

ROTOITI – UPPER BULLER FLATS ECOSYSTEM NATIVE PLANT RESTORATION LIST

Locality:	Moraines, valleys and river flats in the vicinity of Rotoiti Village and Tophouse, westward down to and including Howard River.
Topography:	Gentle topography including valley floors, alluvial terraces, moraines and mountain toeslopes.
Soils and Geology:	Soils derived from greywacke rocks and often very stony. Moraines and highest terraces relatively infertile where poorly drained. Lower river terraces generally well-drained and relatively fertile.
Climate:	Frosts moderately severe to severe. Moderate annual temperatures ameliorated by Lake Rotoiti. A few snowfall events each winter. Moderate sunshine hours; rainfall 1500-1800mm.
Coastal influence:	None
Original Vegetation:	Red-silver beech forest on gentle toeslopes and high, well-drained terraces. Frost flat shrublands on terraces with severe frost. Floodplains with various stages of kānuka forest. A range of valley wetlands including bogs to fens.
Human Modification:	Little original vegetation remaining but still relatively good secondary native vegetation cover especially on moraines. Much vegetation is induced by fires. Well-drained terraces and toeslopes largely cleared of forest and shrublands. Hydrology altered in places but not extensively. Wetlands are still dominated by native vegetation.

[Refer to the Ecosystem Restoration map showing the colour-coded area covered by this list.]

KEY

PLANTING RATIO	PLANT PREFERENCES	TYPE OF FOOD PROVIDED FOR BIRDS AND LIZARDS
<p>Early Stage plants are able to establish in open sites and can act as a nursery for later stage plants by providing initial cover.</p> <p>Later Stage plants need cover to establish.</p> <p>2 = plant commonly 1 = plant less commonly 0 = not suitable to plant at this stage</p>	<p>Wet, Moist, Dry, Sun, Shade, Frost</p> <p>1 = prefers or tolerates ½ = prefers or tolerates some 0 = intolerant of</p> <p>Plant in habitat type:</p> <p>W = freshwater wetlands L = lakeside only S = frost flat shrublands</p>	<p>F = Fruit/seeds N = Nectar B = Buds/foilage I = Insects</p>

PLANT SPECIES FOR ROTOITI – UPPER BULLER FLATS ECOSYSTEM		EARLY STAGE PLANTING RATIO	LATER STAGE PLANTING RATIO	PLANT PREFERENCES								Maximum Height (metres)	Food Type
Botanical Names	Māori & Common Names			Wet	Moist	Dry	Sun	Shade	Frost	Freshwater Wetlands only	Frost flat Shrublands		
TREES													
Carpodetus serratus	putaputāwētā, marbleleaf	1	1	1	1	0	1	½	1			10	FBI
Coprosma wallii	bloodwood	1	2	½	1	½	1	½	1		S	4	FI
Discaria toumatou	tūmatakurū, matagouri	2	0	0	½	1	1	0	1		S	4	I
Elaeocarpus hookerianus	pōkākā	1	1	1	1	0	½	½	1			12	FI
Fuchsia excorticata	kōtukutuku, tree fuchsia	0	2	½	1	0	½	1	½			10	FNBI
Griselinia littoralis	papauma, broadleaf	1	2	0	1	1	1	1	1			12	FBI
Halocarpus bidwillii	bog pine	2	1	1	1	½	1	½	1	W		5	FI
Kunzea aff. ericoides (eastern SI)	eastern kānuka	2	0	0	1	1	1	0	1		S	10	NI

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Botanical Names	Māori & Common Names			Wet	Moist	Dry	Sun	Shade	Frost	Freshwater Wetlands only	Frost flat Shrublands		
<i>Leptospermum scoparium</i>	mānuka	2	0	1	1	1	1	0	1	W	S	8	NI
<i>Metrosideros umbellata</i>	southern rātā	1	2	½	1	½	1	½	1	L		10	NI
<i>Myrsine divaricata</i>	weeping māpou	1	1	1	1	1	½	1	1	W	S	4	F
<i>Neomyrtus pedunculata</i>	rōhutu	1	1	1	1	0	½	1	1	W		6	F
<i>Nothofagus fusca</i>	red beech	1	2	0	1	0	½	½	1			30	FNI
<i>Nothofagus menziesii</i>	silver beech	1	2	1	1	1	½	½	1			30	F
<i>Phyllocladus alpinus</i>	mountain toatoa	1	0	0	1	1	1	½	1			10	F
<i>Pittosporum tenuifolium</i>	kōhūhū	2	0	0	1	1	1	½	1			9	FBI
<i>Podocarpus hallii</i>	thin-barked tōtara	1	2	0	1	1	1	½	1			20	FBI
<i>Pseudopanax arboreus</i>	orihou, five finger	1	1	0	1	½	½	½	½			8	FNBI
<i>Pseudopanax colensoi</i>	mountain five-finger	1	2	½	1	0	½	1	1			5	FNBI
<i>Pseudopanax crassifolius</i>	horoeka, lancewood	2	2	½	1	1	1	1	1			10	FNI
<i>Pseudowintera colorata</i>	horopito	1	1	1	1	0	½	1	1			6	F
<i>Raukawa simplex</i>	haumakaroa	0	1	0	1	0	0	1	1			7	FNB
SHRUBS													
<i>Aristotelia fruticosa</i>	mountain wineberry	2	0	0	1	1	1	½	1		S	2	F
<i>Carmichaelia australis</i> var. "flagelliformis"	whip broom	1	1	½	1	1	1	½	1		S	2	NB
<i>Coprosma colensoi</i>	chameleon coprosma	0	1	0	1	½	0	1	1			2	F
<i>Coprosma foetidissima</i>	hūpiro, stinkwood	0	2	1	1	0	½	1	1			3	FB
<i>Coprosma microcarpa</i>	beech coprosma	0	2	0	1	½	0	1	1			2	F
<i>Coprosma obconica</i>	base coprosma	1	1	½	1	1	½	½	1		S	2	F
<i>Coprosma propinqua</i> ssp. <i>propinqua</i>	mikimiki	2	1	1	1	1	1	0	1		S	5	F
<i>Coprosma rhamnoides</i>	bucks-horn coprosma	1	1	0	½	1	1	½	1			2	F
<i>Coprosma rigida</i>	streamside coprosma	2	1	½	1	½	1	½	1		S	3	F
<i>Coprosma tayloriae</i>	tier coprosma	2	1	1	1	1	1	½	1		S	2	F
<i>Coriaria sarmentosa</i>	shrub tutu	2	0	½	1	0	1	½	1		S	1	FN
<i>Corokia cotoneaster</i>	korokio	2	0	0	½	1	1	½	1		S	2	FI
<i>Dracophyllum filifolium</i>	inaka	1	0	0	½	1	½	½	1			2	NI
<i>Dracophyllum palustre</i>	bog inaka	2	0	1	1	0	1	0	1	W		1.5	NI
<i>Hebe leiophylla</i> (= <i>H. gracillima</i>)	arching koromiko	1	0	½	1	½	½	½	1			2	
<i>Hebe salicifolia</i>	South Island koromiko	2	0	½	1	0	1	½	1	W		2	NBI
<i>Hebe venustula</i>	charming hebe	2	1	0	1	1	1	½	1			1.5	I
<i>Hebe odora</i>	bog hebe	1	0	1	1	0	1	0	1	W			
<i>Hebe vernicosa</i>	varnished hebe	0	1	0	1	½	0	1	1			1	I
<i>Leptecophylla juniperina</i>	prickly mingimingi	1	1	0	½	1	1	½	1			3	F
<i>Leucopogon fasciculatus</i>	mingimingi	0	2	0	½	1	½	½	1			4	F
<i>Leucopogon fraseri</i>	pātōtara	2	0	0	1	1	1	0	1			0.2	F
<i>Melicytus "Blondin"</i>	stout porcupine shrub	2	0	0	1	1	1	0	1		S	0.5	FNI
<i>Melicytus flexuosus</i>	leafless māhoe	1	2	0	1	½	1	½	1		S	3	FI
<i>Olearia arborescens</i>	satin tree daisy	1	1	0	1	½	½	½	1			2	I
<i>Olearia avicenniifolia</i>	grey tree daisy	1	0	0	½	1	1	0	1			4	I
<i>Olearia virgata</i>	small-leaved shrub daisy	2	0	0	1	1	1	0	1		S	3	I
<i>Pittosporum divaricatum</i>	wiry kōhūhū	1	1	0	1	1	1	½	1		S	2	I
<i>Podocarpus acutifolius</i>	needle-leaved tōtara	2	0	0	1	½	1	0	1		S	5	FI
<i>Raukawa anomalus</i>	stout netting bush	1	2	½	1	½	½	1	1			2	FN
CLIMBERS													
<i>Clematis forsteri</i>	scrub clematis	0	1	0	1	½	1	0	1		S	5	I
<i>Parsonsia capsularis</i>	native jasmine	1	1	0	1	1	½	½	1		S	5	I
<i>Rubus cissoides</i>	bush lawyer	0	1	½	1	½	½	1	½			10	F
<i>Rubus schmidelioides</i>	shrub lawyer	0	1	0	1	1	1	½	1		S	5	F

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GRASSES, SEDGES, RUSHES & GOUND COVERS													
<i>Acaena anserinifolia</i>	piripiri, bidibid	1	1	½	1	1	1	½	1			0.2	
<i>Acaena juvenca</i>	piripiri, bidibid	1	1	½	1	1	1	1	½			0.2	
<i>Astelia "nervosa broad"</i>	giant ground lily	0	2	0	1	0	½	1	1			1.5	FN
<i>Astelia fragrans</i>	ground lily	0	2	0	1	0	½	1	½			1.5	F
<i>Blechnum discolor</i>	piupiu crown fern	0	2	0	1	½	½	1	½			0.5	I
<i>Blechnum fluviatile</i>	kiwakiwa, creek fern	0	2	½	1	0	0	1	1			0.5	
<i>Blechnum minus</i>	swamp kiokio	2	2	1	1	0	1	½	1	W		0.5	
<i>Blechnum novae-zelandiae</i>	kiokio	2	2	1	1	1	½	1	1			2	I
<i>Blechnum procerum</i>	beech hardfern	0	2	0	1	1	0	1	1			0.5	
<i>Carex "forest"</i>	glade sedge	0	2	1	1	0	1	½	1			1	
<i>Carex cockayneana</i>	bush sedge	1	1	½	1	0	1	½	1			1	
<i>Carex coriacea</i>	rautahi	2	0	1	1	0	1	0	1			0.5	
<i>Carex diandra</i>	peat sedge	1	2	1	0	0	1	0	1	W		1	
<i>Carex dissita</i>	backwater sedge	0	1	1	1	0	½	½	1			0.5	
<i>Carex secta</i>	pūrei	2	1	1	½	0	1	½	1	W		2	I
<i>Carex sinclairii</i>	sward sedge	0	2	1	0	0	1	0	1	W		0.5	
<i>Carex tenuiculmis</i>	red swamp tussock	2	1	1	1	0	1	½	1	W		1	
<i>Carex virgata</i>	pukio	2	1	1	½	0	1	½	1	W		1.5	I
<i>Chionochloa conspicua</i>	hunangāmoho, streambank snow-tussock	1	1	½	1	0	1	½	1			2	I
<i>Cortaderia richardii</i>	South Island toetoe	2	0	1	1	1	1	0	1	W		3	I
<i>Eleocharis acuta</i>	spike rush	1	0	1	½	0	1	½	1	W		1	
<i>Empodisma minor</i>	wire rush	2	0	1	1	0	1	0	1	W		0.3	I
<i>Juncus edgariae</i>	wiwi	1	0	½	1	0	1	0	1	W		1	
<i>Microlaena avenacea</i>	bush ricegrass	0	2	½	1	½	½	1	1			0.5	
<i>Muehlenbeckia axillaris</i>	mat pōhuehue	2	0	0	1	1	1	0	1			0.1	I
<i>Paesia scaberula</i>	mātātā, scented fern	1	0	0	1	1	1	0	1			0.3	
<i>Phormium cookianum</i>	wharariki, coastal flax	2	0	0	1	1	1	0	1			1.5	N
<i>Phormium tenax</i>	harakeke, swamp flax	2	0	1	1	½	1	0	1	W		2	N
<i>Poa cita</i>	silver tussock	2	0	0	½	1	1	0	1			0.5	I
<i>Polystichum vestitum</i>	prickly shield fern	2	2	½	1	0	½	1	1		S	1	I
<i>Uncinia clavata</i>	clubbed hookgrass	0	1	0	1	½	½	1	1			0.5	
<i>Uncinia ferruginea</i>	fierce hookgrass	0	2	½	1	0	½	1	1			0.5	
<i>Uncinia strictissima</i>	rush sedge	2	1	½	1	0	1	½	1		S	0.5	
<i>Uncinia uncinata</i>	hookgrass	1	2	½	1	½	½	1	1			0.5	