

12 Jul 2023

## Roussillon reflections on climate change



*Following up on Tam's [March visit to France's Roussillon](#), when the wild rocket and cherry trees were in full bloom and the vines seemed impressively resilient despite the long drought, vintner Jonathan Hesford writes in with a less rosy report.*

Up until 2016, when people used to ask me whether it was going to be a good year, I would reply 'It's always a good year in the Roussillon.' The Mediterranean climate was much more consistent than Atlantic regions such as Bordeaux or continental climates like Burgundy. However, since then, nearly every year has dealt us climatic surprises that have made the vintages and the yields less consistent. This has meant that the styles of the wines and the volumes that we have for sale have varied more from year to year than they did before 2016.

Scientists now talk about climate change rather than global warming because, although the planet is getting hotter overall, it is the increased frequency and intensity of extreme weather events that are causing the most problems. The media

and the layman make the false assumption that hot, dry weather simply results in wines of increased alcohol levels. Alcohol levels are influenced by temperature. That's why wines from the Roussillon are generally more alcoholic than those from the Loire. However, the impact of heatwaves and drought is a bit more complex.



*Domaine Treloar's Mourvèdre bush vines are coping much better with the long winter drought than the trellised vines*

The winter of 2022–2023 broke records for lack of rain in the south of France. Our reservoirs and wells dried up, some villages had no running water and the vines, especially on hillside sites, struggled to grow their shoots. By the end of April some of the vineyards had shoots only 10 cm (4 in) long, with two or three leaves above the visible grape bunches. Normally they would have five or six, acting as the energy source to keep them growing through the season and powering the flowing and fruit-set of the bunches. At first I thought it was just the vines that I had pruned late which had stunted growth. We often see this but it corrects itself later. However, that wasn't the case. My Mourvèdre vineyard, which I'd pruned in December, never really grew its

shoots either.

The wild flowers that we saw in the vineyards in March all dried up and died off in April and the next phase of weeds never really grew. I didn't need to mow or plough for the first time ever. Even though it has rained on-and-off through May and June, the rains have come too late for many of the vines. The soils are so dry that the rainwater is absorbed just into the top 10 cm and never reaches the depth where the vines' roots are. In our subregion, Les Aspres, we rely on snowmelt and water seeping down from the Pyrenees through the soils, which are mainly glacial moraine. Because there was so little snow or winter rain, there is hardly any water seeping down.



*Domaine Treloar's Roubau Syrah vineyard seems to be coping better with the dry winter of 2022-2023 than the Grenache vineyards.*

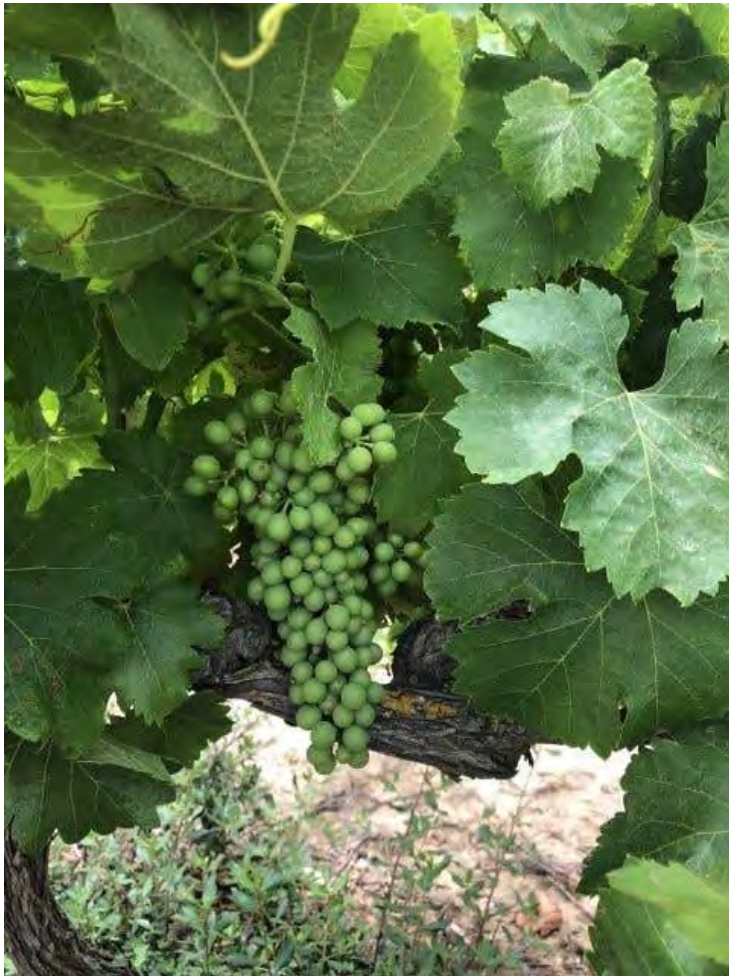
The old wisdom that old vines and varieties like Grenache are more resistant to drought has proved incorrect when dealing with a serious winter drought. Grenache may be able to handle a lack of rain in summer with its smaller, thicker leaves, and old vines, with their deeper roots, can find water that young vines can't reach, but if the winter never put enough water into the deeper soils, there is none there for those old vines to get. Furthermore, old vines tend not to have shallow roots to scavenge rainfall at the surface. The result is that my old vineyards of Grenache look far less healthy and vigorous than my younger vineyards of Syrah. It's very unlikely now that those vines will recover sufficiently to

ripen their bunches, even if we receive more rain. Besides, summer rain is a double-edged sword because it brings with it a much higher risk of mildew and botrytis rot.

The vines growing on deeper clay soils are more stunted than those growing on shallow, stony ones. I can only assume that the deep soils have allowed the root structure to form at a greater depth that normally contains more water than the surface layer.

My fear is that because the canopy is so reduced, the ripening of the bunches is going to be retarded. First of all, that means the bunches are not developing and remain in their fragile, post-fertilisation stage and, secondly, that there won't be enough leaves to ripen all the grapes. I will probably do some bunch-thinning to try to give the

remaining ones a chance but with very short stems and a few small leaves, it's hard to see how they will ever ripen enough to make wine



*Younger village Syrah vines, already carrying good fruit*

This winter drought has turned conventional wisdom on its head and disproved many of the things that [we spoke about in March](#). Wherever I look, old vineyards that we thought would survive the driest summers look in a poor state compared with younger vineyards planted on soils which can absorb and retain the little rain we are getting. I think the future of viticulture in the Roussillon very much depends on winter rainfall patterns. Perhaps, to save the vines, irrigation over winter, before [budburst](#), will be required. It seems to make more sense than putting in drippers to try to boost yields of vineyards on the plain destined to make low-price

wines. However, political power in the Roussillon still rests with the bulk producers, not the ones that make wines to excite the readers of Purple Pages.

*Jonathan Hesford has a Postgraduate Diploma in Viticulture and Oenology from Lincoln University, New Zealand, and is the owner, vigneron and winemaker of [Domaine Treloar](#) in the Roussillon. All photos here are his own.*