



# **‘COVENTRY’**

**Tamworth NSW**

Featuring Jared Doyle

## **Soil Carbon Project Case Study**

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# OVERVIEW

Management decisions are grounded in data at the Doyle family's beef property, 'Coventry', south of Tamworth, NSW.

The Doyle family's desire to back strategy with science underpins their successful registration of a soil carbon project with the Clean Energy Regulator in August 2024. It's the launchpad to transform their property with new infrastructure and fine-tuned grazing. This will improve soil health and increase pasture production, ultimately driving whole-of-farm productivity.



## SEASONAL CHALLENGES

Jared Doyle is the fourth generation to farm the 2,300ha property between Wallabadah and Nundle, alongside his wife Suz and children William, Charlie and Alessandra. His parents, Peter and Sally, are also involved in the business.

## SNAPSHOT Tamworth NSW

- Fourth generation family farm
- 2,300 Hectares
- 650 Angus breeders + followers and trade cattle



The realities of farming in a changing climate hit home in the past two years. Jared describes the 18 months through to winter 2024 as ‘extremely tricky’. Their rolling 12-month rainfall fell to just half of their expected 700mm at various times throughout 2023.

While conditions have now improved, their agile enterprise proved essential.

*“As well as an Angus breeding herd we run trading stock, which creates a pressure valve to adjust numbers in response to seasonal conditions”*

A quarter of their undulating farm – which has a 300m range in elevation – has been improved with perennial pasture species, 15% is annual cropping, and the remainder is native pastures.

“We’re fortunate to grow reasonable quality native species when it does rain, but it’s an area we’re looking to improve with more perennial species,” Jared said.



A challenge to feedbase production is weathering the 50-degree temperature range, with the thermometer dropping to -5°C in winter and climbing to 45°C in summer.

“It can be tricky keeping our temperate species alive during summer, and have the tropical species last long enough into autumn to make them a worthwhile feed option.”

An important tool for monitoring pasture growth has been the grazing management software, MaiaGrazing. Jared has used it for eight years to record stocking rates and feed availability and track grazing patterns, and drew on this data to support the soil carbon project.

# ENVIRONMENTAL OUTCOMES

Jared's interest in the soil carbon space is grounded in achieving environmental outcomes for his farm.

*“We wanted to improve the soil health and water holding capacity of our farm. When we started looking more into soil carbon, we realised there were complementary factors between the recommendations for improving soil carbon and the philosophy we were working towards to improve grazing management.”*

He connected with Atlas Carbon – a soil carbon project developer who combines grazing, agronomic and carbon advice with data and insights from MaiaGrazing.

“One of the reasons I enjoy working with Atlas Carbon is they have datasets through MaiaGrazing, so I have confidence in the information they provide us,” Jared said. “We’re actually learning from others who have already gone down this path.”

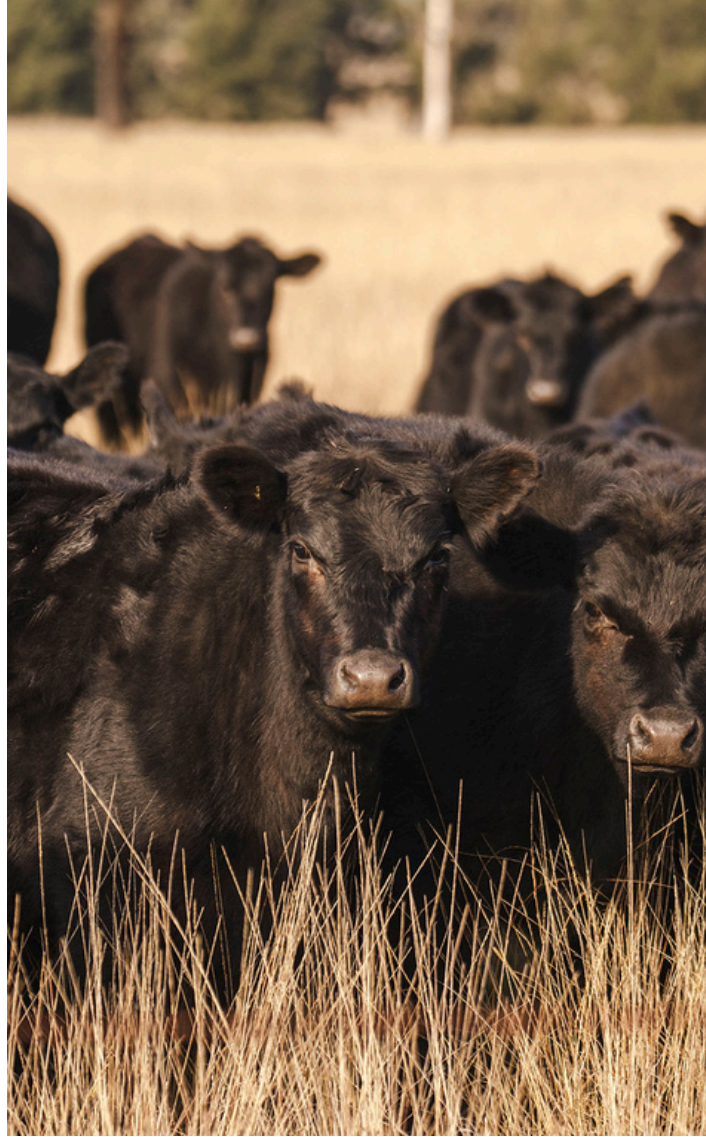
The first step saw Atlas Carbon crunch the numbers to assess if a soil carbon project was suitable for the Doyles' business, taking into account factors such as soil type, rainfall and current grazing. This initial stage, a free analysis for producers, provided them with food for thought.

“The numbers stacked up, so we moved to the next phase with Atlas Carbon, which includes a farm visit and subsequent Project Viability Assessment. This involved grazing and carbon specialists coming on-farm for a day to take soil samples and learn more about our business and objectives,” Jared said.

The viability assessment projected potential soil carbon and farm productivity increases. Based on these recommendations, the Doyle's decided to register a soil carbon project.

Atlas Carbon joined them as the co-proponents. Jared said the investment of time required to get the project up and going made working with a project developer valuable.

“Atlas took on the admin load, which was significant. As a co-proponent, they have a vested interest in making sure our project is successful, which gives us confidence.”



*“There was a cost involved in the phase, but I found it very valuable. Even if we hadn’t gone ahead with the project, it would have been a worthwhile process to identify our farm’s potential.”*





# WIRE & WATER

Now the project has been registered, the next step is to take soil samples from across the farm and analyse baseline soil carbon levels.

This sets a benchmark, so future carbon levels can be compared to track the impact of adapting new grazing strategies. Jared has also hit the green light on an extensive on-farm infrastructure project.

“As part of the project application, we developed a land management strategy to identify the steps we’ll take which are additional to our existing management. We can now start implementing these strategies, which include building fences, putting in troughs, then adjusting our mob sizes to match the paddock sizes.

“Like many family farms, ours was set up a couple generations ago to take advantage of what was regarded as best practice at that time. Transitioning to a more modern take on grazing management does require a big investment in time and resources.”



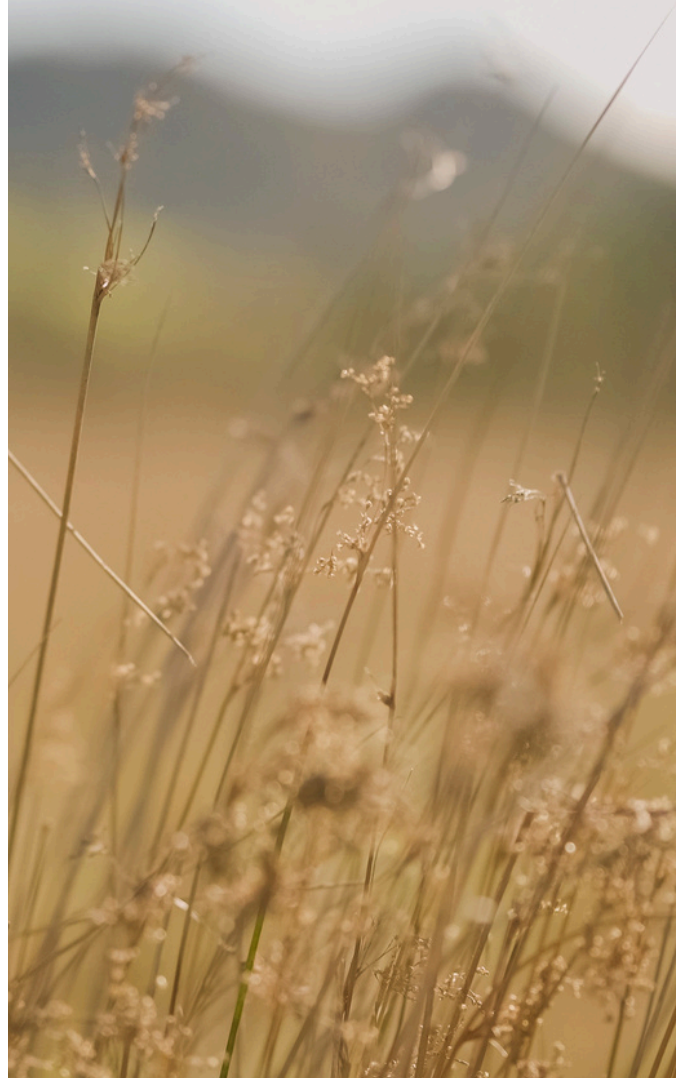
The new layout will support a transition from a three paddock/mob rotation to a 15 paddock/mob rotation. This will increase the area of pasture in rest at any time and extend the rest period between each graze.

*“More intensive grazing, combined with longer rest periods, reduces selective grazing and encourages pasture quality and diversity. This will support more targeted use of fertiliser and promote soil biology for healthier soils”*

While the investment is significant, Jared made the decision based on data.

“We were already gaining a better understanding of our paddocks and the influence of higher stocking rates and increased rest periods through the data we record in MaiaGrazing. This data gives us confidence to support the new configuration of paddocks.

“The soil carbon project just incentivised us to accelerate what we were considering doing over a much longer period – it’s fast-tracked it from a 20–25 year investment, down to the next 12–24 months,” he said.



“It's hard to conceptualise how we could achieve such improved productivity off the same area and the same – or more – animals, but I'm confident as the science indicates we will grow more grass on the same land by using the methods recommended through the soil carbon project.

“It’s a leap of faith – but it’s one backed by data. We’ve seen the data from MaiaGrazing and from another benchmarking group we’re involved in, as well as our own observations about what has worked when we’ve trialled more intensive grazing on a smaller scale. This gives me confidence to do this on a larger scale.”



# LABOUR REQUIREMENTS

When it comes to the labour requirements of moving stock more frequently, Jared's previous experience with rotational grazing gives him confidence cattle will become accustomed to the regular moves. He also sees the opportunity to transfer labour from other management activities.

"A goal of the infrastructure development is to improve the pasture base and provide more resilience in pasture, so I anticipate the increased stock movements will be offset by a reduction in hand feeding cattle. The cattle are the enjoyable part of being a cattle producer, so I'd rather be out in the paddock moving them than mixing up feed."

## LOOKING AHEAD

While Jared said he's budgeted conservatively for the ACCUs projected for their project, improving the health of his soil remains his primary consideration.

"I enjoy being involved in agriculture and helping to feed people, but I want to do it sustainably. Improving our soil health and the biodiversity of our farm, while maintaining the highest standard of animal welfare, are our motivating factors.

"I also feel having information about our soil carbon will be a valuable asset to help us to navigate a world where primary production is under scrutiny." With the 25-year project locked in, Jared is conscious of the long-term impact to the family farm.

"We're aware it's potentially overlapping with the end of my stewardship and someone else's stewardship – whether that's the next generation or someone else. But we feel it's important to start the process and sequester carbon in a way which improves our soil health.

We hope it will only make the farm more valuable in the future for whoever does take it over."





# Thank You



We hope you found this Case Study helpful in furthering your understanding of soil carbon projects. If you have any questions or need more information, don't hesitate to reach out.

## Contact us :



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