



# expanding your bush

## AND WILDLIFE HABITAT

Remnant vegetation suitable for wildlife habitat includes native trees, living and dead timber including fallen logs, understorey including native shrubs, herbs and grasses, and leaf litter. There are many ways you can encourage the restoration of native plants back into the landscape and the return of wildlife.

Three techniques for establishing native trees and other vegetation are

- **natural regeneration**
- **planting**
- **direct seeding**

Choose the method that best suits your budget and situation and best helps to achieve your aims.

### *natural regeneration*

Encouraging natural regeneration (ie allowing the bush to grow back by itself) is the cheapest and easiest option for expanding remnants. (For more information on this see Note No 11.)

For natural regeneration to happen, fencing off areas from stock, or other uses which damage native vegetation, is essential.

After fencing it is important to assess whether natural regeneration is occurring. Monitor the site to see if new seedlings are coming up. Remember it may take one to two years or longer before seedlings come up because germination may need to be triggered by events such as flooding and fire. If no regeneration is taking place there are a range of activities you can undertake.

### *assisting natural regeneration*

Natural regeneration may be assisted by:

- clearing away existing pasture grasses or other exotic weeds that are preventing seedlings germinating or suppressing native plant growth. Refer to Note No 11 for a more detailed description of techniques used in weed removal and control and fencing;
- disturbing the seed bed and the soil surface by lightly scarifying, ripping or grading the soil; and
- sensible and planned use of fire may encourage natural regeneration of such species as eucalypts and wattles.

### *planting*

Planting native species can help where natural regeneration is unable to proceed without assistance or if you wish to plant vegetation to extend or join remnants.

Wherever possible select suitable local native species for planting and direct seeding. Local native plants are adapted to the environmental conditions in your area.

This means they are more likely to thrive and grow, may require less follow-up maintenance and provide habitat and food for locally native animals.

At the same time ensure you create variety by planting both shrubs and trees. If competition from other ground layer species will not be a problem, you can also include grasses and groundcovers.

### *planning ahead*

Before planting, plan ahead and prepare the site. Good preparation and timing, careful planting and a little extra care during the early stages of plant growth can save work and costs.

- Assess the site to determine factors which may influence the types of plants that may grow at the site ie. is the area on a steep slope, affected by acid soils and saline soils, currently grazed by domestic animals?
- Propagate seeds yourself or have the seeds you collected propagated for you. (Collect only 10 per cent of a species' total annual seed crop. This allows natural regeneration to occur) A licence must be obtained from NPWS for seed collection from protected plants, and from species and communities listed under the *Threatened Species Conservation Act 1995*.
- Alternatively, obtain good quality planting stock from nurseries who specialise in growing local native species which have been propagated from material collected in the local area. The seedlings should be actively growing, not root-bound, free of pests and disease and labelled with provenance and species.
- Control feral grazing animals such as rabbits by fumigation, poisoning and shooting.
- If the site is adjacent to stock and grazing lands protect it by fencing, and



- If the whole planting area is not to be fenced, then fence around dead or remnant trees within the planting area. This encourages regeneration of these tree species and can result in improved health of these existing trees.

### PREPARING THE SITE

Good site preparation will improve your success in establishing vegetation and assist in good plant growth during the first few seasons. The method of preparation will depend on your individual site, but activities common to most sites include:

- controlling introduced grasses and weeds;
- deep ripping early in the planting season or several months before planting, or mounding if the soil is saline; and
- applying of lime or dolomite to assist sites with water-table induced acid soils (some native grasses prefer acid soils).

### PUTTING THE PLANTS IN THE GROUND

- Work with the seasons. Try to plant at the most opportune time of year —usually the wet season.
- Avoid planting in dry times or during drought periods.
- Planting around your remnant so the plantings act as a buffer providing protection for the remnant from wind and weed infestation.
- Use plantings to form corridors to join existing remnants.
- Make multiple use of your plantings: ie. incorporate them into your farm plan as shelter belts and windbreaks. (See Note No 7 for further information on Shelterbelts).
- Do not plant more than you can maintain.
- Keep a record of the species you plant and the seed source. Take photographs of each stage to compare the performance of different species, and those of different origins. (See Note No 9 on Photographic monitoring)

If your resources allow, growth and success rates may be improved by

- the use of tree guards to provide protection against wind, frosts and vermin
- mulching, and
- watering plants at the time of planting.

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### FOLLOW UP

You will often need to carry out work at the site in the years following the planting. You may need to :

- control weeds on the site;
- water during drought conditions;
- control feral animals, particularly rabbits; and
- replace losses.

### *direct seeding*

Another way to extend your remnant is by direct seeding. As with planting, try to select local native species and include a variety of trees and shrubs. If the site is suitable and competition from other groundlayer species will not be a problem, also include grasses and groundcovers.

- Prepare your site as you would if you were “planting out”. In addition, erect a fence before you seed to exclude grazing animals and rabbits.
- Collect seed from within or as close to the remnant as possible.
- Control weeds by spraying three times in the 12 months before seeding, ‘crash’ grazing in winter, or by scalping or moundboard ploughing. Carefully assess native vegetation on the site before undertaking any of these methods of weed control.
- Before sowing, place hard-coated seeds (wattles, bush-peas) in hot water for 1 minute, soaked them in water for 24 hours or scarify them prior to sowing. This will enhance the germination rate of the seeds.
- You can adapt farm machinery to make it suitable for direct seeding. Alternatively some organisations have appropriate machinery.

### *references*

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