



**Community
Grants Hub**
Improving your grant experience



National Landcare Program – Smart Farms Small Grants Round 2 Project Summary

Wanganella Plains Preservation Project Findings

Activity ID: 4-BA2U9L5



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The objective of the project was to address the lack shelter and protection for livestock and wildlife that was widespread on many of the properties in the Wanganella region. The region is predominately saltbush plains interrupted by a few intermittent timbered waterways. Many properties have paddocks up to 2,000ha in size with not a tree in sight to offer protection for livestock and wildlife. The conditions are harsh in those paddocks particularly for lambing ewes to shelter their new born lambs from the wind and chilly conditions in the winter months and extreme heat in the summer months.

The topic of tree plantations and shelter belts has readily come up in our neighbourly get together and it was suggested that we should apply for group funding and pool our resources, ideas, labour and machinery to increase the chance of achieving a successful outcome of increasing vegetated shelter in our region.



An example of the treeless plains that the project set out to provide shelter for livestock and wildlife

Upon acknowledgement of success in the funding application the following was carried out;

- *Public workshop on Establishing Shelterbelts with the Murray LLS at Wanganella Community Hall where the benefits of shelter belt implementation was discussed as well as best practice design.*
- *Shelter belt beds were prepared on all sites*
- *Protection fences were erected on sites*
- *Species were planted and watered in*
- *Watering was carried out a couple of times during the summer on selected sites*
- *Regular monitoring of site for pests and moisture all sites*
- *Regular group inspections of the sites in the project to see how the shelter belts had progressed and to discuss the different preparation and implementation methods used.*



Public workshop run by the Murray LLS at the Wanganella Hall

Caroonboon Station, Wanganella NSW owned by the Pye Family

Located NW of Wanganella

Site 1

Triangle Paddock

This plantation site was chosen due to very little tree cover and the lighter loamy type of soil.

This area wasn't fenced but the paddock was destocked to ensure there was no competition for species planted in the tree line.

As the soil was a light red loamy soil it had the potential to establish a good plantation, providing moisture was provided during the establishment of the species.



Area was deep ripped, species water in and tree guards installed.

The site chosen eventually proved to be unsuccessful as due to severe drought conditions, kangaroos and vermin from an adjoining swamp paddock annihilated the tree guards and species in the plantation.

As a lesson learnt, for this area to be successful, exclusion fences similar to exclusion fencing established in QLD to keep wild dogs out would have protected the plantation from predators.



Eucalyptus variety



Lucerne tree

Species planted

Lucerne Tree

Yellow Box

Myall

Old Man Saltbush

Silverton Gum

Blackbox

Site 2

Upper Weaner Paddock

This 2,000ha paddock had no trees.

The area was deep ripped, gravity watered with drains that run parallel to the 2 rows species in the plantation.

A fence was erected around the area 1000m x 25m.

A variety of species were planted. This plantation has been watered twice annually in March and December.

There were some predators that managed to damage plants but overall they were well protected with the tree guards and the secure fencing installed.

The Yellowbox, Old Man Saltbush, Boree and Silverton species were well suited to the soil and environmental conditions.

We planted 100 lucerne trees as an experiment with very little success. The softness of their trunk and branches while in the tube stock stage, they were easily damaged by wind and predators.

60% of species planted survived.

This paddock had no Old Man Saltbush in it previously and it is hoped once fully established, seeding will take place and increase the coverage of Old Man Saltbush in the paddock. As Old Man Saltbush can grow up to 3 metres tall, it will provide protection for livestock and wildlife from the elements earlier than the tree species planted.



Plantation was deep ripped



Two V drains were construction for retention of water next to the tree lines



Old man saltbush performed very well



Lucerne tree

Species planted

Lucerne Tree

Yellow Box

Myall/Boree

Old Man Saltbush

Silverton Gum

Blackbox

Site 3

Upper Weaner Paddock

This 2,000ha paddock had no trees.

The area in this small plantation which was planted on the eastern side of the paddock had no preparation other than very secure fencing erected around the area.



70% of species planted survived.

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This paddock had no Old Man Saltbush in it previously and it is hoped once fully established, seeding will take place and increase the coverage of Old Man Saltbush in the paddock outside the plantation. As Old Man Saltbush can grow up to 3 metres tall, it will provide protection for livestock and wildlife from the elements.

Old man saltbush performed very well in the compacted soil

It can also be seen with a netting format in this solid fence construction, that wildlife have been excluded and natural grasses have regenerated considerably.

Species planted;

Myall/Boree

Old Man Saltbush

Site 4

House Paddock

This plantation is made up of two rows of species each side of a road adjoining irrigation paddocks and was established to provide protection for lambing ewes on irrigation paddocks that are without trees.

The area was deep ripped and a V drain constructed to assist with watering of the plantation.

This plantation is watered twice annually in March and December.

Tree guards were installed upon planting and the area has since been fenced off to provide further protection from predators.

60% of species planted survived.

This area had no Old Man Saltbush in the area previously and it is hoped once fully established, seeding will take place and increase the coverage of Old Man Saltbush in the surrounding paddocks. As Old Man Saltbush can grow up to 3 metres tall, it will provide protection for livestock and wildlife from the elements.



Old man saltbush performed very well along with the Silverton Gum

Two V drains were constructed for retention of water next to the tree lines

Species planted; Myall/Boree, Old Man Saltbush, Silverton Gum

Millabong Station, Wanganella NSW owned by the McCrabb Family

Located NW of Wanganella.

3 sites visited on the property

The McCrabb family have for many years invested much finance and labour into the establishment of plantations on their property.

Preparation of the sites was carried out by deep ripping the sites over a couple of years to aerate and reduce the compaction in the sites. The fence line was a construction of 7 plain wires. Species were planted 3 metres apart and had a 50% survival success rate.



Yellowbox



Myall/Boree Species

Species planted

Mugga Ironbark
Red flowering Ironbark
Yellow Box
Myall
Old Man Saltbush
Silverton Gum
Blackbox

Old Man SaltBush established well



North Run Station, Wanganella NSW owned by the Wallace Family

Located NE of Wanganella.

Site 1

The soil was a lighter loamy soil in comparison to some of the other plantations on previous sites inspected.

The area was deep ripped in November. Sprayed for weeds.

The plantation species were planted and watered at the same time and had no watering other than natural rainfall runoff. The lighter soil was an advantage and the majority of species thrived. The success of this plantation impressed all that viewed it due to it receiving only rainfall and no artificial watering.

The plantation was made up of 2 rows 500 metres long of varying species planted 6 metres apart.



Fencing format



Old Man Saltbush



Species planted

Blackbox

Boree

Saltbush

Milgee

Belah



We measured and recorded our progress through monthly inspections of the sites and recorded the progress through documenting the growth through visual inspections and by photo documentation. Social media posts to the Caroonboon Merinos and Calga Dohnes Facebook pages were also used to share the progress and success of the project with a broader audience.

Significant outcomes from the project were the establishment of shelterbelts in areas void of trees and now in the early years of establishment successful results have already been achieved in the survival of species within the shelterbelts. They have survived drought, extreme heat, and predators. In many of the plantations native grasses have re-established and regenerated. The most prolific in growth of all the species planted was the Old Man Saltbush. As it can grow over two metres tall it will provide early protection from the elements for livestock and native wildlife while the tree species such as Black Box, Silverton Gum and Myall/Boree establish themselves and gain height and size.

Some unexpected outcomes from the project were strengthening of relationships between project participants along with other likeminded people in the community interested in creating a sustainable environment during a challenging time in the pandemic.

The final inspection of the sites renewed enthusiasm for the project and for the benefits that shelter belt implementation can offer land managers in the long term. Participants plan to have ongoing inspections to monitor how each shelter belt progresses.