

Pines, firs and larches grow well in New Zealand's High Country, but can also infest the surrounding land with wilding trees.

So plan your farm or landscape plantings carefully – choose those trees with a lower risk of wilding spread.

This guide contains some trees and shrubs that are potentially good for shelter in the high country, have moderate-fast growth, and a comparatively low risk of wilding spread. Be sure though to check your tree choice and planting location comply with local council regulations, and confirm your choice of tree with a commercial nursery that is familiar with your growing conditions.

Wildings - the wrong trees in the wrong place

It's never too soon to control wildings on your land - the costs increase every year of delay

Since 2016, \$140 million of crown funding, and at least \$20 million from other partners, has been spent on controlling wilding pines and preventing the spread.

The Programme is a nation-wide collaboration led by Biosecurity New Zealand (part of the Ministry for Primary Industries), working across central and local government, industry, mana whenua, landowners, researchers, farmers, and communities.

If all this stopped, wilding pines could invade a quarter of New Zealand in 25 years.

For more information visit wildingpines.nz



Remember that any tree can potentially spread seedlings into surrounding land – so be a good neighbour and ensure your plantings do not spread.

Be careful when selecting which tree species to plant, and where – check with your regional council before planting any conifer species.

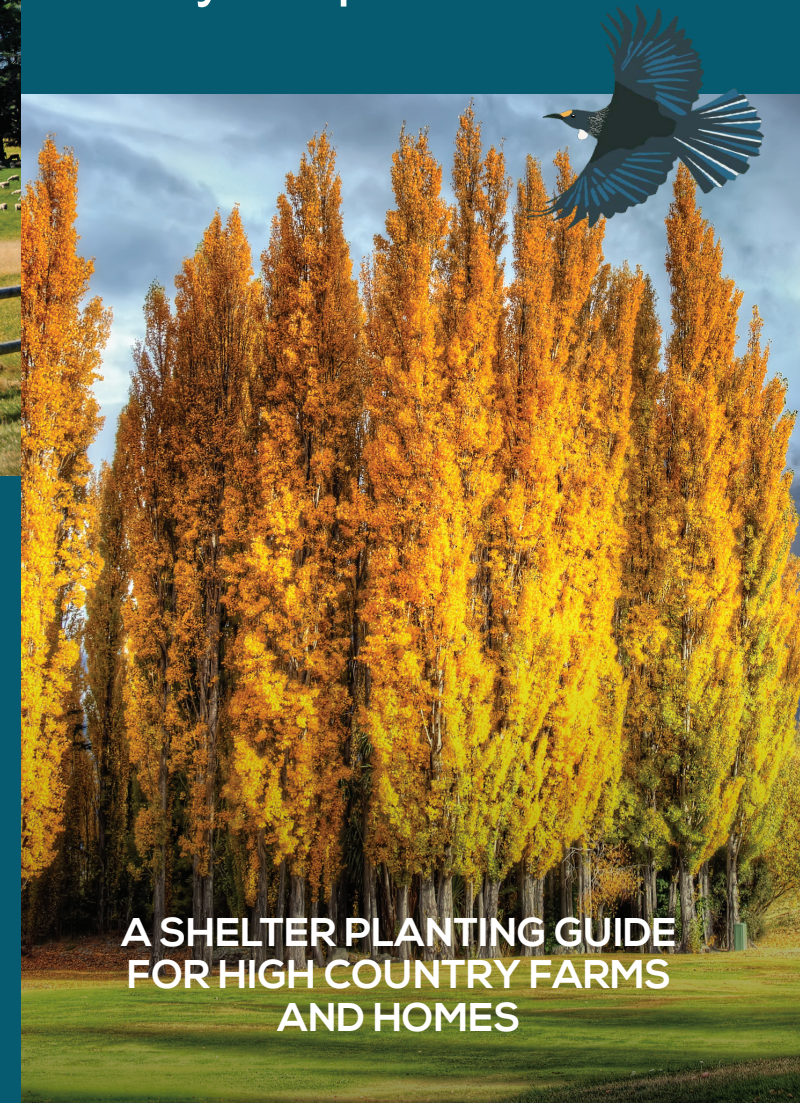
Remove any wilding pine seedlings and saplings that have established outside planted areas, before they develop cones.

Work with neighbours to control wilding pines that have spread across property boundaries.

DISCLAIMER

While we have made every effort to ensure the information is accurate, the National Wilding Conifer Control Programme does not accept any responsibility or liability for error of fact, omission, interpretation or opinion that may be present, or for the consequences of any decisions based on this information.

Plant the right trees for your place



A SHELTER PLANTING GUIDE FOR HIGH COUNTRY FARMS AND HOMES



NATIONAL WILDING CONIFER CONTROL PROGRAMME

October 2018
V2 140423

TREES & SHELTERBELTS:

good/moist soil

Lombardy poplar (*Populus nigra 'Italica'*)
Fast-growing shelter, but susceptible to rust. Hardy. Can be topped to maintain desired height.

Cider gum (*Eucalyptus gunnii*)
Large, upright tree that tolerates a range of soils from dry to swampy. Excellent shelter for cold, frosty sites.

Swamp peppermint gum (*E. rodwayi*)
Fast growing, excellent shelter tree. Tolerant of cold, drought, and wet soils.

Snow gum (*E. pauciflora subspecies*)
Shelter tree that withstands snow and ice. Enjoys well-drained soil, although grows across a range of conditions: from shallow, dry, and rocky through to wet snowy areas on high ridge tops.

Eucalypts for shelter are recommended to be planted one-two metres apart.

Western red cedar (*Thuja plicata*)
Great for hedging. Good for cool, moist sites; tolerant of full sun and shade. Initial growth is slow.

Leyland cypress 'Ferndown' and 'Staplehill' (sterile hybrids)
Fast-growing tree providing dense, even shelter. Tolerates a range of soils and climate. Requires more maintenance than other cypress clones. Evergreen. Cold hardy.

Red beech (*Fuscospora fusca*) or **silver beech** (*Lophozonia menziesii*)
Require shelter to establish – surviving better when sheltered by a nurse crop such as mānuka.

Hall's tōtara (*Podocarpus laetus*)
Suitable for hedging, but requires protection while young.

Pinus attenuata x radiata hybrid
As above, but more tolerant of dry and cold conditions.

Stone pine (*Pinus pinea*)
Tolerates hot, dry conditions. Requires well-drained soils. Hardy.

Torrey pine (*P. torreyana*)
Tolerant of dry sites. Hardy.

Pines for shelter are recommended to be planted one metre apart. *Pinus radiata* and hybrids are generally less spread-prone in the High Country than at lower altitudes. However, given their spread potential, consider leaving a well-grazed buffer of at least 200 metres between *radiata* plantings and your boundary, and check regularly for any wilding spread.

dry soil

Leyland cypress 'Ferndown' and 'Staplehill' (sterile hybrids)
Fast-growing tree providing dense, even shelter. Tolerates a range of soils and climate. Requires more maintenance than other cypress clones. Evergreen. Cold hardy.

Arizona cypress (*Cupressus arizonica*)
A compact conifer that provides a tough shelter belt. Hardy to drought and cold.

Deodar (Himalayan) cedar (*Cedrus deodara*)
Excellent for trimmed or untrimmed shelter on dry sites. Rapid early growth. Wind and frost hardy.

Atlas cedar (*Cedrus atlantica*)
Prefers well-drained soils. Great shelter on dry exposed sites. Frost hardy.

Cider gum (*Eucalyptus gunnii*)
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Swamp peppermint gum (*E. rodwayi*)
Fast growing, excellent shelter tree. Tolerant of cold, drought, and wet soils.

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Hall's tōtara (*Podocarpus laetus*)
Suitable for hedging, but requires protection while young.

Pinus attenuata x radiata hybrid
More tolerant of dry and cold conditions than *P. radiata*.

Stone pine (*Pinus pinea*)
Tolerates hot, dry conditions. Requires well-drained soils. Hardy.

Torrey pine (*P. torreyana*)
Tolerant of dry sites. Hardy.

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MEDIUM/LOW SHELTER:

Ribbonwood (*Plagianthus regius*)
Medium height, hardy tree, can be trimmed into dense hedge. Medium-rapid growth, even on dry, windy sites.

Kohuhu (*Pittosporum tenuifolium*)
Medium height, good hedging tree. Suitable for privacy screening or lower farm shelter. Tolerates wind, drought, and frost.

Mountain lacebark (*Hoheria lyallii*)
Medium height, preferring damp soil in a sunny site. Very cold hardy.

Mountain wineberry (*Aristotelia fruticosa*)
Divaricating shrub that can be pruned into low shelter. Likes full sun.

Kapuka/Broadleaf (*Griselinia littoralis*)
Excellent shelter, suitable for hedging. Tolerates some drought, although grows best with regular irrigation. Trim in summer. Hardy.

Hall's tōtara (*Podocarpus laetus*)
Suitable for hedging, but requires protection while young.

Kānuka (*Kunzea ericoides*)
Small tree that is moderately frost tolerant.

☘ = Evergreen species
(provides consistent, year-round shelter)

☼ = Deciduous species
(allows more light onto paddocks & homestead in winter)

