

Restoring landscape-scale connectivity for the threatened Mallee Bird Community

A four-year targeted revegetation program (2024-28) will improve the connectivity and condition of fragmented habitat for the threatened Mallee Bird Community.

The Mallee Bird Community is an assemblage of 20 species that rely on mallee habitat across New South Wales, South Australia and Victoria. Listed as endangered in 2021 (*Environment Protection and Biodiversity Conservation Act 1999*), the community includes species such as Malleefowl, Mallee Emu-wren, Red-lored Whistler and Regent Parrot. Eight of the bird species are found exclusively in Mallee woodlands. The remaining 12 species are considered 'dependent' on mallee habitat where it is present but have a wider range extending into other habitats.

Habitat fragmentation: a key threat to the Mallee Bird Community

The widespread clearing of the mallee vegetation and its fragmentation into smaller, isolated patches is a key threat to the Mallee Bird Community. These fragmented remnants support fewer species and individual's resource needs. They are less resilient to the impacts of climate change and more susceptible



Red-lored Whistler, a mallee specialist which prefers mallee habitat that has not been burned for 21 – 44 years. Photo: Joseph Douglas.

to the effects of invasive species, fire, competition and grazing.

Fragmentation also limits the ability of the Mallee Bird Community to disperse between suitable habitats to access resources, breed successfully and to repopulate patches after disturbances. The resulting lack of exchange between populations reduces genetic diversity and increases the threat of further local extinctions.

Restoring biodiversity linkages to connect habitat for the Mallee Bird Community

To address the key threats of degraded and isolated habitat, 421 hectares of targeted revegetation works will be undertaken over four years (2024 – 2028). Guided by a 2014 report commissioned by the Victorian Malleefowl Recovery Group (Allen and Sluiter, 2014) and in consultation with stakeholders, the works will restore biodiversity linkages between State Forests, National Parks, and a private property across four priority landscapes: Berrook, Cramenton, Wyperfeld and Yaapeet (see Figure 1 for locations of planned revegetation works).

These areas will be planted with tubestock and direct seeded with a diverse range of key canopy, shrub and herb species to restore diversity and vegetation structure. To maintain genetic diversity and to safeguard against future climate change, seed will be sourced from a number of collection zones, including regions with climatic conditions resembling those modelled for the Mallee region past 2030. Seed collection and plant propagation will be undertaken in partnerships with local First Nations-owned nurseries.



Splendid Fairy-wren, one of 12 mallee-dependent species which utilise mallee habitat as part of a wider range. Photo: Joseph Douglas.



Berrook target area



Wyperfeld target area



Yaapeet target area

Figure 1: Locations of planned revegetation works on public land (2025-2028)

Species planted will include a range of Eucalypts, Acacias, Hakeas, small shrub species and Spinifex (*Triodia* spp.), an important plant for vulnerable ground-dwelling species such as the Mallee Emu-wren and Striated Grasswren. Over the course of the program, 66,600 seedlings will be planted, and 13.5 kg of seed will be sown. To increase their odds of survival seedlings are treated with Sen-Tree™ browsing deterrent, protected by tree guards and watered in at establishment. Seedlings will also receive follow-up watering at least twice post-establishment.



Small Hop-bush seedling planted in 2025 within a 24-hectare revegetation corridor linking remnant vegetation patches. Photo: Francine Scott.

Monitoring the success of the revegetation works

The Mallee CMA will routinely monitor the vegetation condition, seed germination and survival rates of tubestock during, and beyond the life of the program. Insights from the monitoring are incorporated into future plantings and can highlight factors driving success or failure.

Who is involved in this work?

The Mallee CMA will be delivering the revegetation works in partnerships with the Department of Energy, Environment and Climate Action, private land managers, Barengi Gadjin Land Council Aboriginal Corporation and First People of the Millewa-Mallee Aboriginal Corporation.

References

Allen, G.C. and Sluiter, I.R.K. (2014) An Investigation of Potential Landscape Links to Enhance Malleefowl Conservation in Northwest Victoria – June 2014. A report for the Victorian Malleefowl Recovery Group, Ogyris Ecological Report No. 2014 /13.

How can I learn more?

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