

## Wilding trees: eradication and control

Self-sown trees can threaten land use options, scenic values and biological diversity.

Successful control of wild conifer spread should concentrate on removing 'wildings' before they reach seeding age (5-12 years). If they are already coning, a long-term commitment will be required, with two or three removal operations separated by several years. Special attention should be given to lone "outliers", which can be the source of new infestations.

Managing wilding forests as a commercial initiative is not normally a realistic option. Trees are often of the wrong species, on the wrong site, and of poor form and varying age.

*Trees up to 50cm tall can be removed by hand pulling*

*Removing lower branches ready for chainsawing*



**To kill a conifer, all live foliage  
MUST be removed**

**NO GREEN NEEDLES can be  
left, or the tree will re-establish**

### CONTROL TECHNIQUES

#### Hand pulling

This is an ideal technique for removing young seedlings less than 50cm tall. It is best undertaken when the ground is moist.

#### Grazing

Most wilding seedlings are vulnerable to grazing for the first two years.

Intensive grazing with dry sheep in the autumn is the most effective control option.

The best results are achieved with the more palatable species, ie radiata, ponderosa and contorta.

# Wilding trees: eradication and control

## REMOVING LARGER WILDINGS

**Trees less than 50mm diameter at ground level:**  
Suitable tools include jacksaws, pruners, slashers and axes.



*A two-man team removing a dense stand of wilding trees in the Rakaia catchment using a chainsaw*

**Trees over 5-cm diameter at ground level:**  
Chainsaws or scrubcutters are necessary. On uneven ground it is difficult to cut close enough to the ground to remove all green needles. Any needles or branchlets left must be pulled off by hand, or the stump chemically treated.

### Ringbarking:

This is a useful technique, especially for mature outliers. Use a tomahawk to totally remove a 100mm ring of bark down to the white wood layer. All the pink and green inner bark must be removed right round the tree.

### Burning:

Can be very successful for young trees less than 1.5m tall, especially in dense stands before oversowing and topdressing, but it does create an ideal seedbed for re-forestation. Burning alone is not recommended.

### Spraying:

Results have been variable, depending on the district, species, and application rates. Consult local experts before using sprays.

### General guidelines for spraying:

- Full foliar coverage is critical
- The more actively the tree is growing, the better the results
- Best results are from gun spraying using a mix of metsulfuron and glyphosate plus a surfactant
- Large trees need stump treatment immediately after felling
- Stump treatment: 5 gm metsulfuron/litre water or a 50:50 mixture of diesel and either glyphosate or 245T
- Spot spraying from a helicopter can give good results
- Helicopter boom application gives poor results.

### The 'Containment Technique'

Containment may be the most practical control option where infestation is widespread, and too costly to remove completely. An infested area is contained behind a 'no further spread' zone where trees are not permitted to reach the age of seed production. The 'contained' area may be managed for production,

recreation or erosion control. Topdressing or grazing the "no spread zone" will greatly reduce wilding maintenance needs.

### Douglas fir

This species is more shade tolerant than pines and can invade open shrub and forest communities. Be wary of planting Douglas fir adjacent to such vegetation.

### Exotic hardwoods

Exotic hardwoods such as sycamore, rowan, willow and ash can spread into adjacent areas. Native bush remnants, wetlands and other important environments are vulnerable to invasion by these species and it is prudent to reconsider using them near sensitive areas.

Hardwood weeds should be hand pulled at an early growth stage but felling may be required where larger stems are encountered. Because hardwoods can coppice from cut stumps, a stump treatment should be brushed onto the freshly sawn stump to successfully destroy the root system. Regular weed inspections should be undertaken.

Printed on environmentally friendly paper: 50% recycled fibre (35% pre-consumer, 15% post consumer), 50% ECF (elementally chlorine free) fibre. All virgin fibre used comes from sustainably managed forests. E04/66 January 05.