



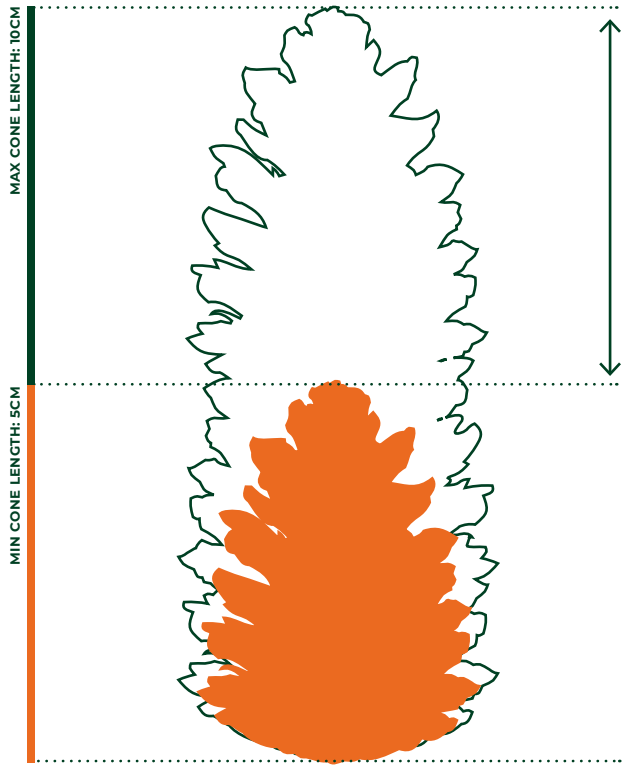
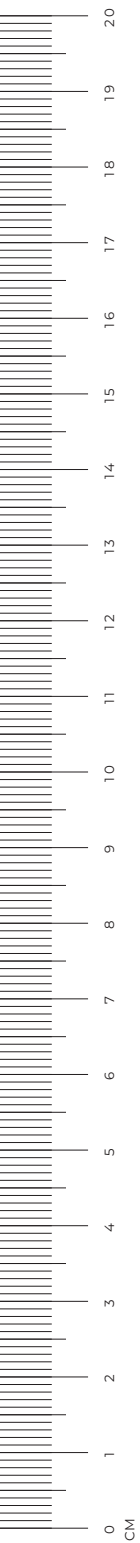
# WILDING CONIFER QUICK ID GUIDE



NATIONAL WILDING CONIFER  
CONTROL PROGRAMME

Kaitiaki This Is Us

WILDINGPINES.NZ



**WE'VE ADDED A SCALE AGAINST EACH SPECIES TO SHOW THE APPROXIMATE SIZE OF IT'S CONE**



**CONE**  
2-5cm long. Irreg. flat or curved on one side.

**BARK**  
Grey with red-brown, scaly patches.

**SPREADING VIGOUR**  
Low/Medium.

**SCOTS PINE**  
*Pinus sylvestris*

**CONIFER**

**HEIGHT**  
10-20m

**LEAVES**  
Needles 2-4cm long in a whorl of 2.

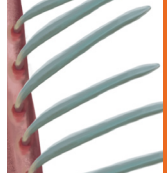
**FRUIT**  
Cone 2-5cm long. 10-15cm diam. 10-15cm diam. 10-15cm diam.

**PROPAGATION**  
Seed

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## 3 SINGLE NEEDLES

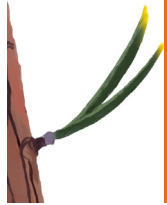
- 3 Douglas Fir
- 3 Silver Fir
- 4 Sitka Spruce



SINGLE NEEDLES

## 4 TWO NEEDLES (SHORT)

- 4 Lodgepole Pine
- 5 Jack Pine
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- 6 Dwarf Mountain Pine
- 6 Mountain Pine



TWO NEEDLES (SHORT)

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- 7 Bishop Pine
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TWO NEEDLES (MEDIUM/LONG)

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THREE NEEDLES

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- 10 Western White Pine
- 10 Eastern White Pine (Weymouth Pine)



FIVE NEEDLES

## 11 CLUSTER NEEDLES

- 11 European Larch
- 11 Japanese Larch
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CLUSTER NEEDLES



## DOUGLAS FIR

### *Pseudotsuga menziesii*

#### SINGLE NEEDLES

1–2cm long. Flat, soft, pale on underside, orange scented when crushed.

#### CONE

5–10cm long. Three-pronged scales.

#### BARK

Thin, smooth and grey, with resin blisters, becoming thick, deeply grooved with dark reddish-brown ridges.

#### SPREADING VIGOUR

Extreme.

MAX: 10CM

MIN: 5CM



## SILVER FIR

### *Abies alba*

#### SINGLE NEEDLES

1.8–3cm long. Flat, soft, pale on underside.

#### CONE

9–18cm long, sit upright on the branch.

#### BARK

Dark grey and smooth with resin blisters that break into square plates with age.

#### SPREADING VIGOUR

Low/Medium.

MAX: 18CM

MIN: 9CM



IMAGE: © MIKE PATTERSON / PHOTO 6608953/CC BY-NC



MAX: 10CM

MIN: 5CM

## SITKA SPRUCE

*Picea sitchensis*

### SINGLE NEEDLES

1.5–2.5cm long and sharp.

### CONE

5–10cm long. Pale-brown drooping with thin, flexible scales.

### BARK

Grey, smooth, thin, becoming dark purplish-brown with scaly plates with age.

### SPREADING VIGOUR

Low/Medium.



MAX: 6CM

MIN: 3CM

## LODGEPOLE PINE

*Pinus contorta*

### TWO NEEDLES (SHORT)

2.5–6.5cm long. Yellow-green to dark green; rigid with a short horny point, often twisted and forward pointing.

### CONE

3–6cm long. Scales end in a slender prickle.

### BARK

Reddish-brown, grey on surface, fissured and forming small plates.

### SPREADING VIGOUR

Extreme. The most vigorous spreading conifer species in New Zealand.

SINGLE  
NEEDLES

TWO NEEDLES  
(SHORT)



## JACK PINE

### *Pinus banksiana*

#### TWO NEEDLES (SHORT)

2.5–4cm. Yellowish to green colour.

#### CONE

2–5cm long. Irregular shape, flat or curved on one side.

#### BARK

Grey with red-brown, scaly patches.

#### SPREADING VIGOUR

Low/Medium.

MAX: 5CM

MIN: 2CM



## SCOTS PINE

### *Pinus sylvestris*

#### TWO NEEDLES (SHORT)

4–7cm long. Grey-blue tinge – can look silvery.

#### CONE

3–6cm long on a short stalk.

#### BARK

On lower stems thick, scaly-plated, grey-brown; on upper stems and branches, thin, flaking and orange-red.

#### SPREADING VIGOUR

High.

MAX: 6CM

MIN: 3CM



## DWARF MOUNTAIN PINE

*Pinus mugo*

### TWO NEEDLES (SHORT)

3–7cm long. Stiff – like a scrubbing brush.

### CONE

3–5cm long. No spines with scales hooked back.

### BARK

Varies from pink to brown-grey, fissured and broken into irregular small, curled-up plates.

### SPREADING VIGOUR

High.

MAX: 5CM

MIN: 3CM



## MOUNTAIN PINE

*Pinus uncinata*

More upright than dwarf counterpart.

### TWO NEEDLES (SHORT)

3–7cm long. Stiff – like a scrubbing brush.

### CONE

3–5cm long. Recurved cone scales, but no spines.

### BARK

Ash grey-brown to black-grey, splitting into angular scaly plates.

### SPREADING VIGOUR

High.

MAX: 5CM

MIN: 3CM



## BISHOP PINE

*Pinus muricata*

### TWO NEEDLES (MED/LONG)

7–16cm long. Bluish tinge.

### CONE

4.5–8cm long. Arranged in whorls around branches. Spiky scales.

### BARK

Dark grey, deeply furrowed into long ridges, scaly-plated.

### SPREADING VIGOUR

Medium.

MAX: 8CM

MIN: 4.5CM



## BLACK CORSICAN PINE

*Pinus nigra*

### TWO NEEDLES (MED/LONG)

8–16cm long. Can be 3 needled. Grey-green or bluish-green, grooved on opposing sides.

### CONE

5–8cm long. Scales end in tiny prickles.

### BARK

Dark grey, breaking into longitudinal ridges, small scaly plates.

### SPREADING VIGOUR

High.

MAX: 8CM

MIN: 5CM



MAX: 16CM



## MARITIME PINE

*Pinus pinaster*

**TWO NEEDLES (MED/LONG)**

6–17cm, dull green.

### CONE

7–16cm long. Purplish when very young, becoming shiny brown with age; weathering to grey-brown.

### BARK

Thick, deeply fissured and forming small irregular plates with smooth dark red or reddish-brown surfaces.

### SPREADING VIGOUR

Low in high country.  
High in lowlands.

MIN: 7CM

MAX: 14CM



## PONDEROSA PINE

*Pinus ponderosa*

**THREE NEEDLES**

13–25cm long. Can also be 2, 4 or 5 needles, stiff.

### CONE

8–14cm long. Spines on scales.

### BARK

Thick, large, smooth, rectangular plates on mature trees. Reddish-brown or reddish-pink to orange-yellow in colour.

### SPREADING VIGOUR

High/Medium.

MIN: 8CM

TWO NEEDLES  
(MEDIUM/LONG)

THREE NEEDLES

MAX: 15CM



## RADIATA PINE

### *Pinus radiata*

Most commonly planted pine in NZ.

#### THREE NEEDLES

9–13cm long. Dark green.

#### CONE

7–15cm long. Held in clusters of up to 6.

#### BARK

Thin and brown, developing deep, mainly vertical, fissures with age.

#### SPREADING VIGOUR

Low/medium in high country. High in lowlands.

MIN: 7CM



## MEXICAN WEEPING PINE

### *Pinus patula*

#### THREE NEEDLES

15–30cm long, thin, flexible, drooping below branches; grass-green colour.

#### CONE

7–10cm long. Reddish-brown colour, held singly or in small clusters.

#### BARK

Red-brown bark that peels easily with orange-brown under bark.

#### SPREADING VIGOUR

Medium.

MAX: 10CM

MIN: 7CM

LEFT IMAGE: ©Kate\_mcalpine inaturalist 73818647/CC BY



IMAGE: ©Bill Finch/naturalist 1027676/CC BY-NC-ND



## WESTERN WHITE PINE

*Pinus monticola*

### FIVE NEEDLES

4–13cm long, blue-green with blunt tip and solid feel.

### CONE

7–25cm long.

### BARK

Grey-purple and smooth, becoming grey-brown, divided into rectangular, scaly plates with age.

### SPREADING VIGOUR

Medium/Low.



## EASTERN WHITE PINE (WEYMOUTH PINE)

*Pinus strobus*

### FIVE NEEDLES

6–14cm long. Blue-green to dark green, soft and flexible, tending to droop.

### CONE

7–20cm long. Light yellowish brown, very resinous.

### BARK

Smooth, grey-green to grey-brown, becoming darker and ridged into rectangular plates with age.

### SPREADING VIGOUR

Medium/Low.



## EUROPEAN LARCH

### *Larix decidua*

#### CLUSTER NEEDLES

2–4cm long and held in dense whorls. Grass-green but is deciduous so needles turn bright yellow and drop in the autumn.

#### CONE

2.5–4cm high and upright. Female cones are crimson-red, maturing to brown. Male cones are yellow.

#### BARK

Pink-brown and thick, developing wide vertical fissures with age.

#### SPREADING VIGOUR

High.

MIN: 2.5CM  
MAX: 4CM



## JAPANESE LARCH

### *Larix kaempferi*

#### CLUSTER NEEDLES

2–5cm long. Light green but like European Larch, needles turn bright yellow and drop in the autumn.

#### CONE

1.5–3.5cm long. Violet maturing to orange-brown

#### BARK

Smooth, red-brown, becoming scaly, fissured and grey with age.

#### SPREADING VIGOUR

High.

MIN: 1.5CM  
MAX: 3.5CM

MAX: 13CM



## DEODAR CEDAR

*Cedrus deodara*

### CLUSTER NEEDLES

2.5–5cm long, grow in small, dense clusters on short shoots, bright green to blue-green color.

### CONE

7–13cm long, barrel cones.

### BARK

Smooth but becomes rough with grooves and irregular, grey coloured scales with age.

### SPREADING VIGOUR

Low/Medium.

MIN: 7CM

## WHAT ARE WILDING PINES?

Wilding conifers (also called wilding pines) refers to self-seeded trees from several species of fir, spruce, larch and pine that are growing where they are not supposed to be. Wilding pines pose a big threat to New Zealand's unique environment. Unlike well managed planted forests, wilding infestations don't allow for native undergrowth, are not managed for fire risk, and are rarely a usable resource.

## WHAT'S BEING DONE?

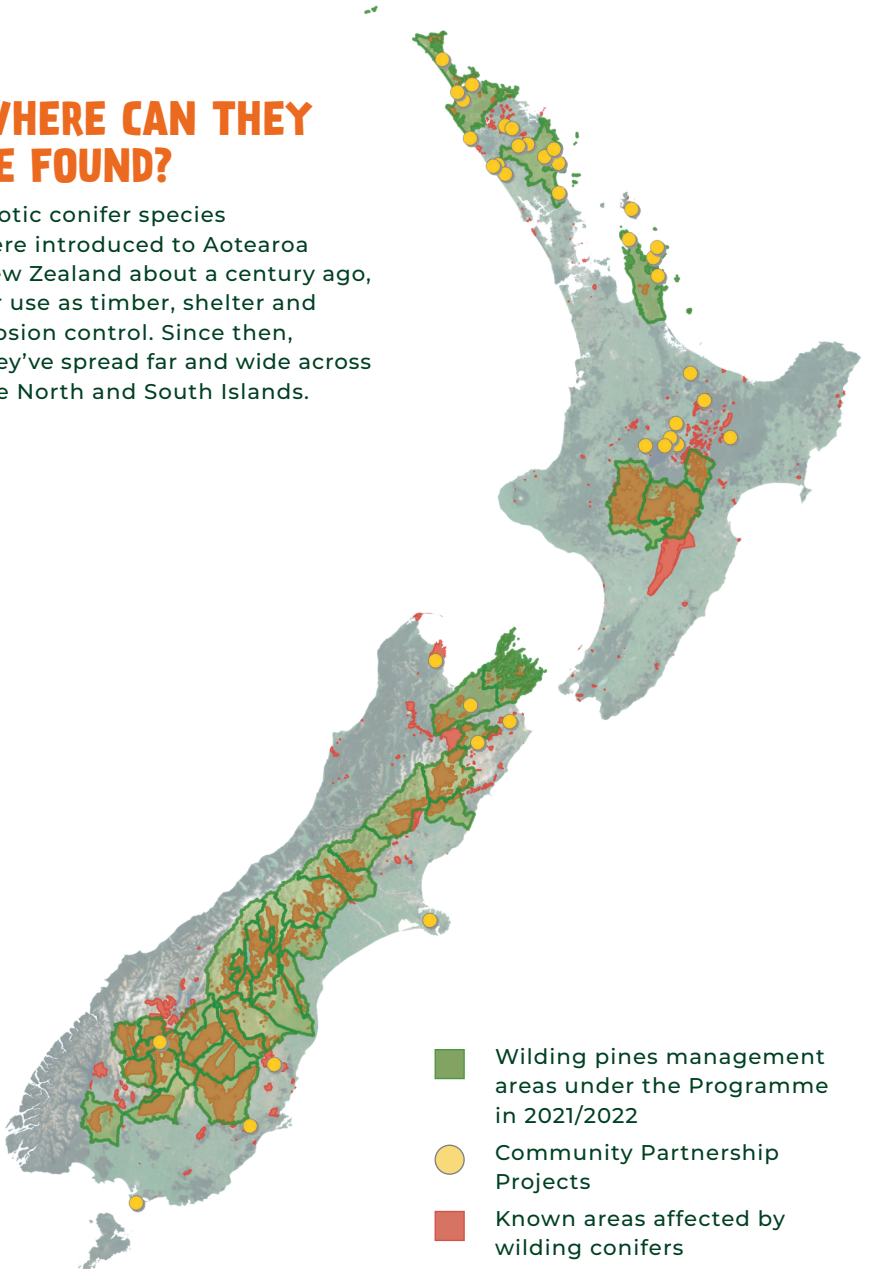
The National Wilding Conifer Control Programme led by Biosecurity New Zealand, helps coordinate and support the efforts of New Zealanders working to tackle this significant national problem. Programme partners include central and local government, Iwi, Hapū, Rūnanga, researchers, landowners and community groups. Local volunteers also play a big part in controlling wilding pines.

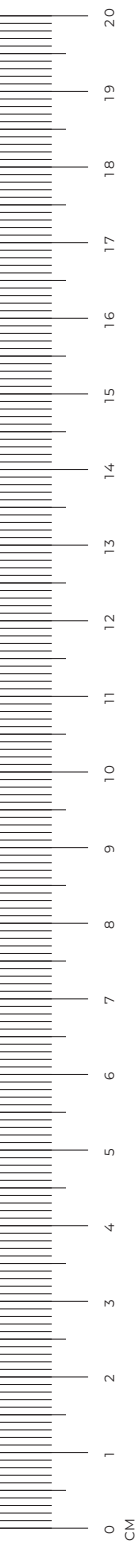
## WHAT CAN YOU DO?

- Be careful when selecting which tree species to plant, and where – check with your regional council.
- Remove 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.
- When hunting, hiking or just enjoying the outdoors, you can pull out small wilding pine seedlings or cut small trees close to the ground and remove all green needles from the stump. These trees can be left on site to break down naturally.
- Businesses can sponsor community projects and help spread the word.
- Anyone can join (or start) a community group helping to control wilding pines or spread the word on social media – check out the videos and images you can use from the [www.wildingpines.nz](http://www.wildingpines.nz) website.

## WHERE CAN THEY BE FOUND?

Exotic conifer species were introduced to Aotearoa New Zealand about a century ago, for use as timber, shelter and erosion control. Since then, they've spread far and wide across the North and South Islands.





## VIEW INFESTATIONS

View wilding conifer infestations in your region.

[WILDPINES.LINZ.GOV.T.NZ](http://WILDPINES.LINZ.GOVT.NZ)



## MANAGEMENT AND CONTROL

Visit iNaturalist NZ – Mātaki Taiao to record what you see in New Zealand nature.

[INATURALIST.NZ](http://INATURALIST.NZ)

**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.

Information provided around spread vigour is indicative only and based on observations by the Programme. For region specific risk, refer to the regional council regional pest management plan for your area.



**NATIONAL WILDING CONIFER  
CONTROL PROGRAMME**

