

Liquid

Lock, Stock and Can

Ready-to-Drink Cocktails

Climate Change

It Is Not All Bad

Traditional Drinks

From Around India



In a rare twist to the endless litany of bad news around global warming, a study published in *OENO One* shows that climate change is actually set to boost wine production in the UK over the next twenty years.

UK viticulture has grown more than four-fold from 761 to 3,800 hectares, spread over more than 800 vineyards, between 2004-2021. With sales of English and Welsh wines up by 31% to 9.3 million bottles in 2021, the UK wine industry is emerging as one of the fastest-growing agricultural sectors.

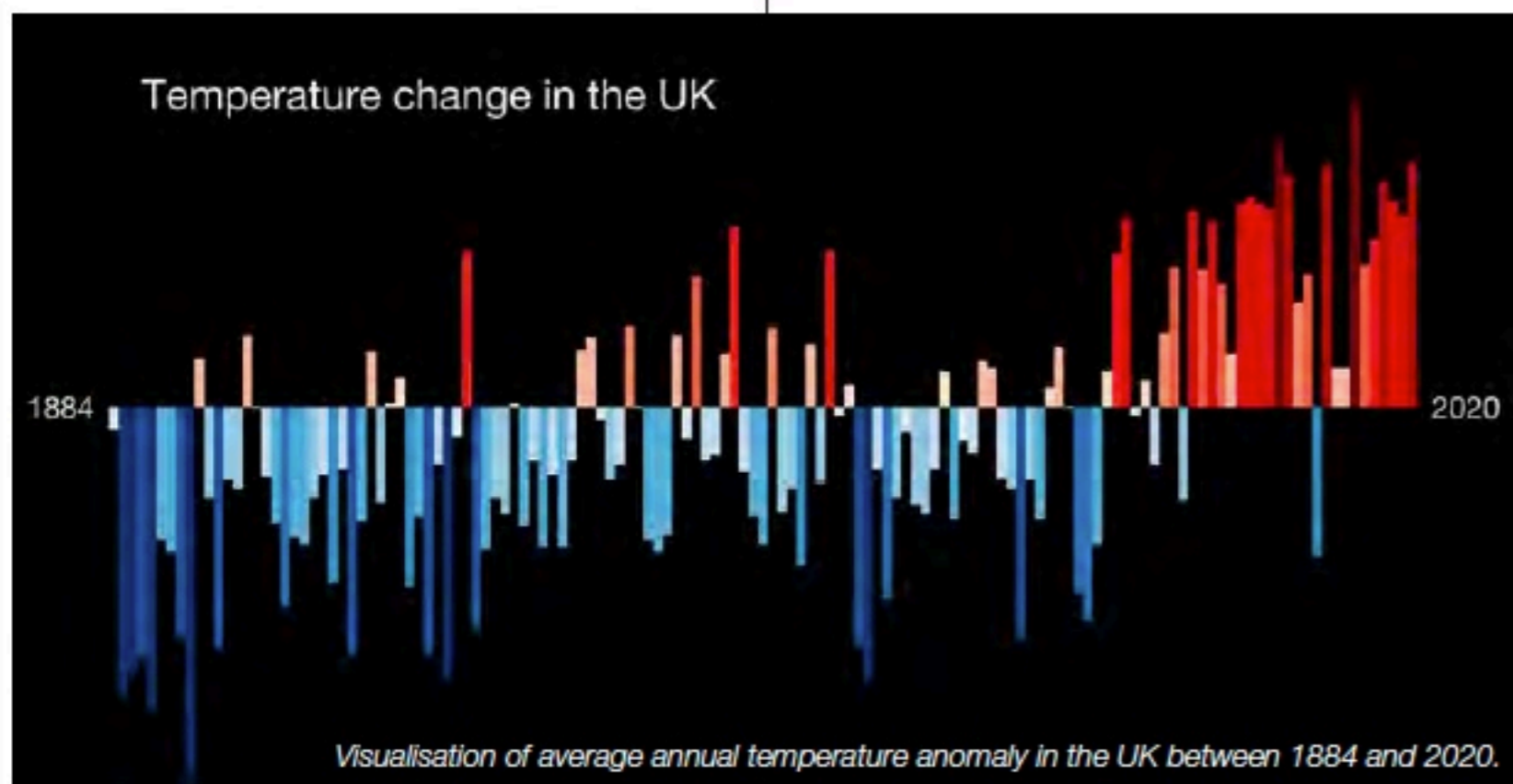
'Climate change projections for UK viticulture to 2040: a focus on improving suitability for Pinot Noir' is the study conducted by a team of researchers from the University of East Anglia (UEA), the London School of Economics, Vinescapes Ltd and Weatherquest Ltd. The Climate Resilience in the UK Wine Sector (CREWS-UK) project was funded by the Natural Environment Research Council.

The team used UK Climate Projection scenarios from 2018 (the year of UK's best-ever bumper vintage) to assess future variety and wine style suitability in the UK, and potential for viticulture investments, resilience and sector adaptation over the period 2021-2040.

Areas in East Anglia, Lincolnshire, south-central England, north-east Wales and coastal areas in south-west England and southern Wales are projected to have the '2018 conditions' in more than half the years during 2021-2040. The exceptional 2018 vintage will become more common.

Drawing on the latest detailed climate data, the team have modelled and mapped projections to show how the growing conditions in the UK climatically resemble those seen most recently in the famous wine producing regions of Champagne and Burgundy in France, and Baden in Germany. Their findings show how the climate of a larger area of England and Wales is expected to





become suitable for reliably growing grape varieties for sparkling wine, and how the potential for high quality still wine production is rapidly emerging.

Currently, while there are vineyards in England, Wales and some recent plantings in Scotland, the most densely planted region is the south-east, which represents over 50% of total vineyard plantings. At the turn of the millennium, the dominant grape varieties grown in the UK were cooler-climate tolerant Reichensteiner, Seyval Blanc and Müller-Thurgau. By

2020, this had changed to Pinot Noir, Chardonnay and Pinot Meunier, representing 78% of the total planted area, best suited to sparkling wine made using the Traditional Method. Bacchus, representing around 5% plantings, dominates still wine production.

The study's lead author, Dr Alistair Nesbitt of Vinescapes, said "We found that by 2040, significant areas in much of England and Wales are projected to become warmer by upto 1.4°C during the growing season – this warming climate is a key factor for



growth and variety change in the UK viticulture sector. This expands the area of suitability for Pinot Noir for sparkling wine production, but also new areas will open up within the growing season temperature suitability range for still wine production, and for growing varieties such as Sauvignon Blanc, Riesling, Semillon and more disease-resistant varieties, which are hardly grown in the UK at present."

However, the researchers warn that significant challenges remain. British weather can still be unpredictable, as the 2012 vintage demonstrated when much UK grape production was lost due to the cool and very wet flowering period. Even if the longer-term trends are good, year to year climatic variability, including early season frost risk, will remain. The rapidly changing UK climate requires the industry to remain agile and not 'lock-in' to processes which can't adapt to the changing growing conditions.

Potential investors in a vineyard in the UK can benefit from this study's findings through advice on 'best' locations, both now and under future climate change conditions. But, a detailed analysis of all the growing environment and market risks will always be needed for sustainable vineyard and winery investment decisions.

Grape growers worldwide have been faced with crop damage caused by erratic weather patterns including spring frosts, warm winters, heat waves in summer, droughts, floods, unseasonal hail, and wildfires. Early harvests are becoming common, and shorter harvest periods imply wines have higher alcohol content with a diluted flavour profile. Supply is as much at threat as quality – as seen in the spring frost disaster earlier this year which almost completely destroyed the crop in some parts of France and Italy.

While winemakers in the warmer regions like France, Italy and Spain have suffered, these changing conditions have actually favoured those in some cooler regions, with longer growing seasons and more flavourful berries.

While weather extremes will become more common, the ability to grow new varieties in new conditions is being seen as a positive impact of this climate change.



Adaptability is becoming the key. For example, in the UK, some regions now have the perfect climate to make sparkling wines, and the share of sparkling wines in overall wine production in the UK is almost 72%. The prospects are compelling enough that Champagne Houses Taittinger and Pommery have already invested in vineyards in the UK.

Professor Steve Dorling of Weatherquest said, "There are exciting times ahead for the UK wine sector, but our results have emphasized the challenge of establishing wine identities and brands, in particular those tightly associated with varieties and wine styles, in a rapidly changing climate." [TL](#)

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