How our farm at Cosgrove is adapting for Climate Change



KEY FACTS Property size: 960 hectares

Location: Cosgrove, VIC

Enterprise: Cropping, wool and fat lambs

Average Annual Rainfall: 350mm

Soils:

SHELTERBELTS ON FARM

Managing climate risk has been a focus for Alex Graeme on his 960ha farm in Cosgrove Victoria. His family has owned the property since 1978, and he has been managing it for 36 years. In prime cropping country Alex grows dryland crops, wool and fat lambs. Part of his climate change strategy includes increasing shade, shelter and water.

Currently Alex and his wife XX run 1000 Merino ewes with a 60:40 White Suffolk to Merino cross to ensure high quality fat lambs and prime wool. 700ha is rotationally cropped with canola, wheat, barley and fava beans. They also grow lucerne and cereal hay.

The Graeme's have an area covenanted with Trust for Nature and managed for native vegetation. This, together with additional tree corridors and increasing water security for stock, is part of Alex's planning to protect his business from extreme weather conditions more likely in a changing climate.

MOTIVATION FOR CHANGE

- Desire to leave a legacy on the property to ensure continued care for the landscape is clear.
- To reduce the impacts of climate change on farm, such as the impacts of changing weather conditions, water availability for stock despite the lesser rainfall and protection of stock during extreme weather events.
- To have a self-sustaining fodder production system to reduce biosecurity risks and supply issues.
- To ensure the productivity of the business.

PRACTICES & INNOVATIONS

- Direct drilling of all crops to reduce soil disturbance
- Mulching the stubble in rocky paddocks
- Water reticulation systems with the ability to draw water into each paddock from multiple locations
- Experimentation with pasture paddocks growing species with the ability to handle xx
- Experimenting with pasture protection for lambing using Phalaris and keeping it tall
- Self-sustaining fodder supply for stock to reduce biosecurity risks and supply issues
- Shear twice a year to increase ewe health
- Planting shelterbelts for livestock shelter and crop protection from spray drift
- Precision soil sampling and mapping to inform more accurate soil management

LOOKING FORWARD

The changes Alex has implemented on the farm have been made over 5 years and he continues to plan for the future. His aims are to:

- Help others learn the importance of planning understanding the importance of water options for stock, native vegetation corridors, where hot and cold weather comes from so that stock get the best protection, and tree corridors for crop management.
- Put another covenant on their favourite place on the farm so that the native plants recover and the family can enjoy the space.
- Continue to enjoy their business and to reduce the risk due to climate change.
- Continue experimenting with long grass as a protection for lambing.



OUTCOMES

Ecological

We have planted approximately 80,000 native plants on the property and protected countless regenerated trees.

Where we have rocky outcrops, we are planning to try and protect them by adding them to our planting regime.

The tree corridors not only protect our animals from severe weather but also provide a buffer from spray drift in adjacent cropping paddocks. We have one covenant in existence currently and are looking to increase this to another special area of the property.

Economic

We are spending less on our lime, gypsum and single super now that we soil test regularly with precision mapping prior to purchasing fertiliser.

We shear sheep twice a year to improve our ewe health and ewe lambs.

Water infrastructure has been a large cost but we now know that our water can come from multiple sources and thus a level of security.

Social

Our favourite place on the farm is a native grass paddock. "My wife and I love walking in the area, we see something new every time and we are thinking about placing a covenant on the area", said Alex.

The multiple water supplies in each paddock provides us with peace of mind - we know the stock will always have clean water to drink.

Soil

Soil fertility has been a focus of our farming operation, but using precision mapping and regular soil testing we have further understood what our property needs and where, increasing the overall soil fertility.

We know that some paddocks are not suited to grazing or cropping so we are planning for these to become covenants and ensuring that we leave a legacy on our property.