

Observation Table - Plant species & Bush structure

(Note: The factsheets 'Waitakere Rainforest – A Home' and 'Observation Table – Events' should be used in conjunction with this table).

Use the following table to record the plant species at your site, divided up according to the structural layer in which they occur (this means that sometimes a plant will be listed several times). By comparing this table with future tables for the site you may notice the changing development of the different structural layers within the site. The categories – Emergent, Canopy etc relate to rainforest structure as illustrated in the fact sheet 'Waitakere Rainforest – A Home'.

The table already has a number of plant names in it to help you get started. Add to or delete these to customise it to your site. For each species indicate the level of abundance within each layer using the following three categories:

+	=	Uncommon	One or a few plants, or covering very little area.
++	=	Common	Found <u>throughout this layer</u> of the vegetation.
+++	=	Abundant	<u>Lots of it in this layer</u> of the vegetation.

Table 1: Plant species present (according to size at time of survey)

Notes:

Species which are found and are listed as invasive or environmental weeds as shown by Waitakere City Council in 'Invasive & Environmental Weeds of Waitakere' can be shaded grey to highlight the need to take action. **Of these, further highlight in bold plants with legal requirements for control as in the 'Auckland Regional Pest Management Strategy'.**

Exotic (non-native) species - label with an 'E' at the left, and those which have been planted on the property (i.e. not natural or naturalised) label 'P'. An asterisk (*) denotes that the species has been spotted recently by the landowner or community member but was not seen during the earlier survey.

Structural	Common Name	Latin Name	Abundance
Emergent	Kauri	<i>Agathis australis</i>	
	Kahikatea	<i>Dacrycarpus dacrydioides</i>	
	Rimu	<i>Dacrydium cupressinum</i>	
	Rewarewa	<i>Knightia excelsa</i>	
Canopy E, P	Nikau	<i>Rhopalostylis sapida</i>	
	Puriri	<i>Vitex lucens</i>	
	Karaka	<i>Corynocarpus laevigatus</i>	
	Kohekohe	<i>Dysoxylum spectabile</i>	
	Titoki	<i>Alectryon excelsus</i>	
	Camellia	<i>Camellia</i> sp.	
	Cabbage tree	<i>Cordyline australis</i>	
	Mamaku	<i>Cyathea medullaris</i>	
	Fuchsia	<i>Fuchsia excorticata</i>	
	Kanuka	<i>Kunzea ericoides</i>	
	White maire	<i>Nestegis lanceolata</i>	
	Lemonwood	<i>Pittosporum eugenioides</i> *	
Whauwhaupaku, five-finger	<i>Pseudopanax arboreus</i> *		

	Horoekea, lancewood Pate	<i>Pseudopanax crassifolius</i> * <i>Schefflera digitata</i>	
Subcanopy	Ponga, silver tree fern Mahoe E, P Bottlebrush Putaputaweta Kanono E, P Magnolia P Pohutukawa P Tanekaha P Totara Kowhai	<i>Cyathea dealbata</i> <i>Melicytus ramiflorus</i> <i>Callistemon</i> sp.* <i>Carpodetus serratus</i> <i>Coprosma grandifolia</i> <i>Magnolia grandiflora</i> ?* <i>Metrosideros excelsa</i> * <i>Phyllocladus trichomanoides</i> * <i>Podocarpus totara</i> * <i>Sophora microphylla</i> **	
Shrub	Hangehange Kawakawa Mahoe E, P Natal flame bush Toropapa E, P Azalea Putaputaweta E, P Mandarin Kanono Shining karamu Twiggy coprosma Karamu P Wheki Pigeonwood Houhere Rewarewa Mingimingi Mapou Heketara Nikau	<i>Geniostoma rupestre</i> <i>Macropiper excelsum</i> <i>Melicytus ramiflorus</i> <i>Alberta magna</i> * <i>Alseuosmia macrophylla</i> <i>Azalea</i> sp. <i>Carpodetus serratus</i> <i>Citrus reticulata</i> * <i>Coprosma grandifolia</i> <i>Coprosma lucida</i> * <i>Coprosma rhamnoides</i> * <i>Coprosma robusta</i> <i>Dicksonia squarrosa</i> <i>Hedycarya arborea</i> <i>Hoheria populnea</i> <i>Knightia excelsa</i> <i>Leucopogon fasciculatus</i> * <i>Myrsine australis</i> <i>Olearia rani</i> * <i>Rhopalostylis sapida</i>	
Ground	Hen-and-chicken fern E African clubmoss P Rengarenga Kiokio E Green umbrella sedge Coastal Gahnia Toekiwi Toatoa E Wild ginger Hairy legs	<i>Asplenium bulbiferum</i> <i>Carex lambertiana</i> <i>Oplismenus hirtellus</i> <i>Selaginella kraussiana</i> <i>Arthropodium cirratum</i> * <i>Asplenium lamprophyllum</i> <i>Blechnum membranaceum</i> * <i>Blechnum novae-zelandiae</i> * <i>Carex ochrosaccus</i> * <i>Centella uniflora</i> <i>Cyperus eragrostis</i> <i>Gahnia lacera</i> <i>Gahnia xanthocarpa</i> * <i>Haloragis erecta</i> <i>Hedychium flavescens</i> <i>Hydrocotyle elongata</i> <i>Lastreopsis hispida</i>	

	P	King fern	<i>Marattia salicina</i> *
			<i>Microlaena stipoides</i> *
			<i>Nertera dichondrifolia</i> *
	P	Oxalis	<i>Oxalis</i> sp.
			<i>Pittosporum cornifolium</i>
		Gully fern	<i>Pneumatopteris pennigera</i>
		Swamp willow weed	<i>Polygonum salicifolium</i>
		Creeping buttercup	<i>Ranunculus repens</i>
		Nightshade	<i>Solanum americanum</i>
	E	Wandering Jew	<i>Tradescantia fluminensis</i>
		Hook sedge	<i>Uncinia uncinata</i>
Seedlings		Kahikatea	<i>Dacrycarpus dacrydioides</i>
		Nikau	<i>Rhopalostylis sapida</i>
		Kawakawa	<i>Macropiper excelsum</i>
		Titoki	<i>Alectryon excelsus</i>
	P	Taraire	<i>Beilschmiedia tarairi</i> *
		Rangiora	<i>Brachyglottis repanda</i>
		Putaputaweta	<i>Carpodetus serratus</i>
		Mamangi	<i>Coprosma arborea</i>
		Kanono	<i>Coprosma grandifolia</i>
			<i>Coprosma spathulata</i>
		Karaka	<i>Corynocarpus laevigatus</i>
		Kohekohe	<i>Dysoxylum spectabile</i>
	E	Bizzy Lizzie	<i>Impatiens walleriana</i>
		Pukatea	<i>Laurelia novaezelandiae</i> *
		Mahoe	<i>Melicytus ramiflorus</i>
	E	Hedge woundwort	<i>Stachys silvatica</i>
		Puriri	<i>Vitex lucens</i>
Epiphytes &		Kareao, supplejack	<i>Ripogonum scandens</i>
		Tmesipteris	<i>Tmesipteris lanceolata</i>
			<i>Anarthropteris lanceolata</i> *
	E	Climbing asparagus	<i>Asparagus scandens</i>
		Makawe	<i>Asplenium flaccidum</i> *
			<i>Asplenium oblongifolium</i> *
			<i>Asplenium polyodon</i> *
		Perching lily	<i>Astelia solandri</i> *
		Thread fern	<i>Blechnum filiforme</i> *
			<i>Bulbophyllum pygmaeum</i> *
		Kahakaha	<i>Collospermum hastatum</i>
			<i>Drymoanthus adversus</i> *
	P		<i>Earina autumnalis</i> *
			<i>Earina mucronata</i> *
		Kiekie	<i>Freycinetia baueriana</i>
		Mangemange	<i>Lygodium articulatum</i> *
			<i>Metrosideros diffusa</i>
		Akakura	<i>Metrosideros fulgens</i>
		Akatea	<i>Metrosideros perforata</i>
			<i>Microsorium scandens</i>
		Tutukiwi	<i>Pterostylis banksii</i> *

	Leather fern Tmesipteris Winika	<i>Pyrrosia eleagnifolia</i> * <i>Tmesipteris elongata</i> <i>Winika cunninghamii</i>	
Edge	Karamu Cabbage Tree Coastal Gahnia Hangehange Mingimingi Kawakawa Mahoe Nightshade	<i>Coprosma robusta</i> <i>Cordyline australis</i> <i>Gahnia lacera</i> <i>Geniostoma rupestre</i> <i>Leucopogon fasciculatus</i> * <i>Macropiper excelsum</i> <i>Melicytus ramiflorus</i> <i>Solanum americanum</i>	

Useful resources for learning about plants in your covenant

Brownsey, P. J. and J. C. Smith-Dodsworth (2000). **New Zealand Ferns and Allied Plants**. David

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Crowe, A. (1994). **Which Native Forest Plant?** Viking, NZ.

Denyer, K., Cutting, M., Campbell, G., Green, C. and M. Hilton (1993). **Survey Report for the Protected Natural Areas Programme: Waitakere Ecological District**. Auckland Regional Council.

Malcolm, B. and N. Malcolm (1989). **The Forest Carpet**. Craig Potton Publishing, Nelson.

Poole, A. L. and N. M. Adams (1994). **Trees and Shrubs of New Zealand**. Manaaki Whenua Press, Lincoln.

Webb, C., Johnson, P. and B. Sykes (1990). **Flowering Plants of New Zealand**. DSIR Botany.

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Waitakere City Council (regularly updated) **The State of Waitakere City – Natural Environment**.

<http://www.waitakere.govt.nz/abtcit/ps/socreport.asp#natural>