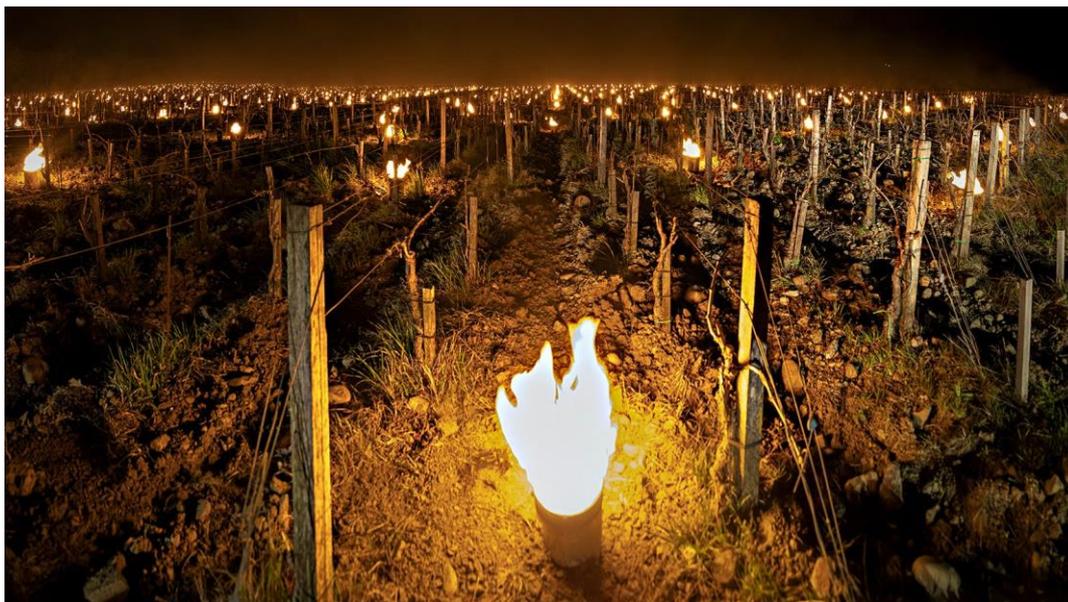


Frost Strikes Vineyards in Leading Italian Wine Regions

Vines in Piedmont and Tuscany were impacted by the same cold snap that devastated France; vintners say it will take time to know the extent of damage



On Tuscany's border with Umbria, the team at [Tenuta di Trinoro](#) lit fires in the vineyards on multiple nights, hoping to fight off frost. (Courtesy Tenuta di Trinoro)

The same cold front that [damaged vine buds](#) in an estimated 80 percent of French vineyards two weeks ago also struck Italy, leading Italian vintners report. Piedmont and Tuscany were unable to escape freezing temperatures over several nights. However, the damage was heterogeneous, depending on grape variety, elevation and how much the vines had grown since warm temperatures arrived in March.

"The damage is like the spots on a leopard—widespread but only hitting early varieties [such as Sangiovese and Merlot] exposed to the warmer sides of the hills and below a certain elevation, as cold air goes down," reported Antonio Michael Zaccheo Jr. of Carpineto, whose five estates are located in Montepulciano, Montalcino, Chianti Classico and Maremma.

Tuscan troubles

The frost was deadly this year because a warm March sparked many vines to start growing early. When a cold snap brought several nights of freezing temperatures April 6, 7 and 8, the young buds suffered. Frost tends to strike vines on valley floors and lower parts of hills more, because cool air settles there.

"Sadly, Sangiovese [in Montepulciano] was already budding in many of our vineyards, so for us the shoots from at least 50 acres [of vines] suffered anywhere from 50 percent to 90 percent damage," said Zaccheo. "In the Vino Nobile appellation I would guess at least one-quarter of the surface at lower elevations had similar damage."

Carpineto's vineyards in Montalcino are at higher elevations and his Chianti Classico estates are in cooler areas, thus were not affected. However, an experimental plot of Teroldego in Maremma was devastated, and Zaccheo estimates 50 percent damage to the Merlot there, while Vermentino was spared.

Antinori also has estates in multiple locations, including Tuscany, Umbria and in Piedmont. CEO Renzo Cotarella reports that they were spared in some appellations, but not all. "It was quite severe in Montepulciano, in the lower areas of Montalcino and also in Maremma," he told *Wine Spectator*. "We were also affected at Castello della Sala [in Umbria] with Chardonnay. Much better in Bolgheri, where the damage was very little—5 percent—and in Chianti Classico, thanks to the altitude."

Gaja's properties include vineyards in Barolo, Barbaresco, Montalcino and Bolgheri. Co-proprietor Gaia Gaja estimates the damage from the frost was minimal in Piedmont and Bolgheri, but some of the vineyards in Montalcino, particularly near Torrenieri were hit. "We had no damages in the Tavernelle area [surrounding their Pieve Santa Restituta cellars]," she said. "It is in the southwest portion of the denomination at [1,155 feet] altitude and temperatures reached [30° F]."

"The issue is more with the Torrenieri vineyards, an area which is in the northeastern part," she said. "There, temperatures dipped to [23° F] and we have some vineyards facing north that got particularly damaged. However, it's still very early to understand the damage because the vineyards here were pruned very late and there is a possible chance that the buds will recover."

Le Ragnaie proprietor Riccardo Campinoti owns parcels in several areas of Montalcino, from Castelnuovo dell'Abate in the southeast to Montosoli in the north. "The worst hit was my vineyard in the lowest part of Castelnuovo—everybody had damage down there," he said. "I am estimating over 50 percent of the production gone in that one. We have secondary buds and will see what comes out. [There was] also bad damage in the northern part in Montosoli."

Giacomo Neri also had vines impacted in Casanova di Neri's Tenuta Nuova vineyard near Castelnuovo dell'Abate, but little impact in Cerretalto further north. His parcels for the Brunello White Label were high enough to escape any damage.

Leonardo Bellacini, technical director for San Felice, says they were able to save about 50 acres surrounding the winery in Chianti Classico, but the wind was so strong that the frost affected vineyards up to nearly 1,500 feet in elevation. San Felice's Montalcino estate, Campogiovanni, suffered damage to about 80 percent of buds; its vineyards are at 925 feet.

Marco Pallanti, whose Castello di Ama vineyards sit, on average, above 1,500 feet in Chianti Classico, says his vines were largely spared. "The altitude of our vineyards and the low humidity are our natural protections against the frost," he said. While most of the damaged areas experienced freezing temperatures on the coldest nights of April 7 and 8, Pallanti's never dipped below 34° F.

Farther south, in the Orcia Valley near the Umbrian border, Tenuta di Trinoro suffered very minimal damage to buds on its Merlot vineyard. "The team of 24 people were fantastic. It took nine hours every night in really shivering cold to carry in, light up and then put out 3,500 candles," said owner Andrea Franchetti.

Piedmont's pain

In Piedmont, Renato Ratti owner Pietro Ratti was concerned that the forecast for cold weather would be a repeat of 2017, when frost not only damaged buds in the lower-lying areas, but cold winds swept up ravines, hurting buds in higher elevations too. Despite even colder conditions this year, the vegetation was not as far advanced as in 2017. Nonetheless, Ratti estimates the loss could be 30 percent in his Conca and Rocche dell'Annunziata MGAs. He also noted that his suppliers for his Nebbiolo Langhe Ochetti in Roero suffered up to 50 percent damage in their vineyards.

At Oddero, which owns vineyards in several MGAs around Barbaresco and Barolo, Isabella Oddero estimates a loss of about 25 to 30 percent of buds in the Gallina MGA in Barbaresco and in the San Biagio MGA, in the lower part of La Morra.

At Mauro Molino, which also has vineyards in La Morra, Matteo Molino says the parcels in the lower altitudes were not affected because the vine growth is less developed. "We have some loss in Bricco Luciani (10 to 12 percent) and in Conca (8 to 10 percent). [Our parts of] La Serra and Gallinotto have a higher altitude and have not been damaged fortunately," he said.

The cold weather also brought growth in the vineyards to a halt for several days. It will likely be another week or two before the exact impact on the overall production for 2021 can be evaluated.

Antinori's Cotarella remains stoic. "As you know, these kind of events are part of our business and we have to accept them, even if, especially for someone like me, they are really frustrating."



Tenuta di Trinoro placed 3,500 flames in their vineyards each night to try and keep temperatures above freezing. (Courtesy Tenuta di Trinoro)