

to wonder if it might be *Kunzea ericoides* var. *linearis*. Manuka was less common, with *Leucopogon fasciculatus*, *Dianella nigra*, *Morelotia affinis* and *Lepidosperma laterale*. The *Pomaderris* caused comment, and Maureen's claim that it was *P. hamiltonii* although doubted by some at the time, was later confirmed by two herbarium records collected nearby – one of which was a flowering specimen with comments on the pale flowers (AK 224025), and one from as far back as 1978 (AK 269440). A good stand of *Baumea arthropphylla* ('Sparse', on Auckland Threatened Plant List) growing in the shallow water allowed us to compare this with other species of the genus, especially *B. rubiginosa*. The former has a longer inflorescence, and the lowest branchlet is very narrow and often drooping. Also seen were *B. juncea*, *B. articulata* and *B. teretifolia*. Two introduced rushes were *Juncus bulbosus* growing in wet ground near the lake edge, and *J. dichotomus*, distinguished by the difficulty one has in pulling it from the ground.

As the informal track began to peter out, we pushed through much umbrella fern, *Gleichenia dicarpa*, and occasional *Lycopodiella cernua*, and finally came to the promised *Empodisma minus* ('Regionally Critical'). This peat-forming restiad was present in swathes of bright green wirey growth. No flowers could be found, but many sheaths sported tufts of fine white hairs. This population belies the stated claim in the wetland plant book by Johnson & Brooke (1995) that it no longer occurs north of Auckland City (it is still to be found in the Far North too, notably the Shenstone Block, Te Paki Farm Park).

Acknowledgements

We are grateful to local farmer Simon Drinkrow for permission to use the farm race, and to Ewen Cameron for checking Auckland Museum herbarium records.

References

Heenan, P.B.; de Lange, P.J.; Cameron, E.K.; Champion, P.D. 2002: Checklist of dicotyledons, gymnosperms, and pteridophytes naturalised or casual in New Zealand: additional records 1999-2000, *New Zealand Journal of Botany* 40: 155-174.

Johnson, P.N.; Brooke, P.A. 1989: *Wetland Plants of New Zealand*. DSIR Publishing, Wellington.

A fine, but inaccessible swamp was visible on the other side of the lake, with *Eleocharis sphacelata*, *Typha orientalis*, and *Baumea articulata* on the water's edge, and grading back to a manuka/flax wetland.

Planted trees noted included coast wattle (*Acacia sophorae*) abundantly naturalised, radiata pine (*Pinus radiata*), maritime pine (*Pinus pinaster*), cork oak (*Quercus suber*), brush box (*Lophostemon confertus*), willow bottlebrush (*Callistemon salignus*), crimson bottlebrush (*Callistemon citrinus*), *Eucalyptus botryoides*, and grey ironbark (*Eucalyptus paniculata*). On the rough bark of the ironbark an empty cocoon was found, and it took Mike next to no time to spot a large, colourful caterpillar of the gum emperor moth eating the foliage.

A few people had a quick visit to Te Arai Point, which was beautiful in the afternoon sun, and a new plant for us on the dunes was the yellow-flowered beach evening primrose, *Oenothera drummondii*. It is new for the Flora writers too, as it does not appear in Flora Volume IV – it was first collected at Te Arai by R. Smith, April 1997, AK 234463 (Heenan et al. 2002).

Attendance (22) Colleen Brewer, Warren Brewer, Jan Butcher, Lisa Clapperton, Brian Cumber, Chris Ferkins, Jo Fillery, Liz Furkert, Leslie Haines, Kristy Hall, Shelley Heiss-Dunlop, Peter Hutton, Helen Preston Jones, John Kendrick, Elaine Marshall, John Millett, Juliet Richmond, Doug Sheppard, Alison Wesley, Mike Wilcox, Tony Williams, Maureen Young (leader).

Trip Report: Waiomu Kauri Grove Track, Coromandel Peninsula, 15 March 2008

Mike Wilcox

We were blessed with a beautiful late summer day for this visit to the Coromandel Peninsula. People gathered at the Waiomu Café and then headed up the Waiomu Valley Road where cars were parked and the walk commenced.

Those attending were: Alison Wesley, Brian Cumber, Colleen Crampton, Doug Sheppard, Elaine Marshall, Frances Duff, Helen Preston Jones, Jan Butcher, John Smith-Dodsworth, James Lee, Jorma Lee, Josh Salter,

Juliet Richmond, Katarina Brink, Leslie Haines, Mike Wilcox, Pam Dale, Richard Hursthouse, Tony Williams. A species list was handed out, with promises of chocolate fish for significant additions. Such was the incentive engendered by this offer that new discoveries came thick and fast throughout the day.

The trip is best described in three stages – the lower approaches, the middle boulder-hopping section, and the upper kauri grove and beyond.

Lower approaches

This first section of the walk was from the carpark along the road, thence along a 4WD track to the entrance of the Waiomu Ecological Area and along the track following the Waiomu Stream. Exotic plants featured prominently here. Black wattle (*Acacia mearnsii*) and brush wattle (*Paraserianthes lophantha*) and planted groves of Sydney blue gum (*Eucalyptus saligna*) grew along the road. There was also Himalayan honeysuckle (*Leycesteria formosa*), spectacular stands of pampas grass (*Cortaderia jubata*), much parsley dropwort (*Oenanthe pimpinelloides*) and patches of hedge woundwort (*Stachys sylvatica*) and apple mint (*Mentha suaveolens*).



Fig. 1. *Carex geminata* (Mike Wilcox, 15 Mar 2008)

Kanuka (*Kunzea ericoides*) was the main native tree, and there were several small wetlands dominated by *Carex geminata* (with long, slender, drooping seed heads, Fig. 1) and *Typha orientalis*. Alison found *Juncus prismatocarpus* (a new record) in a ditch beside the track and Richard and Elaine found one fine specimen of *Syzygium maire*. Of particular interest were numerous very large specimens of five-finger (*Pseudopanax arboreus*), each still attached to its tree fern host. Native herbs seen beside the track were *Callitriche muelleri*, *Centella uniflora*, *Hydrocotyle dissecta*, *H. moschata*, *Lobelia anceps*, *Oxalis exilis* and *Ranunculus reflexus*. The tree ferns here were *Cyathea dealbata*, *C. medullaris* and *Dicksonia squarrosa*.

Middle boulder-hopping section

Our group were all adept at crossing the stream, either by careful boulder-hopping or by simply wading across. The vegetation had become forest at this stage, being an impressive second-growth of mixed broadleaved trees, with scattered conifers. The main canopy trees were towai (*Weinmannia silvicola*), tawa (*Beilschmiedia tawa*), hinau (*Elaeocarpus dentatus*), rewarewa (*Knightia excelsa*), with occasional pukatea (*Laurelia novae-zelandiae*), and with pigeonwood (*Hedycarya arborea*) in the understorey. The main conifers of note were tanekaha (*Phyllocladus trichomanoides*), kauri (*Agathis australis*) and miro (*Prumnopitys ferruginea*), and there was an increasing diversity of ground ferns. Close to the stream were pate (*Schefflera digitata*), kanono (*Coprosma grandifolia*), tree fuchsia (*Fuchsia excorticata*) and wineberry (*Aristotelia serrata*). Nikau (*Rhopalostylis sapida*) was plentiful and there were some spectacular columns of kiekie (*Freycinetia banksii*) on tree trunks. Dark, damp banks had the broad-leaved bristle fern, *Trichomanes elongatum*.



Fig. 2. Alison Wesley & Richard Hursthouse, Waiomu Stream (Mike Wilcox, 15 Mar 2008)

Upper kauri grove and beyond

After crossing the Waiomu Stream for the last time (Fig. 2) we ascended steeply up the boardwalk to the kauri grove and became immersed in a very different sort of forest. Here there were numerous large northern rata (*Metrosideros robusta*), Halls totara (*Podocarpus hallii*), tanekaha, miro, tawa, white maire

(*Nestegis lanceolata*), tawari (*Ixerba brexioides*) and wondrous groves of big kauri trees. Kauri seed fall was in progress. There was a typical kauri understorey and ground flora with kauri grass (*Astelia trinervia*) abundant, and plentiful *Sticherus cunninghamii*, *Lindsaea trichomanoides*, *Geniostoma ligustrifolium*, *Olearia rani*, *Coprosma arborea*, *Coprosma lucida*, *Leucopogon fasciculatus*, *Pseudopanax crassifolius*, *Alseuosmia macrophylla* and *Brachyglottis kirkii* var. *angustior*.

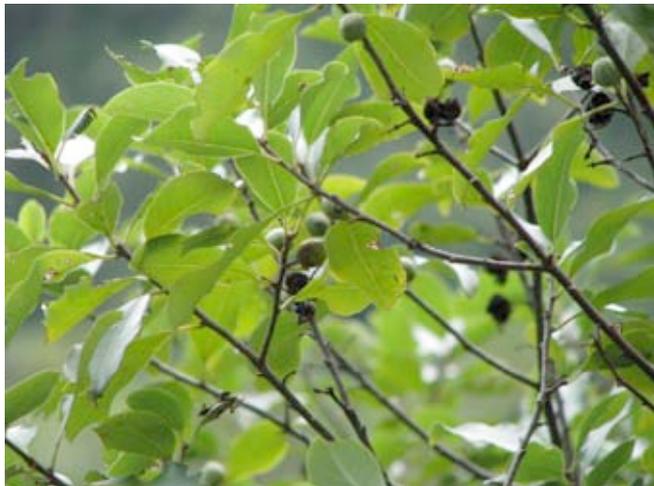


Fig. 3. *Pittosporum huttonianum* (Mike Wilcox, 15 Mar 2008)

We found a good deal of *Cordyline pumilio*, some with short trunks, and numerous colonies of the giant moss *Dawsonia superba*. There were good patches of toatoa (*Phyllocladus toatoa*) – with ripe seeds – and tanekaha, with several huge specimens of toru (*Toronia toru*), one measuring 43 cm in diameter and 14 m in height – the biggest any of us had ever seen.

Acknowledgements

Thanks to all members of the group for observations and to Graeme Jane for his 3 March 2002 species list. We did not see all the species on the list, but on the other hand were able to make several additions to it as a result of our excursion.

Species List (By G. Jane, with additions by M. Wilcox).

* = exotic

(A) = new additions

Mosses

Dawsonia superba
Hypnodendron comatum
Hypnodendron kerrii
Hypopterygium rotulatum
Ptychomnion aciculare
Sphagnum cristatum

Ferns and allies

Adiantum cunninghamii
Asplenium bulbiferum
Asplenium flaccidum
Asplenium oblongifolium
Asplenium polyodon
Blechnum chambersii
Blechnum discolor
Blechnum filiforme

Several Coromandel specialities were seen – *Pseudopanax discolor* commonly in the understorey, and further up towards the top of the range, *Pittosporum huttonianum* (Fig. 3) – spotted by Alison and identified by Coromandel botanist John.



Fig. 4. Fruit of *Pittosporum cornifolium* (Mike Wilcox, 15 Mar 2008)

Other species to catch our attention were two small shrubs of *Metrosideros albiflora*, a fine fruiting specimen of *Pittosporum cornifolium* (Fig. 4), a few small specimens of *Leionema nudum* handsome examples of *Nestegis montana* and *Dracophyllum latifolium*. Toward the main ridge there was abundant *Metrosideros fulgens* in flower, large festoons of mangemange (*Lygodium articulatum*) and continuation of tawa, towai and white maire.

Blechnum fluviatile (A)
Blechnum fraseri
Blechnum novae-zelandiae
Cardiomanes reniforme
Ctenopteris heterophylla
Cyathea dealbata
Cyathea medullaris
Dicksonia squarrosa
Diplazium australe
Doodia australis
Histiopteris incisa (A)
Huperzia varia
Hymenophyllum demissum
Hymenophyllum dilatatum
Hymenophyllum ferrugineum (*H. franklinii*) (A)
Hymenophyllum flabellatum
Hymenophyllum rarum

Hymenophyllum revolutum
Hymenophyllum sanguinolentum
Lastreopsis glabella
Lastreopsis hispida
Loxogramme dictyopteris
Lycopodium deuterodensum
Lycopodium volubile
Lygodium articulatum
Microsorium pustulatum
Microsorium scandens
Paesia scaberula
Pneumatopteris pennigera
Pteridium esculentum
Pteris macilenta
Pteris tremula
Pyrrhosia eleagnifolia
Schizaea dichotoma
**Selaginella kraussiana* (A)
Sticherus cunninghamii
Todea hymenophylloides
Tmesipteris elongata
Tmesipteris lanceolata (A)
Trichomanes elongatum (A)
Trichomanes venosum

Conifers

Agathis australis
Dacrycarpus dacrydioides
Dacrydium cupressinum
Phyllocladus toatoa
Phyllocladus trichomanoides
Podocarpus hallii
Prumnopitys ferruginea

Dicot trees, shrubs & climbers

**Acacia mearnsii*
Alseuosmia macrophylla
Aristotelia serrata
Beilschmiedia tawa
Brachyglottis kirkii var. *angustior*
Brachyglottis repanda
Carpodetus serratus
Clematis paniculata (A)
Coprosma arborea
Coprosma grandifolia
Coprosma lucida
Coprosma rhamnoides
Coprosma robusta
Coriaria arborea
Corynocarpus laevigatus
Dracophyllum latifolium
Dysoxylum spectabile
Elaeocarpus dentatus
**Eucalyptus saligna* (A) (cult.)
Fuchsia excorticata (A)
Geniostoma ligustrifolium
Griselinia lucida
Hebe corriganii
Hebe stricta
Hedycarya arborea
Ixerba brexioides

Knightia excelsa
Kunzea ericoides
Laurelia novae-zelandiae
Leionema nudum (A)
Leucopogon fasciculatus
**Leycesteria formosa*
Litsea calicaris
Macropiper excelsum
Melicytus ramiflorus
Metrosideros albiflora (A)
Metrosideros diffusa
Metrosideros fulgens
Metrosideros perforata
Metrosideros robusta
Muehlenbeckia australis
Myrsine australis
Nestegis lanceolata
Nestegis montana
Olearia rani
**Paraserianthes lophantha*
Parsonsia heterophylla (A)
Passiflora tetrandra
Pittosporum cornifolium (A)
Pittosporum huttonianum (A)
Pittosporum tenuifolium
Pomaderris amoena (A)
Pseudopanax arboreus
Pseudopanax crassifolius
Pseudopanax discolor
Quintinia serrata
Rubus cissoides
**Rubus fruticosus*
**Salix caprea* (A)
Schefflera digitata
Syzygium maire
Toronia toru
Vitex lucens
**Vitis vinifera* (A)
Weinmannia silvicola

Dicot herbs

**Achillaea millefolium*
**Ageratina adenophora*
Anaphalioides trinervis (A)
**Bidens frondosa*
Callitriche muelleri
Centella uniflora
**Cirsium vulgare* (A)
**Conyza sumatrensis*
**Duchesnea indica*
Epilobium nerteroides (A)
Epilobium pallidiflorum (A)
**Erigeron karvinskianus*
**Gamochaeta coarctata*
Haloragis erecta
Hydrocotyle dissecta
Hydrocotyle moschata (A)
**Hypochaeris radicata*
**Leucanthemum vulgare*
Lobelia anceps (A)
**Lotus pedunculatus*

**Mentha pulegium*
 **Mentha spicata* (A)
 **Mentha suaveolens*
 **Mycelis muralis*
Nertera depressa
Nertera dichondrifolia
 **Oenanthe pimpinelloides* (A)
Oxalis exilis
 **Plantago australis*
 **Plantago lanceolata*
 **Plantago major* (A)
 **Prunella vulgaris*
Pseudognaphalium luteoalbum (A)
Ranunculus reflexus
 **Senecio bipinnatisectus*
 **Senecio diaschides*
Senecio minimus (A)
 **Sison amomum*
Solanum americanum
 **Solanum nigrum* (A)
 **Sonchus oleraceus* (A)
 **Stachys sylvatica*
 **Trifolium pratense*
 **Trifolium repens*
 **Torilis arvensis* (A)
 **Verbena bonariensis*
 **Verbena litoralis* var. *brasiliensis*

Monocots

**Agrostis capillaris*
 **Anthoxanthum odoratum*
 **Aristea ecklonii* (A)
Astelia solandri
Astelia trinervia
 **Axonopus fissifolius* (A)
Carex geminata
Carex lambertiana (A)
Carex lessoniana (A)
Carex virgata
Collopermum hastatum
Cordyline banksii
Cordyline pumilio
Cortaderia fulvida (A)
 **Cortaderia jubata*
 **Cynodon dactylon*
 **Cyperus eragrostis*
Cyperus ustulatus
 **Dactylis glomerata*

Dianella nigra
Dichelachne micrantha
Drymoanthus adversus (A)
Earina autumnalis
Earina mucronata
Freycinetia banksii
Gahnia lacera
Gahnia pauciflora (A)
Gahnia setifolia
Gahnia xanthocarpa
Ichthyostomum pygmaeum
Isolepis inundatus (A)
Isolepis sepulchralis
 **Juncus articulatus* (A)
Juncus edgariae
 **Juncus effusus*
Juncus planifolius
Juncus prismatocarpus (A)
 **Juncus tenuis*
Microlaena avenacea
Microlaena stipoides
 **Miscanthus nepalensis*
Morelotia affinis
Nematoceras macrantha
Oplismenus hirtellus
 **Pennisetum clandestinum*
Phormium cookianum
 **Poa annua*
Pterostylis banksii
Rhopalostylis sapida
Ripogonum scandens
Rytidosperma gracile
 **Rytidosperma penicillatum*
Schoenus maschalinus
Singularybas oblongus
Thelymitra sp. (A)
Typha orientalis
Uncinia uncinata
Winika cunninghamii
 **Zantedeschia aethiopica*

Birds

grey warbler
 NZ pigeon
 ?Eastern rosella
 silvereye
 bellbird