



natural resource
management program



A Decade of the State NRM Office Supporting the Shire of Mt Marshall

Despite the 1990s and 2000s being a period of increased attention and resources in Landcare, the period still saw a serious decline in perennial vegetation coverage in most Wheatbelt shires—and, unfortunately, it was not that high to begin with. The Shire of Mt Marshall’s level of perennial vegetation coverage in the agricultural zone reduced from 13.5% to 9.9% across this period.

The last decade has seen a consistent partnership between the Shire of Mt Marshall and the State NRM Office. While this decade did not mark the beginning of the relationship between the two, it has been focused on revegetating cleared areas and protecting remnant vegetation.

The effects of losing perennial vegetation include habitat fragmentation, water and wind erosion, and increasing salinity. This means that losing remnant vegetation is bad news, not just for the remaining vegetation and biodiversity, but is also a threat to the long-term sustainability of the region.

This decline in vegetation (and the associated environmental threats) will continue without concerted efforts to combat it.

Since 2013 there have been four projects supported by funding from the Western Australian Government’s State NRM Program.

Project	Farmers	Seedlings	Fencing km	Area protected (ha) – Revegetation and remnant
13111	4	30,016	4.1	65.2
A17198	4	24,288	2.1	44.6
CSGS185154	3	13,184	4.3	79.8
CSGS20113	2	5,056	7.9	66.7
TOTALS	13	72,544	18.4	256.3



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The fencing has not been the only aspect of the project that has provided landholders with the flexibility to tailor to their requirements for the site. In the first project, Damian Tomas wanted a design that benefited native birds: “When planting the site I wanted the seedlings closer together to give protection sooner to little birds.”

By fencing the site and using a wide range of soil type specific species, including under-, mid-, and over-storey varieties, it is planned that over time the sites will come to more closely resemble natural bush than traditional tree-planting projects. In turn, this will provide a wider range of landscape benefits from shade to habitat for native animals, and from windbreaks to combating salinity. When used correctly, properly planned revegetation projects are an effective management tool available to landholders.

When designing a biodiverse revegetation planting, a good rule of thumb is to work on 3 metres between rows and 3 metres between each seedling in the row. This works out to a planting density of 1,089 stems per hectare. However, different site shapes, purposes, and seedling type can alter the density from anywhere between 800 to 1,200 stems per hectare. For example, the density of sandalwood plantations can be even lower, while the density of fodder shrub plantations will generally be higher.

A Project 13111 Site

Max Lancaster has regularly participated in revegetation projects and the results he has achieved have all been outstanding. The below photos document the progress of one of Max’s sites over the decade covered by this document. This site is situated in a broad valley floor with the soil type being red loam with patches of Morrell—one of the most challenging soils to revegetate.

Late summer, after planting in winter 2014. The first summer is always a big test for seedlings. The survival rate here was approximately 75%.

2015





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100
1923-2023
MT MARSHALL

2017



Autumn, showing good progress in less than three years since planting.

2019

An overcast spring day.



2024



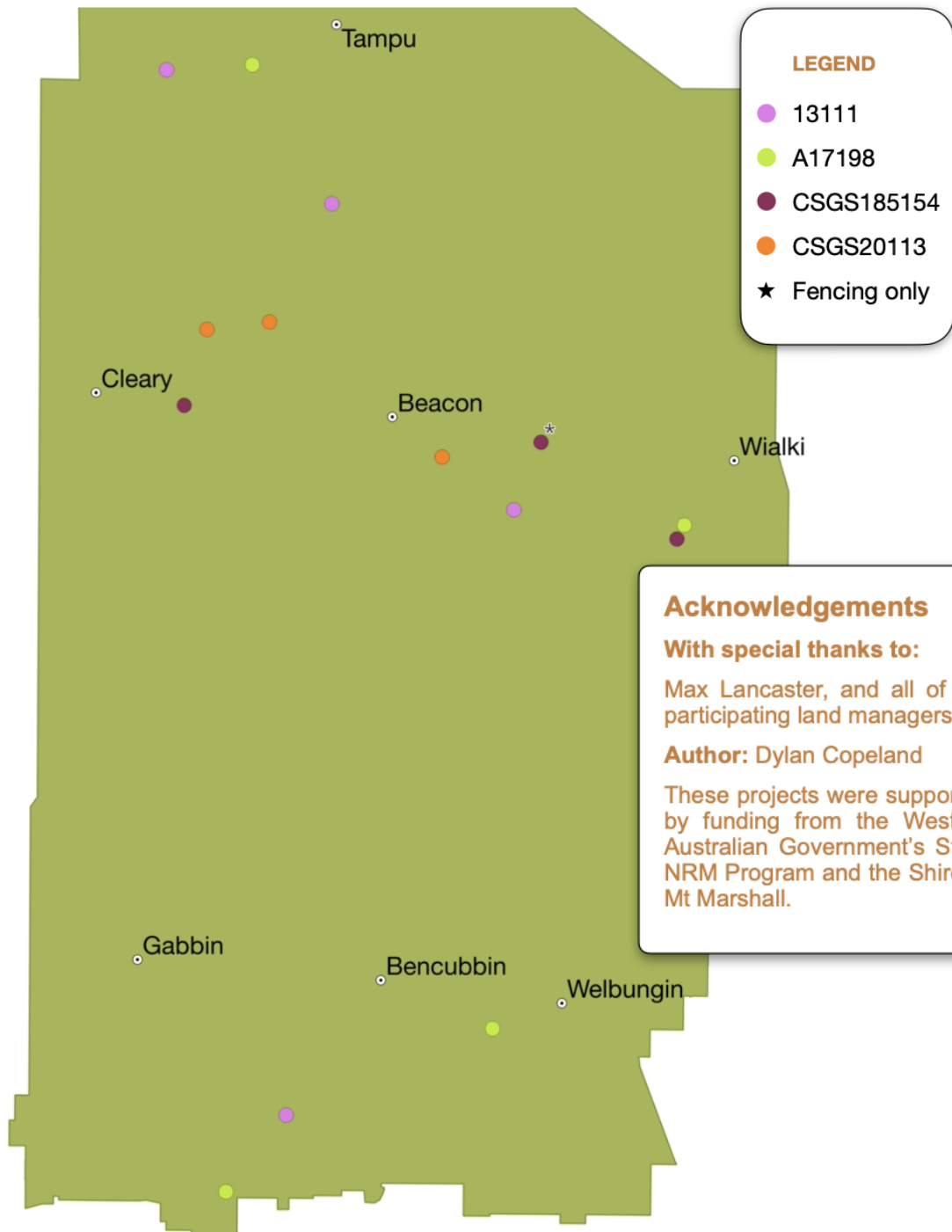
Late summer, just under 10 years after planting. At first glance the site seems dominated by eucalypts, but the more you look the more shrubs and understorey you can see.



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Sites by Project



Acknowledgements

With special thanks to:

Max Lancaster, and all of the participating land managers.

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These projects were supported by funding from the Western Australian Government's State NRM Program and the Shire of Mt Marshall.

Disclaimer: The information in this publication has been compiled from personal experiences and views of the participants featured. The author, Shire of Mt Marshall, and State Government do not accept any liability for possible inaccurate information provided.