

Table 1. Whatipu hard beech trees and seedlings 1976-1997

August 1976	October 1976	March 1983	August 1997	
(a) Trees				
Height (m) [From AK 216565]*	Diameter (cm) [AK 104567, 216564]	Diameter (cm)+ [MacDonald 1984]	Diameter (cm)+ [Cameron 1997]	Average diameter increase (cm/yr) from 1976 to 1997
21.0	50.9	54.1	61.5	0.50
15.0	30.7	34.2	39.0	0.40
21.0	23.6	24.6	27.6	0.19
10.5	8.1	9.7	16.1	0.38
(b) Seedlings				
Height (cm)	Height (cm)	Height (cm)	Height (cm)	
30	30	125	(not searched for)	-
	4	40		
		20		
		10		
		8		
		4		

* Diameter figures also recorded but not used here because they were all larger than the October 1976 figures and 2 were even larger than the 1983 figures.

+ Diameter at breast height (dbh).

I would be interested in receiving additional records of beech in the Waitakere Ranges.

Acknowledgements

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Wairoa Valley Field Trip, 20 September 1997

Steve McCraith

A group of 28 BOTSOCers turned out in South Auckland on a beautiful spring morning for the monthly botanical foray. Headed by their leader for the day (myself) the group, some still bleary-eyed, set off from the township of Hunua at 9.45 am down Hunua Road to the Wairoa catchment valley on Moumoukai Road. After parking (off Otau Road), observing the remnants of a local pastime (a burnt out car), hearing a quick introduction to the area and receiving a short (and soon

to be lengthened species list) the group set off at a blistering pace in search of botanical wonderment.

Immediately obvious was the presence of Himalayan honeysuckle (*Leycesteria formosa*), a common weed in disturbed sites in the central Hunuwas, and the abundance of *Lycopodium scariosum* lining the clay banks. The fern ally was common throughout the area along with several other species of *Lycopodium*. Further along the meandering track were a group of tree fuchsias (*Fuchsia excorticata*) which were flowering. Hinau (*Elaeocarpus dentatus*) and putaputaweta (*Carpodetus serratus*) were seen in numbers and, as is common in the Hunuwas, tawa (*Beilschmiedia tawa*) and rewarewa (*Knightia excelsa*) were the dominant canopy trees.

After crossing the creek three or four times the group came to a grove of *Alseuosmia x quercifolia* identifiable by its variable leaf shape and microscopic brown hairs in the leaf axils. It was noted that although many plants were heavily in bud apparently none were flowering (however it was later found there were a few plants in flower with their strong scent on the other side of the valley). A single king fern (*Marattia salicina*) and lone raukawa (*Pseudopanax edgerleyi*) were sighted streamside by the keen eyes of the trailing group.

Still further on the group came to two massive podocarps guarding the track which were initially assumed by their sheer size to be kahikatea (*Dacrycarpus dacrydioides*). They were revealed, however, to be miro (*Prumnopitys ferruginea*) and it soon became obvious that the valley was home to many of these monsters. While trying to identify the trees, a difficult task due to the number of epiphytes on the lower branches, Ewen came across several fruiting *Acianthus sinclairii* orchids at the base of one of the miro.

Around the next bend in the track was found a large kawaka (*Libocedrus plumosa*) and, it was soon discovered, many seedlings and juveniles presumably grown from the adult. After much discussion about the number of young cedars present and a rather half-hearted attempt at finding *Peripatus* in a rotting log the train rolled on. It chugged further along the track and, just like the little engine who could, managed to crawl up yet another hill and pulled to a halt alongside a sizeable population of *Corybas macranthus*. The orchids were in flower and looked to be in fine condition on the clay bank nestled in amongst mosses and *Hymenophyllum*.

The call for lunch began and BOTSOC set out for the goal of a midday lunch with gusto. A cracking pace was set and after enduring a few more hills, noting the excellent condition of the kohekohe (*Dysoxylum spectabile*) in the possum-thinned bush and the presence of a few flowering *Pterostylis alobula* we said goodbye to the Wairoa Valley Track. A short walk along Repeater Road with a quick stop to admire the pink-flowered sundew (*Drosera auriculata*), common on the clay road cuttings, and the group piled onto and around the lookout platform on the side of the road. The spot was ideal for lunch allowing a breathtaking view of the Mangatawhiri Reservoir and surrounding area. The meal was a quiet affair with botanists hoeing into packed lunches and soaking up the spring-time sun. In fact so good was the spot it wasn't until three-quarters of an hour later that the enthusiasts set off contented but at a noticeably slower pace.

Then near chaos as the group splintered and various factions emerged. One group had bolted up the hebe lined road in search of the summit, a second group (led by Ewen, Ann and Jessica) had renounced higher plants and began to actively survey the moss flora resulting in a third small group consisting only of myself stranded midway (the conversation though a bit thin was highly entertaining all the same). I stopped alongside a fine *Clematis paniculata*, apparently a male as it was more open and showy, a point noted loudly by Ewen later.

Eventually the trailing group caught up and pointed out *Thelymitra longifolia* in abundance along with *Microtis uniflora* trackside though sadly neither were yet flowering. The summit was reached, BOTSOC regrouped, the repeater station was noted and it was off down the Wairoa Loop Track. When told it was now downhill to the end there was near pandemonium after a morning of low gradient hill climbing. Ten minutes into the track and a side branch was taken to another lookout.

Along the way a mixed population of *Corybas trilobus* and *C. oblongus* was encountered. The former, with its distinctive wider than long leaf shape, was in full flower but the latter was yet to put on its floral show. More *Pterostylis banksii* were seen until the bush opened out to reveal another fine view, this time of the Wairoa catchment valley. After a few quick ooh's and aah's it was back down the track, to join up with the those who had remained back, to find they had discovered a population of *Corybas macranthus* right at the track junction. Further along many more of these spider orchids were found on the shaded banks.

On down the track BOTSOC plowed leaping a fallen rata (*Metrosideros robusta*) with the grace of a sick horse, scampering past many heavily buttressed pukatea (*Laurelia novae-zelandiae*) and tawa until suddenly the track gave way to a gravel road and with it the end of the journey. A fine clematis was seen as the bush was exited and Ewen pointed out the native herb *Epilobium nummularifolium* before the apparently contented crew rambled back to their cars. The abundant kohuhu (*Pittosporum tenuifolium*), tarata (*P. eugenioides*) and flax (*Phormium tenax*) along the road margin appeared to be planted and they were not seen from the track.

It is interesting to note that apparently no kauri (*Agathis australis*) is present in this valley even though it is common to the north and abundant in the valleys to the immediate south and that kauri grass (*Astelia trinervia*) is present towards the top end of the Wairoa Valley Track. Also noted was the late flowering times of many of the plants in the valley compared to those growing in the Waitakeres possibly a result of the cooler climes encountered in the Hunuas.

(Editor: At a later date I found some wild ginger a few meters along a side track to a water-gauge; I have not seen it elsewhere in these hills.)

WAIROA VALLEY SPECIES LIST

FERNS AND FERN ALLIES (44)

Adiantum cunninghamii
Anarthropteris lanceolata
Asplenium bulbiferum
Asplenium flaccidum
Asplenium lamprophyllum
Asplenium oblongifolium
Asplenium polyodon
Blechnum chambersii
Blechnum discolor
Blechnum filiforme
Blechnum fluviatile
Blechnum fraseri
Blechnum membranaceum
Blechnum "sp. 1"
Cyathea dealbata
Cyathea medullaris
Cyathea smithii
Dicksonia squarrosa
Histiopteris incisa
Hymenophyllum demissum
Hymenophyllum flabellatum
Hymenophyllum sanguinolentum
Lastreopsis hispida
Leptopteris hymenophylloides
Lycopodium cernuum
Lycopodium deuterodensum

Lycopodium scariosum
Lycopodium varium
Lycopodium volubile
Lygodium articulatum
Marattia salicina
Paesia scaberula
Phymatosorus pustulatus
Phymatosorus scandens
Pneumatopteris pennigera
Polystichum richardii
Pteridium esculentum
Pyrrosia eleagnifolia
Rumohra adiantiformis
Sticherus cunninghamii
Tmesipteris elongata
Tmesipteris tannensis
Trichomanes reniforme
Trichomanes venosum

GYMNOSPERMS (6)

Dacrycarpus dacrydioides
Dacrydium cupressinum
Libocedrus plumosa
Phyllocladus trichomanoides
Podocarpus hallii
Prumnopitys ferruginea

DICOTYLEDONS (110)

Acaena anserinifolia
Alseuosmia macrophylla
Alseuosmia x quercifolia
Apium nodiflorum *
Aristolelia serrata
Beilschmiedia tarairi
Beilschmiedia tawa
Bellis perennis *
Berberis glaucocarpa *
Brachyglottis repanda
Callitriche muelleri
Callitriche stagnalis *
Cardamine debilis
Carpodetus serratus
Centella uniflora
Cerastium glomeratum *
Cirsium vulgare *
Clematis ? flammula *
Clematis paniculata
Conyza albida *
Coprosma arborea
Coprosma grandifolia
Coprosma lucida
Coprosma robusta
Coprosma spathulata
Coriaria arborea
Corynocarpus laevigatus
Cotoneaster glaucophyllus *
Crepis capillaris *
Digitalis purpurea *
Drosera auriculata
Dysoxylum spectabile
Elaeocarpus dentatus
Elatostema rugosum
Epilobium nummularifolium
Epilobium pallidiflorum
Erica lusitanica *
Fuchsia excorticata
Galium aparine *
Galium palustre *
Gaultheria antipoda
Geniostoma rupestre
Geranium purpureum *
Gnaphalium gymnocephalum
Gnaphalium simplicaulae *
Griselinia lucida
Haloragis erecta
Hebe stricta
Hedycarya arborea
Hydrocotyle elongata
Hydrocotyle microphylla
Hypericum androsaemum *
Hypericum japonicum
Knightia excelsa
Kunzea ericoides
Lagenophora pumila
Laurelia novae-zelandiae
Leptospermum scoparium
Leucopogon fasciculatus
Leycesteria formosa *
Lobelia anceps
Lonicera japonica *
Lophomyrtus bullatus
Lotus pedunculatus *
Ludwigia palustris *
Macropiper excelsum
Meliclytus ramiflorus
Metrosideros diffusa
Metrosideros fulgens
Metrosideros perforata
Metrosideros robusta
Mida salicifolia
Muehlenbeckia australis
Myrsine australis
Myrsine salicina
Nertera depressa
Nestegis lanceolata
Olearia furfuracea
Olearia rani
Ornithopus pinnatus *
Oxalis magellanica
Parsonsia sp.
Passiflora tetrandra
Plantago lanceolata *
Plantago major *
Prunella vulgaris *
Pseudognaphalium luteoalbum agg.
Pseudopanax arboreus
Pseudopanax crassifolius
Pseudopanax edgerleyi
Quintinia serrata
Ranunculus reflexus
Ranunculus repens *
Rhabdothamnus solandri
Rorripa nasturtium-aquaticum *
Rubus australis
Rubus cissoides
Rubus fruticosus agg. *
Sagina procumbens *
Salix cinerea *
Schefflera digitata
Senecio bipinnatasectus *
Senecio jacobaea *
Senecio minimus
Sonchus asper *
Sonchus oleraceus *
Stellaria parviflora
Streblus heterophyllus
Teline monspessulana *
Ulex europeus *

MONOCOTYLEDONS (38)

Acianthus sinclairii
Agrostis capillaris *
Anthoxanthum odoratum *
Astelia solandri
Astelia trinervia
Carex lessoniana
CollospERMUM hastatum
Cordyline australis
Cordyline banksii
Cordyline pumilo
Cortaderia jubata *
Corybas macranthus
Corybas oblongus
Corybas trilobus
Dendrobium cunninghamii
Dianella nigra
Earina autumnalis
Earina mucronata
Freycinetia banksii
Gahnia pauciflora
Gahnia setifolia
Gahnia xanthocarpa
Isolepis reticularis
Juncus effusus *
Juncus gregiflorus
Juncus tenuis *
Luzula sp. *
Microlaena avenacea
Microtis uniflora
Pterostylis alobula
Pterostylis banksii
Rhopalostylis sapida
RhytidospERMA sp.
Ripogonum scandens
Schoenus tendo
Thelymitra longifolia
Uncinia banksii
Uncinia uncinata

MOSSES (38)

Achrophyllum quadrifarium
Breutelia pendula
Bryum billardierei
Bryum sp.
Calomnion complanatum
Campylopus clavatus
Campylopus introflexus
Catharomnion ciliatum
Cladomnion ericoides
Cyathophorum bulbosum
Dicranoloma billardierei
Dicranoloma menziesii

Ditrichum difficile
Fissidens asplenioides
Fissidens oblongifolius var. capitatus
Fissidens pallidus
Hymenodon pilifer
Hypnodendron arcuatum
Hypnodendron colensoi
Hypnum chrysogaster
Hypnum cupressiforme
Hypopterygium filiculaeforme
Hypopterygium rotulatum
Leptostomum macrocarpum
Leucobryum candidum
Macromitrium sp.
Philonotis tenuis
Pogonatum subulatum
Polytrichadelphus magellanicus
Pseudoscleropodium purum *
Ptychomnion aciculare
Racopilum convolutaceum
Rhizogonium novae-hollandiae
Sematophyllum amoenum
Stokesiella praelonga
Thuidium furfurosum
Tridontium tasmanicum
Wijkia extenuata

LICHENS : (24)

Cladia aggregata
Cladina confusa
Cladonia capitellata
Cladonia fimbriata
Cladonia pleurata
Clathroporina exocha
Dibaeis arcuata (Baeomyces fungoides)
Lecanora sp.
Lecidia ?
Leptogium ? azureum
Parmotrema sp.
Peltigera dolichorhiza
Pertusaria sorodes
Pertusaria sp.
Physcia sp.
Pseudocyphellaria allanii
Pseudocyphellaria dissimilis
Pseudocyphellaria cf. dissimilis
Pseudocyphellaria glabra
Rimelea cetrata
Rimelea reticulata
Stereocaulon ramulosum
Usnea angulata
Usnea sp.

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