

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

August 1976	October 1976	March 1983	August 1997	
<b>(a) Trees</b>				
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>(b) Seedlings</b>				
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 Hunuwas.

(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*  
*Melicytus 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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