

Small changes lead to big rewards



Allen and Andrea Hart own and run a small vineyard and winemaking business in the rugged timbered hillsides of the Pyrenees wine region.



The Hart's have a simple vision: "To make good wine, grow grapes and not drag down the environment while doing so."

Since purchasing their 58 hectare property, Allen and Andrea have worked hard to incorporate sustainable farming principles in their business and wine label – DogRock Wines. Their success was recognised in 2007 when they received the Powercor Grampians/Pyrenees Small Business Award for Environmental Responsibility. While Allen and Andrea may feel like they are not making a global difference, they certainly know it's a start, and are pleased to be business leaders in their region.

The Property

Planning has been a very important part of their business success.

In 1998, hillsides and gullies where vineyards were not to be planted were identified and revegetated with over 5,000 trees. In some locations native vegetation from lower rainfall regions in north west Victoria were selected. Another 1,000 trees were planted in 2000, with a survival rate of 30 per cent, mostly due to below average rainfall that year. Allen suggests that the successful trees of this region will change over the next 200 years. A subsequent whole farm planning course has revealed that there are still some zones which can be planted out.

While the tree planting at the winery naturally contributes to carbon sequestration on the property, Allen and Andrea do not currently see this aspect of their whole farm approach as a marketing opportunity. "We are yet to calculate how the trees contribute to the carbon footprint of the business," Allen said. "Staying informed about official government carbon neutral standards will allow us to capitalise on opportunities in the future while maintaining the integrity of our environmental mission."

The Vineyard

Currently wines are produced from vines covering 6.5 hectares of the property. It is estimated that this is about 60 per cent of the area suitable for viticulture on the property.

Allen and Andrea are closely observing climate trends and considering water storage options before committing to planting vines or trees in the remaining cleared areas.

Some varieties grown in the vineyard are unique for the area. Many people thought that Allen and Andrea would be unable to successfully grow the wine grape varieties Tempranillo and Grenache; however, they were confident that the changing climate would provide adequate growing conditions for these hardy varieties.

Andrea suggests that "as the weather changes it becomes easier and easier to ripen Grenache".

While much of the vineyard was planted to be dry grown, drip irrigation infrastructure has been incorporated to handle the increasingly dry conditions. A 'big roof' has also been constructed on one of the hillsides to harvest rainwater for the dam.

Allen says "one quarter of a megalitre of runoff captured by the roof, our answer to a roaded catchment, could be critical during the growing season".



The Energy

The winery's living quarters and winery design were very important aspects of ensuring a holistically sustainable business approach. Reducing the reliance on expensive energy is a significant business saving.

The property had no connection to mains power, meaning a lot of investigation went into power supply and building design. As a result, the house and winery are powered by solar and wind (house only) power. During winter, a wet back stove provides hot water to the house using renewable wood energy.

Throughout vintage, power intensive winery equipment is supported by a diesel power generator. Allen and Andrea estimate the machinery runs for a total of 50 hours per year. They estimate that carbon dioxide emissions produced from this fuel burning process is easily sequestered by trees planted over the years.

Both the house and winery are partially built into the ground, resulting in an even temperature throughout the year. This natural insulation of tanks and barrels significantly reduces energy needs for temperature stabilisation during fermentation and storage.

While traditionally white wines are cooled at about 14 degrees Celsius, Allen suggests that his Riesling does very well being cooled naturally to around 19 degrees Celsius. "This is particularly important when considering that fermentation with a low yeast count reduces the biomass of heat generating yeast in the fermentation process. More yeast leads to a more vigorous fermentation, which in turn leads to more heat energy and the requirement for further cooling."

Allen said starting with less yeast in the mix allows the white wines to be naturally cooled in barrels.



The Commitment

The business' commitment to sustainability and the environment is continued with the product packaging. Cardboard packaging is 100 per cent recycled and recyclable and new lighter weight bottles are being investigated. Andrea said decisions about packaging are not purely based on economics, but rather desire. "We want to do that anyway, its part of a nice big picture."

Flexibility to adapt to a changing climate and holistic view of the environment has proven a successful business strategy.

While the challenge of water remains a huge issue, Allen and Andrea have equipped themselves with some excellent strategies for staying ahead of a carbon constrained economy, including being energy self-sufficient and having a diversified water harvesting and use system across the property.

Allen quotes the saying - If everyone starts doing small things, then good things can happen.

"We need to look at what the vines are doing. They have no political agenda. They respond to the immediate environment around them. Harvest is getting earlier and climate change is becoming a part of our lives. We need to adapt."

For more information

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