

CASE STUDY: Three decades of sustainability and organic farming at a NSW vineyard

The Jarrett family has farmed in the Orange region for more than 30 years, building **See Saw Wine** around organic production and a deep commitment to land stewardship. They have worked to improve soil health, reduce waste and energy use, and conserve water. By continually seeking better ways to manage their farm and wine operations, the Jarretts are strengthening the resilience of their business in a changing climate.

The farm: See Saw Wine

About: Wine grapes, sheep and a wine processing operation

Location: Orange, Central West NSW

The challenges

- **First generation farmers:** When they bought their first block of land in 1991, the Jarretts had a lot to do – and a lot to learn.
- **Transition to organic practices:** They were labelled “new age” because they did not adopt “traditional ways” of managing the system. And because they were doing things differently, they also had to solve their problems differently.
- **New regulations:** There are increasing requirements for environmental, social and governance (ESG) reporting, yet nature repair or decarbonisation incentives often aren’t tailored to small operations.

The turning point

For the Jarretts, environmental sustainability and responsible land stewardship has always been front-of-mind. Owners Pip and Justin studied horticulture at university and were taught a biological approach to farming. Their view was, ‘healthy soils will lead to healthy whatever we grow.’

Their first major investment was three sets of high-quality 10KW solar panels, which were installed almost two decades ago, and still operate effectively today.



Maggie Jarrett is a 2025 Nuffield Scholar and handles ESG reporting and exports for See Saw Wine, her family's business.

When their daughter Maggie, a 2025 Nuffield Scholar, returned to See Saw Wine in February 2024 and took on the role of export and sustainability manager, the business doubled down on its commitment to helping with environmental and climatic issues.



On-farm changes

- **Fenced all major waterways:** Riparian zones have regained much-needed ground cover.
- **Sheep grazing throughout the vineyard:** Running the sheep in the vineyard for 10 months of the year instead of eight months reduces the need for slashing, therefore reducing CO2 emissions, increasing carbon and improving soil health through the introduction of different bacteria and fungi from the sheep droppings.
- **Developed a community of like-minded farmers and land managers:** The family found support within the vineyard industry, through Landcare, at conferences, and from other farmers. Maggie has also found support through the Nuffield program and Farmers for Climate Action.



I honestly think if there's something that you want to do (on your farm), talk to one person and then get them to pass you on to the next person. Eventually you will find out so much. You'll talk to people who have worked, lived it, breathed it... (the possibilities) that opens is quite crazy.

- **Equipment and machinery investments:** New refrigeration, a diesel-efficient tractor, a bigger press and multi row equipment saves money and time on operational tasks.
- **Switched to light glass for wine bottles:** "For the wine industry, the biggest carbon emissions are from glass. We have basically moved in our entire range to the lightest glass."
- **Introduced 'social governance':** A holistic approach to farm management, encompassing everything from the environment to the social aspects of agriculture.

Impacts

Improved water quality and reduced erosion: Fencing waterways has restored ground cover, significantly reducing erosion and improving water quality.

Reduced on-farm emissions and waste:

- Transitioning to lightweight glass bottles (from 700g to 360g) has significantly lowered the vineyard's largest source of carbon emissions.
- Wine cartons are made from 80% recycled cardboard and all packaging is recyclable.
- Sheep grazing in the vineyard reduces reliance on mechanical slashing.
- Tractor diesel use has halved since the business invested in a Fendt tractor.
- Stalks left over from the wine making process are used as compost.

Enhanced soil health:

- Soil organic matter has increased from 1% to 4%, improving soil structure and infiltration.
- Under-vine plantings and sheep manure inputs are also improving soil health.

Improved operational efficiency and reduced input costs: Investment in modern, energy-efficient machinery and equipment has streamlined operations, reducing labour and fuel use.

Future plans

The team at See Saw Wine is always looking for ways to improve the business' commitment to a sustainable future. Maggie says some ideas include:

- Increase electric fleet, e.g. electric van for deliveries.
- Floating solar system on the dam: This would generate power and reduce evaporation.