Project diary

	Year One			Year Two											Year Three		
	Jul - Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Evaluation																		
Order plants																		
Cultivation																		
Fencing																		
Pre-plant spray																		
Planting general																		
Planting frosty sites																		
Planting wet sites																		
Watering													as required					
Weed control																		
Mortality count																		
Order replacements																		

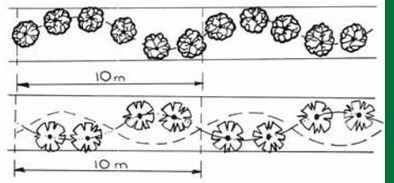
A suggested shelter design using natives

Two curved lines of hardy native plants can provide efficient stock shelter, wildlife habitat and improved farm landscape.

STEP 1 **(12 plants per 20m)**
Establish the 'backbone' plants at 1.8m spacing along a curved line, e.g., Pittosporum tenuifolium, Coprosma robusta

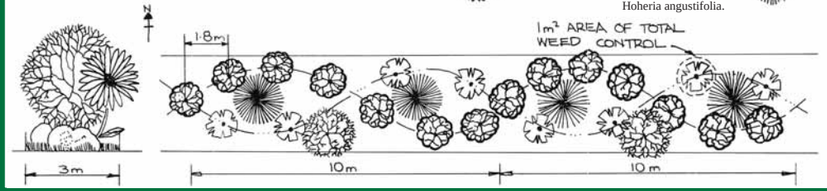
STEP 2 **(8 plants per 20m)**
Repeat the operation along an imaginary opposite line, e.g., Olearia paniculata, Griselinia littoralis.

STEP 3 **(6 plants per 20m)**
Add a random mix of supplementary species as shown.

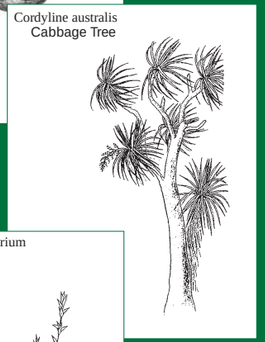


Shade tolerant:
Pseudopanax arboreus, Podocarpus totara.

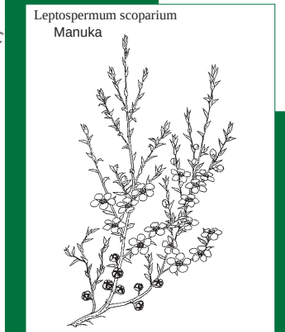
Light preferring:
Sophora microphylla, Cordyline australis, Hoheria angustifolia.



Taupata
Coprosma repens



Cordyline australis
Cabbage Tree



Leptospermum scoparium
Manuka

Follow-up maintenance

- Maintain a weed free planting spot for two years. Hand grub or spray with glyphosate around shielded plants as necessary.
- If hare or rabbit damage occurs, apply a repellent. You can make your own by mixing 5 fresh eggs with 150 ml of acrylic white paint and 600 ml water.

The natural regeneration option

Remember that planting may be unnecessary. When grazing and fire are absent and a seed source is nearby, natural regeneration of native plants will succeed dense gorse, broom and bracken.

January 1989

Natural regeneration of shade tolerant native forest species under 15-19 year old gorse following the removal of grazing animals.

Photos (except front cover) and specimen plant sketches: Hugh Wilson

January 1992

Environment Canterbury
Your regional council

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Using native plants in Canterbury

Environment Canterbury
Your regional council

Native plants in Canterbury

Native plants are part of our unique natural heritage and regional identity. They have adapted to grow on a wide variety of sites, and require little maintenance.

Native plants are useful for:

- preventing erosion and stabilizing land
- restoring native remnants and developing new diverse habitats
- recreating Canterbury's unique landscapes
- providing shelter from winds

This pamphlet shows you how to select and successfully establish native plants for Canterbury conditions.

Selecting suitable species

First look at the site conditions, then use the table to match the most suitable species to the site.

Remember that native plant communities develop naturally through succession. Pioneer species create favourable conditions for later species. Non-pioneers such as beech, kahikatea, totara and rimu can be planted several years after the initial planting.

Obtaining plants

Use healthy plants grown by nurseries in containers or root trainers rather than transplanting wild seedlings. Don't accept pot bound stock.

To retain genetic purity of your district's native vegetation ask for plants that are propogated from local sources.

Keep plants covered and cool during transport.

Wineberry

Aristotelia serrata

Native plants suitable for Canterbury conditions

Key

✔✔ very well suited; ✔ well suited; (✔) marginal but OK in some situations; ✗ not recommended; ✗✗ definitely not suited

Common name	Botanical name	Coastal Sites	Exposed (**E**), Open (**O**), or Sheltered (**S**) Sites	Dry (**D**), Moist (**M**), or Wet (**W**) Sites	Cool or Frosty Sites	Low fertility or Acidic Sites	Wetland or Poorly Drained Sites	Shelter Belts/ Hedges	Roadsides
Sedges and Grasses									
Tussock sedges	*Carex secta / C. virgata*	(✔)	O	W	✔	✗	✔✔	✗	✗
Red tussock	*Chionochloa rubra*	(✔)	O	M-W	✔✔	✔✔	✔✔	✗	✔
Toetoe	*Cortaderia richardii*	✔	O	M-W	✔✔	✗	✔	✔✔	✔✔
Silver tussock	*Poe cita*	✔	O-E	D-M	✔✔	✗✗	✗	✗	✔
Shrubs									
Karamu	*Coprosma robusta*	✔✔	S-O	M-W	(✔)	✗	(✔)	✔	✔
Mingimingi	*Coprosma propinqua*	✔✔	O-E	D-W	✔✔	✔	✔✔	✔	✔
Taupata	*Corposma repens*	✔✔	O-E	D-M	✗✗	✗	✗	✔	✗
Korokio	*Corokia cotoneaster*	✔	O-E	D-M	✔	✗	✗	✔	✔
Koromiko	*Hebe salicifolia*	✔	S-O	M	✔	✗	✗	✗	✔
NZ Flax	*Phormium tenax*	✔✔	O-E	M-W	✔✔	✔	✔✔	✔✔	✔✔
Shore ribbonwood	*Plagianthus divaricatus*	✔✔	O-E	M-W	✔	✗	✔	✗	✗
Larger Shrubs and Small Trees									
Wineberry	*Aristotelia serrata*	✗	S-O	M	(✔)	✗	✗✗	(✔)	✔
Marbleleaf	*Carpodetus serratus*	✗	S-O	M	(✔)	✗	✗✗	✗	✔
Cabbage tree	*Cordyline australis*	✔✔	O-E	D-W	✔✔	(✔)	✔✔	✔✔	✔✔
Akeake	*Dodonaea viscosa*	✔✔	O-E	D-M	✗	✗	✗✗	✔✔	✔
Tree fuchsia	*Fuchsia excorticata*	✗	S	M	(✔)	✗	✗✗	✗	✔
Broadleaf	*Griselinia littoralis*	✔✔	S-O	M-W	✔	✗	✗	(✔)	✔
Lacebark	*Hoheria angustifolia*	✗	O	M-W	✔✔	✗	(✔)	✔✔	✔
Kanuka	*Kunzea ericoides*	✔	O	D-M	✔✔	(✔)	✗	✔✔	✔✔
Manuka	*Leptospermum scoparium*	✔	O	D-W	✔✔	✔✔	✔✔	(✔)	✔
Mahoe	*Melicytus ramiflorus*	✔	S	M	✗	✗	✗✗	✗	✔
Ngaio	*Myoporum laetum*	✔✔	O-E	D-M	✗✗	✗	✗✗	✔	✔
Akiraho	*Olearia paniculata*	✔✔	O-E	D-M	✔	✗	✗	✔✔	✔
Kohuhu	*Pittosporum tenuifolium*	✔	O	M-W	✔	(✔)	(✔)	✔✔	✔
Five-finger	*Pseudopanax arboreus*	✔	S	M	✘	✗	✗	(✔)	✔
Kowhai	*Sophora microphylla*	✔	O-E	D-M	✔✔	✗	✗	(✔)	✔
Trees									
Kahikatea	*Dacrycarpus dacrydioides*	✗	S-O	M-W	✔	(✔)	✔✔	✗	✗
Rimu	*Dacrydium cupressinum*	✗	S	M	✔	✔	✗	✗	✗
Lacebark/Houhere	*Hoheria populnea*	✗	O	M	✔	✗	✗	✔✔	✔
The Beeches	*Nothofagus spp.*	✗	S-E	M-W	✔✔	✔	✗	(✔)	✔
Lemonwood	*Pittosporum eugenioides*	(✔)	S-O	M	(✔)	✗	✗	✔	✔
Ribbonwood	*Plagianthus regius*	✗	O	M-W	✔	✗	(✔)	✔	✔
Totara	*Podocarpus totara*	✗	S-O	D-M	✔	✗	✗	(✔)	(✔)

Preparing the site

Weed competition can be reduced by spraying metre square spots of glyphosate several weeks before planting. Hand grubbing is an alternative to spraying.

Native plants enjoy cultivated sites. Where it is practical, deeply cultivate with a tractor and wing tined ripper.

Erect fencing to keep out domestic stock. Repellents or eradication may be the only option to get rid of unwanted pests.

A nurse crop such as saltbush or tree lucerne will create better conditions for establishing your natives on exposed sites.

Planting

Generally it is best to plant in August or September using frost-hardened plants.

Dig a large hole and return some of the topsoil to the bottom. Cut off any spiralling roots from plants in containers, and cut the bottom 3cm off plants which have been raised in root trainers.

Plant to the full depth of the container mix, return the soil and gently firm. Make a dished depression around the plant to collect moisture.

Where practical, mulch the area planted with a 6cm layer of coarse bark chips, stones or a thick layer of newspaper. This conserves moisture, reduces weed growth and controls soil temperatures.

Project diary

Keeping a diary like the example overleaf will help your project be a success.