

Vascular Plants of the Kaimanawa Forest Park (60051, NZMS 260 T19, T20 & U19)

Individual species lists for specific locations include;

1. Waimarino River terraces, part of Ecological Area (N.Singers, 12/1999).
2. Ecology stream Ecological Area (S.Deverell *et.al.* 1/2000)

Vegetation description

Red – silver beech forest

Mountain beech forest

Ecology stream ecological area

Mixed beech – mixed podocarp forest

Red beech – silver beech – rimu – matai – miro / kamahi
Waimario

Red beech – rimu forest

Red beech – Hall's totara forest

Silver beech – mountain beech forest

Kamaha forest

Kanuka forest

Manuka – (kanuka) scrub

When Elder wrote “The vegetation of the Kaimanawa Ranges” he surveyed an area bounded by the Desert road (S.H.1) and Lake Taupo in the west, the natural mountain – plain boundary of the northern Kaimanawa and Kaingaroa plains, in the east a roughly north–south boundary of the Taharua Stream, Omaru, Ngaruroro and Rangitikei Rivers and in the south from Waioru to the Napier – Taihape Road until the Rangitikei River (appendix 1).

Based on vegetation pattern this substantial area was broken up to four sub–regions the northern, central, southern and south–western Kaimanawa (Appendix 2). The Kaimanawa Forest Park only encompasses areas of the first three sub–regions.

The northern

Compiled from Kaimanawa RHA, Kaimanawa mountain beech study plot sheets (1998-99) and personal observations by N.J.D.Singers, Department of Conservation, Turangi (1998, June 1999).

Abundance Key

Species abundance was quantified subjectively using the following abundance key.

r = rare

u = uncommon

l = local

o = occasional

c = common, also lc = locally common

a = abundant, also la = locally abundant

* = exotic/adventive species

Gymnosperm trees

<i>Dacrydium cupressinum</i>	rimu	l
<i>Dacrycarpus dacrydioides</i>	kahikatea	u
<i>Manoao colensoi</i> ¹	silver pine	r
* <i>Pinus contorta</i>	Lodge-pole pine	u
<i>Podocarpus hallii</i>	Halls totara	lc
<i>Podocarpus totara</i>	totara	u
<i>Phyllocladus aspleniifolius</i> var. <i>alpinus</i>	celery-top pine	c
<i>Phyllocladus glaucus</i> ²	tanekaha	u
* <i>Pseudotsuga menziesii</i> ³	Douglas fir	r
<i>Prumnopitys ferruginea</i>	miro	c
<i>Prumnopitys taxifolia</i>	matai	c

Gymnosperm shrubs

<i>Lepidothamnus laxifolius</i>	Pigmy pine	lc
<i>Podocarpus nivalis</i>	mountain totara	lc

Monocot trees and shrubs

<i>Cordyline australis</i>	cabbage tree	l
<i>Cordyline banksii</i>	forest cabbage tree	l
<i>Cordyline indivisa</i>	mountain cabbage tree	l

Dicot Trees

<i>Aristotelia serrata</i>	wineberry, makomako	lc
<i>Carpodetus serratus</i>	putaputaweta	a
<i>Elaeocarpus dentatus</i>	hinau	l
<i>Elaeocarpus hookerianus</i>	pokaka	l
<i>Griselinia littoralis</i>	broadleaf	c
<i>Hedycarya arborea</i>	porokaiwhiri	c
<i>Kunzea ericoides</i>	kanuka	c

¹ Druce recorded a silver pine in the lower Waipakihi Valley (Elder, 1963)

² The southern limit of toatoa (*Phyllocladus glaucus*) is in the Waiotaka River valley (Speedy, pers.obs.). It also occurs in a limited area near the head of the Waimarino River (Elder, 1963) and the Tauranga – Taupo River.

³ One wilding tree recorded from the Omaru valley, near Omaru hut.

<i>Melicytus lanceolatus</i>	mahoe-wao	l
<i>Melicytus ramiflorus</i> subsp. <i>ramiflorus</i>	mahoe	lc
<i>Myrsine australis</i>	mapou	lc
<i>Myrsine salicina</i>	toro	
<i>Nestegis cunninghamii</i>	black maire	c
<i>Nestegis lanceolata</i>	white maire	l
<i>Nothofagus fusca</i>	red beech	a
<i>Nothofagus menziesii</i>	silver beech	a
<i>Nothofagus solandri</i> var. <i>cliffortioides</i>	mountain beech	la
<i>Olearia rani</i> ⁴	heketara	r
<i>Pennantia corymbosa</i>	kaikomako	c
<i>Pittosporum eugenioides</i>	lemonwood	lc
<i>Pittosporum tenuifolium</i> var. <i>tenuifolium</i>		
<i>Pittosporum tenuifolium</i> var. <i>colensoi</i>		
<i>Pseudopanax arboreus</i>	five-finger	
<i>Pseudopanax colensoi</i>	mountain five-finger	
<i>Pseudopanax crassifolius</i>	lancewood	
<i>Raukaua edgerleyi</i>	raukawa	
<i>Schefflera digitata</i>	pate	
<i>Weinmannia racemosa</i>	kamahi	

Dicot shrubs

<i>Alepis flavida</i>	yellow mistletoe	
<i>Alseuosmia macrophylla</i>	shrubby honeysuckle	
<i>Alseuosmia pusila</i>	mountain alseuosmia	
<i>Alseuosmia turneri</i>		
<i>Androstoma empetrifolia</i> (<i>Cyathodes empetrifolia</i>)	bog mingimingi	
<i>Aristotelia fruticosa</i>	mountain wineberry	
* <i>Buddleja davidii</i>	purple buddleia	u
<i>Carmichaelia australis</i>		
<i>Coprosma acerosa</i> forma <i>brunnea</i>		
<i>Coprosma areolata</i>	thin-leaved coprosma	
<i>Coprosma cheesemanii</i>		
<i>Coprosma colensoi</i>		
<i>Coprosma foetidissima</i>	stinkwood	
<i>Coprosma grandifolia</i>		
<i>Coprosma linariifolia</i>	mikimiki	
<i>Coprosma lucida</i>	karamu	
<i>Coprosma microcarpa</i>		
<i>Coprosma perpusilla</i>		
<i>Coprosma propinqua</i> subsp. <i>propinqua</i>	mingimingi	
<i>Coprosma propinqua</i> x <i>robusta</i>		
<i>Coprosma pseudocuneata</i>		
<i>Coprosma rhamnoides</i>		
<i>Coprosma robusta</i>	karamu	
<i>Coprosma rugosa</i>		
<i>Coprosma rigida</i>		

⁴ One grove known at Te Tiringa stream (Speedy, pers.obs.)

<i>Coprosma</i> “taylorae”		
<i>Coprosma tenuifolia</i>		lc
<i>Coriaria arborea</i>	tree tutu	
<i>Coriaria plumosa</i>	small-leaved tutu	
<i>Coriaria pteridoides</i>	small-leaved tutu	
<i>Corokia cotoneaster</i>	korokio	
<i>Cyathodes fraseri</i>		
<i>Cyathodes juniperina</i>	prickly mingimingi	a
<i>Dracophyllum recurvum</i>	neinei	lc
<i>Dracophyllum subulatum</i>	monoao	
<i>Epacris alpinus</i>		
* <i>Erica lusitanica</i>	Spanish heath	u
<i>Fuchsia excorticata</i>	kotukutuku	lc
<i>Gaultheria antipoda</i>	bush snowberry	
<i>Gaultheria colensoi</i>	mountain snowberry	
<i>Gaultheria depressa</i>	snowberry	
<i>Hebe parviflora</i> var. <i>arborea</i>		
<i>Hebe odora</i>		
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko	a
<i>Hebe tetragona</i>	whipcord hebe	
<i>Hebe venustula</i>		
<i>Helichrysum glomeratum</i> var. <i>lanceolatum</i>		
<i>Leptospermum scoparium</i>	manuka	a
<i>Leucopogon fasciculatus</i>	mingimingi	a
<i>Lophomyrtus obcordata</i>	rohutu	
<i>Melicytus micranthus</i>	swamp mahoe	
<i>Melicope simplex</i>	poataniwha	
<i>Melicytus</i> aff. <i>alpinus</i> "Central N.I (AK 237270)	thick-leaved mahoe	
<i>Myrsine divaricata</i>	weeping mapou	a
<i>Myrsine nummularia</i>	creeping mapou	
<i>Neomyrtus pedunculatus</i>	myrtle	
<i>Olearia ilicifolia</i>	tree daisy	
<i>Olearia virgata</i>	twiggy tree daisy	
<i>Ozothamnus leptophylla</i>		
<i>Pentachondra pumila</i>		
<i>Pseudowintera colorata</i>	horopito	a
<i>Peraxilla colenso</i> ⁵	red mistletoe	
<i>Peraxilla tetrapetala</i> ⁶	scarlet mistletoe	
<i>Pimelea buxifolia</i>		
<i>Pimelea microphylla</i>		
<i>Pimelea prostrata</i>	New Zealand daphne	
<i>Pittosporum divaricatum</i>		
<i>Pittosporum turneri</i>	Turner's kohuhu	
<i>Raukaua anomalus</i>		
<i>Raukaua simplex</i>		
<i>Urtica ferox</i> ⁷	ongaonga	

⁵ Occurs on silver beech in the western and northern Kaimanawa to a maximum known altitude of 800m+ near Cascade hut.

⁶ Known on *Nothofagus solandri* var. *cliffortioides* trees in the Rangitikei and Waipakahi catchments

Dicot lianes

<i>Clematis forsteri</i>	
<i>Clematis paniculata</i>	white clematis
<i>Clematis quadribracteolata</i>	
<i>Metrosideros diffusa</i>	climbing rata
<i>Muehlenbeckia australis</i>	pohuehue
<i>Muehlenbeckia axillaris</i>	creeping pohuehue
<i>Parsonsia capsularis</i>	native jasmine
<i>Parsonsia heterophylla</i>	native jasmine
<i>Rubus australis</i>	bush lawyer
<i>Rubus cissoides</i>	tataramoa, bush lawyer
<i>Rubus schmideloides</i>	tataramoa, bush lawyer

Lycopods and fern allies

<i>Lycopodium deuterodensum</i>	clubmoss
<i>Lycopodium fastigiatum</i>	clubmoss
<i>Lycopodium volubile</i>	clubmoss

Mosses

<i>Acrocladium auriculatum</i>
<i>Dawsonia superba</i>
<i>Dendroligotrichum dendroides</i>
<i>Dicranoloma</i> spp.
<i>Ptychomnion aciculare</i>

Ferns

<i>Asplenium bulbiferum</i>	hen and chicken fern
<i>Asplenium colensoi</i>	
<i>Asplenium flaccidum</i>	hanging spleenwort
<i>Asplenium oblongifolium</i>	shining spleenwort
<i>Asplenium polyodon</i>	sickle spleenwort
<i>Blechnum chambersii</i>	lance fern, nini
<i>Blechnum colensoi</i>	
<i>Blechnum discolor</i>	crown fern, piupiu
<i>Blechnum filiforme</i>	thread fern
<i>Blechnum fluviatile</i>	kiwakiwa
<i>Blechnum fraseri</i>	
<i>Blechnum membranaceum</i>	
<i>Blechnum montanum</i>	
<i>Blechnum nigrum</i>	
<i>Blechnum novae-zelandiae</i>	
<i>Blechnum pennamarina</i>	
<i>Blechnum procerum</i>	small kiokio

⁷ *Urtica ferox* occurs locally in mixed beech – podocarp forest in the western Kaimanawa.

<i>Blechnum vulcanicum</i>		
<i>Cyathea colensoi</i>		
<i>Cyathea cunninghamii</i>	ponga	
<i>Cyathea dealbata</i>	silver fern, ponga	
<i>Cyathea medullaris</i>	mamaku	
<i>Cyathea smithii</i>	soft tree fern, katote	
<i>Dicksonia fibrosa</i>	wheki-ponga	
<i>Dicksonia lanata</i>	tuokura	
<i>Dicksonia squarrosa</i>	wheki	
<i>Diplazium australe</i> ⁸		
<i>Gleichenia dicarpa</i>	tangle fern	
<i>Grammitis billardierii</i>		
<i>Histiopteris incisa</i>	waterfern	a
<i>Hymenophyllum demissum</i>	irirangi	
<i>Hymenophyllum flabellatum</i>	filmy fern	
<i>Hymenophyllum multifidum</i>	filmy fern	
<i>Hymenophyllum rufescens</i>	filmy fern	
<i>Hymenophyllum rarum</i>	filmy fern	
<i>Hymenophyllum sanguinolentum</i>	filmy fern	
<i>Hymenophyllum villosum</i>	filmy fern	
<i>Hypolepis millefolium</i>	thousand leaved fern	
<i>Hypolepis rufobarbata</i>		
<i>Leptolepia novae-zelandiae</i>		u
<i>Leptopteris hymenophylloides</i>	heruheru	c
<i>Leptopteris superba</i>	Prince of Wales fern	lc
<i>Paesia scaberula</i>	lacefern	lc
<i>Pellaea rotundifolia</i>	tarawera	u
<i>Phymatosorus pustulatus</i>	hound's tounge	
<i>Phymatosorus novae-zelandiae</i>	hound's tounge	u
<i>Polystichum richardii</i>	shield fern	l
<i>Polystichum vestitum</i>	prickly sheild fern, puniu	c
<i>Pyrrosia eleagnifolia</i>	leather leaf fern	c
<i>Sticherus cunninghamii</i>	umbrella fern	lc
<i>Trichomanes reniforme</i>	kidney fern, raurenga	lc

Orchids

<i>Adenochilus gracilis</i>	
<i>Aporostylis bifolia</i>	odd-leaved orchid
<i>Caladenia catentata</i>	pink fingers
<i>Chiloglottis cornuta</i>	green bird orchid
<i>Corybas oblongus</i>	spider orchid
<i>Corybas trilobus</i>	spider orchid
<i>Earina autumnalis</i>	easter orchid
<i>Earina mucronata</i>	bamboo orchid
<i>Microtis unifolia</i>	onion orchid
<i>Prasophyllum colensoi</i>	leek orchid
<i>Pterostylis banksii</i>	tutukiwi

⁸ Locally common in the Waioitaka River valley

Grasses

<i>Chionochloa rubra</i>	red tussock	
<i>Cortaderia fulvida</i>	toetoe	
* <i>Dactylis glomeratus</i>	cocksfoot	
<i>Deschampsia tenella</i>	hair-grass	
<i>Deyeuxia avenacea</i>		
<i>Echinopogon ovatus</i>	hedgehog grass	
<i>Hierochloe redolens</i>	holy grass	
* <i>Holcus lanatus</i>	Yorkshire fog, brown top	
<i>Microlaena avenacea</i>	bush rice grass	
<i>Microlaena stipoides</i>		
<i>Poa anceps</i>	broad-leaved poa	
<i>Poa breviglumis</i>		MB
<i>Poa colensoi</i>	blue tussock	
<i>Poa cita</i>	silver tussock	
<i>Poa imbecilla</i>	weak poa	
<i>Poa nova zealandiae</i>		MB
<i>Rytidosperma gracile</i>		
<i>Rytidosperma setifolium</i>	bristle tussock	

Sedges and rushes

<i>Eleocharis pusilla</i>	spike sedge	
<i>Empodisma minima</i>		
<i>Carpha alpina</i>		
<i>Gahnia xanthocarpa</i>	gahnia	
<i>Isolepis habra</i>		
<i>Isolepis pottsii</i>		
<i>Lepidosperma australe</i>	square sedge	
<i>Luzula banksii</i>	woodrush	
<i>Luzula picta</i> var. <i>picta</i>	woodrush	
<i>Oreobolus pectinatus</i>	combsedge	
<i>Schoenus pauciflorus</i>	bog rush	
<i>Uncinia caespitosa</i>		
<i>Uncinia nervosa</i>		
<i>Uncinia rubra</i>		
<i>Uncinia rupestris</i>		
<i>Uncinia uncinata</i>		
<i>Uncinia viridis</i>		

Monocot herbs

<i>Astelia banksii</i>	shore kowharawhara	
<i>Astelia fragrans</i>	kakaha	
<i>Astelia nervosa</i>	mountain astelia	
<i>Bulbinella hookeri</i> ⁹	Maori onion	

⁹ *Bulbinella hookeri* is found in the Waipakihi valley (Elder, 1963)

Collospermum microspermum
Phormium cookianum

wharariki, flax

Composite herbs

<i>Acaena anserinifolia</i>	bidibid	
<i>Acaena emittens</i>	bidibid	
<i>Brachycome radicata</i>	roniu	
<i>Brachyglottis lagopus</i>	hare's foot daisy	
<i>Celmisia alpina</i>	mountain daisy	
<i>Celmisia gracilentia</i>	pekapeka, mountain daisy	
<i>Celmisia spectabilis</i>	mountain daisy	
* <i>Cirsium vulgare</i>	Scotch thistle	
<i>Craspedia uniflora</i>	woollyhead	
<i>Forstera</i> spp.		
<i>Gnaphalium</i> spp	cudweed	
<i>Gnaphalium ruahinicum</i>	creeping cudweed	
<i>Helichrysum bellidioides</i>	Hells bells	
* <i>Hieracium pilosella</i>	hawkweed	
<i>Hydrocotyle dissecta</i>		
<i>Hydrocotyle heteromeria</i>		
<i>Hydrocotyle microphylla</i>		
<i>Hydrocotyle moschata</i>		
* <i>Hypochoeris radicata</i>	catsear	
<i>Lagenifera cuneata</i>	slender N.Z. daisy	
<i>Lagenifera petiolata</i>	papataniwhaniwha	
<i>Lagenifera strangulata</i>	parani	
<i>Leptinella squalida</i>		
<i>Luzuriaga parviflora</i>	lantern berry	
* <i>Mycelis muralis</i>	wall lettuce	
<i>Raoulia albosericea</i>	scabweed	
<i>Raoulia australis</i>	scabweed	
<i>Raoulia glabra</i>		
* <i>Senecio jacobaea</i>	ragwort	1
<i>Senecio lag?</i>		
<i>Senecio minimus</i>	fireweed	
<i>Schizeilema trifoliolatum</i>		
<i>Sonchus oleraceus</i>	sow thistle	
<i>Taraxacum officinale</i>	dandelion	
<i>Vittadinia australis</i> ¹⁰ (AK249773)	white fuzzweed	1

Dicot herbs

<i>Anisotome aromatica</i>	aniseed, kopoti	
<i>Australina pusilla</i> ¹¹		
<i>Cardamine debilis</i> agg.	bitter cress	
<i>Colobanthus apetalus</i>	colobanthus	

¹⁰ *Vittadinia australis* occurs on dry river gravels (terraces) in the Waipakihi and Waimarino Rivers

¹¹ *Australina pusilla* has been found once next to a small creek in the vicinity of kiko loop track

<i>Dactylanthus taylorii</i> ⁶	woodrose
<i>Drosera binata</i>	sundew
<i>Epilobium alsinioides</i>	willowherb
<i>Epilobium brunnescens</i>	willowherb
<i>Epilobium melanocaulon</i> (AK 249771)	willowherb
<i>Epilobium microphyllum</i> (AK 249768)	willow herb
<i>Epilobium pedunculare</i>	willowherb
<i>Euphrasia cuneata</i>	N.I. eyebright
<i>Euphrasia zelandica</i>	
<i>Galium perpusillum</i>	bedstraw
<i>Galium pro</i>	bedstraw
<i>Gentiana bellidifolia</i>	mountain gentian
<i>Gentiana patula</i>	gentian
<i>Geranium microphyllum</i>	namunamu
<i>Jovellana repens</i>	
<i>Nertera ciliata</i>	
<i>Nertera depressa</i>	
<i>Nertera dichondrifolia</i>	
<i>Oreomyrrhis colensoi</i>	oreomyrrhis
<i>Ourisia macrocarpa</i>	mountain foxglove
<i>Ourisia vulcanica</i>	foxglove
<i>Oxalis magellanica</i>	oxalis
<i>Pratia angulata</i>	pratia
<i>Ranunculus reflexus</i> (<i>R. hirtus</i>)	bush buttercup
* <i>Sagina procumbens</i>	pearlwort
<i>Scleranthus biflorus</i>	Canberra grass
<i>Scleranthus uniflorus</i>	
<i>Stellaria alsine?</i>	bog stichwort
<i>Stellaria gracilentia</i>	chickweed
* <i>Stellaria media</i>	chickweed
<i>Stellaria parviflora</i>	chickweed
<i>Urtica incisa</i>	bush nettle
<i>Viola cunninghamii</i>	violet
<i>Viola filicaulis</i>	violet
<i>Wahlenbergia pygmaea</i>	harebell