



## Clos Mogador and The Rise of Regenerative Viticulture



**H**uman-generated carbon dioxide is the primary contributor to global warming, and its impact will only intensify if ongoing greenhouse gas emissions are not reduced. In response, people from diverse sectors are taking action.

Farmers, in particular, are contributing through practices like regenerative farming, which focuses on revitalizing soils and ecosystems using the carbon cycle. One regenerative practice involves the transfer of carbon dioxide from the atmosphere into the soil by using cover crops, like legumes, which employ photosynthesis to capture and sequester carbon.

Until 2021, with the founding of the [Association of Regenerative Viticulture](#) (RVA), there weren't any organizations specifically tailored for viticulture under the regenerative agriculture umbrella. The RVA was established in collaboration with ECOCERT, a leader in organic farming certification, and is open to wineries globally. With over 80 members across six countries, the association fosters collaboration and knowledge exchange within the wine industry.

Among the organization's five founding members is Clos Mogador, a winery in northeastern Spain's Priorat region. Founded in the early 1980s by René Barbier, the winery pioneered the revival of the terroir and wines of this remote and rugged region. Today, Barbier's sons, René and Christian, follow in their father's innovative footsteps, advocating for regenerative viticulture.

In a conversation via email, Christian Barbier elaborated on the importance of our soils in restoring climate stability.

## **Lisa Denning: What is regenerative viticulture, and how does it benefit the environment?**

*Christian Barbier (in photo below): Regenerative viticulture is, in short, a model focused on restoring life to soils by imitating nature. The more alive soils are, the more they can capture atmospheric carbon dioxide and the more they can contribute to slowing the rise in temperatures.*

*In turn, the accumulation of organic carbon in vineyard soils will help to improve the health of these soils, increase their resilience to erosion and their ability to cope with drought as they will retain water better, and favor biodiversity, creating a balanced ecosystem that is beneficial for the vineyard and the planet.*

### **How does working regeneratively differ from working organically or biodynamically?**

*Biodynamic and regenerative agriculture are two practices of ecological agriculture that aim to balance the soil and create resistance to agricultural diseases, resulting in healthier and more natural products. The issue is complicated because each practice adds social and environmental demands to the equation.*



*Biodynamic agriculture observes a farm as a living organism, biodiverse in interconnected crops and habitats—the more self-sufficient, the better. Proposed by Rudolf Steiner in 1924 in central Europe, a farm's management is based on the application of medicinal preparations in homeopathic quantities, the preparation of the compost through its own system, the monitoring of the lunar cycle, and cosmic rhythms to balance the vital forces of the system.*

*Regenerative agriculture, on the other hand, combines various organic agriculture practices. The main aim is to achieve a high content of organic matter in the soil, improve the water cycle, reduce tillage, promote biodiversity, and utilize crop rotation, cover crops, and green manure. Above all, regenerative farming emphasizes carbon sequestration in the soil as a solution to combatting climate change. Also important are the use of charcoal and biostimulants, key line subsoil plowing and permacultural design. These practices have all been promoted by the Rodale Institute in the United States since the 1980s.*

### **What are the most important practices used in regenerative viticulture?**

*At Clos Mogador, the golden rule for us is to ensure the soil has the "3M's": Organic Matter, Minerals, and Microbiology. To do this, we implement the following practices:*

**Vegetal Cover.** *This practice gives structure to our soils, helps retain moisture, prevents erosion, and serves as a habitat for microbiology, birds, and insects. Additionally, it serves as grazing grounds for our horses, sheep, and chickens. We have been actively using vegetal covers for over 12 years.*

**Direct Sowing.** *We create vegetation "bombs" using clay, molasses, water, and seeds, following the [Fukuoka method](#), also known as "Do Nothing Farming."*

**Mulching.** *In instances of insufficient rainfall and overly dry soils that can't support vegetal cover, we cover the entire terrace with straw.*

**Pastures.** *We create a designated area enclosed with an electric shepherd to ensure that the animals we put in there can graze it in a single day. The grazing sequence involves horses, followed by sheep to consume the remaining grass, and then chickens to distribute droppings left by the preceding animals. Afterward, the plot undergoes an 80-day rest period, and this cycle is repeated across other plots until the whole farm is covered.*

**Animal Traction.** *Instead of relying on motorized machinery, we use animals to pull plows, carts, or other implements. We currently have a horse and three mules in the vineyards. The main benefits of this approach include eliminating the use of machinery, such as tractors, to avoid soil compaction, fertilizing with animal excrement, using more detailed work with modernized tools that are lighter and more efficient, and connecting the animals with the earth.*

**Biofertilizers and Phytotherapy.** *We have a biofactory for manufacturing our own products to apply to the vines. This includes Microbiology Creation, which enables a diverse undergrowth and various biofertilizers.*

**Phytotherapy:** *Using plants to heal plants.*

**Use of Local Plants.** We use horsetail, nettle, valerian, and comfrey, mostly grown in the garden.

**Use of Biochar.** We carbonize plant and pruning residues. The resulting charcoal acts as a nutrient and moisture reservoir, particularly beneficial in soils lacking clay, like ours.

**Compost.** We use 30% of our animals' manure, incorporating biochar and biodynamic preparations. The remaining compost comes from a rented plot in a composting plant, where we select manure from nearby cow farms. The composting system here mirrors the one we use for our animals at home, involving biochar and biodynamic preparations.

### **What are the requirements to become a member of the Association of Regenerative Viticulture?**

There are 2 levels of certification based on the level of implementation: RVA Certified and RVA Transition. The minimum requirements to obtain this certification are to have been working with regenerative viticulture for at least one year; to have completed training on the subject (introductory course taught by the Association); and to do physicochemical analyses of the soil through accredited laboratories and qualitative analyses once a year.

Wines that apply for the RVA seal must be certified organic or demonstrate that they come from vineyards that have been grown organically for at least three years following the rules currently in force. Vine growers and wine producers who start the certification process will have a mobile app (also available as a web app) that has a detailed work plan and a field notebook to keep track of the practices implemented and monitor the development of the vineyard. To certify the vineyards as regenerative, the vine growers must carry out an annual self-assessment using the app and a certification visit for the vineyards every three years, while the wines will be certified every through visits to the winery by the certifying company.

There is also a transitional RVA status, indicated as 'RVA Transition', that vine growers can use for up to six years if they are not implementing all the practices recommended by the standard. Once all the regenerative viticulture practices are implemented, these growers will obtain the 'RVA Certified' seal.

The mandatory regenerative practices established by the RVA include ground cover, no tilling, organic soil conditioners, rational grazing (or replacement mechanical control), preserving or increasing biodiversity, doing field testing and microbiological analyses, and ensuring animal welfare and decent working conditions. Optional practices include water management, the use of phytotherapy, and natural soil improvement methods.

In this [link](#), you can find information about the process a winery must follow to become a member. As it is international in scope, all interested wineries are eligible.