

France's cultural heritage withers on the vine

News analysis

Wine growers blame global warming for upsetting the flavour and balance of grape harvests, says Esther Bintliff

Christine Vernay was on holiday in Missouri when she got the call. It was August 12 2003 and the French vineyard owner was not due to return home for 10 days; the harvest on her Rhône valley estate would begin in late September. But then a friend from the same village, Condrieu, called her husband's mobile phone. "The grapes have ripened early. You need to come home now," he said.

France was sweltering in the most extreme heat wave on record. Christine and her husband, Paul Ansellem, caught the first flight back but by the time they reached the vineyards most of the grapes in their 18 hectare estate had shrivelled on the vine.

Instead of rows of plump, light golden fruit, the couple found shrunken berries, burnt brown by the sun. "We'd never seen anything like it," says Christine, a 52-year-old mother of two, who took over the renowned Vernay estate from her father in 1997. She scrambled to arrange a harvest within three days of their return. Even so, the

vineyards produced only half its usual volume of wine that year. The grapes were simply too desiccated.

Ms Vernay's experience offers a stark preview of what scientists say could be the future of the wine industry in southern Europe. Heat waves like that of 2003 will occur with increasing frequency in coming decades, they predict, while average yearly temperatures will continue to rise.

Martin Beniston, a senior climate scientist at the University of Geneva, and a member of the Intergovernmental Panel on Climate Change, says: "Where one heat wave summer can have a beneficial effect on some grapes, several in a row would take a heavy toll on all but the most robust species."

Since 2003, every summer but one – 2007 – has been hotter than the average of the 30 years before, according to France Météo, the meteorological office. This summer was France's fifth hottest since 1950, with the average temperature 1.3°C above normal.

In August, for five days in southern France reached 40°C; in Languedoc and Beaujolais, grape-picking began in late August, while even in northern France winegrowers are preparing for a premature harvest.

"It will be a very early vintage, without a doubt," says Jean-Louis Vézien, director of CIVA, the Alsace



Christine Vernay and Paul Ansellem on the Vernay estate in the Rhône valley

Mouillaud Richard

organisation of wine growers and handlers.

Franck Thomas, European sommelier of the year in 2000, believes the result is already altering French wine "profoundly". "If you harvest earlier... the alcohol content is higher [and] it unbalances the wine. For instance, with red wine, you have the maturity of the alcohol but not the tannins coming from the skin. So you lose the freshness, and the wine becomes tart and unpleasant."

He is not alone in his concern. In August, Thomas and 49 of France's top chefs, sommeliers and wine producers wrote to Nicolas Sarkozy, the French president, arguing that climate change was threatening the survival of the wine industry and pushing for France to demand a 40 per cent cut in global carbon emissions by 2020 at this December's Copenhagen conference.

"French wines, jewels of our shared, cultural heritage, elegant and refined, are in danger," they wrote in the letter, which was published in *Le Monde*. Their fear is that rising temperatures in southern Europe could render centuries-old practices of wine growing irrelevant. Grapes across the Mediterranean would roast on the vine before reaching full maturity.

France's position as a revered producer of wine is thanks to centuries of cultivation, after the Greeks and the Romans imported tech-

niques of viticulture into the Burgundy, Bordeaux and Rhône regions. But it rests on the delicate balance of climate and soil, and location.

"France's primacy at the top level of winemaking is an accident of nature," says Alun Griffiths, wine director at Berry Brothers & Rudd. "France just happens to be in the perfect position to make a range of fantastic wines. It's considered a reasonably marginal climate – just a bit farther north in Britain it's not quite hot enough; Africa is too hot."

If that changes, the specificity of certain wines could be destroyed for ever, according to Franck Thomas. "In 2003, the wines lost their identity. It was very bizarre. Wine from the Loire valley tasted like wine from the Rhône. If we don't do something now, in 30 years we will have that problem every year."

Ms Vernay's father, Georges, made 54 harvests before handing over the running of the estate to his daughter. In all but two of those years, they fell at the end of September, says Ms Vernay. "Since I took over we've had 10 consecutive years in which our harvests have been about 10 days earlier than normal.

"It's most important that we start stopping or slowing down the change in climate. Otherwise we are facing real catastrophe."

Culprits targeted

Focusing on other greenhouse gases and pollutants rather than carbon dioxide could lead to an easy victory in combating global warming, according to a report from the United Nations, reports Fiona Harvey.

CO₂ is often seen as the worst culprit in terms of greenhouse gas emissions and climate change, but the UN has estimated that nearly half of the emissions causing global warming this century will be other "climate changers", including soot, low-level ozone, methane and nitrogen compounds.

Tackling these is now a matter of urgency. Achim Steiner, executive director of the UN Environment Programme, told the World Climate Conference in Geneva yesterday.

Durwood Zaelke, president of the Institute for Governance and Sustainable Development, said: "UNEP's fast-action climate mitigation initiative could literally save the planet for the few decades we'll need to radically cut CO₂ emissions."

Low-level ozone acts as a greenhouse gas and cutting its levels would have benefits beyond the climate – annual losses from smog linked to ozone amount to \$5bn across China, Japan and Korea.