

Shelterbelt establishment for pasture and livestock management, Kangaroo Valley, NSW

Location: Kangaroo Valley, NSW

NRM Region: Southern Rivers Catchment Management Authority

Industry: Beef Farming & Agroforestry

Issues:

- Low fertility soils
- Rain shadow - drought
- Shelter for stock - wind
- Linking remnant vegetation

Landholder Vision:

- To achieve farm sustainability and a profit from beef and farm forestry enterprises

Funding:

- The Australian Government Envirofund is the local action component of the Australian Government's \$3 billion Natural Heritage Trust.



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Small Farms and Rural Living Network

Southern Councils Group

The Project

The project will provide stock and pasture shelter from strong westerly and southerly winds often experienced for two-four months of the year, and reduce sediment movement into Kangaroo Valley River.

The project constructed 788 metres of (3-strand /2 barb) fencing (utilising existing fencing) and enclosing 0.53 ha of land. The project planted 850 native trees, shrubs and grasses across three sites. Each shelterbelt was positioned across the farm to increase farm biodiversity, reduce wind/ water erosion and provide shelter for livestock and pasture.

The property was de-stocked through the drought. The landholders implemented a plan to improve soil fertility, establishing competitive pastures / crops and constructing infrastructure to improve overall farm management. It was envisioned a combination of effective shelter, soil and pasture management would increase the overall carrying capacity of the property and improve the farms drought tolerance during dry periods.

The landholders expected to see:

1. Improved soil stability and less wind and sheet erosion across the ridges;
2. More native grass species and improved pastures across the property during dry/drought conditions through greater soil water retention (increased organic matter content);
3. Improved health and condition of livestock during cold and windy periods of weather, which will be monitored through weight measurements by the owner.
4. Increased biodiversity on farm linked to nearby bushland and riparian vegetation.

Results so far

Two shelterbelts were initially established on the main ridge and situated 100m apart in adjacent paddocks. Although both sites were initially slow to establish, most species are now over 2-3m in height. The third and final shelterbelt was planted 12 months later in ideal conditions. With unusual summer rainfall, this shelterbelt has established extremely well with most species 1-1.5m in height. Best practice was followed for establishment and maintenance, which including spraying, deep ripping, vigilant weed control and regular watering from a temporary tank installed on site.

The landholders have implemented their pasture management plan successfully and have dramatically improved the farms soil and pasture diversity. Ryegrass and clover is abundant across most paddocks as is evident in the photographs below.



Area 1- with HV power lines dissecting the two sites. All areas were sprayed and ripped before planting, which improves establishment and growth rates.



Area 2 – 18 months old (2 – 3m in height) due to excellent site maintenance



Area 3 – 12 months after planting. Excellent establishment and growth rates with water available from a temporary tank on site.

More Details

For more details about this project or to plan your own revegetation project, contact Andrew Britton, Small Farms Coordinator on (02) 4232 3200 or email

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