

# Landcare-led Landscape Resilience

Tools and data for restoration decisions

## Biodiversity Revegetation Cells, under White cypress

### OBJECTIVES

Establish small, modular revegetation sites within a paddock that remain part of the grazing rotation while also serving as vital connecting corridors across the property. By establishing protected nodes around existing old Cypress trees using low-cost materials, you can leverage the trees' microclimate and improved soil biome. This approach facilitates the reintroduction of endemic species within these zones, promoting enhanced biodiversity and creating stepping stones for broader ecological recovery.

### WHAT IS SUCCESS?

Completely removing the grazing pressure would allow the Cypress to naturally regenerate and with ongoing management the ecological processes would return over time. However, in situations that remain a vitally important part of the grazing rotation, regeneration is not possible. To ensure the future of the remnant population of White Cypress, regeneration is crucial. The modular approach will, in the short term, provide small islands of biodiversity. In the long term, with extensions, these islands will go on to become shelter belts and essential corridors for biodiversity across the farm.



*White Cypress sapling regenerating in an area fenced off from grazing on the property.*

### KEY STEPS

- Identify the sites and determine the dimensions that best suit the land use and desired outcomes. In this case, positioned along existing fence lines.
- Decide on preparation methods for the cells. A combination of planting, cool burning, and mulch introduction from other areas was utilised.
- Select species carefully, focusing on a few small shrubs and ground covers. Consider the existing seed bank, which includes White Cypress and other large tree species.
- Monitor the Biodiversity Revegetation Cells as you would for a standard revegetation project, ensuring weeds and pest species are controlled.
- Over time, expand or replicate the cells in other areas, leveraging the existing seed bank to help kick-start the process.



*Old growth White Cypress on site near the installed Biodiversity regeneration cells.*



## KEY LEARNINGS FROM EXPERIENCE

Restoration in degraded agricultural landscapes requires a long-term vision and dedication to unlock the site's potential. On working farms, complete closure of areas to embark on restoration projects is often impossible, so a modular approach is crucial. By breaking the landscape into small, manageable areas, we can focus on the most effective interventions to kick-start ecological repair. This allows for targeted strategies and efficient use of resources, while also integrating with existing farm operations. Creating concentrated pockets of high biodiversity within the landscape serves as ecological steppingstones, connecting with existing canopy and providing habitat islands. This strategic, modular approach enables meaningful improvements in biodiversity and ecosystem function, even in highly degraded spaces. By balancing agricultural needs with ecological goals, we can create resilient ecosystems and ensure the long-term sustainability of the landscape.

**Even modest budgets can yield significant ecological benefits.**



*Biodiversity Revegetation cell replication made from old gates, protecting climate ready Themeda being reintroduced to a Box gum grassy woodland site in Wagga Wagga*

## COST CONSIDERATIONS

Small-scale patches can be very cheap and effective, by utilising existing resources and carefully planning interventions, even modest budgets can yield significant ecological benefits. Making this approach to revegetation and regeneration, both economically viable and environmentally, are impactful for farmers and landowners. This modular approach would also be a cost effective way of protecting paddock trees and positively increasing biodiversity in cropping systems.

## RESOURCES

**Revegetation:** There are ample resources available if you are not working in an area covered by a revegetation guide. Contact your Local Landcare Coordinator or Natural Resource Management agency for further details.

- South West Slopes and Riverina Revegetation Guides <https://revegetation.org.au/>
- NSW state Governments Trees near me app <https://www.treesnearme.app/explore>.
- Australian Association of Bush regenerators <https://www.aabr.org.au/>
- Greening Australia <https://www.greeningaustralia.org.au/>