

REGENERATIVE AGRICULTURE IN BORDEAUX

Felicity Carter pays Domaine Émile Grelier a visit to see the future of viticulture.

Benoît Vinet flips the rubber mat with his foot. And seems disappointed there's nothing underneath. For most people, finding something under this mat would be a nightmare – it's a snake shelter. "No snakes today," says Vinet, and puts the rubber back.

This 8ha Merlot vineyard is a haven for nature. There are boxes for birds, tangles of undergrowth for hedgehogs, shady places for bats, and flowers springing between the vines for insects to feed on. It's thrumming with life.

But when Benoît and his wife Delphine arrived in 2012, there was nothing but a grass field. The transformation of Domaine Émile Grelier, in Lapouyade in Gironde, isn't just a testament to Vinet's hard work. It also models the latest scientific thinking about regenerative agriculture, which is beginning to be adopted in Bordeaux.

Polyculture returns

During a coffee break, Vinet sits at the long wooden table in his eco-house, built the same

time his vineyard was planted. Created from wood and other natural materials, it's kept warm in winter with fire, and cool in summer thanks to the forest out the back.

"When Delphine and Benoît came here, they had a lot of questions," says translator Nathalie Escuredo. "His family are farmers and they were organic since 1976." Deciding that being organic is no longer enough, the Vinets sought advice on how to encourage biodiversity from a number of scientific and regional associations, such as LPO Aquitaine, which gives advice on bird life, and Groupe Chiroptères d'Aquitaine, which promotes bat conservation. Altogether, the Vinets have partnerships with seven different organisations.

"The first step was to plant trees," says Vinet.

The Vinets were advised to plant ash and other local trees, as well as fruit trees. "Not oak," says Vinet, surprisingly, given the historic association between oak and wine. "The oak dominates the other trees and is prejudicial to the wine. When they grow close to oaks, the vines have less minerals and less expression."

The experts told him that trees would not

only create a better microclimate, but would also prepare his property for global warming. Now, 500 trees stand behind his house. Some of them are studded with owlies, where injured Little Owls take refuge.

Then came hedges – 600m so far. Hedges function as a form of pest control, attracting insects that prey on vine pests. A happy side effect is that hedges also offer shelter to hedgehogs. Although widespread until quite recently throughout Western Europe, the hedgehog population has fallen dramatically because farmers have uprooted trees and hedges to extend fields of monoculture crops. Pesticide use has also contributed to their decline.

"Last year we had four small ones born here," says Vinet. Now, conservationists turn up and deposit even more hedgehogs on his property. Vinet is happy to host them because he says they eat snails and slugs that would otherwise attack young vine shoots.

Then there's the long, lush grass growing between his vines, which remains unmown. "Mowing creates competition between the vines and the grass," says Vinet, which sounds counter-intuitive, until he explains that mowing causes the grass to put more energy into growing back, which means it extracts more soil nutrients.

Grass can be a problem in Bordeaux, because it traps moisture and creates humidity around the vines, but Vinet says he protects the vines by lifting the soil around the roots a little bit. He also sometimes grows vegetables in the vine rows: potatoes, onions and tomatoes. Although it sounds like a huge amount of work, Vinet says the farm mostly takes care of itself now. The truly back-breaking task is the pruning, because the vines are quite low.



Hedges encourage the return of hedgehogs.

Eco-agriculture

The Vinets are not the only people working on biodiversity. The Conseil Interprofessionnel du Vin de Bordeaux (CIVB) is on a mission to reduce Bordeaux's notoriously high pesticide load, and is encouraging growers to bring back trees and hedgerows, which were pulled out when the tractor came. Bats are another focus. "Two years ago we engaged with the Bird Protection League and on their suggestion measured the bat population," says Allan Sichel, head of the CIVB. "In France, there are 33 species of bats, of which 20 are present in the Gironde."

The study revealed that the flying rodents devour Eudemis and Cochylis moths, which feed on grapes. "Each bat will eat about 2,000 of these moths a night, so are very useful in regulating the moth population," says Sichel. "Therefore, if we had more bats, we'd be using less pesticides."

Bats, unfortunately, have a poor reputation, says Sichel. "A lot of people were scared of bats, saying they pull your hair out." So the first order of business was to reassure growers that bats are allies. "When you have bats, it's a good thing."

The CIVB has set up an online bat observatory, both to help growers identify the presence of bats and in turn contribute information about bat habitats. "What we'd like them to do is give us feedback on this internet site, to say 'I've got bats here and this is what I've done.'"

It's only one of the CIVB's sustainability projects. Another is encouraging the presence of pollinators. "The basic message we're telling everyone is that insects are important," says Sichel.

As well as keeping grass cover, hedges are encouraged. "We have a partnership with a

hunters' association, and they'll come and help plant the plants to create hedgerows," says Sichel, adding that such projects are cheap and useful and it doesn't take much to persuade people to get involved. Almost 23km of shrub hedges had been planted by the end of 2018, thanks to the help of Arbres et Paysages, a non-profit.

Not only that, but Château d'Yquem recently announced it was moving to organic cultivation, while Château Lafite has announced it is trialling it. The days of chemical farming are drawing to a close.

What cost?

As worthy as biodiversity is, it also has to earn its keep. Vinet says polyculture farming is cheaper than monoculture, because he doesn't need a tractor, pesticides or fertilisers. He doesn't yet have a winery of his own – though that's coming – but he has a vat and the right to work at a local cooperative, and says the vineyard work improves the taste of the final wine. To demonstrate, he opens a bottle. A 100% Merlot, it's tight and at first sip somewhat acidic. But over time, the wine opens up and shows layers of complexity. Vinet gives Meininger's a bottle to take away, and two days after it's opened, the taste is even better.

What's happening at Domaine Émile Grelier and other wineries in Bordeaux may look at first glance like an attempt to recreate historic farming methods. It is in some ways, but it's also an outcome of the best contemporary scientific and ecological thought. This isn't the past being brought to life – it's the future.

With thanks to the CIVB for providing a driver and translator.



Benoît Vinet, owner, Domaine Émile Grelier