Understanding Wind, an Underappreciated Part of Wine

BY ROGER MORRIS

Illustration by Julia Lea

Most winds that sweep through the world's vineyards bring both positive and negative results for winegrowers, often depending on the time of the season in which they blow. Whatever happens, you often can taste "the wind" in your glass.

Whether a gentle breeze or howling tempest, wind is generally an underappreciated part of a vineyard's terroir. Unlike soil, sun and location, you can't see wind. Yet, winds are very important to the quality and quantity of the wine.

In the U.S., we seldom give names to winds, but Europeans and Asians have honored them with almost human characteristics.

Perhaps most famous, the Mistral powers down through the vineyards of the Rhône Valley, then fans out into parts of Provence and Languedoc. The Sirocco is the fierce, often sand-filled wind that blows off the Sahara Desert and flies north through the island vineyards of the Mediterranean.

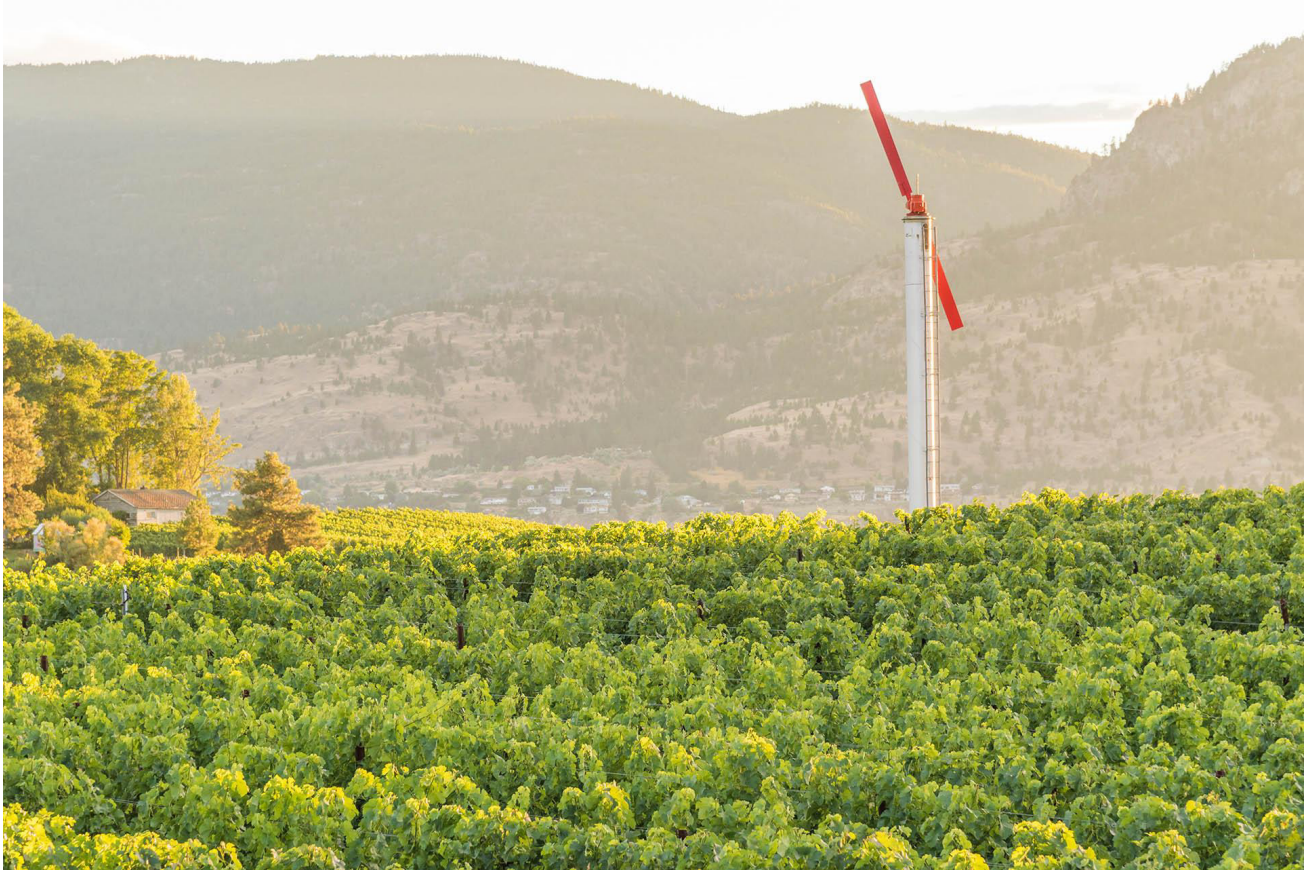
"The old people say, 'The Mistral can destroy grapes, but overall, it saves grapes,'" says Victor Coulon, whose family owns Domaine de Beaurenard in Châteauneuf-du-Pape just outside of Avignon.

That duality can be observed in vineyards around the world. Winds can cause the most damage in spring, do the most good in the weeks before harvest and have mixed results during summer.

In the springtime, when tender shoots and buds can be killed by frost, air movement through the vines can ward off freezing for a few degrees. For one recent vintage, grape growers at Cloudy Bay and other Marlborough producers brought in a fleet of helicopters to hover over the vines in the cold, early dawn hours to circulate air.

In Argentina, the Zonda wind blows in from the Pacific Ocean and down over the Andes Mountains.

“When Zonda blows in Mendoza, it produces a quick increase of the temperature and drops the humidity to almost zero,” says Franco Bastias, chief agronomist for Domaine Bousquet. It helps to hold back freezing temperatures that creep north from Patagonia.



Wind machines, like this one in British Columbia, Canada, help to protect a vineyard from frost damage./Getty

But spring winds can also do a lot of damage. On the Sicilian island of Pantelleria, winds from Africa during the late spring often influence crop size.

“Pantelleria is only 38 nautical miles from Africa,” says Antonio Rallo, whose family owns Donnafugata. “Between March and May, the wind can be insidious. The more intense, the less will be the quantity of the shoots whose flowers will grow into berries, and the fewer clusters of berries, the scarcer the harvest will be.”

The scenario flips in summer, when humidity in most vineyards rises. Rainstorms are common.

“Wind and sun are nature’s antibiotics, and wind dries things out more quickly after a rain,” says Ed Boyce, co-owner/winemaker at Black Ankle Vineyards in Maryland. “Downy mildew, for instance, needs about six hours of wetness to establish itself, so a nice breeze after a storm can significantly reduce the incidence of disease.”

In Châteauneuf-du-Pape, Coulon says that the strong Mistral “blows away the clouds, helping our region be so sunny. The vines love it.”

In California’s Santa Lucia Highlands, cooling winds are as regular as clockwork. They begin around noon each day, from Monterey Bay and up the Salinas River Valley.

“Two things are happening during berry ripening as a result of photosynthesis,” says Steve McIntyre, owner of McIntyre Vineyards and the Monterey Pacific vineyard management company. “The first is accumulation of sugar. The higher and longer the temperature, the faster the sugar content rises in the berry. Everything else—flavor, aroma and structural precursors—is only time dependent, so higher temperatures have no impact on accumulation.

“The wind slows the process of sugar accumulation, allowing more time for all of the other goodies to accumulate in the berry, [and is] one of the reasons our growing season is so long.”

In the Sta. Rita Hills of Santa Barbara County, Matt Dees deals with strong coastal winds up to 50 miles per hour in the vineyard from which he makes The Hilt wines.

“Clusters are smaller,” says Dees. “Skins are thicker, and the resulting wines are defined by concentration of fruit, high acidity and a powerful tannic structure, producing some of our finer wines, but often in smaller quantities.”

The vineyards in the edges of Israel’s Negev Desert also need relief from the heat.

“The westerly winds off the Mediterranean during summer serve to cool the vineyards near the end of the day,” says Eran Goldwasser, winemaker at Yatir Winery.

One of California’s newest appellations, the Petaluma Gap, became an American Viticultural Area (AVA) in 2017. It’s partly defined by its “wind gap” that channels cold air from the Pacific Ocean into the interior of Sonoma and Marin counties.

“Wind dries things out from the cooling fog, and we need that window of time,” says Ria D’Aversa, farming manager for McEvoy Ranch. It’s especially important to an organic operation like McEvoy, where synthetic sprays can’t be used to kill fungus.

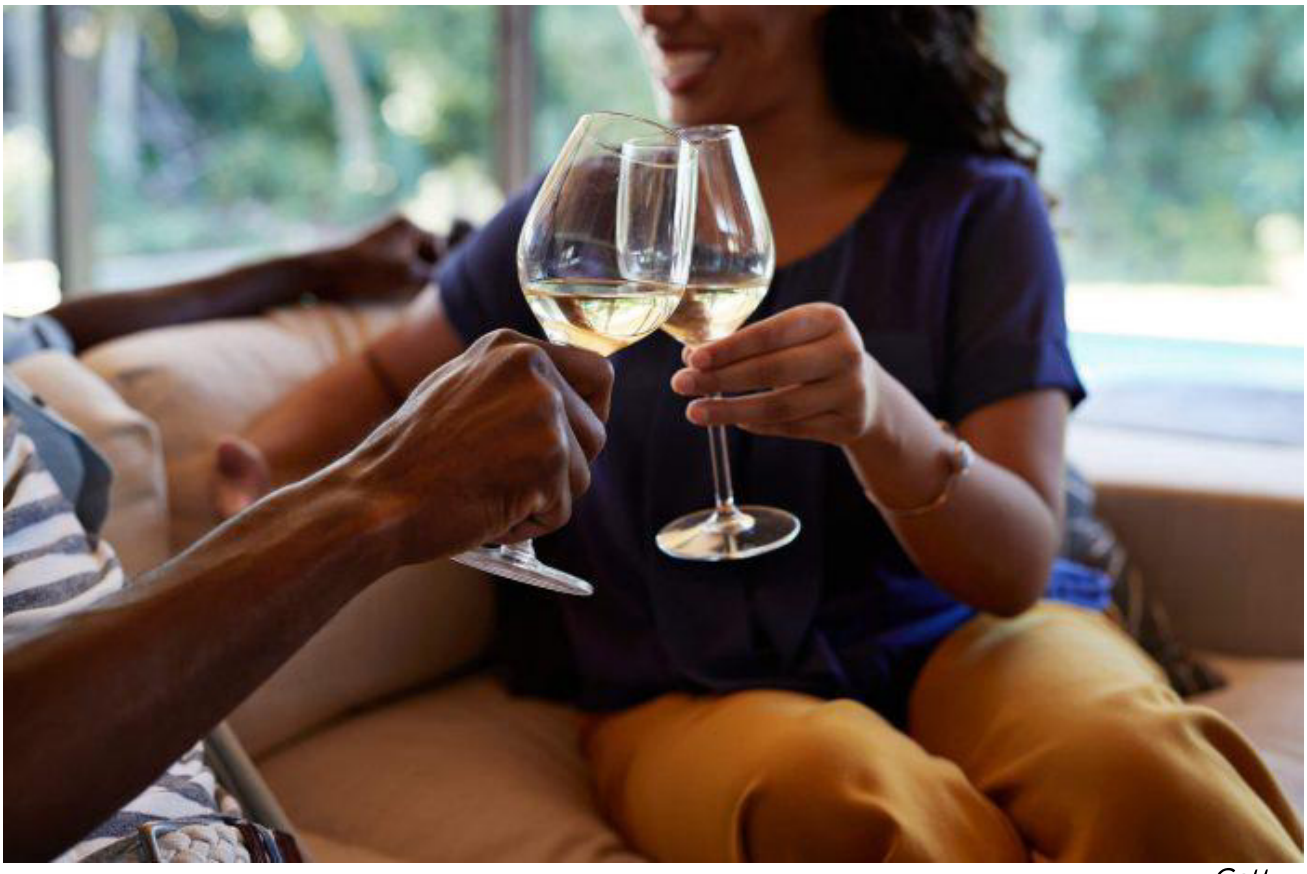
Winegrowers on the East Coast worry about another type of harvest wind: hurricanes that sweep up the Eastern seaboard.

Anthony Vietri, owner/winemaker at Va La Vineyards in Pennsylvania, has made wine through a few hurricanes, but one that struck just before harvest sticks out in his mind.

“That one knocked down an entire end row loaded with Pinot Grigio,” says Vietri. “We had to reset new posts with the trellises still burdened down by vines full of fruit. Not fun.”

This French Region Produces Timeless White Wines

BY ANNA LEE C. IIJIMA



Getty

While the Northern Rhône Valley is best known for Syrah, roughly 15% of the wines produced in the region are white. The whites of Condrieu and Saint-Joseph, two neighboring appellations with distinct expressions, are often underappreciated. Condrieu is devoted entirely to the production of Viognier. Saint-Joseph, Hermitage and Crozes-Hermitage produce whites from only Marsanne and Roussanne.

Northern Rhône whites are a marked contrast to fashionably zingy, linear wines like Riesling or Sauvignon Blanc. These wines are distinctly lower in acidity, with a richness and perfume that can border on flamboyant. They are timeless, if not trendy, wines often overlooked on restaurant menus and store shelves.

Until the 1990s, Viognier was rarely planted anywhere beyond Condrieu. Known for its dizzying perfume and ample, often blowsy, demeanor, it is as lusty and full-throttled as whites come. Cultivated amidst the steep, sunny hills of Condrieu, it yields heady, acacia-scented wines pulsating with flavors of peach and apricot and edged by notes of musk, marzipan and spice.

In Saint-Joseph, as in Hermitage or Crozes-Hermitage, white wines are typically blends of Marsanne and Rousssane. Marsanne is the softer and more zaftig of the two, producing full-bodied wines with a honeyed, oily richness and broad pear and peach flavors. Roussanne is more pert, offering fresh herb notes, delicate floral tones and peppery spice. Fine tannins and higher acidity give Roussanne a bit more edge than Marsanne. When blended, the plushness of Marsanne and elegance of Roussanne are delightfully complementary. Cheers!

François Villard 2017 Le Grand Vallon (Condrieu); $70, 96 points. Wafting of rose petals and peach marmalade, this is the lustiest, most flamboyant white wine imaginable. It's unabashedly hedonistic, classically Condrieu, and yet invitingly fresh and balanced. It's a bottling that's ready now but sure to please beyond 2030. ***Editors' Choice.***

Jean-Luc Colombo 2017 Amour de Dieu (Condrieu); $90, 94 points. Aromas of toast, vanilla, preserved peach and caramel are heady here, lending flair to orange cream and honey on the palate. It's rich and unctuous, silky in texture, but fringed by pleasing bitters. A beauty already, it should evolve positively through 2027. ***Editors' Choice.***

E. Guigal 2015 Ex Voto White (Hermitage); $320, 93 points. Smoke, cedar and vanilla tones are pronounced now, but plenty of succulent white peach, apricot and tangerine pulses at the core of this generous white. Rippling and rich yet freshly balanced, it's a sturdy bottling built for the long haul. Drink through 2026. ***Cellar Selection.***

M. Chapoutier 2017 Invitare (Condrieu); $70, 93 points. Crisp white grapefruit and tangerine flavors lend an unusually spry charater to this full-bodied but pristine Condrieu. Accented by whispers of vanilla and sweet spice, it's an alluring, expansive wine but elegant and restrained, not hulking. The finish is marked by a pleasant bite of tea tannins. Best now–2025.

Ferraton Père et Fils 2017 Les Oliviers (Saint-Joseph); $45, 91 points. A blend of equal proportions Marsanne and Roussanne, this intensely mineral white offers zesty lemon and yellow-apple flavors. Made with biodynamic grapes, it's a juicy, concentrated sip with a thirst-quenching, tangy finish. Enjoy now–2023.

Cave de Tain 2017 Nobles Rives Marsanne (Crozes-Hermitage); $29, 90 points. On first whiff, this full-bodied Marsanne seems a bit quiet, suggesting faint earth and smoke. The palate, however, is ripe and penetrating, bursting with plump white grapefruit and apple. It's savory yet satisfyingly fruity. The finish is marked by hits of salted nut and tobacco leaf.

Domaine Coursodon 2016 Silice (Saint-Joseph); $45, 90 points. Creamy, concentrated flavors of orange parfait and yellow peach are accented by crisp mineral tones and perfumed apple blossoms in this wine. Made from 100% Marsanne, it's rich and rounded but maintains a sunny brightness throughout. Enjoy now–2023.

Comments