

FACT SHEET: Revegetation



Restoring and enhancing the vegetation in Nillumbik is important because the vegetation provides habitat for many species and it has its own intrinsic worth.

Restoring vegetation involves promoting natural regeneration of indigenous plant species and revegetation with useful habitat plants to enhance the diversity of habitats available to local wildlife on both public and private land.

Some areas of vegetation in Nillumbik do not need revegetating and they can be enhanced by fencing and weed control to support regeneration. Other areas, particularly those that have been cleared, are suitable for revegetation. This fact sheet provides helpful tips for revegetation projects.

1. Select the appropriate restoration technique

The right method for you to restore or revegetate your land depends on the characteristics of your site and the quality of vegetation already present.

Seek advice from Council or a suitably qualified environmental consultant about species selection and techniques. Alternatively, your local Landcare group may provide some guidance.

Prepare and maintain your site



Good site preparation is critical if you wish to revegetate your rural property successfully, regardless of whether you plan to seed the site directly or plant out an area.

The basic goal of site preparation is to provide new plants with good growing conditions in the establishment phase, within the site constraints.

There are several site conditions to consider: existing vegetation, salinity, soil fertility, slope, whether there is access for machinery, design of the planting, whether or not herbicides are an option, and cost. The planting site should be prepared in advance to ensure the right techniques can be implemented at the right time.

2. Understand the condition of your soil

Be aware of your site's history; whether the site has been cut, filled or compacted, or there are erosion problems that require correction before planting.

Salinity may have a significant impact in many areas of Nillumbik. All of these issues will influence the type of site preparation required.

Your local Landcare Group can help you with advice regarding the history and condition of your soil.

3. Control weeds on your site

Weed control is usually the most important aspect of site preparation. Weeds are a major threat to existing remnant vegetation and the success of any revegetation project. They compete with establishing plants for light, nutrients and water and can significantly reduce the growth of the desired plant.

It is necessary to control weeds around the new plants for at least 12 months after planting and ideally for the first two years.



Protecting plantings

The basic equipment for planting includes a mattock to dig into the soil or the rip line.

Tree guards and fencing are often used to protect revegetated areas until the plants become established and can withstand the stress caused

by rabbits, native animals, wind and domestic stock.

Hardwood stakes are most suitable for guards and three stakes are used per guard with a mallet to hammer them in. Rabbit-proof fences are expensive and are therefore only used in areas where the rabbit problem is extreme.

Direct seeding



Direct seeding establishes trees, shrubs and understorey plants by sowing seed directly onto the site to be revegetated – at a fraction of the cost of planting tubestock.

As with all revegetation works, good site preparation and effective weed control are essential for the plants to establish successfully.

For further information about direct seeding, contact Greening Australia Victoria on 9450 5300.

CASE STUDY:

Establishing shelterbelts with Julia Gibson

Julia Gibson and her partner Peter Darby bought their property at Arthurs Creek in 1998. They planted their first shelterbelt that year and every year from 1998 to 2007 planted understory plants and approximately 2000 trees.

In total, more than 20,000 plants were established plus 1,600 trees in a firewood plantation in 2002. The firewood is for Julia and Peter's own use and they hope to sell some in future. Some trees are also suitable for commercial sawmilling and take 20-25 years to be ready.

The shelterbelts provide many benefits. Horses and cattle use the shade when it's hot and the shelter when it's cold. Grass grows better in the sheltered paddocks and hangs on better in dry conditions, due to wind protection. It's a great amenity to be able to walk and ride horses through the shelterbelts. They also support biodiversity; lots of native birds fly around all the time and there is evidence of some Ringtail Possums and Sugar Gliders in the area, although they have not been seen in the shelterbelts yet.

There have been challenges. In the first two years caterpillars denuded the *Eucalyptus rubida* (Candelbark) trees. The problem eased by the third year probably because there were more birds and other animals to 'balance' nature. Spraying around plants in their first year is essential, and in the second year it helps. After that, shading starts to block out weeds and grasses.

In some years, the season quickly went from very wet to very dry, which is difficult for some species. In other years, it went from very dry to very wet, and other species don't like that.

In 2002-2003, it was extremely dry, which made it hard for some understory shrubs to survive. There were also drainage problems from past activities, and salinity. Golden Wattles (*Acacia pycnantha*) and Yellow Box (*Eucalyptus melliodora*) both tolerate some salinity, although Golden wattles do not tolerate too much wet or changes from wet to dry.

It was difficult to work out the right distance between plantings. Julia aimed for enough density to provide good shelter but also for plants to be able to survive and regenerate in the long term. There is a risk of having too many trees (they rarely die) and not enough understory plants. Most plants were guarded, but if not they were nipped off by hares or rabbits.

The shelterbelts are very little work now for Julia and Peter. The biggest tasks are monitoring for rabbits and poisoning, spraying blackberries that grow from bird droppings, and occasionally tidying up dead or fallen trees if they are in the way of the path. It is easier to get big areas done in one go and the benefits can be seen sooner.

Julia believes 20 metres should be a minimum width, although she has planted some shelterbelts only 10-12 metres wide which have worked reasonably well. She was concerned about using up too much paddock but now sees that wider shelterbelts work best. It is worthwhile putting a path or track through the plantation for walking and riding. It is also worth considering the use of good contractors, who can do the work in a flash with 'pottiputkis' (treeplanting tools).

Julia and Peter always rip before planting using a winged ripper. Other advice is to plant understory and trees at the same time. Be careful not to plant too many trees, and remember trees mostly survive whereas there is a much higher death rate in understory plants.



Useful links

[Department of Sustainability and Environment Revegetation Planting Standards](#)

Revegetation techniques: a guide for establishing native vegetation in Victoria (book) [compiled by Katherine Corr; editor Sue Whyte]