# Weedbusters Taranaki



RECOGNISE, REPORT AND REMOVE WEEDS

Restore biodiversity by planting native species

#### What's in a name?

- A weed is simply any plant that is growing in the wrong place
- A pest plant is one Taranaki Regional Council has classified as being a pest.
   It is most likely to become widespread and have a harmful impact on native plants, habitats, farms and gardens in our region.

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## INTRODUCTION

#### How to use this booklet

The plants in this guide are grouped according to their structure and the way they grow. In each section, weeds are listed first, followed by desirable native alternatives. Identify your weed, report and/or remove it, then select a native to take its place. *Sweet!* 

#### What about weeds?

There are more weed species growing wild in Aotearoa/New Zealand than native plants! They are found everywhere. They invade the natural environment from dumped garden waste, by seeds blown in the wind, and by being eaten and dispersed by birds and animals. Weed fragments travel along waterways and are carried in socks and boots and on vehicle tyres.

Weeds degrade natural ecosystems by displacing native species and cost our economy billions of dollars annually through lost productivity, control measures and their effect on human and animal health.

We need to stop this! We need your help! We must reduce the extent of weeds in our communities.

#### The legislation

*All* weeds in this booklet are recommended for control or removal. However, some species are even more unwelcome than others! The most undesirable are governed by two pieces of legislation, the Regional Pest Management plan for Taranaki (2018) and the National Pest Plant Accord (2020). There are additional notes in the plant lists for these species that indicate their classification.

#### **REGIONAL PEST MANAGEMENT PLAN FOR TARANAKI (2018)**

The Regional Pest Management Plan (RPMP) is the statutory framework by which the Taranaki Regional Council undertakes the management of pest animals and pest plants in the region for the next 10 years. It sets out a management programme for 16 pest plant species the council believes warrant *regional intervention*. These pest plants are of most concern to the environment and economy of our region. They are not able to be sold, propagated, distributed or displayed. See https://www.trc.govt.nz/environment/ farmhub/biosecurity-biodiversity/pest-management-what-you-need-to-know/



There are two classifications:

- 1 **Eradication**: These not many of these pest plants in the region but the long term plan is to eradicate them altogether. **Report these species to the council as soon as you see them** and *the Council will undertake control*. The sooner an infestation is observed and reported, the greater the saving in time and money. Email biosecurity@trc.govt.nz or phone on 0800 736 222. If you can, send a photo.
- **2 Sustained Control**: These pest plants are more abundant. The long-term goal is to prevent them from spreading to new areas or neighbouring properties.

#### Pest plants under the RPMP

Common name	Scientific name	Programme
Climbing spindleberry	Celastrus orbiculatus	Eradication
Giant reed	Arundo donax	Eradication
Madeira vine (mignonette)	Anredera cordifolia	Eradication
Moth plant	Araujia hortorum/A. sericifera	Eradication
Senegal tea	Gymnocoronis spilanthoides	Eradication
Giant buttercup	Ranunculus acris	Sustained control, GNR
Giant gunnera	Gunnera manicata & G. tinctoria	Sustained control, G
Gorse	Ulex europaeus	Sustained control, GNR
Nodding, plumeless and variegated thistles	Carduus nutans, C. acanthoides, Silybum marianum	Sustained control, GNR
Old man's beard*	Clematis vitalba	Sustained control, G
Wild broom	Cytisus scoparius	Sustained control, GNR
Wild ginger (Kahili and yellow)	Hedychium gardnerianum, H. flavescens	Sustained control, G
Yellow ragwort	Jacobaea vulgaris	Sustained control, G

G = A General Rule applies, meaning that the land occupier is required to undertake control.

GNR = A Good Neighbour Rule (GNR) applies. If your rural property is free of the plant, you can notify the Council of any infestation/s on adjoining rural property/ies. The adjoining occupier/s will then have to take the required action.

\* Some sections of the Waingongoro and Patea Rivers are exempted for old man's beard. See the council website (previous page) for details.

#### NATIONAL PEST PLANT ACCORD (2020)

The National Pest Plant Accord (NPPA) was set up to prevent the further spread of pest plants within Aotearoa New Zealand. If allowed to spread further these pest plants could seriously damage the environment and economy. The Accord is a co-operative agreement between Ministry for Primary Industries, Department of Conservation, Regional and District Councils and the NZ Plant Producers Incorporated.



All plants listed in the Accord are unwanted organisms under the Biosecurity Act. There are approximately 240 species. They are banned from sale, propagation and distribution throughout Aotearoa New Zealand. The Accord contains a physical description of each species, with accompanying photographs, a summary of its impact and what to do. The Taranaki region contains many of the pest plant species described in the Accord. These species are invading and damaging our natural areas.

The Accord can be found at https://www.mpi.govt.nz/biosecurity/how-to-find-report-and-prevent-pestsand-diseases/partnerships-programmes-and-accords/national-pest-plant-accord/

For some pest plants you may also need to notify the Ministry for Primary Industry (MPI) on Pests & Diseases hotline, 0800 80 99 66. MPI is responsible for managing exotic pests when they enter our country. Visit the MPI website (www.mpi.govt.nz/biosecurity) to see if the pest is known to be in New Zealand.

Pest plant sightings can also be logged at https://inaturalist.nz/projects/pest-plants-weeds-of-nz or at www.findapest.nz. If you can, send a photo to provide additional valuable information.

# PART 1

**S** 

Recognise, report & remove **Weeds** Replant with

native species

## Weed ground covers & herbs

Weed ground covers grow vigorously to form dense smothering mats on the ground. These mats often grow rapidly to form large infestations. Weed ground covers outcompete and shade out native ground cover species and suppress seedlings. Many species are shade tolerant. They are spread by wind, water and birds and many seed prolifically.

#### CONTROL OR REMOVE THESE SPECIES.

#### Artillery plant / aluminum plant

Lamium galeobdolon

- Mat forming
- Oval green leaves with large silver patches
- Purple creeping stems
- Yellow flowers

Artillery plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 







#### Bear's breeches Acanthus mollis

- Clumps up to 120cm high
- Leaves are large, multi-lobed and shiny on a stalk
- White flowers on a central spike

#### Plectranthus

#### Plectranthus ciliatus

- Creeping
- Hairy textured oval leaves with purple underside
- Erect stems of white flowers

#### **Giant gunnera**

Gunnera tinctoria / Gunnera manicata

- A herb that resembles giant rhubarb
- Grows in clumps up to • 2m high
- Rubbery prickles on huge ٠ leaves and stems

Under the Regional Pest Management Plan giant gunnera must be under sustained control.

#### **Elephants ears**

Alocasia brisbanensis

- A herb
- Grows up to 2m high
- Leaves are large and arrow-shaped on stems
- Small cream flowers •
- Red fleshy fruit •

#### **Fairy crassula**

Crassula multicava

- Creeping succulent Fleshy leaves with small
- pitted dots Clusters of small pale pink
- flowers

Fairy crassula is registered with the National Pest Plant Accord. It is prohibited from propagation, distribution and sale.

#### **Giant knotweed**

Fallopia sachalinensis

- Shrub-like herb up to 4m high
- Red-purple shoots then green • canes
- Leaves long, triangular
- Creamy white flowers •

Under the Regional Pest Management Plan this plant must be eradicated. Report it to the Taranaki Regional Council.













#### **Ginger species**,

Hedychium gardnerianum and Hedychium flavescens

- Kahili ginger & yellow ginger
- Erect stems to 2.5m high; large shiny leaves
- Tall yellow or cream flower heads; orange fruit
- Thick rhizome clumps and strong roots

Under the Regional Pest Management Plan ginger species must be under sustained control.

#### Mexican daisy

Erigeron karvinskianus

- Sprawling daisy up to 40cm high
- Long thin stem
- Small narrow leaves
- White or pink flower

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 







Carolyn I ewis: inset: Trevor, James

#### Nasturtium

Tropaeolum majus

- Hairless, scrambling
- Long fleshy stems
- Round leaves on stalks
- Tubular red/orange/yellow
  flowers

#### Periwinkle

Vinca major

- Scrambling ground cover or vine
- Stems are long, strong and trailing
- Shiny leaves
- Solitary violet flowers



#### **Pink ragwort**

Senecio glastifolius

- Up to 1m high at flowering
- Stems grow from crown
- Oval, toothed light green leaves
- Clusters of bright pink/purple flowers



#### Ragwort

Jacobaea vulgaris

- Erect plant <60cm high
- Stems grow from crown
- Waxy, lobed, dark green leaves
- Clusters of bright yellow
   flowers

Under the Regional Pest Management Plan this plant *must be under sustained control.* 

#### Snow poppy

Eomecon chionantha

- Small oval leaves with scalloped edges
- White four-petalled flower with yellow stamens
- Extensive rhizomes

This plant is registered with the National Pest Plant Accord. It is prohibited from propagation, distribution and sale.

#### Wandering willy

Tradescantia fluminensis

- Ground cover with succulent creeping stems
- Dark green shiny smooth oval leaves
- White flowers







## Native ground covers

Native ground covers are found naturally in our ecosystems. They are suited to local conditions and will thrive. Their low growing sprawling nature prevents bare soil from being washed away and helps retain moisture. They cover the ground so suppress weeds.

Their foliage adds texture and their abundance of flowers adds colour. Planting native ground cover will provide fruit, nectar and leaves for birds and habitat for insects and lizards.

Plant these species. Select from any of the options on pages 13 to 15.

#### Puatea

Anaphalioides trinervis

- Dark green leaves
- Straw-paper-like white flowers on long stems
- Prefers partially shaded moist banks, such stream sides or the edges of waterfalls







# oto & inset: Janet Hunt

#### **Bead plant**

Nertera depressa

- A tiny, mound-forming plant
- Bright green leaves
- Tiny greenish-white flowers
- Small shiny orange berries

#### Harakeke

Phormium tenax

- Up to 5m high
- Large long leaves arising from base and floppy at ends
- Tubular red flowers
- Flat black seeds



#### Kakaha / bush lily

Astelia fragrans

- Broad-green flax-like leaves stiffly arched with a silvery sheen
- Scented flowers
- Orange berries on female plants

#### Leptinella squalida

Leptinella squalida subsp squalida

- Fast growing
- Member of the daisy family
- Single erect lobed green leaves
- Yellow button-like flowers

#### Panakenake / pratia

Lobelia angulata

- Fast growing
- Tiny circular leaves with toothed margins Small white/ violet flowers
- Purplish red berries

#### Parataniwha

Elatostema rugosum

- Long textured leaves with saw-like edge Green or redpurple
- Tiny fruit
- Prefers shade and damp













#### **Pinatoro**

Pimelea carnosa

- Very low growing sprawling shrub
- Tan/grey stems
- Overlapping pairs of thick • fleshy oval leaves
- Clusters of small white flowers, white fruit

Piripiri / bidibid

• Pairs of oblong toothed leaves Flower heads spherical each

with a long, hooked spike

Acaena anserinifolia Slender stems

when fruiting

•







#### Rengarenga

Arthropodium cirratum

- Clump forming to 60cm high
- Strap-like green arching • leaves
- Spikes of white star-shaped flowers

Eco-source your plants if possible.

This means getting your plants from seed and cuttings obtained from within, rather than outside, your region.

These plants are better adapted to local conditions and are more likely to thrive.



## Weed grasses, bulbs and ferns

Weed grasses, bulbs and ferns grow vigorously and rapidly to smother the ground. They often form colonies that prevent the establishment of native seedlings. This group ranges in size from tall Pampas grass to shorter species such as African clubmoss. Many of this group are shade tolerant. They are spread by wind, birds, water and vegetative matter.

#### CONTROL OR REMOVE THESE SPECIES.

#### African clubmoss

Selaginella kraussiana

- Carpet forming fern-like plant with creeping, slender, irregular branched stems
- Tiny leaves up to 4mm long in rows on stem
- Spread by spores on boots or feet

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Agapanthas

Agapanthas praecox subsp. orientalis

- Herb up to 1.2m
- Long leathery leaves arise from base of rhizomes
- White/purple/blue flowers on erect stems



#### Aristea

Aristea ecklonii

- Stiff upright iris-like leaves growing in clumps up to 70cm high
- Small blue-purple flowers



#### Bamboo

Bambusa glaucescens

- Tall erect grasses up to 5m • high
- Clump forming •
- Long green/brown smooth • hollow stems
- Leaves long thin •

#### **Formosan lily**

Lillium formosanum

- Up to 1m high
- Narrow leaves up to 13cm in length off main stem
- Large white trumpet -shaped ٠ flowers
- Many wind-blown seeds in pod •

This plant is registered with the National Pest Plant Accord. It is prohibited from propagation, distribution and sale.

#### **Field horsetail**

Equisetum arvense

- Forms dense mats
- Erect jointed stems: sterile • are green and branched, fertile are pale brown and unbranched

This plant is registered with the National Pest Plant Accord. It is prohibited from propagation, distribution and sale.

#### **Giant reed**

Arundo donax

- Bamboo-like grass up to • 5m high
- Clump forming
- Hollow stems .
- Bluish-white leaves
- Plume-like flower head •

Under the Regional Pest Management Plan this plant must be eradicated. Report it to the Taranaki Regional Council.













#### Himalayan fairy grass

Miscanthus nepalensis

- Tufted grass up to 1m high
- Leaf blades with a mid-rib
- Drooping brown flower head on long stem

#### **Arum lily**

Zantedeschia aethiopica 'Green Goddess'

- Clump forming plant up to 1.5m
- Large arrow-shaped glossy leaves and white flowers
- Green/orange fruit

Italian arum

Arum italicum

high

•

•

٠

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

Poisonous plant up to 60cm

Dark green arrow-shaped

Orange berries on spikes

leaves with cream veins Green/white flowers







#### Canna lily

Canna indica

- Clumping plant up to 2m high
- Large green oblong leaves on sturdy stems
- Yellow/orange/red flowers on stem



#### Himalayan giant lily

Cardiocrinum giganteum

- Large lily up to 3.5m high
- Big shiny green heart-shaped leaves
- Clusters of large tubular pink/ white flowers on tall stems











#### Marram grass

Ammophila arenaria

- Erect densely tufted grass to 1m high
- Grey-green tightly rolled leaves
- Seed head a dense golden spike

#### Mexican feathergrass

Nassella tenuissima

- Tussock-forming grass
- Fine wiry leaves <70cm high
- Feathery flowerhead

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Montbretia

Crocosmia x crocosmiiflora

- Clump forming plant
- Sword shaped leaves <90cm high arise from base of corms and rhizomes
- Orange flowers overtop foliage

#### Palm grass

Setaria palmifolia

- Large dense grass
- Large elongate palm-like leaves
- Narrow seed heads with fuzzy tips on long arching stems

#### Pampas grass + purple pampas grass

Cortaderia selloana + Cortaderia jubata

- Clump forming grass up to 4m high
- Long thin sharp leaves
- Erect fluffy flower heads white-pinkish or purple

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 









#### **Stinking Iris**

Iris foetidissima

- Clump forming herb <80cm high
- Sword-shaped leathery leaves from base
- Pale yellow flowers on stems
- Fruit capsules

#### Tuber ladder fern

Nephrolepis cordifolia

- Up to 1m high
- Tuft forming
- Long erect fronds with serrated divided leaflets



## Native grasses, bulbs and ferns

Native grasses, bulbs and ferns thrive in local conditions. They stabilise the soil, prevent erosion and suppress weeds. They provide food and habitat for insects and lizards.

Grasses are versatile and low maintenance and come in a variety of sizes and colours. Plant one or two species for simplicity. Ferns are a beautiful garden addition. They like free-draining soil, consistent moisture and an appropriate level of light.

Plant these species! Select from any of the options on pages 22 to 27.

#### **Alpine hard fern**

Blechnum penna-marina

- Low growing and compact up • to 20cm high
- Narrow erect dark green fronds
- Young fronds are tinged red ٠

**Broad-leaved poa** 

Tufted up to 70cm high

drooping leaves Flowering stalk

Coarse light green, green-

brown to blue-green erect or

Poa anceps

٠

٠









#### **Bush rice grass**

Microlaena avenacea

- Fine blue green grass ٠
- Sword like erect or drooping leaves
- Arching flower stems



#### Common maidenhair fern / puhinui

Adiantum cunninghamii

- Tufted with creeping stem
- Dark green to blue green fronds, paler underside
- Oblong leaflets attached by a stalk

#### Huruhuruwhenua/ shining spleenwort

Asplenium oblongifolium

- Tufted up to 1m high
- Dark green fronds
- Bright green shiny narrow • leaflets up to 15cm in length









# <sup>a</sup>hoto: Colin Ogle; inset: Wayne

#### **Kiwikiwi**

**Kuta** 

•

•

Eleocharis sphacelata

• Sedge with submerged roots Thick hollow mid to dark

green stems up to 1m high Small cream to brown flower

spike on tip of foliage

#### Blechnum fluviatile

- Dark brown spiky upright fronds in centre
- Drooping green ladder-like ٠ fronds with round leaflets



#### Makaka / true maidenhair fern

Adiantum aethiopicum

- Spreading clumps with fronds up to 0.5m high
- Small bright green leaflets on wiry black stems

#### Mikoikoi / NZ Iris

Libertia ixioides

- Fan-shaped
- Stiff sword-like yellow tinged green flat leaves
- Small white flowers
- Orange/yellow seed pods









Oioi / jointed wire rush

Apodasmia similis

- Fine grey-green leaves
- Regular brownish joints running up stems
- Up to 1m high

#### Petipeti / crown fern

Blechnum discolor

- Upright up to 1m high
- Shuttlecock shaped crown
- Closely spaced oblong leaflets green above, paler below

D: Carolyn Lewis; inset: Carolyn Lewis

#### Pikopiko / hen and Chicken fern

Asplenium bulbiferum

• Tufted and erect

**Pukio** Carex secta

1m high

•

• Pale green arching feathery fronds with plantlets on the upper surface

• Tussock forming sedge up to

• Drooping yellow- green leaves

Circular clump shape





#### Pukio / swamp sedge

Carex virgata

- Clump forming
- Bright green leaves up to 1m high
- Leaves arching and fine
- Dark brown seed heads

#### Pukupuku / rasp fern

Blechnum parrisiae or Doodia australis

- Clump forming
- Erect up to 1m high
- Rough arching green fronds, pink-red when young
- Narrow leaflets





#### Shield fern

Polystichum neozelandicum or Polystichum wawranum

- Erect stems •
- Blue-green scaly fronds up to • 1m high
- Leaflets oblong, toothed, • pointed at tip







#### Speckled sedge

Carex testacea

- Erect and densely tufted up to 60cm high
- Fine dark red to orange-red ٠ arching foliage

Swamp astelia

• Clump up to 1.5m high Erect wide leaves

Olive green with silvery sheen

Astelia grandis

beneath • Orange berries

•

•

Flower spikes •

#### Swamp kiokio

#### Parablechnum minus

- Green and arching up to 0.5m high
- New fronds red tinge
- Leaflets long and pointed •
- Brown hairs on fronds and • stems

#### Thread fern

Blechnum filiforme

- Climbing fern that creeps along the ground before climbing a tree trunk
- Juvenile has short fronds with serrated oblong leaflets;
- Adult fronds are larger with elongated tapering leaflets, then long thread-like leaflets



Austroderia fulvida or Austroderia toetoe

- Robust grass up to 1.5m high
- Long leaves, sharp edged
- Leaves dull on the upper side, shiny below
- Upright dense feathery plumes



#### Ререре

**Turutu** Dianella nigra

> long stems Tiny white flowers

•

٠

Machaerina sinclarii

- Drooping bright green wide flat leaves up to 1.5m high
- Long drooping panicles of fine rusty red flowers

Resembles a fine leafed flax

Bright blue/purple berries on

Grows up to 50cm high



## **Weed climbers and vines**

Weed climbers and vines grow vigorously and rapidly up into the canopy. They are a serious threat to native forest. They spread to form a thick blanket which smothers and strangles native shrubs and trees. Some climbers and vines form a dense layer on the forest floor that suppresses low growing native species. Weed climbers and vines grow from seeds, stems and root fragments.

#### CONTROL OR REMOVE THESE SPECIES.

#### Asparagus-bushy

Asparagus aethiopicus

- Scrambling
- Multi stemmed and bushy
- Small white flowers
- Red berries

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Asparagus-climbing

Asparagus scandens

- Climbing fern-like plant
- Wiry stems up to 2m long, widely branched
- Scale-like thin leaves; small white flowers, red berries

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Asparagus-ferny

Asparagus plumosus

- Scrambling fern-like plant
- Branched stems up to 2m long
- Thin fern-like leaves
- Small white flowers
- Purple/black berries







#### Asparagus-smilax

Asparagus asparagoides

- Scrambling, up to 3m high
- Wiry branched stems
- Oval pointed leaves
- Green/white flowers
- Red berries

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

## Blue morning glory

Ipomoea indica

- High climbing vine
- Twining purplish hairy stems
- 3-lobed hairy leaves
- Blue-purple funnel-shaped
  flowers

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Bomarea vine

Bomarea multiflora

- Vine with long thin pointed leaves
- Clusters of trumpet-shaped red flowers with yellow on inside

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Cape Ivy

Senecio angulatus

- Scrambling, up to 2m high
- Thick ivy-shaped leaves coarsely toothed
- Clusters of yellow daisy-like flowers









#### **Cathedral Bells**

Cobaea scandens

- Woody vine with clawed tendrils
- Bell-shaped flowers green when young then turn purple
- Green seed capsule

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Chilean flame creeper

Tropaeolum speciosum

- Vine with slender stems and five-fingered leaves
- Scarlet flowers
- Blue/black berries

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### **Chocolate vine**

Akebia quinata

- Climbing vine or scrambling ground cover
- Leaves palmate <5 leaflets
- Purple-brown flowers
- Purple-violet flattened seed pods

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### **Climbing dock**

Rumex sagittatus

- Scrambling vine up to 4m long
- Arrow shaped leaves hanging down
- Clusters small green/pink flowers
- Kumara-like rhizome









#### Climbing spindleberry

Celastrus orbiculatus

- Vine up to 12m long
- Serrated heart-shaped leaves
- Small clusters of green flowers
- Young stems have sharp spines
- Yellow and red fruit

Under the Regional Pest Management Plan this plant *must be eradicated.* Report it to the Taranaki Regional Council.

#### German Ivy

Delairea odorata

- Scrambling vine up to 5m long
- Thin soft glossy ivy-shaped leaves
- Clusters of yellow button-like flowers

#### Great bindweed / convolvulus

Calystegia silvatica subsp disjuncta

- Creeping herb with stems up to 2m long
- Smooth arrow-shaped leaves
- Large white funnel-shaped flowers

#### Japanese honeysuckle

Lonicera japonica

- Scrambling branched climber
- Brown smooth flexible stems
- Dark green leaves
- Paired white-yellow flowers







#### Jasmine

Jasminum polyanthum

- Climber up to 12m long
- Tough wiry stems •
- Dark green leaflets
- Pink flower buds •

lvy

•

•

•

Hedera helix

• Climber with woody stems Clings using aerial rootlets

Shallow lobed leaves

Tiny yellow/green flowers

White star-like flowers







#### Madeira vine

#### Anredera cordifolia

- Vine with reddish stems and small aerial tubers
- Glossy heart shaped leaves •
- Small drooping cream flowers

Under the Regional Pest Management Plan this plant must be eradicated. Report it to the Taranaki Regional Council.

#### **Mile a Minute**

Dipogon lignosus

- Vine
- Leaves with three heartshaped leaflets
- Pea-like white/pink/purple ٠ flowers
- Sickle shaped seed pods •

#### Moth plant

Araujia sericifera syn A hortorum

- Vine up to 10m long
- Dark green leaves
- Clusters white flowers
- Large pods with black thistle down-like seeds

Under the Regional Pest Management Plan this plant *must be eradicated*. Report it to the Taranaki Regional Council.

#### Old Man's Beard

Clematis vitalba

- Vine up to 20m long
- Long woody stems with 6 ridges
- Cream-white flowers, from December–May
- Seeds have white fluffy plumes

Under the Regional Pest Management Plan this plant *must be under sustained control.* 

#### Banana passionfruit

Passiflora 'Tacsonia' subgroup

- Climbing vine up to 6m long
- Tendrils on stems, lobed leaves; pink/white/purple pendulous flowers
- Oval green/yellow/orange fruit

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale* 

#### Blue passion flower

Passiflora caerulea

- Climbing vine up to 6m long
- Tendrils on stems, lobed leaves; pink/white/purple pendulous flowers
- Round green/yellow/orange fruit











## Native climbers and vines

Native climbers and vines are suited to local conditions and will thrive. They provide nectar and fruit for birds, insects, and lizards and also provide seasonal interest and screening without taking over the space at ground level. They add scent and colour with their multitude of beautiful flowers. Climbers and vines are hardy, fast growing and add diversity to the upper tier of your planting.

**Plant these species!** Select from any of the options on pages 34 to 36.

#### Akakiore / kaihua / NZ jasmine

Parsonsia heterophylla

- Twining growth habit up to 4m high
- Slender stems, glossy green leaves
- Clusters of sweetly scented creamy white flowers

Akatea / climbing rata / scarlet rata

Metrosideros fulgens • Vine up to 10m long • Twine/rope like stems Oval shaped, dark green

glossy leaves • Bright red flowers

Akatorotoro / small white rata Metrosideros perforata

stiff stems

unavailable

• Small round green leaves on

Clusters white flowers Can take the shape of a bushy shrub when support is









#### Kohia / NZ passionfruit

Passiflora tetrandra

- Climber up to 10m long
- Tendrils
- Glossy green leaves
- Small fragrant creamy flowers
- Round orange fruit

#### Kokihi / native spinach

Tetragonia implexicoma

- Scrambler
- Long trailing stems up to 4m long
- Initially succulent, woody with age
- Fleshy leaves and fruit

#### Pohuehue / large leaved pohuehue

Muehlenbeckia australis

- High climber with many branched stems, tendrils
- Adult leaves oval, juvenile leaves 3-lobed; irregular margins
- Small creamy flowers

#### Small leaved pohuehue

Muehlenbeckia complexa var. complexa

- Twining vine
- Dense wire-like stems, interlaced tiny round light green leaves
- Tiny creamy-green flowers









#### Pouwhiwhi / NZ bindweed

Calystegia tuguriorum

- Scrambler
- Numerous, slender, twining stems
- Heart shaped green leaves
- Large white funnel-like flowers

#### Puawananga / clematis

Clematis paniculata

- High climber
- Stems up to 9m long
- Leaves have 3 oval bright green leaflets
- Star shaped large white flowers in spring

#### Tataramoa / bush lawyer

Rubus cissoides

- Scrambling vine
- Lance-shaped leaflets with toothed edges and prickles to cling to adjacent vegetation
- Orange-red fruit

#### Tataramoa / swamp lawyer

Rubus australis

- Scrambling vine
- Round leaflets with toothed edges and prickles to cling to adjacent vegetation
- Orange-red fruit











hoto: Jeremv Rolfe

## Weed shrubs, trees and palms

Weed shrubs, trees and palms grow vigorously and rapidly to form dense stands. They grow into the canopy where they crowd and replace native species, preventing regeneration. Many weed shrubs, trees and palms were planted historically and are long-lived. Many are shade tolerant and spread aggressively by seeds, root suckering and stump sprouting.

#### CONTROL OR REMOVE THESE SPECIES.

#### Alder

Alnus glutinosa

- Deciduous tree up to 15m high
- Fissured bark
- Oblong toothed leaves

**Bangalow palm** 

Leaves are uniformly dividedHanging purple flowers

Archontophoenix cunninghamiana • Palm up to 14m high

• Grey trunk

• Spherical fruit

• Clusters of catkins mature to cones







#### Barberry

Berberis glaucocarpa

- Evergreen spiny shrub up to 7m high
- Leathery leaves
- Clusters yellow flowers
- Red/black berries when ripe

N.

#### **Black locust**

Robinia pseudoacacia

• Tree up to 25m high

Boneseed

green leaves

distribution and sale.

high

- Thin round leaflets in pairs on leaf stalk
- Drooping clusters of pea-like white/yellow flowers

Chrysanthemoides moniliferaEvergreen shrub up to 3m

Yellow flowers followed by hard green-black fruit

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation,* 

• Leathery serrated bright

# hoto: Carolyn Lewis





# oto: Bruce Clarkson

#### Boxthorn

Lycium ferocissimum

- Erect shrub up to 6m high
- Branched stems with spines
- Fleshy oblong leaves
- Cream/purple flowers
- Red fruit

#### **Brush wattle**

#### Paraserianthes lophantha

- Shrub to small tree
- Leaflets on either side of a stem
- Green/yellow flowers
- Long brown seed pods


## **Buddleia**

Buddleia davidii

- Shrub up to 3m high
- Multi-stemmed •
- Thin drooping leaves
- Hanging clusters of white/ ٠ purple flowers

## **Castor Oil Plant**

Ricinus communis

- Shrub or small tree up to 4m high
- Glossy palmate serrated green/red/purple leaves
- Red/green flowers
- Spiky pod full of large seeds •

**Chinese windmill** 

Leaves are fan-shaped with

sharp marginal teeth • Numerous yellow flowers

Trachycarpus fortunei • Palm up to 12m high Fibrous trunk

palm

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## **Coastal banksia**

Banksia integrifolia

- Tree up to 15m high
- Narrow elliptical leaves with • white underside
- Erect stalks of yellow flowers
- Woody cones



## Cotoneaster species

- Evergreen shrubs up to 3m high
- Dark glossy leaves
- Clusters small white flowers
- Bunches of red berries

Cotoneaster simonsii is registered with the National Pest Plant Accord. It is prohibited from propagation, distribution and sale.

## Darwin's barberry

Berberis darwinii

- Shrub up to 4m high
- Clusters leaves spiny edges
   and below
- Clusters orange flowers
- Purple/black berries

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 







Elder

Sambucus nigra

- Shrub up to 6m high
- Serrated leaflets
- Clusters of white flowers and black fruit on red/purple stems



#### Elaeagnus

Elaeagnus x reflexa

- Dense scrambling shrub up to 20m high
- Oval wavy leaves
- Clusters small whitish flowers
- Oblong orange fruit

## Grey willow

Salix cinerea

- Deciduous shrub or small tree up to 7m high
- Shiny oval serrated leaves
- Erect catkins appear before leaves

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 



# oto & right inset: Trevor James; left inset Carolyn Lew

Heather

Hawthorn

• Thorny stems

Red fruit

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Crataegus monogynaDense tree up to 14m high

Lobed and toothed leavesSmall white flowers

Calluna vulgaris

- Bushy shrub <60cm high
- Woody stems
- Tiny leaves in rows
- Spikes of small purple or pink flowers

This plant is registered with the National Pest Plant Accord. It is prohibited from propagation, distribution and sale.

#### Himalayan honeysuckle

Leycesteria formosa

- Shrub up to 2m high
- Many stemmed
- Heart-shaped leaves
- White flowers surrounded by red/purple bracts



## Holly

Ilex aquifolium

- Tree up to 12m high
- Glossy serrated leaves with a spine at each point
- Small white flowers
- Red berries

#### Japanese spindle tree

Euonymus japonicus

- Shrub or small tree up to 7m high
- Glossy oval leaves; clusters of small green flowers
- Round pink seed capsules

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Japanese walnut

Juglans ailantifolia

- Tree up to 15m high
  Large leaves <17 stalkless leaflets</li>
- Produces catkins
- Walnut with a green husk

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

## Lantana

Lantana camara (all varieties)

- Shrub up to 2m high
- Wrinkled leaves, toothed edges
- Clusters small yellow/pink/
   orange flowers
- Berry-like blue/black fruit

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 











# Lodgepole pine / wilding pine

Pinus contorta

- Tree up to 24m high
- Reddish brown rough bark
- Green needle-like leaves in clusters
- Egg-shaped cones

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

## Mistflower

Ageratina riparia

- A low-growing shrub
- Scrambling, erect
- Up to 1.5m high
- Many hairy stems
- Serrated leaves
- Small clusters of white flowers

## Monkey apple

Syzygium smithii

- Tree up to 20m high
- Glossy oval leaves
- Whitish flowers
- White/pink berry-like fruit

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

## Phoenix palm

Phoenix canariensis

- Diamond patterned trunk
- Large leaves with spines on stalks
- White/yellow flowers
- Orange berries









#### **Privet species**

- Four tree species
- up to 15m high •
- Lumpy warts on stems ٠
- **Glossy** leaves •
- Tiny cream flowers •
- Blue/black berry-like fruit ٠

Ligustrum lucidum is registered with the National Pest Plant Accord. It is prohibited from propagation, distribution and sale.

#### Rowan

Sorbus aucuparia subsp aucuparia

- Tree up to 8m high ٠
- Erect trunk, spreading • branches
- Leaves up to 8 pairs of • leaflets

**Sexton's Bride** Rhaphiolepis umbellatum Bushy shrub up to 3m high

**Oval leathery leaves** 

Purple/black fruit

stamens

White flowers with pink

- White flowers .
- Red berries

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## **Spanish heath**

Erica lusitanica

- Shrub up to 2m high •
- Needle-like leaves in whorls of • 3-4
- Bell-shaped white/pink • flowers

#### Strawberry dogwood

Dendrobenthamia capitata

- Tree up to 6m high
- Paired leaves with prominent veins
- Pale yellow flower
- Strawberry-like fruit

## Sweet pea shrub

Polygala myrtifolia

- Shrub up to 2m high
- Smooth branched stems
- Smooth oval leaves
- Clusters of pea-like purple flowers

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

## Sycamore

Acer pseudoplatanus

- Deciduous tree up to 35m high
- Grey trunk
- Large palmate leaves
- Cluster small yellow/green
   flowers
- Winged seeds in pairs











## Taiwan cherry

Prunus campanulata

- Deciduous tree up to 8m high
- Serrated leaves
- Bell-shaped dark pink flowers
- Fruit shiny scarlet cherries

## Tree of Heaven

Ailanthus altissima

- Deciduous tree up to 25m
   high
- Compound leaves with alternating leaflets
- Flowers are yellow/white/ green

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

## Tutsan

Hypericum androsaemum

- Small shrub 1.5m high
- Oval leaves turn red in autumn
- Yellow flowers
- Round red berries which ripen to black

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Velvet groundsel

Roldana petasitis

- Shrub up to 2m high
- Large rounded toothed hairy leaves
- Clusters yellow daisy-like flowers
- Winged seeds

## Victorian tea tree

Leptospermum laevigatum

- Shrub up to 6m high
- Oblong grey/green leaves
- White and red/pink flowers
- Fruit is a capsule









hoto & inset: Carolyn Lewi



## Wattle species

Acacia spp

- Shrubs to large trees
- Leaflets in rows on stalk / leaves extend from stem
- Yellow flowers
- Long flat seedpods

Wild Cherry

• Tree up to 12m high

• Red cherry-like berries

Oval ribbed serrated leaves Clusters of white flowers

Woolly nightshade

• Smelly shrub up to 10m high Velvety oval leaves that are

covered in dusty hairs Clusters purple flowers

This plant is registered with the National Pest Plant Accord. It is prohibited from propagation,

Solanum mauritianum

Round berries

distribution and sale.

Prunus avium

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Dispose of weeds in such a way that they cannot regrow into new infestations.

See more on p.68.



Kahili ginger seed head and roots will regrow. Send them to landfill or otherwise dispose of them.



But the leaves and stalks can be chopped and then mulched or put in the compost.

# Native shrubs, trees, palms & tree ferns

Native shrubs, trees, palms and tree ferns suit local conditions and thrive in our environment. Taller species provide shelter from frost, wind and direct sunlight; they filter the air, prevent flooding and provide privacy. They also provide food and habitat for birds insects and lizards. Trees, palms and tree ferns are also some of our most iconic and greatly reduced plant species — you can provide a refuge for them in your own backyard.

Plant these species! Select from any of the options on pages 47 to 63.

## Akeake

Dodonaea viscosa

- Bushy shrub or small tree
- Flaky reddish bark
- Long thin wavy green to redpurple leaves
- Clusters of small greenish flowers







## Coastal tree daisy

Olearia solandri

- Bushy shrub
- Yellow sticky stems with clusters of small long green leaves, white underneath
- White flowers

## Common (native) broom

Carmichaelia australis

- Small tree
- Many flattened narrow green twigs off grey-brown branches
- Small inconspicuous leaves
- Small white and purple flowers

#### **Coprosma species**

- Shrubs or small trees
- Smooth-edged leaves in opposing pairs
- Tiny holes underneath on each side of the main vein
- Small, wind-pollinated flowers
- Berries are brightly coloured ٠ and popular with birds

#### Karamu

Coprosma robusta

Shining karamu Coprosma lucida

Swamp coprosma Coprosma tenuicaulis

Taupata Coprosma repens

Thin leaved coprosma Coprosma areolata

Twiggy coprosma Coprosma rhamnoides

# Thin-leaved coprosma



## Hangehange

#### Geniostoma rupestre var ligustrifolium

- Shrub •
- Pale green oval leaves that end in a point
- Clusters small green/cream ٠ flowers
- Orange seeds •



## Heketara / tree daisy

Olearia rani

- Small tree
- Thin toothed oval green leaves white underneath
- Visible veins
- Clusters of daisy-like white flowers





Elaeocarpus dentatus

- Tall tree
- Long thin leaves with small teeth along margins, pits on the underside
- Twigs with small hairs
- Clusters of white lacy flowers
- Oval purple fruit



hoto & inset: Janet Hunt



Houhere / lacebark

Hoheria sexstylosa

- Tree with grey trunk
- Long oval leaves, widest near middle, with toothed edges
- Large white flowers

## Horoeka / lancewood

Pseudopanax crassifolius

- Tree up to 15m high
- Trunk with a small diameter
- Long narrow-toothed juvenile leaves
- Bushy round head and straight trunk when mature

noto & inset: Janet Hun

# Photo: Jesse Blythell; inset: Melissa Hutchinso

### Kaikomako

Pennantia corymbosa

- A dense tangled shrub
- Stems with small leaves, lobed at the tip
- Grows into a small tree with larger leaves
- Clusters of small white flowers





Kunzea robusta

- Tree
- Bark flaking in long leathery strips
- Masses of soft oval pointed leaves
- White red-centred flowers







## Kapuka/broadleaf

Griselinia litoralis

- Bushy tree
- Rough dark trunk and yellowish stem
- Large green leaves, thick, shiny and rounded
- Small green-cream flowers

## Kawakawa

Macropiper excelsum

- Shrub
- Dark jointed twigs
- Large green glossy heartshaped leaves, often with insect holes; veins radiating from middle
- Orange fruit

## Kohuhu/black matipo

Pittosporum tenuifolium

- Small tree
- Dark twigs with green glossy wavy leaves
- Dark flowers
- Green seed capsule with black sticky seeds

## Koromiko

Hebe stricta var stricta

- Bushy shrub
- Pairs of long narrow pointed leaves
- Flowers white or pinkish on a spike

## Kotukutuku / tree fuchsia

Fuchsia excorticata

- Small tree
- Peeling orange-tinted bark
- Oval pointed leaves with veins
- Clusters of small green-yellow to purple-red flowers from trunk or branches

## Kowhai

Sophora microphylla

- Tree
- Leaves with pairs of leaflets
- Bunches of drooping yellow flowers
- Dry knobbly seed pods
- Hard yellow seeds









Photo & insets: Janet Hur



## **Lowland horopito**

Pseudowintera axillaris

- Small shrub
- Wavy glossy green leaves, • pale underneath
- Aromatic
- Greenish-yellow flowers •
- Red berries

Mahoe

Melicytes ramiflorus • Small-to-medium tree • Knobbly pale trunk

along twigs

• Purple fruit

• Light green toothed leaves • Flowers greenish, in clusters





#### Makomako/ wineberry Aristotelia serrata • Small bushy tree Thin heart-shaped sharply toothed leaves

- Rose coloured flowers
- Black berries

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#### Manuka

Leptospermum scoparium

- Small shrub or tree
- Flaky bark
- Masses of hard oval pointed prickly leaves
- White or pinkish red-centred flowers



Photo: Janet Hun



## Ngaio

Myoporum laetum

- Spreading tree
- Glossy green spotted oval leaves
- White flowers with purple spots
- Pink fruit on a stalk

## Nikau

Rhopalostylus sapida

- Palm
- Ringed trunk
- Narrow leaflets up to 1m along central stem
- Pinkish flowers on multiple spikes at the top of trunk
- Red fruit









## Pate

Schefflera digitata

- Medium tree, bushy
- 7 soft leaves with serrated margins in a fan on a long stalk
- Tiny greenish-white flowers
- Purple berries

## Pokaka

#### Elaeocarpus hookerianus

- Small tree
- Interlaced juvenile form
- Maturing with larger olive green serrated leaves
- Small white drooping flowers
- Purple fruit

## Porokaiwhiri/ pigeonwood

Hedycarya arborea

- Small tree
- Oval, green, glossy leaves with toothed margins, in pairs
- Small sprays greenish flowers
- Orange fruit

#### Poroporo

Solanum laciniatum

- Poisonous shrub
- Dark green, thin leaves divided into 1-3 large sharp lobes
- Ruffled purple flowers
- Yellow or orange fruit

# Putaputaweta / marble leaf

Carpodetus serratus

- Small spreading tree with a tangled juvenile form
- Adult leaves are oval and serrated with light green marbling
- Tiny white flowers











## Rangiora

Brachyglottis repanda

- Large shrub or small tree
- Very large wavy leaves, white and felted underneath
- Large sprays of small fragrant cream flowers

#### Red mapou

Myrsine australis

- Bushy shrub
- Bright red branches
- Green leaves with wavy margins
- Clusters of small white flowers



## Salt marsh ribbonwood

Plagianthus divaricatus

- Dense tangled shrub
- Silvery stems
- Small long narrow leaves
- Small aromatic cream flowers
- Prefers damp coastal sites and estuarine areas

#### Swamp maire / waiwaka

Syzygium maire

- Tree with pale smooth trunk and buttressed roots
- Pointed oval leaves, mottled and often blistered
- Clusters of flowers with white stamens
- Red fruit

## Tall Mingimingi

Leucopogon fasciculatus

- Bushy shrub
- Hard narrow prickly leaves which fan out from a stem
- Small white bell-shaped flowers



**Photo**: Wayne Bennett; left inset: Melissa Hutchir. right inset: John Barkla





## Tauhinu

Ozothamnus leptophyllus

- Bushy shrub
- Small green leaves
- Silver/white stems
- Clusters of tiny cream daisy flowers
- Down-covered seed heads

#### Taurepo / NZ gloxinia

Rhabdothamnus solandri

- Bushy shrub
- Twigs with thin rounded leaves with a toothed edge
- Tubular orange streaked papery flowers









#### **Tawhirikaro** Pittosporum cornifolium

- Shrub
- Often growing on other trees
- Whorls of oval glossy pointed leaves
- Red/yellow flowers

## Ti kouka / cabbage tree

Cordyline australis

- Palm-like tree
- Erect trunk with rough bark
- Tough long narrow pointed leaves
- Sprays of small white flowers



## Titoki

Alectryon excelsus

- Small tree
- Dark fluted trunk with spreading branches
- Pairs of glossy green long oval leaflets
- Clusters small red flowers

#### Turepo / smallleaved milk tree

- Streblus heterophyllus
- Shrub or small tree
- Tangled juvenile stage
- Small oval toothed leaves
- Small cream/red flowers on short spike









## Wharangi

Melicope ternata

- Small bushy tree
- Glossy green wavy leaves, in threes, at the end of a long stalk
- Flowers green-white

## Whauwhaupaku / five finger

Pseudopanax arboreus

- Bushy shrub
- Glossy green oval toothed leaves arranged in fans of five
- Green/yellow flowers
- Purple fruit

## White maire

Nestegis lanceolata

- Tree
- Narrow leaves
- Small greenish-yellow flowers
- Red berries

## Gully tree fern

Cyathea cunninghamii

- Slender trunk up to 20m high
- Green-stalked soft leaves up to 3m long
- Old leaves fall off leaving a clean trunk
- Leaf stems covered in hairs and scales





## Ponga / silver fern

#### Cyathea dealbata

- Trunk up to 10m high, covered by the bases of old fronds
- Green-stalked soft leaves up to 4m long, silver on the underside
- Leaf stems covered in hairs

#### Mamaku / black tree fern

#### Cyathea medullaris

- Trunk up to 20m high with scars from old leaves
- Black-stalked leaves up to 5m long
- Leaf stems covered in scales





#### Katote / soft tree fern

Cyathea smithii

- Trunk up to 5m high, skirted • by old leaves
- Green-stalked soft leaves up • to 2.5m long
- Leaf stems covered in hairs and scales





Dicksonia squarrosa

- Trunks up to 7m high with a messy skirt of dead fronds
- Green-stalked rough leaves ٠ up to 2.4m long
- Usually forming colonies ٠

Wheki-ponga Dicksonia fibrosa Solitary

Trunk up to 10m high, stout

Green-stalked leaves up to 2m long, form a dense crown

and covered in roots Tidy skirt of dead fronds

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After carefully selecting your site, plant your native shrub, tree, palm or tree fern.

You will have great pleasure in watching it grow over the years.





# Very large trees

These giants have been given their own subsection because they grow to 20 metres or more when mature. Plant them with care, especially in an urban setting, and keep in mind that one day they will be very, very tall.

#### Black maire

Nestegis cunninghamii

- 20+m high
- Thick straight trunk
- Bark coarse and square patterned
- Pairs of green long wavy leaves
- Red fruit

## Kahikatea

Dacrycarpus dacrydioides

- 20+m high
- Trunk often fluted and buttressed; flaky grey bark
- Branchlets slender and drooping, leaves small and awl-shaped
- Red/orange fruit









#### Weinmannia racemosa

- 20+m high
- Irregular trunk, sometimes more than one
- Oval leaves are with deeply toothed margins
- Spikes of white or pink flowers

## Kohekohe

Dysoxylum spectabile

- Up to 15 m high
- 4 pairs of large green glossy leaflets along a stem with a fifth leaflet at the tip
- Clusters of small white
   flowers off branches and
   trunk

## Matai

Prumnopitys taxifolia

- 20+m high
- Grey flaky 'hammered' bark
- Tangled juvenile form; broad crown with spreading branches on mature form
- Small long thin green leaves with silver-blue underside









## Miro

Prumnopitys ferruginea

- 20+m high,
- Grey flaky 'hammered' bark
- Dark green, feathery, needle like leaves flattened into two rows
- Large red fruit

## Northern rata

Metrosideros robusta

- 20+m high
- Pairs of small olive green oval leaves
- Clusters of crimson red flowers
- As an epiphyte sends roots down a host tree

## Pukatea

Laurelia novae-zelandiae

- 20+m high
- Greyish trunk with fluted base
- Pairs of oval glossy dark green toothed leaves; reddish stems
- Tiny white/green aromatic flowers



## Puriri

Vitex lucens

- 20+m high
- Knobbly trunk, thin, pale, flaky bark
- Dark green leaves, five wrinkled leaflets
- Pink, bell-shaped flowers
- Red, 20mm wide berries

Rewarewa Knightia excelsa • 20+m high • Cylindrical trunk





## Rimu

Dacrydium cupressinum

• Dark green long toothed leathery leaves

• Dense spikes of red flowers

- 20+m high
- Brown-grey, knobbled bark
- Tiny bright green leaves overlap tightly around a branchlet
- Drooping branchlets
- Round-topped crown

#### Tawa

Beilschmiedia tawa

- 20+m high
- Dark trunk

**Totara** 

green

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- Leaves pale green, narrow with pointed tip and drooping
- Sprays of yellow flowers
- Large purple fruit

Podocarpus totara

Bark thick and furrowed;

and pointed, brownish to dark

falling in long strips Leaves small thick narrow

20+m high Large trunk







## Aquatic & semi aquatic freshwater weeds

Aquatic freshwater weeds have enormous potential for environmental damage. They spread readily through wetlands, lakes, streams, ponds and drains forming sediment-trapping, choking masses that are very hard to control. They displace native aquatic and streamside plants, blocking water flows, stagnating water and killing fish. Some are toxic to mammals.

They spread on uncleaned equipment or recreational gear.

#### CONTROL OR REMOVE THESE SPECIES.

## Egeria

#### Egeria densa

- Large, bottom-rooted oxygen weed; leaves in whorls of 4–5
- White 3-petal flowers with float on surface in summer
- Slender, branched, buoyant stems

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Hornwort

Ceratophyllum demersum

- Submerged
- Can occur as stems anchored to sediment, as a floating mat, or drifting segments
- Branched stems up to 7m; whorled, branched, narrow leaves; tiny flowers

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

## Yellow flag iris

Iris pseudacorus

- Poisonous
- Clump forming, up to 1.5m high
- Sword-shaped leathery leaves from base
- Yellow flowers
- Prefers damp ground

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale* 





## Purple loosestrife

Lythrum salicaria

- Erect, marginally-aquatic plant up to 2m high
- Many-branched stems
- Narrow leaves
- Spike of purple-magenta flowers

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

#### Oxygen weed

Lagarosiphon major

- Submerged, bottom-rooted
- Leaves recurved along the stem, in closely-packed spirals
- Long, slender, branched stems; tiny, pinkish flowers

This plant is registered with the National Pest Plant Accord. *It is prohibited from propagation, distribution and sale.* 

## Senegal tea

Gymnocoronis spilanthoides

- Marginally aquatic plant up to 1m
- Hollow stems, dark green waxy leaves
- Clover-like white flower heads

Under the Regional Pest Management Plan this plant *must be eradicated.* Report it to the Taranaki Regional Council.









## KEEP OUR WATERWAYS WEED FREE

Freshwater weeds can be spread by your activities in and around waterways. If you've been in a lake, river, stream or wetland and plan to move to another within 48 hours, you must clean all gear that has been wet using the 'Check, Clean, Dry' method.

For more information, visit mpi.govt.nz/check-clean-dry or talk to the Taranaki Regional Council.

# PART 2

**S** 

# Useful Information

# Weed control

#### Plan

To make the most of your effort it is important to develop a plan before you begin. Set objectives for your project and then plan how you are going to achieve them. Consider which species you should tackle first, where you should focus initially and how you are going to manage the area once the weeds are gone.

- Know your weeds. Make a list of what you have. Control the weeds you have least of first.
- Tackle your weeds in sections. Don't try and take on too much at once. Once a weed or area has been cleared undertake regular follow up to control any new growth.
- Remove weed sources to prevent spread i.e. flowers removed before they set seed.
- Practice weed hygiene. Use garden bags to contain weeds and fragments to prevent spread when moving weed waste around.
- Once the weeds have been removed you will have bare ground which will easily be re-colonised by more weeds. Plant these areas with native species to suppress them.
- Take before and after photos to remind yourself of how much progress you have made.

For more information and a planning template refer to: http://pestplants.aucklandcouncil.govt.nz/pestplants/planning-your-pest-control

#### Control

The method you choose will depend on the species, the location and the size of the infestation. There are a range of control methods, many involving the use of herbicide:

- Foliar spray Identify which herbicide to use and the best time of year to apply it. Wait for fine calm weather. Follow the herbicide manufacturer's instructions. Mix only what you need and apply the herbicide correctly and safely. A penetrant may improve the effectiveness of the spray. You can use a marker dye to see where you have been.
- Drill and fill best for big trees in areas where fall will not pose a risk to people or property. Drill holes around the trunk and squirt in herbicide.
- Ringbark cut a section of bark off the trunk and apply herbicide.
- Stump paint apply herbicide to the surface of the cut stump.
- Vial treatment individual flower vials can provide selective control for climbers/vines.
- Hand pull or dig only if the entire root system can be removed.
- Machine dig occasionally useful to remove large or deep infestations.

#### Dispose

It is vital that weed waste is disposed of in such a way it cannot regrow and form new infestations. Three quarters of the problem weeds in Aotearoa New Zealand are garden escapees or plants that have been dumped at parks, reserves, beaches, lakes and rivers. Decide on a suitable disposal method for the weeds you are controlling before you start work.

#### **Disposal options**

Refer to: www.weedbusters.org.nz/what-are-weeds/disposing-of-weed-waste/

- Compost on site. Never try to compost or mulch weed waste containing seed or fruit, corms, tubers or rhizomes, or stems or roots from species that can grow from these fragments. Some weeds will need to be treated i.e. dried or rotting before being composted.
- Transport to an approved transfer station using a tarpaulin to cover your load.
- Burn when cut and/or dried.
- Weed waste that won't regrow can be disposed of at a Greenwaste facility.
- Use a commercial green waste collector

#### New Plymouth District: www.npdc.govt.nz

Green waste can be disposed of at the New Plymouth, Waitara or Inglewood Transfer stations.

- Stringy plants are not accepted i.e. Agapanthus, Bamboo, Ginger, Norfolk pine
- Nor are branches greater than 150mm.
- Put noxious weeds such as Wandering Willy, pest plants such as Ginger, Old Man's Beard, Yellow ragwort or non-compostable plants such as Agapanthus in the landfill bin.

#### Stratford District: www.stratford.govt.nz

Green waste can be disposed of at a transfer station.

The following are not accepted:

- Stringy plants i.e. Yucca, Bamboo and branches over 100mm in diameter
- Noxious weeds and invasive species i.e. Agapanthus, Ginger, Box thorn, Norfolk pine
- Plants that have been sprayed

#### South Taranaki District: www.southtaranaki.com

South Taranaki District have a Voluntary Green Waste Kerbside Collection Service using a 240L wheelie bin. Green waste can also be disposed of at a transfer station.

The following are not accepted:

- Stringy plants and branches over 150mm in diameter
- Noxious weeds and invasive species i.e. Agapanthus, Ginger, Box thorn, Norfolk pine
- Plants that have been sprayed

#### Ask for help if you need it!

Weedbusters, Taranaki Regional Council, Ministry for Primary Industries and Department of Conservation are ready and waiting to help with identification, advice and control of weeds.

ORGANISATION	WEBSITE	EMAIL	PHONE
Weedbusters	www.weedbusters.org.nz	weedbusters@trc.govrt.nz	
Taranaki Regional Council	www.trc.govt.nz	biosecurity@trc.govt.nz	0800 736 222
• for Taranaki Regional Pest Management Plan			
• for Taranaki Regional Council Biosecurity Strategy			
Ministry for Primary Industries • for National Pest Plant Accord	www.mpi.govt.nz	info@mpi.govt.nz	06 755 9311 or 0800 00 83 33
Department of Conservation • for pest plants on public conservation land	www.doc.govt.nz	newplymouth@doc.govt.nz	Ngamotu Office: 06 759 0350

#### **Resources available:**

- The Weed Control Handbook: see the Weedbusters website or purchase from the Taranaki Regional Council for \$25.00.
- An Illustrated Guide to Common Weeds of New Zealand Third edition (2010); Ian Popay, Paul Champion, Trevor James. RRP \$59.99
- NZ Plant Conservation Network is a great place to go for plant identification: www.nzpcn.org.nz or email them at info@nzpcn.org.nz





# Become a Weedbuster

Get involved by creating or joining a weedbusting community group. Look up weedbusters.org.nz and click on the Taranaki region to find a group near you.

Or, if you already belong to an environmentally-active group, your group can register as weedbusters. You can then use the weedbusters logo to promote your work, advertise events through the website and receive promotional items and publications. Fill in the form on the weedbusters website.

This informal group (below) has, over a period of many months, cleared weeds and replanted a section of PG Nopps Reserve on the banks of Inglewood's Kurapete Stream. They meet once a month on a Sunday afternoon.

Check it out next time you are passing. PG Nopps Reserve is on the south side of town.



# Restoration planting in Taranaki

All native species in this booklet can be planted across the region and contribute to restoration of our native flora but if you wish to go further with your planting project, the following restoration planting guides will be useful. They complement this booklet and are available at https://restoretaranaki.nz/resources/. They will enable you to undertake further planting as you remove pest plants from your backyard and your community.

Taranaki contains five Ecological Districts; North Taranaki, Egmont, Matemateaonga, Foxton and Manawatu Plains.

Each ecological district has different landforms, climate and soils and a correspondingly distinct native vegetation. A restoration planting guide has been written for each ecological district.

The restoration planting guide series are for



landowners and community groups who wish to plant native species that best suit their site and conditions, and for people who just want to plant the 'right' species for biodiversity in their backyards.

Native trees and plants are part of the greater, interlinked forest ecosystem, providing shelter and food for native birds, bats, fish, lizards and insects and other invertebrates. Each native plant you plant is a small addition to the greater regional landscape.

Providing a seed source increases the potential for the spread of native plants that will protect the soil and water. Best of all at some distant time your children and theirs may stand among plantings that are small seedlings now.



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# Taranaki

www.weedbusters.org.nz weedbusters@trc.govt.nz