

Native bush on your farm

Adding value

Planting native trees and shrubs on your farmland, or protecting existing bush can help the environment and add value to your property. A patch of native bush can enhance the landscape, provide shade and shelter for stock, stabilise the soil and provide habitat for native wildlife.

Planning what species are most appropriate, how you will plant and maintain your area of native bush will help ensure you get the best return on your efforts.

Site preparation

Secure fencing is essential to prevent trees being eaten by stock and to allow native seedlings to regenerate. It is a good idea to erect the fence before planting. Try and follow the natural contours of the land, avoiding planting or fencing in straight lines.

Before you plant, hand clear any long grass and weeds, or spray the area. Spot spraying planting spaces a few weeks beforehand is an option.

The best time to plant is from May through to September although if you get heavy frosts, spring is better. New trees should be planted in moist (but not waterlogged) soil. Make sure the plants are kept cool and moist until you are ready to plant.



Protecting existing native bush or planting natives could help your farm and the environment

What to plant

Conditions on an open grassland site, like a farm paddock, are not the most favourable for many native trees. Native bush develops naturally in stages where each plant community improves the conditions for the next. The soil composition changes as layers of decaying plant material build

up. This rich organic matter is not available on farm pasture so your first plantings should be used to improve soil conditions and provide shade and shelter for less hardy species.

Light-demanding pioneer species such as manuka and kanuka are ideal for first plantings. Kanuka grows best on drier or more fertile soils while manuka will grow in wet or dry conditions. Manuka slash (branches with ripe seed) can be laid over bare ground from earthworks or slips or ground that has been disced. A dense cover of manuka seedlings should result.

Other hardy species include karamu, koromiko, mahoe, lacebark, ribbonwood, wineberry, mapou, pittosporums, cabbage tree and flax. For best results, choose plants that are naturally found in your area and ecosourced locally. Generally, plants should be waist high before planting at 1 to 2 metre spacings. Once these plants are well established (3 to 5 years), main canopy trees such as tawa, kokekohe, titoki, pukatea, hinau and kamahi can be planted in between.

Totara and kahikatea could be planted at the outset but mostly these forest trees, along with rimu, matai and miro, prefer some shade and shelter. If your site already has some remnant bush, choose your plants according to what is already there.

Planting

Dig the holes slightly larger and deeper than the size of the rootball of your tree. If the ground is hard, dig your spade into the bottom of the hole several times to break up the soil. Remember to take the trees out of their containers and if tightly root bound, gently tease out the major roots with your fingers (but don't disturb manuka roots). Position your tree in the hole so that the stem is just below ground level to allow for 1cm of soil to be placed on top of the potting mix. Fill the hole with the loose soil and press down with your foot, being careful not to damage the bark and branches.



Most native plants do well on a good sheltered site without added fertiliser. However, on poorer soils in an exposed position, fertiliser can make a difference. Dig the fertiliser or compost into the bottom of the hole before planting so the roots will not touch it and get burnt. One or two pellets of slow release fertiliser will feed a tree for a year or more.

It is a good idea to put a stake next to each tree after planting. The stake need only be 60-70cm tall but it will enable the tree to be found easily, especially if you paint the top.

Caring for your trees

Newly planted trees will grow quicker if you reduce competition from weeds and grasses in the first 2-3 years. Spring is a critical time when there is new growth on plants. Weeds can be controlled by hand or with herbicides. If using a grubber, be careful not to dig too deeply as you could damage the roots. It's easier to clear after rain.

Herbicide control can be effective provided you use the correct chemicals and take care in applying them. When using a knapsack sprayer, apply in a 'S' shaped pattern rather than a circular motion which tends to concentrate the herbicide close to the plant. Avoid any contact with the stem and leaves, preferably by using a shield and spraying on a calm day.

Weed growth can be reduced by adding a layer of mulch around each plant but this is not always practical for large scale plantings. Materials include leaf mould, hay/straw, old silage, bark chips and cardboard. Mulch should be laid at a depth of 6-8 cm and kept at least 150 mm from the trunk. Don't mulch plants in waterlogged soils as this could cause root rot.

Watch out for possums or rabbits eating new shoots and put a pest control programme in place if



Protecting native bush on your property can provide food and habitat for native birdlife

necessary. Contact DOC or your regional council for local pest control advice. Another option is to spray a mixture of 5 eggs beaten in 600 ml of water with 150 ml of acrylic paint added. This will treat about 50 young trees and should repel possums, rabbits and hares.

Enjoy your bush

As your bush becomes established, native birds should start visiting and making their home in the trees. They in turn will bring seeds and help to implant a variety of seedlings.

Build a stile over the fence (gates are too easily left open) and form a path through the forest so you can enjoy it fully.

Be proud of what you have achieved. Encourage your neighbours to also establish native bush to create linkages across the landscape as corridors for birds to travel from one habitat to another.

Funding and Support

Funding may be available to protect existing native bush or restoration work on private land.

The **Biodiversity Condition and Advice Fund** works to enhance management of biodiversity on private land. Phone the Biodiversity Funds team on 0800 86 2020 for more information.

Regional councils may have an environmental enhancement fund you can apply to for protection or restoration work.

The **QEII Trust** helps private landowners to protect significant natural and cultural features in perpetuity on their land through open space covenants. Phone 0800 4 OPENSACE for legal protection advice and possible funding for fencing.

Nga Whenua Rahui is a contestable fund to provide for the protection of indigenous ecosystems on Maori land through covenants, as Maori reserves or physical protection. Contact the Kaitakawaenga 0800 112 771 for details.

Further Information

The information contained in this pamphlet is intended as an introductory guide. It won't give you all the answers but should get you started on creating your own patch of native bush.

Some useful reference material:

- Department of Conservation: A guide to the control of animal pests.
- Queen Elizabeth II National Trust : Native forest restoration

For more information contact your local DOC office or visit www.doc.govt.nz.