

FACT SHEET



PREPARING A SITE FOR PLANTING



Spraying weeds around the planting site is part of the ongoing maintenance

Useful for: Landholders intending to undertake large scale plantings (500+ plants)

The key to successful native vegetation establishment is proper site preparation and species selection. Good preparation and timing, careful planning and a little extra care during the early stages of plant growth will save you time and money. The following four steps will make sure that your planting project is a success.

1. PLANNING

Choosing the best site for planting?

Before choosing the most suitable site for planting, clearly define why the plantings will occur – is it for salinity control, biodiversity, shelter, erosion control or a combination of these. On farms consider revegetating land that is not suitable for growing crops or pasture due to rocks, slope, poor soil type, structure or depth (eg land capability Class VI or VII - see our Land Capability fact sheet for more information). Avoid planting into naturally treeless areas where native grasslands occur. Where possible it is recommended to select the site well in advance. Early site selection allows good lead-in time for weed control and soil cultivation. A general rule of thumb is to select your site at least six months before planting. Site size is also important. Make sure you don't overextend the resources available to you.

Which species should you choose to plant?

Make sure you select species and provenances (local seed source) that will suit the location, satisfy your purpose, and survive and thrive on the selected site.

Assess the chosen site to determine factors which may influence the types of plants you choose. Is the area on a steep slope? Is it affected by acid or saline soils? Do you have livestock?

Once you've selected the types of plant you will use, propagate the seeds yourself or have the seeds you collected propagated for you. Alternatively, you can obtain good quality planting stock from nurseries specialising in growing local native species. To guarantee supply, place your order at least six months prior to planting (generally no later than the December prior to planting).

The seedlings should be actively growing, not root-bound, free of pests and disease and labelled with provenance and species. (For more information on the use of provenance plants ("local natives") please refer to the HNCMA fact sheet "Use of Provenance Plants")

2. PREPARATION

Good site preparation will improve your success in establishing vegetation and assist in good plant growth during the first few seasons and should be carried out at least six months prior to planting. The method of preparation will depend on your individual site, but activities common to most sites are provided below.

PRE-CULTIVATION WEED CONTROL

Weeds compete for soil moisture and nutrients and can cause death of the seedling, or at least reduce the growth and health of the tree. To reduce the amount of germinating weeds and grasses during the planting season, and to improve soil moisture it is wise to undertake pre-cultivation weed control in the spring before planting. Methods include spray-topping the grasses using low rates of herbicide to prevent seed set and prior cropping of the site.

If there are live weeds on the site, spray with herbicide for total weed control at least two weeks prior to cultivation. If spraying is not done, the process of deep ripping or ripping and mounding can bury weeds which are very hard to control later on.

PRE-CULTIVATION PEST CONTROL

Pests such as rabbits and hares can cause a huge amount of damage to planted sites in a matter of days. Controlling these pests prior to planting is essential. Also inspect the planted site regularly for any new damage. Methods of control include ripping rabbit warrens, baiting (rabbits and hares only) and the use of tree guards. Contact your local Rural Lands Protection Board for further control advice.

PREPARING THE SOIL

"Deep Ripping" and "Ripping and Mounding" are the two main ways to prepare your site for planting depending on your local soil conditions.

LIVESTOCK CONSIDERATIONS

All stock must be kept off sites that have been prepared for planting, or else soil compaction may occur. If the site is adjacent to stock and grazing lands, protect it by fencing.

Deep Ripping: Ripping dry soil (down to 45-60cm) breaks up the sub-surface soils and is essential for improving root penetration and good tree growth. This should be done as early as possible, when soils are dry, to allow time for consolidation. Large machinery such as a bulldozer is required for effective deep ripping.

Ripping and Mounding: This process involves firstly ripping the soil as above and then mounding the soil alongside the newly created furrow. The seedlings are then planted directly into the elevated mounds, and the mounds should be flattened on top so water doesn't run off. Ripping followed by mounding is essential on sites with poor drainage and/or high salinity. On saline sites, mounding must be done well in advance of planting so salt can be leached-out prior to planting. Ripping and mounding in the one pass is recommended on suitable sites (not too steep or rocky) followed by additional cultivation.

PRE-PLANTING WEED CONTROL

Good pre-plant weed control will make management much easier after planting. Pre-plant weed control occurs after cultivation and at least three weeks before planting. To stop new weeds from germinating apply an appropriate and registered residual herbicide along the planting line in a 1.5m wide strip. If there is fresh germination after cultivation combine with a knockdown herbicide.

If possible, delay planting until after decent rainfall (preferably, at least 50mm) as this allows the residual chemical to be incorporated into the soil. If there is no rain, wait three weeks after spraying.

For further information on label rates, legislative restrictions and safety please visit www.pestgenie.com.au

3. PLANTING

Wherever possible select suitable local native species for planting and direct seeding. Local native plants are adapted to the environmental conditions of the area. This means they are more likely to thrive and grow, may require less follow-up maintenance and provide habitat and food for local native animals.

For more information on how to plant trees please see the HNCMA fact sheet "Native Species Planting Guide".

TIPS FOR RIPPING

- Rip before the autumn break
- Rip along the contour when the ground is dry to get deep shattering of the soil
- Rip three to four metres apart at a minimum depth of 45cm. This will allow better and deeper root development after planting, which will result in better survival and faster growth
- Erosion prone gullies may require herringbone ripping
- Avoid ripping under the drip-line of existing trees
- Avoid ripping across drainage lines

4. MAINTENANCE

Your work is not done yet! To ensure you make the most out of your investment, you need to continually maintain the site.

POST-PLANTING WEED CONTROL

Each site must be monitored for weeds during the spring and autumn following planting. Post-plant weeding is probably the most difficult aspect of the planting site establishment due to the variety of weeds that can grow and the need to use herbicides that are registered for use over trees.

POST-PLANTING PEST AND LIVESTOCK CONTROL

You will need to routinely inspect for vermin damage or stock entry to the planting site. Strategic grazing with sheep may be an option for the area after the seedlings are three years old whilst cattle should be kept out permanently.



Ripping improves root penetration and promotes tree growth

TIPS FOR APPLYING HERBICIDES

- Spray after autumn break when plants are actively growing. Usually before frost but 10 days after rain.
- Spray 1.5m wide along rip lines with knockdown herbicide such as glyphosate – keep one metre away from existing plants and even use hand spray or shield to be sure they are not affected
- Always read the chemical label before use
- The most efficient method is to spray along the planting lines using a quad bike
- It is always best to apply herbicides when:
 - Weeds are actively growing and not under stress from drought or frosts
 - Weeds are small rather than large
 - The weather is suitable.