

Paddock Trees - Natural Regeneration

Limestone Coast Landscape Board

Natural regeneration can be a cheap way to get new trees and shrubs growing on your property. It can also successfully rejuvenate a degraded patch of bush land. However, in a grazing system natural regeneration can be unreliable and difficult to achieve. This factsheet aims to provide information that will help landholders decide if natural regeneration is suitable for their property.

How it works

Natural regeneration is what happens in nature without our intervention. Sometimes it happens surprisingly easily, but in some situations it is a complex process with some difficulties to overcome. Natural regeneration can only happen if there are mature plants nearby to provide a seed source. Seed must then survive until conditions are right for germination. Young seedlings need to be able to deal with competition from other plants, grazing pressure, and then finally summer heat and low soil moisture.

What to do

Planning is important. You need to decide where you want more trees or shrubs. Natural regeneration is most likely to occur within only 30m of existing trees.



Placing fallen limbs around trees offers some protection from stock rubbing and camping under them



Protection from stock grazing is essential in the early years for paddock trees

The easy approach

Just like farming, some years are better than others. Natural regeneration is most likely to occur in years with higher rainfall, especially in spring and into summer. Usually there is so much feed available stock and other animals don't eat the seedlings.

Once you notice young trees in the paddocks, simply choose those you wish to keep and protect them from stock and other grazers like deer, rabbits and kangaroos. Choose a means of protection that suits your farming practices. You can choose a cheap and simple approach like placing very large fallen tree limbs around the seedlings so stock can't get to them, or a more expensive fence. Young trees will need the strongest possible protection from cattle. The options are endless so be creative - maybe just put three old gates together around a seedling: job done.

The Managed Approach

Site preparation

Large perennial pasture grasses like Phalaris should be spot sprayed to minimise competition. If not controlled, it is unlikely seedlings will grow. Importantly, do not spray out large areas because in a wet year, this could result in thousands of seedlings that will be difficult to manage, and in a dry year a large area could blow out leading to erosion.

Grazing management

To maximise success, grazing will need to be removed from July/August until seedlings emerge and can be protected. This may take several months. Prior to stock removal the area should be grazed low to allow sunlight to reach the soil surface. If pasture is too dense, seeds will not germinate.

You will also need to control for red-legged earth mite and snails.

Weed control

Maintain weed control in target areas, especially those with big rosettes such as thistles, salvation jane, storksbill etc. Spraying must be done carefully and regularly - knapsack sprayers only! A general untargeted spray that goes beyond individual weeds will kill tree seedlings, which may be only five millimetres tall and very difficult to see. You may need to get on your hands and knees to see them in the early stages.

Germinating seedlings will take time to establish – in the first few months inspection on hands and knees is required!



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This young Red Gum (approx 6 months old) self germinated after a wet year

Seedling protection

Just like the easy approach above, seedlings will need protection. Whilst expensive, permanent fencing offers the trees long term protection from the impacts of stock camping (including soil compaction, high nutrient loads and trunk damage).

After five years the trees will be protected under the Native Vegetation Act because they will be considered native vegetation under the Act.

If you want plants that aren't on your property, e.g. drooping sheoak or silver banksia, your only option is to undertake a revegetation program with direct seeding or planting tubestock.

More information

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