A planter's handbook for Northland natives

Including special plants for wetlands, coast and bird food

Northland
REGIONAL COUNCIL
Te Kaunihera ā rohe o Te Taitokerau

Tiakina nga manu, ka ora te ngahere.
Ka ora te ngahere, ka ora nga manu.

Look after the birds and the forest flourishes.
If the forest flourishes, the birds flourish.

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Choosing the right plants

Are you deciding on what native Northland plants to use on your land?
Whether you're deciding on plants for landscaping or restoration, this handbook will help.

Getting started

Read on to find out the size and growth rate of plants and which natives attract wildlife. While not listing every plant native to Northland, this book contains a wide range that may be available in local nurseries.

Charts on each page show whether a plant provides food for birds, what its final height may be and how quickly it grows. The book also includes plants that will handle harsh coastal environments, windy and/or dry locations and frosts, as well as those plants that tolerate shade or a wetter habitat. This information will help you choose plants that will benefit you, the local wildlife, and the environment.

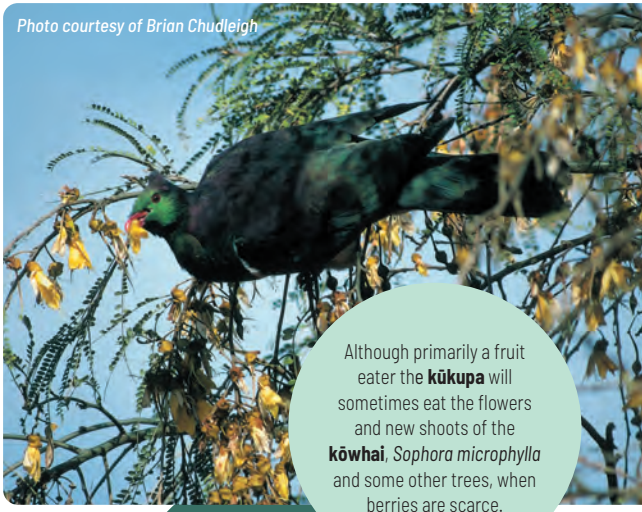


Photo courtesy of Brian Chudleigh

Although primarily a fruit eater the **kūkupa** will sometimes eat the flowers and new shoots of the **kōwhai**, *Sophora microphylla* and some other trees, when berries are scarce.

Restoration and ecosourcing

Restoration planting aims to create a wild plant community which can look after itself and would have occurred naturally at a site in the past. For restoration planting we strongly recommend using ecosourced plants. Ecosourced plants are grown from seeds that have been collected locally from a range of the naturally occurring vegetation in your area. By ecosourcing, you'll maintain the genetic diversity of local plants and help keep the unique character of Northland.

Year-round food supply

To attract **tūi, kūkupa (NZ pigeon)** and other birds, the two calendars at the back of this book can help in choosing which trees you could plant to ensure a year-round berry and nectar supply. Basic information on site preparation, care advice for after planting and weed and pest control is included.

Some parts of the plant may be poisonous

Least flammable plants (i.e. plant has low to moderate flammability)

We're here to help

Remember more detailed information on plant species, planting, weed and pest control is available from the Northland Regional Council website: www.nrc.govt.nz. You can contact one of our Biodiversity Advisors for advice, and further resources are available at the back of this booklet.

Please note: Some species e.g. harakeke (flax) and tī tōuka (cabbage tree) retain or drop dead foliage which is flammable. Clear dead foliage to reduce flammability risk.

Plants to 6 metres

Botanical name	Common name	What can the plant tolerate					Bird food		Environs		Growth	
		Dry soil	Shade: light med heavy	Wind	Frost	Do possums eat it? 1-No 2-At times 3-Often	Food for: bellbird tūī silvereye	Food for: pigeons (kūkupa)	Coast salt hardy	Damp margins wetlands	Growth rate	Final height metres
Alseuosmia macrophylla	karapapa		M			2	•				med	1.5
Clianthus puniceus	kakabeak	•	L			3	•				fast	2
Coprosma autumnalis (=C.grandfolia)	kanono		M			2		•			med	6
Coprosma propinqua	mingimingi					2	•			•	med	6
Corokia buddleioides	korokia		L			1	•		•		med	3
Geniostoma ligustrifolium	hangehange	•	M			2			•		med	3
Piper excelsum	kawakawa		M			2	•	•			med	5
Leptospermum scoparium	mānuka	•		•	•	1			•	•	fast	4
Lophomyrtus bullata	ramarama	•		•		2	•				med	6
Myrsine australis	māpou	•		•	•	2	•		•		slow	6
Myrsine divaricata	weeping māpou		L			1				•	slow	4
Olearia furfuracea	akepiro	•	L			1			•		med	5
Phormium tenax	flax	•		•	•	1	•		•	•	med	3
Pseudopanax lessonii	houpara	•		•		2			•		med	6
Solanum aviculare	poroporo	•	M			2	•	•			fast	2.5
Tecomanthe speciosa	tecomanthe					1	•				fast	vine

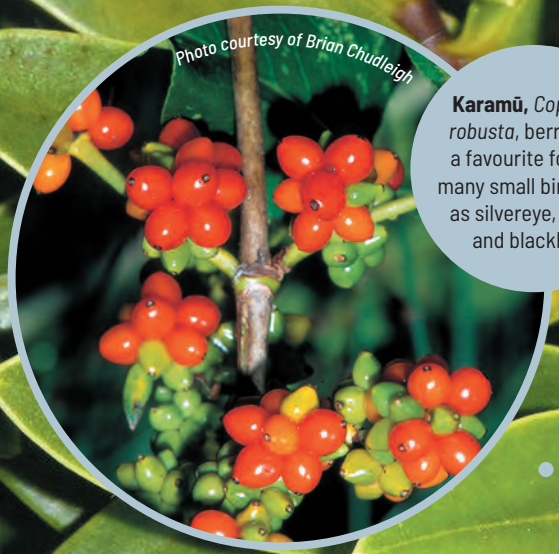
Snail/slug control will be needed

Phormium teanax (**flax**) is an evergreen perennial plant native to New Zealand. *Phormium tenax* has many uses in traditional Māori society and is the main material used for weaving.

Silvereyes are among many birds that feed off **flax** flowers.

Plants to 6-8 metres

Botanical name	Common name	What can the plant tolerate					Bird food		Environs		Growth	
		Dry soil	Shade: light med heavy	Wind	Frost	Do possums eat it? 1-No 2-At times 3-Often	Food for: bellbird tūī silvereye	Food for: pigeons (kūkupa)	Coast salt hardy	Damp margins wetlands	Growth rate	Final height metres
Aristotelia serrata	makomako / wineberry		L	•	•	3	•	•			fast	10
Brachyglottis repanda	rangiora					1				•	med	6
Coprosma repens	taupata	•		•		2	•		•	•	fast	8
Coprosma robusta	karamū					2	•		•	•	fast	6
Dodonaea viscosa	akeake	•		•		1			•		fast	6
Entelea arborescens	whau		L			1			•		med	6
Griselinia littoralis	kapuka / broadleaf	•		•		2	•	•	•		slow	8
Griselinia lucida	puka / akapuka	•		•		2	•	•	•		slow	7
Melicope simplex	poataniwha		L		•	1				•	slow	8
Meryta sinclairii	puka	•		•		2			•		med	8
Olearia rani	heketara		L			1				•	med	7
Pittosporum umbellatum	haekaro	•		•		2			•		fast	7
Pseudopanax arboreus	whauwhaupaku / five finger	•		•		3	•	•	•		fast	8
Schefflera digitata	patē	•				3	•	•			med	8
Veronica species	hebe / koromiko	•		•		2			•	•	fast	7



Karamū, *Coprosma robusta*, berries are a favourite food for many small birds such as silvereye, thrush and blackbrid.

Veronica (=Hebe) brevifolia is one of about 16 **hebes** native to Northland. They can provide a variety of different coloured flowers and are suited to Northland conditions.

Photo courtesy of Northland Regional Council

Plants to 9-12 metres

Botanical name	Common name	What can the plant tolerate					Bird food		Environs		Growth	
		Dry soil	Shade: light med heavy	Wind	Frost	Do possums eat it? 1-No 2-At times 3-Often	Food for: bellbird tūī silvereye	Food for: pigeons (kūkupa)	Coast salt hardy	Damp margins wetlands	Growth rate	Final height metres
Ackama rosifolia	makamaka				•	2					med	12
Alectryon excelsus	tītoki				•	2	•	•		•	slow	10
Carpodetus serratus	putaputawētā		L	•	•	2	•	•		•	med	10
Coprosma macrocarpa	karamū	•		•		2			•		med	10
Fuchsia excorticata	kotukutuku		H	•	•	3	•	•			med	12
Hedycarya arborea	porokaiwhiri / pigeonwood		H	•		2		•			med	12
Hoheria populnea	houhere / lacebark	•		•	•	2			•	•	fast	10
Melicytus ramiflorus	mahoe	•	H	•	•	3	•	•	•	•	fast	10
Myoporum laetum	ngaio	•	L	•	•	1		•	•		med	10
Pittosporum crassifolium	karo	•		•		1	•		•		fast	9
Pittosporum eugenioides	tarata / lemonwood			•	•	2	•			•	fast	9
Pittosporum tenuifolium	kōhūhū		M		•	2	•			•	fast	9
Rhopalostylis sapida	nīkau	•	H	•		2		•	•		slow	10
Sophora microphylla	kōwhai	•	L	•	•	2	•	•	•	•	med	10
Streblus heterophyllus	tūrepo		L	•	•	2		•		•	slow	12

Titoki, *Alectryon exelsus,* berries.

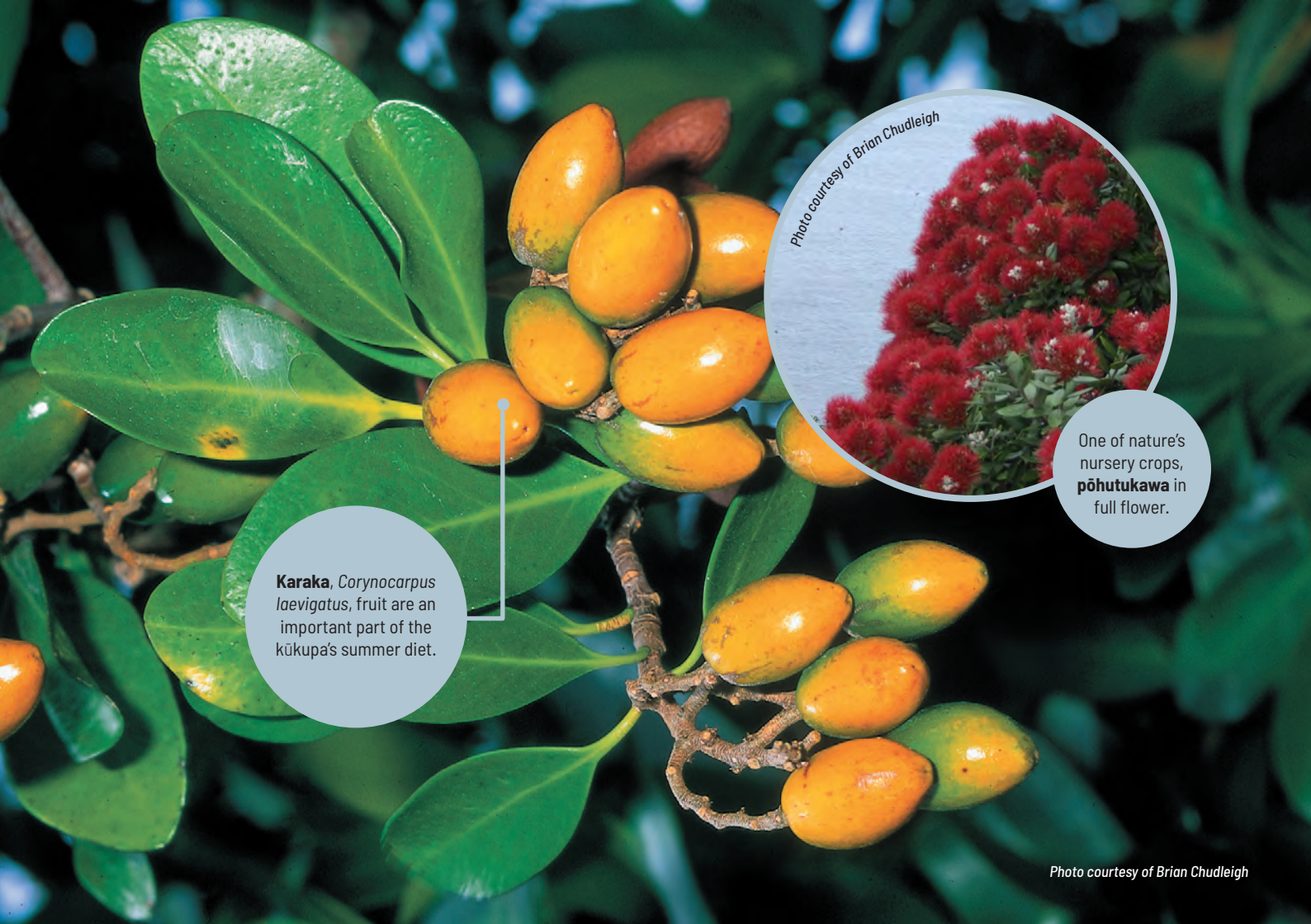
Houhere (lacebark) will grow in any well-drained soil. They prefer a sunny or partly shady location and are wind hardy. Plant eco-sourced trees that will be suited to your local conditions.

The purple fruit of **mahoe**, *Melicytus ramiflorus.*

Photo courtesy of Northland Regional Council

Plants to 13-20 metres

Botanical name	Common name	What can the plant tolerate					Bird food		Environs		Growth	
		Dry soil	Shade: light med heavy	Wind	Frost	Do possums eat it? 1-No 2-At times 3-Often	Food for: bellbird tūī silvereye	Food for: pigeons (kūkupa)	Coast salt hardy	Damp margins wetlands	Growth rate	Final height metres
Cordyline australis	tī kōuka / cabbage tree	•	L	•	•	2	•	•	•	•	med	20
Corynocarpus laevigatus	karaka	•	L	•		2		•	•		med	15
Dysoxylum spectabile	kohekohe		M	•		3		•			med	13
Elaeocarpus dentatus	hīnau		L	•		2		•			slow	18
Elaeocarpus hookerianus	pokaka			•		2		•		•	slow	13
Kunzea robusta	kānuka	•		•	•	1			•		fast	15
Metrosideros excelsa	pōhutukawa	•		•		3	•		•		slow	20
Nestegis sp.	maire			•	•	2		•			med	20
Plagianthus regius	mānatu / ribbonwood (deciduous)		M	•	•	1			•	•	fast	17
Planchonella costata	tawāpou	•		•		2		•	•		med	15
Pseudopanax crassifolius	horoeka / lancewood		L	•	•	2	•	•			med	15
Syzygium maire	maire tawake / swamp maire				•	2		•		•	slow	15
Weinmannia silvicola	towai		L	•		3				•	med	15



Karaka, *Corynocarpus laevigatus*, fruit are an important part of the kūkupa's summer diet.

One of nature's nursery crops, **pōhutukawa** in full flower.

Photo courtesy of Brian Chudleigh

Plants over 20 metres

		What can the plant tolerate					Bird food		Environs		Growth	
Botanical name	Common name	Dry soil	Shade: light med heavy	Wind	Frost	Do possums eat it? 1-No 2-At times 3-Often	Food for: bellbird tūī silvereye	Food for: pigeons (kūkupa)	Coast salt hardy	Damp margins wetlands	Growth rate	Final height metres
Agathis australis	kauri	•		•	•	1					slow	60
Beilschmiedia tarairi	taraire			•		2		•	•		med	20
Beilschmiedia tawa	tawa			•	•	2		•			med	24
Dacrycarpus dacrydioides	kahikatea				•	2	•	•		•	med	60
Dacrydium cupressinum	rimu			•	•	2	•	•	•	•	slow	25
Knightia excelsa	rewarewa	•		•	•	2	•	•			med	30
Laurelia novae-zelandiae	pukatea		M		•	2				•	slow	30
Libocedrus plumosa	kawaka	•		•		2			•		med	25
Metrosideros robusta	rātā			•	•	3	•				slow	25
Podocarpus totara	tōtara		L	•	•	3	•				fast	30
Pectinopitys ferruginea	miro		L		•	2		•			med	25
Prumnopitys taxifolia	mataī		L	•	•	2		•			med	25
Vitex lucens	pūriri	•		•		2	•	•	•		med	20

The foliage and flowers of the **taraire**, *Beilschmiedia tarairi*, provide important food for kūkupa.

Rātā = *Met. robusta* flowers.

Photo courtesy of Nan Pullman

Grasses-Rushes-Sedges

Botanical name	Common name	What can the plant tolerate					Bird food		Environs		Growth	
		Dry soil	Shade: light med heavy	Wind	Frost	Do possums eat it? 1-No 2-At times 3-Often	Food for: bellbird tūī silvereye	Food for: pigeons (kūkupa)	Coast salt hardy	Damp margins wetlands	Growth rate	Final height metres
Apodasmia similis	oioi / jointed wire rush			•	•	1			•	•	med	1.5
Austroderia fulvida	toetoe			•	•	1				•	med	1.5
Austroderia splendens	coastal toetoe	•		•	•	1			•		med	3.0
Austrostipa stipoides	needlegrass	•		•		1			•		med	0.45
Carex comans	longwood tussock / sedge		L		•	1				•	fast	0.25
Carex pumila	sand sedge			•		1			•		fast	0.4
Carex secta	pukio / purei			•	•	1				•	med	1.0
Carex species	tussock sedges	•	L		•	1			•	•	fast	0.3-1.5
Carex uncinata	hook sedge	•	M	•		1			•	•	med	0.45
Chionochloa bromoides	coastal tussock	•		•		1			•		med	0.45
Cyperus ustulatus	giant umbrella sedge			•	•	1				•	med	1.0
Ficinia nodosa	wiwi / knobby club rush	•		•		1			•		med	0.5
Gahnia xanthocarpa	tupari maunga		M	•		1				•	med	3.5
Machaerina (=Baumea) articulata	jointed twig sedge				•	1				•	med	1.8


Photo courtesy of Malcolm Pullman
Rengarenga, *Arthropodium cirratum* (see ground-covers)
Coastal astelia, *Astelia banksii* (see groundcovers)
Needle grass, *Austrostipa stipoides.*
Coastal tussock, *Chionochloa bromoides.*

Low growing/Ground covers

Botanical name	Common name	What can the plant tolerate: Dry soil	Shade: light med heavy	Wind	Frost	Do possums eat it? 1-No 2-At times 3-Often	Bird food: Food for: bellbird tūī silvereye	Food for: pigeons (kūkupa)	Environs: Coast salt hardy	Damp margins wetlands	Growth: Growth rate	Final height metres
Arthropodium cirratum	rengarenga	•	L	•		2			•		fast	0.5
Astelia banksii	kowharawhara / coastal astelia	•	L	•		2	•		•		med	1.5
Calystegia soldanella	rauparaha / shore bindweed	•		•		1			•		med	0.5
Coprosma acerosa	sand coprosma	•		•	•	2	•		•		slow	2.0
Dianella nigra	turutu / NZ blueberry		M			1	•				fast	0.5
Elatostema rugosum	parataniwha		H			1				•	fast	1.5
Fuchsia procumbens	creeping fuchsia		M			2			•	•	fast	0.5
Hibiscus diversifolius	hibiscus	•		•		1			•		med	1.0
Libertia ixioides	mīkoikoi	•	L		•	1					med	0.5
Lobelia angulata	pānakenake / pratia		L			1	•			•	fast	0.2
Mazus novaezeelandiae	mazus		M			1					slow	0.1
Muehlenbeckia complexa	pōhuehue	•		•	•	1	•				med	1.0
Xeronema callistemon	Poor Knights lily	•	M			1	•		•		slow	0.5

Snail/slug control will be needed

Two fast growing, versatile groundcovers are **pohuehue**, *Muehlenbeckia complexa*, and the yellow flowering **native hibiscus**, *Hibiscus diversifolius* (inset).

Ferns

Botanical name	Common name	What can the plant tolerate					Bird food		Environs		Growth	
		Dry soil	Shade: light med heavy	Wind	Frost	Do possums eat it? 1-No 2-At times 3-Often	Food for: bellbird tūī silvereye	Food for: pigeons (kūkupa)	Coast salt hardy	Damp margins wetlands	Growth rate	Final height metres
Adiantum cunninghamii	common maidenhair	•	M			1			•		med	0.35
Adiantum hispidulum	rosy maidenhair	•	L			1			•		med	0.2
Asplenium bulbiferum	pikopiko / hen & chicken fern	•	M			2					fast	0.8
Asplenium flaccidum	hanging spleenwort		M			1					slow	1.0
Asplenium lamprophyllum			L			1			•		slow	0.8
Parablechnum novae-zelandiae	kiokio		L	•	•	1				•	fast	3.5
Cyathea cunninghamii	gully tree fern		M			2				•	slow	20
Cyathea dealbata	ponga / silver fern		M			1					slow	12
Cyathea medullaris	mamaku / blackfern		M		•	3				•	slow	20
Dicksonia squarrosa	wheki		M		•	2				•	slow	7.0
Pteris bemula			M			2				•	med	2.0
Lomaria discolor	piupiu / crown fern		L		•	2					med	1.0
Polystichum neozelandicum	common shield fern	•				2			•		slow	0.8
Pneumatopteris pennigera	gully fern		M			2				•	fast	1.0
Pteris macilenta	sweet fern	•	M			2			•		med	1.4

Photo courtesy of Malcolm Pullman

Native trees for Kūkupa food

During the breeding season (July - February) the home range of kūkupa can be four to five hectares or even smaller if there is sufficient food.

During the non-breeding season kūkupa will fly several kilometres for different foods.
These tree fruiting times are a guide only and may differ slightly in your area.

	Spring	Summer	Autumn	Winter
Best food	taraire		taraire	taraire
		karaka	karaka	
	nīkau	nīkau	nīkau	nīkau
	pūriri	pūriri	pūriri	pūriri
Good food			kohekohe	kohekohe
		miro	miro	
			kahikatea	
	porokaiwhiri /pigeonwood	porokaiwhiri /pigeonwood	porokaiwhiri /pigeonwood	
	maire			
	tītoki	tītoki	tītoki	
OK food		tawāpou	tawāpou	
		māhoe	māhoe	
		kōtukutuku	kōtukutuku	
		karamū	karamū	
			horoeka / lancewood	horoeka / lancewood
		tawa	tawa	
		whauwhaupaku / five finger		

Native trees for Tūī/Silvereye food

	Spring	Summer	Autumn	Winter
Best food	harakeke / flax	harakeke / flax		
	kōwhai			kōwhai
	kahikatea	kahikatea		
			kohekohe	kohekohe
	pōhutukawa	pōhutukawa	pōhutukawa	
	pūriri	pūriri	pūriri	pūriri
	rewarewa			
Good food			whauwhaupaku / five finger	whauwhaupaku / five finger
	karo			karo
		māhoe	māhoe	rewarewa
		rimu	rimu	
		tōtara	tōtara	
	makomako / wineberry	makomako / wineberry		
OK food	kōtukutuku	kōtukutuku		
		horoeka / lancewood	horoeka / lancewood	
	māpou	māpou	māpou	māpou
	puka	puka	puka	
		putaputawētā	putaputawētā	

During their breeding season (September - January) tūī have a home range of four to five hectares, but at other times will fly up to 50 kilometres in search of food.

Silvereye have a breeding season home range of just one hectare but at other times will typically travel up to 10 kilometres for food.

These tree fruiting times are a guide only and may differ slightly in your area.

Prepare and maintain your plants

When to plant

The best time to plant is from late May until mid-August. Without watering, many trees will not survive being planted in dry soil. In dry winters, planting shouldn't take place until enough rain has fallen to make the ground damp, soft and easy to dig.

Choosing a site

Careful site selection and good site preparation are the main ingredients for successful plant growth. Look at your site and list the limitations it may have. Is it a frost-prone area? Does it have poor, swampy, dry or sandy soil? Is the site exposed to wind, especially salt wind if it is near the coast? Is the site north or south facing, sunny or shady?

Look at what else is growing near your planting area and select plants to suit the conditions at your site. This may give you some indication of what to grow. Ask nursery staff, they can provide good advice on the best choices to make.

Prepare - before and while planting

The most important actions you can take are:

» Remove weeds in areas to be planted before you begin to plant. Spot spray patches rather than blanket spraying to avoid bare patches that weeds can invade. Where kikuyu is dominant pre-spray twice in autumn to knock it back hard – initially in March, then again in May four to six weeks out from planting.

» Plant reasonably close together to avoid weed infestations and use larger plants if possible to prevent them being overtaken by grass and weeds.

Maintain - after planting

» Keep up the pest control. Don't waste all that early work only to have rabbits, possums or goats kill or damage your young trees.

» Possums are often found in city gardens as well as rural areas. Northland Regional Council Biosecurity Advisors can advise on their control.

» Weed around your plants regularly (at least twice a year, especially in spring and summer) in the first couple of years, until they are tall enough to out-compete weeds. Using stakes (e.g. bamboo stakes with the tips dipped in white acrylic paint) to mark the position of young trees helps you find them later. If you spray grass and weeds, take care to avoid spray drift or accidental spray around your young plants.

» Mulch around young plants to retain moisture and reduce weeds. Use weeds that have been pulled out to help mulch around trees. Some pest weeds probably shouldn't be mulched.

A **cabbage tree** in full bloom. Inset: **Puriri** flowers.

Photos courtesy of Brian Chudleigh

Further publications by Northland Regional Council at www.nrc.govt/publications

Trees for the land - growing trees for protection, production and pleasure

www.nrc.govt.nz/treesfortheland

Clean streams - a guide to riparian management

www.nrc.govt.nz/cleanstreams

Looking after your wetland

www.nrc.govt.nz/wetlandcare

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