

THE IMPORTANCE OF PADDOCK TREES

One of the defining features of our Mansfield landscape are the sentinel paddock trees. They add value to our ecosystems and farming landscapes, while holding significant cultural values and increasing the aesthetics of our landscape. The value and importance of the humble paddock tree in our landscape is often underestimated.

Many of the large trees you see as you move through the Mansfield landscape are well over 150 years in age containing hollows that create essential shelter, refuge and breeding space for wildlife - 17% of bird species, 42% of mammal species and 28% of reptiles need hollows. These include animals such as bats, gliders, owls, possums, ducks, rosellas, king fishers, snakes, frogs and skinks. Exposure to the elements as well as, fire, lightning, insects, bacteria, and fungi over 80-120 years, dependent on species, creates these hollows, making them an irreplaceable asset.



Living in a fragmented landscape these trees create linkages for wildlife to move across the open farmland by providing refuge. Fauna such as micro bats and some birds play a huge role in controlling insect populations promoting natural insect control, with bats eating up to 700 insects per hour. Two to three paddock trees per hectare can result in a significant increase in these beneficial species on your farm. Old growth trees also provide a major food source for many species. Larger older trees flower more often and for longer periods of time. Blossom provides a food for nectar dependent animals, including bats, insects, birds and gliders and native pollinators.

Fallen timber and leaf litter provide habitat for insects and reptiles creating a food source for phascogales. The breakdown of these materials adds nutrients to the soil and increases water infiltration. Litter also increases desired elements in the soil well beyond the canopy of the tree. Due to their extensive root system these trees can recycle nutrients leached far beyond their root zone, buffer against soil acidity, and control against erosion and desertification.

Yearly, steers' energy requirements increase two and a half fold when exposed to adverse weather. Shelter for stock increases weight gain of which these trees can provide some of the shade and shelter requirements. Seventy-five percent of main food crops grown in Australia benefit from wild pollinators for pollination. Flies and beetles, among other insects, as well as birds and bats, play a larger role in crop pollination than is often acknowledged.

THREATS TO PADDOCK TREES

Unfortunately, we are losing these trees at a significant rate due to natural senescence, clearing, dieback and general absence of recruitment. Studies have found that paddock trees are dying at a 2.5%-11% rate annually, this is known as dieback.

There are many factors that influence dieback;

- Increased nitrification and compaction around the base of trees due to stock camps.
- Stock rubbing and eating tree bark
- Changes in land use and intensification of agriculture
- Decreasing soil moisture
- Changing climate, increased intensity and frequency of winds and storms.
- Insect Attack – due to decrease number of natural predators to control insect populations. High nutrient load in soils cause trees to produce more soft leafy growth, which has lower toxicity, which insects love.
- Salinity in some areas.
- Spray drift

WHAT YOU CAN DO TO HELP YOUR TREES

- Preserve fallen timber under the tree to reduce pressure from stock camping directly under trees.
- Have a succession plan for singular paddock trees by introducing new trees to grow and support older ones in clusters of four to five.
- Protect regenerating trees/ saplings by using large stock proof trees guards.
- Use temporary or permanent fencing to fence around existing paddock trees that are stressed and reduce the stock pressure under the tree. In larger areas introduce understory to help attract beneficial birds and insects.
- Incorporating more paddock trees on your property will improve the health of existing trees and make sure that there are trees in the landscape in the future.
- Create a paddock tree plan by looking at an aerial of your property to see where best to incorporate more trees into your property plan - or enlist the help of Up2Us.

It is predicted that within 40-80 years there will be a significant decrease in paddock trees in our landscape. That could be within your life-time, or maybe your kids' lifetime. So why not plant a paddock tree now??



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