How our farm in Trawool is adapting for Climate Change

KEY FACTS

Property size: 960ha

Location: Trawool, VIC

Enterprise: Beef

Elevation: 140m-470m above sea level

Annual Rainfall: 650mm

Soils: light sandy gravel on hills; mix of heavy clay and sand on the river flats

REGENERATIVE GRAZING - SUMMARY

After taking responsibility for his family property, James was keen to integrate new learning so that his property was profitable and management of the soil, water and vegetation reflected his concern for climate change and finite resources.

After completing a Whole Farm Plan, James gained a much better sense of the farm as a landscape, the distribution of land classes, and the type of effort that would be required to utilise the whole farm area effectively.

I had moved towards higher inputs and an intense pasture improvement program in the search for higher production and a viable farm business, however in the Whole Farm Planning course I came to realise that 90% of our effort was going into 20% of the land area, where we could get the machinery. Through that course I started to consider the bigger picture, and to think about redirecting my focus towards the less desirable, but predominant, land classes. I came to believe that this was where the real potential upside was for our business, if we were willing to take on the terrain."

It was already evident that rotational grazing would be an important factor, and the issues of` healthy soil biology and soil carbon were starting to come onto the radar as factors in farm profitiability. In search of a way to improve soil carbon, I began a Regenerative Grazing course with Graeme Hand and Colin Seis. This course crystallised some of my observations, challenged many preconceptions, and ultimately made it seem possible to achieve a profitable, sustainable, and even regenerative farm management system, even on our terrain. Basically: as few mobs as possible, as densely grazed as possible, with as long a rest for the paddock as required for full recovery and regeneration.

This new approach requires a lot of stock water points, a lot of fencing, and a change of mindset. Now we put the health of the living soil first, and try to only take actions that have a positive, regenerative effect on the ecosystem in our care. Farm performance is not measured by production but by profit. Without inputs, long term profitability is tied to the health of the landscape; increasing as that health improves, and significantly reducing our financial risk and climate exposure by only stocking to our natural carrying capacity (what we can run on a 12 month rotation without inputs or supplements), adjusted to each season as it unfolds.

MOTIVATION FOR CHANGE

- High input costs, realising profit would be difficult in high input system, which could only be applied on a portion of the farm; needed an alternative
- Wanted to find a farming system that worked in partnership with the environment.
- To leave a family legacy which cares for the landscape and manage for climate change
- Very steep hills with varied terrain from river flat to granite plateaus
- Was it possible to produce and by producing it improving what you are producing on?

PRACTICES & INNOVATIONS

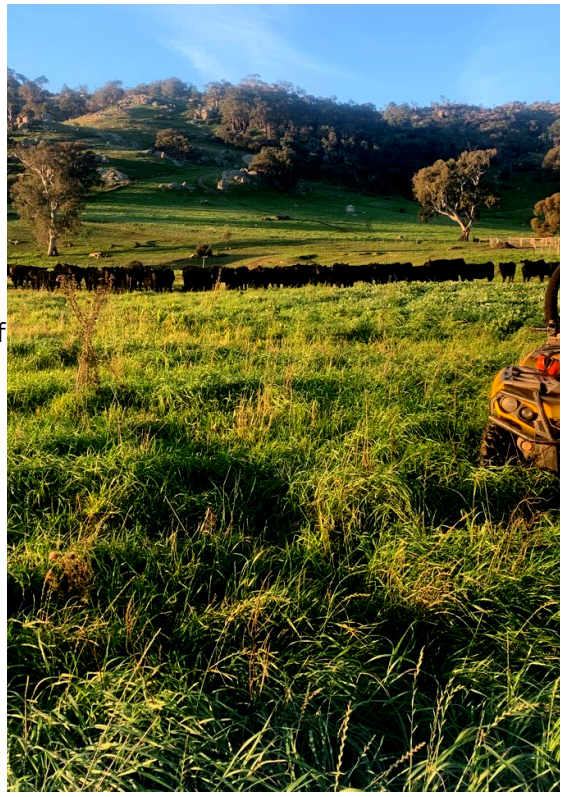
- Installation of 15kms of pipe, 72 new gravity fed water points, 5 new tanks & 38km of new fencing.
- From an initial 47 Paddocks, we now have 130, 108 of which are 50-100m wide grazing lanes to allow for easy division by tape and tread-in into (2 times daily or more) strip-grazing moves.
- Development of a grazing management plan that supports the development of soil and a biodiverse grass production.
- Utilising a web based mapping program to assist with paddock rotations so that staff can adjust paddocks in real time.
- Mentorship with Graeme through the transition has been a vital support.

LOOKING FORWARD

The changes James has implemented on his farm have been made over 5 years. He continues to plan for the future of his family and his farm.

His aims are to:

- Consistently grazing @ 1000 head per ha equivalent, 12 month rotation, a further 40kn of grazing lane fencing to assist management.
- Using this combination to increase soil health, landscape function, soil carbon, greater biodiversity, reduction/elimination of lower order weeds (patterson's curse, thistle, capeweed etc.) drought and seasonal variation resilience, lower risk and improve livestock health.
- To breed animals suited to the grazing system, potentially exploring different breeds, selecting animals according to performance in the system ie. a smaller animal with higher fat scores
- Marketing to a different customer base who value improvement of the environment in the production of their meat.
- Ultimately the aim is to produce healthy food in a way that improves the health of the whole ecology under our care, **moving from production through environmental deficit to production as environmental benefit.**



OUTCOMES

Ecological

The biodiversity in the pasture has increased, broadleaf weed has almost disappeared and the percentage cover is improved.
There is now no fertiliser use on the property and apart from managing blackberry, there is no pesticide or herbicide use.
The cattle are the primary tool for management of pasture improvement.

Soil

"For the time being we have stopped soil testing, in order to allow us to think in a different way. A soil test usually implies that as a result you have to add chemicals/nutrients to your paddock. We wanted to take time to observe our paddocks. What is the colour of our grass? What is the size of our plants? How long do they stay green and how quickly do they respond to rain? What is the number and persistence of the perennial plants? How has the paddock been managed in the past?"
James is looking at options for understanding and measuring soil health, aiming to resume soil testing within a deeper profile to monitor the effect of regenerative management over time.

Social

"The choices made have enabled me to maintain my core values and a pursue career that may otherwise be in contradiction to these values. The farm is now people driven, employing local people on a long-term basis and mentoring them to understand and engage in Regenerative Agriculture. The process of de-mechanising has allowed us to work with the cattle daily and made farming far more enjoyable and family friendly. People are curious and excited about the changes we are making, engaging in a new conversation about the environment and food production."

Economic

No input costs, selling down cattle numbers and redirecting input spending to instead make a long-term investment in grazing management infrastructure. This was part of the farm planning, risk management and business decisions in the early phase of transition, now more profitable with less risk, aiming for increased profit, and profit per head (50% or greater), as the landscape regenerates and stocking rate improves.