As wine consumers seek greener products, Pam Strayer explains eco-certified wines and what makes them unique

# GOING GREEN



#### IN WINE, WE FIND LIFE

In life, we seek truth, craft and the passion of discovery. In life, we seek to build a community connected by a love for wine and wine culture. We are Maze Row Wine Merchant. We inspire a culture of fine wine discovery, a life that talks of people and their sense of place, of truth, craft and endeavor. An enriching journey, encompassing heritage, terroir, culture and philosophy. Through our curation of wines, stories and immersive experiences, we share the best of life with the adventurers, the bon vivants, the passionate connoisseurs.



rom Hummers and Teslas to coal and solar, industries across the globe are finding a new, green future, and moving towards it at warp speed. The same in the wine world. Not long ago, wine was simply red, white or rose. But today, new eco-wine categories — organic, regenerative organic and biodynamic — have exploded as more producers farm without synthetic chemicals, preserving their soil's health and getting the best expression of terroir in their wines.

Growing good grapes is a lot of work. Even in fine-wine regions, conventional and sustainable growers use heaps of synthetic fertilizers and vineyard chemicals — herbicides, insecticides and fungicides. To be organic or biodynamic, growers must pursue a purer path, using rigorous prevention practises and gentler materials.

Organic and biodynamic wine-grape growers farm without synthetic chemicals. That sounds relatively simple, yet it's anything but. By restricting the use of synthetics, whether they are substances with low health impacts to chemicals of graver concern, growers must switch to different methods from the start, beginning with fertilizers.

Organic and biodynamic vineyards use only (and often homemade) organic fertilizers or compost, whereas conventional fertilizers will undergo intensive manufacturing processes requiring considerable amounts of carbon. There are other ways to increase soil productivity naturally. Cover crops — the plants in between vine rows — aid in fertility by providing nutrition for the soils. Farmers will often rotate out the rows or plough them under every couple of years, or mow them, using the clippings as mulch, providing valuable soil protection and cover.



### Farmers who practice organic agriculture see that it returns life to their vineyards.

Much like our own diets, the choice of which cover crops to use depends on the vineyard, since there are different goals in different terroirs. Some vineyard managers guard their proprietary mixes, while eco-growers use native perennials, which naturally reseed each year.

Weed control is another challenge. Conventional growers use herbicides, which are based on glyphosate. Growers use herbicides in the winter and spring to kill weeds. Some fine-wine producers are reducing herbicide use, but they are still fairly ubiquitous.

Their tell-tale yellow strips of dead weeds on vineyard floors are obvious to passers-by. The herbicides can also kill healthy beneficials in the soil. Other deadly herbicides include paraquat, which is used on 13 percent of California vineyards, but not in fine wine regions like Napa and Sonoma.

Cover crops can aid in weed control, with beneficial plantings outcompeting weeds in the vine rows. Organic growers also use special under-vine cultivators that mow just the narrow strip under the vines. Growers may also use sheep to eat weeds and fertilize the soil, tamping natural nutrition into the ground with their hooves.

Fungal diseases are a threat in many vine-yards, showing up as mildews, rots and blights and spreading from vine to vine. In the US, while conventional wine growers commonly use synthetic fungicides, eco-certified growers have to find a way to combat fungal diseases naturally. While both conventional and organic growers use fungicides containing copper, many rely more on popular bio-fungicides, including Sonata and Regalia, which are approved by the United States Department of Agriculture's National Organic Program. Currently, research is underway to study plant-based solutions, searching for organisms that could naturally remove copper from soils.

#### MASTERING THE ECO ALPHABET SOUP

Organic is a materials-based, legal standard that requires growers to use only approved substances and submit to annual certified inspections. In the US, that is the USDA's National Organic Program (NOP), which creates regulations overseen by certifiers it approves. The most common of these in wine are California Certified Organic Farmer (CCOF) and Oregon Tilth. Farmers who practice organic agriculture see that it returns life to their vineyards. The organic conversion process takes three years before a grower can be certified. Meanwhile, organic wine production can cover the vines alone, or the vines and the wines.

Biodynamics is the oldest organic standard, based on a more holistic approach that integrates the use of herbal and mineral sprays, and teas into grape growing. The Austrian Rudolf Steiner is believed to be the catalyst for the biodynamic movement's origins in 1924, but it was his student Ehrenfried Pfeiffer, a soil scientist, who went on to name and to lead the biodynamic movement for decades, supported by a global community of farmers who made its practices public with the publication of the 1938 book "Bio-Dynamic Farming and Gardening".

Sometimes referred to as "organic plus," biodynamic producers must be certified organic as a baseline and go beyond a materials-only standard to an ecosystem approach. The required sprays it prescribes enhance the microbial life in the soil and plant health, promote better resilience during drought and rising temperatures and, in many cases, improve flavors.

In the US, biodynamic certification also has a biodiversity component, requiring growers to set aside at least 10 percent of their land to be wild. Another key component is the emphasis on polyculture and integrating animals and birds in the ecosystem. For instance, chickens, ducks and geese may eat the weeds on the

vineyard floor, providing fertilizer as they graze.

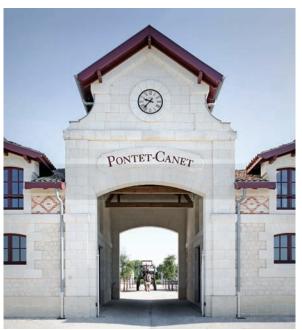
Many producers say soil health and vine quality are the main reasons they become biodynamic. Prestigious wineries such as Château Pontet-Canet in Bordeaux, Domaine Romanée-Conti in Burgundy, and Eisele Vineyard in Calistoga are among the most famous biodynamic producers. But there are also widely available biodynamic wines at more affordable prices to include such producers as Emiliana in Chile and Cantina Orsogna in Italy.

In Bordeaux, the husband-and-wife team of Gonzague Lurton and Claire Villars Lurton own four biodynamic estates — three are classified growths — and emphasize that although they are certified biodynamic, they provide more than the required baseline. "Certification is an essential step in avoiding all chemical products," Villars Lurton says. "But we have to go ahead in biodiversity, in cover crops, planting hedges and trees in the blocks of vines to reintroduce birds, small animals, microfauna, microflora and mycorrhizal life."

She stresses the importance of soil microbacterial life. "It allows vines to assimilate nutrients and make the connection between plants [and] trees," she says. "In biodynamics, vines must be connected with their soil in order to make more complete grapes and wine, expressing their terroir. They are the internet of the soil."

Increasingly, winemakers and soil scientists are focused on exploring in greater detail the life of microbial soil life, using state of the art research technology — from studying six foot deep soil pits (observed and precisely measured annually over decades) to fancy fMRI analysis — to learn more about this rapidly expanding scientific frontier. But for winemakers and wine consumers, it can simply be a matter of developing a taste for eco-friendlier wines.



















In Bordeaux, Vignerons Bio Nouvelle-Aquitaine brings together organic winegrowers to promote organic viticulture, while planting flowers between the vines at Château Haut Bages Liberal encourages a healthier soil

Photography Château Pontet-Canet ©Benjamin Deroche, Julie Rey, Joanna Margan. Château Haut Bages Liberal ©Gautier Dufau. Argiano ©Leigh Banks, Helen Cathcart Pam Strayer visits one of France's oldest wine regions to understand its latest efforts to satisfy consumers' thirst for organically grown wines

## BORDEAUX'S ECOLOGICAL PUSH

ordeaux — it's the source of some of the most sought after, luxury wines in the world. It also has a rainy, maritime climate that encourages mildew, making farming organically a challenge. So, it is all the more surprising that the world's most glamorous wine region is on the brink of becoming the country's biggest producer of organically grown wines. In 2021, France's organic certifier, Agence Bio, reported that Bordeaux is close to having 49,000 acres of organic vines on more than 1,000 properties.

"There is a big move from the most dangerous products to organic products," says Christophe Chateau, director of communications for the Conseil Interprofessionnel du Vin de Bordeaux (CIVB). "We now have 15,000 hectares (37,065 acres), cultivated with organic certification in Bordeaux and 5,000 more (12,355 acres) are going to be certified in the next two years. That's out of a total of 110,00 hectares (271,815 acres)," or around 18 percent of Bordeaux's vineyard acreage.

It isn't just the organic growers who are leading the way to a greener Bordeaux. Overall

vintners in the region are encouraged to follow eco-friendlier practises by planting diverse perennial cover crops between the vines for soil health, fertility and weed control, letting insect-eating bats live in their wine caves to help reduce vineyard pests naturally, or by planting trees and hedgerows to increase biodiversity.

But it is the organic folks in Bordeaux who are setting records. And they come in two groups. First are those taking the slow road—the high-end, prestige wineries in the Medoc, Pessac-Léognan and Saint-Émilion—that have seen moderate but consistent organic and biodynamic growth beginning in 2006.

"The luxury wine consumers are expecting the very expensive wines to be organic, and for those wineries to take a lot of care for the environment," Chateau says.

Organic and biodynamic can be markers for quality. A recent study by two wine economists, professors Magali Delmas from the University of California, Los Angeles, and Olivier Gergaud of Kedge Wine School in Bordeaux, looked at critics' wine scores for 128,000 French wines over a 20-year period. Including scores from more than 30 critics, the study found that organically

certified wines rated six points higher on average than non-certified wines, while biodynamic wine scores were 12 points higher on average than non-certified wines

Then there are those on the fast path. "The big market for organic is the middle range [market]," says Chateau. "We have high pressure from the consumers and also from the buyers, the trade and the supermarkets."

#### **REACHING NEW HEIGHTS**

When two Bordeaux châteaux went organic — Château Pontet-Canet in 2010 in Pauillac and Château Guiraud in Sauternes in 2011 — they were among the first of the classified growths to be certified. In 2018, Château Latour became the first of the First Growths to be certified organic.

In 2020, the CIVB reported 3,459 acres of certified biodynamic vineyards on 72 properties — a movement that may be catching on with the classified growths estates, as well: Château Pontet-Canet in Pauillac and Château Palmer in Margaux are also certified biodynamic. After converting to biodynamics, Pontet-Canet's scores went from 90 points in 1999 to 97 points in 2016.



Château Pontet-Canet (pictured) and Château Guiraud were among the first of the classified growths to be certified in 2010-2011

The Lurton family have played a large role in expanding the biodynamic footprint in Bordeaux. Over generations, the family has grown from négociants into renowned vintners, with the husband-and-wife team of Claire Villars Lurton and Gonzague Lurton first going biodynamic in 2007. The couple now have three classified growths among their four certified biodynamic châteaux in Margaux and Pauillac: Durfort-Vivens, La Gurgue, Ferrière, and Haut-Bages-Libéral.

In Sauternes, Berenice Lurton of Château Climens in the Barsac appellation, converted to biodynamic certification in 2010. Château d'Yquem, where Pierre Lurton is the CEO, also converted.

On the right bank, prestigious wineries who were early to certify include Saint-Émilion Grand Cru producer Château Fonroque. Owner Alain Mouiex received organic certification in 2006 and biodynamic in 2008. He also converted Château Mazeyres in Pomerol to organic in 2015 and biodynamic in 2019. Château Guadet was another early adopter, going organic in 2010 and biodynamic in 2014.

Other notable Saint-Émilion Grand Cru producers who are certified both organic and

biodynamic include Château Fonplegade, owned by Napa Valley vintners Denise and Stephen Adams, and Château Mangot of the Todeschini family.

At the tiny family-owned boutique winery Lapelletrie, another Saint-Émilion Grand Cru, proprietor Anne Biscaye is in her final year of conversion to organic certification. She preserves a precious block of 70-year-old Merlot vines on the estate and grows flowers between her rows as food for her insect predators, bats, thus reducing spraying. In Pessac-Léognan, the Grand Cru Classé Château Smith Haut Lafitte, owned by the Cathiard family, is certified organic.

#### **BUDDING TREND**

While Bordeaux's classified growths account for most of the region's renown, they represent less than 5 percent of its wine production. Other tiers and regions are fueling the organic boom.

The number of consumers who regularly buy organic everyday wines has doubled in the last six years, from 17 percent in 2015 to 26 percent in 2021, according to the latest report by the French association, SudVinBio.

In Bordeaux, it's producers in Blaye-Côtes de Bordeaux and Côtes de Bourge who are meeting this demand. In Blaye, some 28 percent of the 14,579 acres of vines are already certified organic, and more are in transition.

Currently organic growers in the low to middle tiers are paid a premium for their organic grapes and wine, to cover the increased farming costs to be organic, according to Chateau.

Today consumers can find the whole range of organic wine options from Bordeaux — from everyday wines to collectible, ageworthy gems. It's part of the earth-and health-conscious movement driven by consumers who want wines more in line with their environmental values and planet-friendly palates.





With organic practices and principled winemaking, winemaker Barbara Widmer at Brancaia is crafting some of Tuscany's boldest wines.



