Paddock tree planting to help Red-tails

There are many reasons why landholders undertake revegetation projects; equally there are many types of revegetation projects. Most projects quite rightly aim for the best 'bang for buck' to help balance the costs of restoration and the returns farmers need to maintain productivity. This means that projects tend to focus on shelter belts and creek lines, but there are times when landholders may be more interested in planting trees in a scattered pattern to create a paddock tree effect. This may be particularly suitable for grazing industries since stock can benefit from the shade and shelter while native animals can use these trees to move more easily between patches of native vegetation.

Paddock stringybark trees have been found to produce up to 26 times more seed than stringybark trees within patches. Thus, paddock trees offer potential benefits for landholders to help Red-tails without losing farm productivity. These trees may even increase production through benefits like stock shelter and pest control.



Paddock trees are increasingly being shown to have important ecological value. We know this to be the case for the Redtails. This fact sheet does not suggest that paddock plantings are preferred over other types of revegetation projects but it does provide guidelines for landholders wishing to undertake this type of revegetation work to benefit Redtailed Black-Cockatoos in southeast Australia.

Spacing of stringybark trees to obtain 'Paddock' effect

To obtain a paddock tree habitat effect ideal for Red-tails, we first need to determine how many trees to plant per hectare. In the Recovery Plan we have

stated; "Scattered paddock trees refers to trees growing as isolated trees, where total canopy cover is below 20%." After measuring a few healthy paddock stringybark trees, the average canopy diameter was found to be 16m, which equals (πr^2) 200m2 canopy cover for each tree. Thus 50 trees will give 100% cover and 10 trees per ha gives the desired 20% canopy cover. This then equates to a tree every 33m as per diagram. (NB 100mx100m = 1ha). Note that this diagram is purely for explanation of spacing; many landholders would prefer to plant in a less uniform pattern



How to protect new plantings of paddock trees

The Cockies Helping Cockies project (ZoosSA and the Recovery Team) has been trialling the use of Riverina mesh with star pickets to keep sheep away from newly planted stringybark trees. This has proven to be effective and simple to erect, requiring only a sheet of mesh (rolled and tied in a circle) and two star pickets to hold in place (see image).

In Feb 2015 this costs about \$25 in total (covering costs for mesh, 1.1m x 2m, and 2 pickets) but the benefits to our Red-tailed Cockies are much more. To protect seedlings from cattle is more expensive. As a guideline, three standard treated posts (1.8m x 100-125mm diam) driven into the ground with a further three posts bracing the top of the posts would cost about \$65 per tree.



Guards suitable to protect seedlings from sheep.

Consideration should also be given to long term maintenance of scattered tree plantings and how to protect existing paddock trees. Stringybark and buloke trees are both susceptible to damage from stock. A rule of thumb is to exclude stock as far back as the drip line of a tree to avoid the negative impacts of compaction.

Clearly, this is not a cheap way of planting a lot of trees!

But for some farmers it will be an easier way to add stock protection while also increasing the chances of having Red-tails (as well as many other birds and insect controlling bats) visit their properties for present and future farming generations to come.



A 1 year old stringybark revegetation project planted using the paddock spacing.

Find out more or contact us at www.redtail.com.au





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Wimmera

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Feb 2015