 enabled full replenishment of the soils' water reserves with cumulative rainfall which was one of the highest since 2000, in contrast to the previous winter (see Table 1). The rainy winter, combined with temperatures which were rarely very low, but also rarely high enough to stimulate the start of vegetation, led to an unusual delay in growth from bud break (*débourrement*) onwards. In the first quarter, the sum of effective temperatures did not exceed 6°C.d, versus an average of 45°C.d over the previous 13 years. As a result budding did not become widespread until around 15 April.

Table 1 Distribution and accumulation of winter rainfall (2000-2013 period, Tain l'Hermitage)

Winter	Rainfall (mm)					
	Nov	Dec	Jan	Feb	March	Total
00-01	142	62	65	32	123	424
01-02	19	4	25	52	42	141
02-03	339	59	42	10	15	464
03-04	65	216	30	46	31	387
04-05	74	32	12	20	9	146
05-06	70	38	59	76	64	306
06-07	139	52	57	36	18	302
07-08	108	16	76	20	33	252
08-09	86	67	35	114	33	333
09-10	104	71	48	72	63	358
10-11	94	39	25	38	37	232
11-12	139	68	3	1	4	214
12-13	191	35	54	43	102	425



However, the 10 days in the middle of April, which were somewhat warmer than the long-term average (mean daily max temp > 20 ° C), were to give the year the important benefit of a surprisingly homogeneous bud break (on each vine). This partially offset the disadvantages inherent in late years, particularly the difficulty of managing significant variances in maturity at the end of the cycle, in difficult health conditions. This beneficial homogeneity could be seen both on the Marsanne and on the Syrah. A certain smoothing out of the variances in growth stages between parcels could also be observed and this continued until harvest.

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### The vineyards suffered in the spring...

The glimmer of hope brought by the final onset of spring was short-lived. We were soon confronted by the harsh reality of May, especially the last ten days, with an average temperature deficit of 9°C compared to maximum daily temperatures recorded since 2000, and 200mm of cumulative rainfall. In these circumstances, where the soils have been slow to heat up and, as a consequence, to show any significant mineralization activity, the vine naturally vegetated. Chlorosis was not uncommon, even in acidic soils (granite, mica-schist). But there are always two sides to every coin, and in this case the upside was that the prevailing pessimism due the possible outbreak of mildew proved to be unfounded because the fungus was not able to start its cycles of contamination. The low temperatures, complementing the effect of repeated applications of nettle and willow infusions, at least had had that benefit.

It is important to mention that the contained spread of mildew enabled the preservation of an abundant leaf surface which the vine needed to ensure the proper formation and ripening of the grapes in the context of the very late year.

But as far as the grapes are concerned, the ability of the vine to produce sugar through intact foliage is one thing but the richness of the grape berries is another and at this stage only depended on two factors: the number of berries and their volume.



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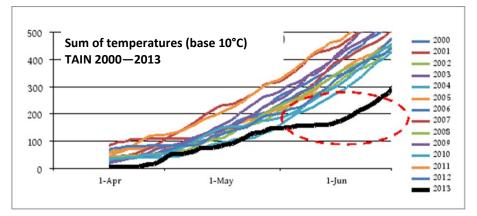


## How was the quality of the flowering and the potential yield?

Flowering (*floraison*) was affected in many ways, in its preparatory phase, by the cold weather in the second half of May, which would dash hopes of a return to normal growth for the time of year. Over this period, the vine literally became inactive and growth fell further behind, as illustrated in Graph 1, via the sum of effective temperatures.



### Graph 1 Sum of temperatures (base 10°C), simulating the activity and the rate of plant growth



The early ripening areas which had flowered around 10<sup>th</sup> June were the ones to be most affected by fruit set failure (*coulure*) due to the thermal regime at the end of May. However the level of fruit set failure remained reasonable and would have a positive influence on the future aeration of the clusters. The later ripening areas (Saint-Joseph, the Hermitage heights, northern Crozes) did however benefit from the relative warming up in early June (see Table 2) during the critical phase of differentiation of male gametes in the stamens and thereby ensured a higher general level of successful fruit set (*nouaison*). In all areas, the fall of the calyptras (mid to end-June depending on the location) benefitted from fairly dry conditions with normal temperatures. Flowering, which was very fast as a result, preserved the benefit of the phenological homogeneity related to the conditions at bud break. The calyptra dehiscence in dry conditions would also have had the important benefit of limiting early botrytis infections at this stage.



With a volume of clusters across all our vineyards which was just under 10% lower than in 2012, fruit set (*nouaison*) partially determined the moderate yields. At the same time the reduced berry size was determined by the low nitrogen mineralization in the spring offsetting the effects of water availability which was not restrictive in most areas in June.

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In short, despite spring appearing to have been negative in every respect, the good ratio of leaves to fruit, after the closure of the clusters, was able to fully compensate for the main handicap of the year which, at this stage, was its extreme tardiness.

### Summer saved the day...

## The early water pattern was much more beneficial than it had appeared

After the homogeneity of the bud break, the dry period from early June (only 17mm of rainfall for the entire month) was a factor which will certainly have had a positive influence on the quality of the vintage. Despite the fact that temperatures and transpirational requirements were not excessive, this respite in rainfall resulted in a climatic water deficit of 50 mm at the start of the berry's herbaceous growth. In the areas with the most superficial soils (Pavillon, Meal, Greffieux, the granite slopes of Saint-Joseph or the fersialitic soils of Crozes), where the bedrock restricts root volume and regulates the feeding of the plant, particularly in terms of water, this deficit level helped to induce the start of stress, stimulating the synthesis of tannins in the forming skins.

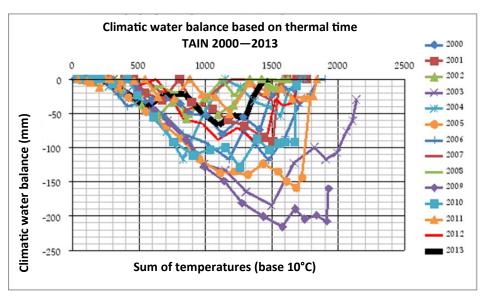
Paradoxically, the lateness of the year was a benefit in this respect because it allowed the first water stress to affect the vines when they were still in an early growth stage, with the quality benefit of giving the red wines a tannic potential which we had had little chance of perceiving with the rainfall in spring.



The climatic water balance is an indicator accumulating, over time, the potential transpirational requirement (counted negatively) and rainfall (counted positively). Illustrated below, not in calendar time but in terms of effective temperatures, simulating the plants' growth cycle - this summary shows the very qualitative behavior of 2013 during this "early" phase of growth (comparable also to 2005 and even showing a slightly greater deficit than in 2009 and 2010, with the oenological potential benefit noted above). Obviously, in addition to the importance of phenolic potential in the composition of the red wines, it also helps protect the plant against fungal pests and, with the fear of botrytis (proportional to the lateness of the year) at the end of the season, this would have been a valuable benefit.

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#### Graph 2 climatic water balance based on thermal time



### A contrasting water pattern in summer, yet remaining positive for the best terroir ...

July was a little too wet (73mm) to make 2013 a high alcohol vintage by prolonging the water stress phase until the closure of the cluster. It was also a stormy month throughout France (500,000 lightning strikes across the country, 5 times higher than average). The Rhône Valley vineyards were also affected but were spared the devastation experienced in the Loire, Burgundy or Bergerac. Only the southern end of our St. Joseph vineyards (Mauves) suffered hail damage, on 9<sup>th</sup> July, but the vine-yards were at a sufficiently advanced stage (pea-size or closure) to enable the grape berries to heal without weakening later as they continued their growth.





August brought a return to a water deficit level which was very beneficial from a quality point of view, due to very low cumulative rainfall (39mm, i.e. the lowest rainfall since 2000, after 2010). Reaching its annual minimum (-70mm), the water balance then induced moderate to severe water stress created by hot days, mainly in the hill areas (in the last ten days in August sap depressions of -10 to -14 bars were consistently recorded on the Syrah in the Hermitage vineyards where we grow our single vineyard selections, in both the granitic and sedimentary areas). The arrest in growth induced by this range of water stress had a very positive effect on the accumulation of sugars against a background of moderate loads, and on the maturation of tannins in the seeds.

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It should be said that the summer water pattern, in terms of accumulation and phenolic maturation, was not as beneficial on the plains as it was on the slopes. So, as we went into September, it was widely believed that managing the threat of botrytis would be a key factor in the decision of when to harvest each plot at the optimum of the potential offered by the vintage.

### Thermal kinetics, the saving grace...

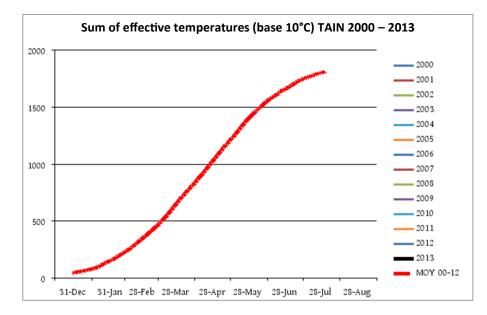
The recovery in quality resulting from the conditions in summer should also be considered in the context of the thermal conditions. Without coming close to compensating for the cumulative delay, the average daily temperatures kept the vineyards at around 2-3 weeks behind the average for the 2000-2012 period (see graph 3).

The soils, having been slow to warm up in the spring, pushed back their mineralization peak to the summer, resulting in the massive emergence of plants indicating an excess of minerals (lamb's quarters and pigweed in particular). Where their moderate growth allowed these plants to be conserved, they played a role in improving the soils' water buffer in the run up to the harvest and thereby helped limit the weakening of the skins associated with rain in September and October. At the same time, the grapes absorbed mineral substances, illustrated by the high levels of potassium and nitrogen shown at maturity. We predict that this accumulation of mineral salts will take the form of a strong stamp of the *terroir* on the end wines, particularly the whites.





#### Graph 3 Sum of effective temperatures 2000 - 2013 (Tain)



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These average daily summer temperatures, comparing better with the reference period than those recorded in spring, in fact hide relatively high daily minimum temperatures and mixed maximum daily temperatures.

These modest variations in temperature did not particularly hamper the accumulation of sugars in the grapes, which from mid-September already showed potential degrees of 12.5%, both for the Marsanne and the Syrah. We knew from that moment onwards that technological maturity would not be a problem, contrary to the real concerns we had had in late spring.

Without doubt, the hard work in the vineyards, in terms of green harvesting and multiple applications of herbal infusions and plant decoctions, had been effective in controlling the various health threats and in keeping the foliage fully effective until maturity. So effective in fact, that the balances shown at the harvest indicated potential degrees between 13 and 14% and pHs of about 3.2 for the whites and 3.4 for the reds. The phenological homogeneity enables us to harvest (with very few sortings) evenly golden berries, mature in phenolic terms, with the classic honey, infusion and praline aromas of Marsanne grapes from quality *terroirs*.

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For the reds on the other hand, the low temperature variances at the end of the maturation process may have had a depressive effect on the accumulation of anthocyanins (as in 2012 for that matter). But apart from the fact that their total volume had not been helped by the conditions over the year, their extractability did benefit from the alternating wetting and drying of the soil surface horizons, causing the berries to swell and shrink in turn.

Ironically, the internal action of the botrytis before its externalization on the berry has also been beneficial on the later ripening plots, where the thick skins would have found it difficult to develop a softer texture under the effect of the grape's enzymes components alone, whose action would have inevitably been hampered by the cool Rhône autumn in mid-October... But it goes without saying that this weakening of the skin due to *Botrytis cinerea* was a phenomenon which had to be watched very carefully, with a strike force, in terms of numbers of pickers, adapted to the circumstances of the vintage. We were also obliged to harvest some of the late ripening areas (some St. Joseph exposed northeast, northern Crozes) for the freshness of the fruit rather than the silkiness of the tannin.

In our Northern Rhône Valley *crus*, the 2013 should therefore produce some beautiful wines, contradicting the label of "*petit millésime*" (lesser vintage) which some people had prematurely given the vintage. The whites are showing some almost Burgundy-like balances which will help them express their diverse nuances over time. The first harvested reds have used up their sugars and are quietly macerating away. It is difficult to pass final judgment on them at this stage, but the first tastings highlight a character which already reflects the wines' origins, in terms of both texture and aromatic breed.

### The harvest timeline...

The first plots in the Northern Rhône Valley were picked over the week commencing 23<sup>rd</sup> September, in Saint-Péray. The Saint Joseph whites were picked and the first early white Hermitages were sorted over the same week. The mild temperatures and frequent south wind over the last ten days of September accelerated the end of the red grapes' ripening process. The bulk of the harvesting took place in the first week of October' starting with the early ripening Cornas vineyards and all of the Côte-Rôtie, followed by the Crozes-Hermitage and Saint-Joseph. The excellent health of the red Hermitages meant that we could afford to leave them to continue ripening until the week commencing 7<sup>th</sup> October.

