Haloragis erecta Hebe macrocarpa Hedycarya arborea Hydrocotyle moschata Knightia excelsa Kunzea ericoides Lagenophora lanata Leionema nudum Leptecophylla juniperina Leptospermum scoparium Leucopogon fasciculatus Lobelia anceps Melicope ternata Melicytus ramiflorus Metrosideros diffusa Metrosideros excelsa Metrosideros fulgens Metrosideros perforata Mida salicifolia Muehlenbeckia australis Myrsine australis Nertera dichondrifolia Nestegis lanceolata Olearia furfuracea Olearia rani Parsonsia heterophylla Pimelea longifolia Piper excelsum Pittosporum cornifolium Pittosporum crassifolium Pittosporum eugenioides Pomaderris amoena Pomaderris kumeraho Pseudopanax arboreus Pseudopanax crassifolius Pseudopanax crassifolius × lessonii Pseudopanax lessonii Ranunculus reflexus Rubus australis Rubus cissoides Sophora chathamica Toronia toru Vitex lucens Wahlenbergia violacea Weinmannia silvicola

Monocotyledons

Acianthus sinclairii Astelia banksii Astelia solandri Astelia trinervia Carex dissita Carex flagellifera Carex lambertiana Collospermum hastatum Cordyline australis Cordyline pumilio Corunastylis pumila Cyperus ustulatus Cyrtostylis oblonga Dianella nigra Dichelachne crinita Diplodium alobulum Diplodium brumalum Diplodium trullifolium Earina mucronata Ficinia nodosa Freycinetia banksii Gahnia lacera Gahnia setifolia Gahnia xanthocarpa Isolepis reticularis

Juncus planifolius Lepidosperma australe Libertia ixioides Machaerina tenax Machaerina teretifolia Microlaena avenacea Microlaena stipoides Microtis unifolia Morelotia affinis Nematoceras trilobum (= Corybas) Oplismenus hirtellus subsp. imbecillis Orthoceras novaezeelandiae Phormium tenax Poa anceps Pterostylis agathicola Pterostylis banksii Pterostylis graminea Rhopalostylis sapida Ripogonum scandens Schoenus apogon Schoenus maschalinus Schoenus tendo Singularybas oblongus (= Corybas) Stegostyla atradenia (= Caladenia) Thelymitra aemula+ Thelymitra carnea Thelymitra aff. ixioides Thelymitra longifolia Thelymitra pauciflora Thelymitra aff. pauciflora "darkie" Thelymitra pulchella Uncinia hanksii Uncinia uncinata Uncinia zotovii

Matheson's Farm Bush, Mangawhai, 19 October 2013

Maureen Young



John and Gale Matheson, who farm on Lawrence Road, between Mangawhai and Kaiwaka, belong to the growing number of farmers who have fenced off bush remnants on their farms and are undertaking pest control. Fifteen years without grazing has ensured that a rich and varied ground cover is now replacing the bare, eaten-out under storey of the bush, and fortunately there are no problem weeds present. They were pleased to lead Bot Soccers through their patches of bush, and to show off the botanical treasures to be found there (Fig. 1).



Fig. 1. Botanists at work in Matheson's Bush. Photo: Joshua Salter, 19 Oct 2013.

The highlight of the day was, without doubt, the 16 trees of Halocarpus kirkii, or manoao, which grow on the property. This member of the Podocarpaceae has a northern distribution, being found from Te Paki south to Coromandel and Port Waikato. However, like several other northern plants, it is not usually found between the Brynderwyns and the Waitakere Ranges. This makes this population, together with two other much smaller groups near Tomarata, of interest to botanists. It has amazingly dimorphic leaves, with juvenile leaves looking somewhat like large soft totara leaves, and almost terete leaves on the adult branches. The terms "juvenile" and "adult" are used advisedly, as both forms can be found on the same branch, or scattered willy-nilly over a tree. The trees are dioecious, and the hunt was on to find male and female cones. Josh, our gymnosperm enthusiast, managed to find an immature female cone.

The other highlight was the usual puzzle over the forms of Alseuosmia that grow in this catchment. In this case it became clear that there were two entities present. One had rather large, dark green, "oak" shaped leaves with red petioles. This fits comfortably into one of the forms that can be called A. quercifolia. The other was the small northern plant, A. banksii. Not only does one have to become conversant with the varied leaf shapes of this species (Fig. 2), but also the growth form. Α. banksii does not, in my experience, have a small trunk with spreading branches, but rather, grows with spreading or trailing cane-like branches. It was noticed on this occasion that an exposed horizontal root had a second stem growing from it. Several red fruit were present. Logues Bush at Tomarata, c. 12 km as the tui flies, also hosts A. banksii.

The recce of Matheson's bush was done in March, after the long, dry summer, and at that time the (Agathis kauri/tanekaha australis/Phyllocladus trichomanoides) patches had a thick ground cover of litter as a result of the trees' response to the stressful conditions, and the terrestrial orchid season was not yet underway. So a marked difference on the October trip was the presence of eleven species of terrestrial orchids, several of them flowering. They were: Acianthus Diplodium trullifolium, sinclairii, Caladenia sp., Nematoceras macranthum, N. trilobum, Pterostylis

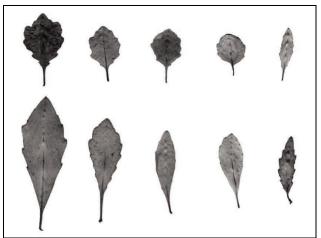


Fig. 2: Some of the varied leaf shapes found on *Alseuosmia banksii.* Collected by Maureen Young, 19 October 2013.



Fig. 3. *Singularybas oblongus* in Matheson's Bush. Photo: Joshua Salter, 19 Oct 2013.

agathicola, P. banksii, P. graminea, Simpliglottis cornuta, Singularybas oblongus (Fig. 3), and *Thelymitra* species. Two perching orchids, *Earina mucronata* and *Drymoanthus adversus*, were also present.

An enjoyable day, accompanied by the almost constant calls of shining cuckoos, was spent appreciating the results of the dedication of members of the rural community. A full list of indigenous vascular plants seen is in the Appendix.

Appendix: List of Indigenous Vascular Plant Species in Matheson's Bush, Lawrence Road, Mangawhai; compiled by John Lambert & Maureen Young, 8 March 2013.

+ = additional species seen by Auckland Botanical Society on 19 October 2013.

Ferns & Lycophytes

Adiantum cunninghamii Asplenium bulbiferum Asplenium flaccidum Asplenium gracillimum Asplenium oblongifolium + Asplenium polyodon Blechnum chambersii Blechnum filiforme Blechnum fraseri Blechnum novae-zelandiae Cyathea dealbata Cyathea medullaris Deparia petersenii Dicksonia squarrosa Doodia australis Huperzia varia Hymenophyllum demissum Hymenophyllum flabellatum + Lastreopsis glabella Lastreopsis hispida Leptopteris hymenophylloides Lindsaea linearis + Lindsaea trichomanes + Loxogramme dictyopteris + Lygodium articulatum Microsorum pustulatum Microsorum scandens Paesia scaberula Pneumatopteris pennigera Polystichum neozelandicum Pteridium esculentum Pyrrosia eleagnifolia Tmesipteris lanceolata

Gymnosperms

Agathis australis Dacrycarpus dacrydioides Dacrydium cupressinum Halocarpus kirkii Phyllocladus trichomanoides Podocarpus cunninghamii Podocarpus totara Prumnopitys ferruginea

Dicotyledons

Acaena novae-zelandiae Alectryon excelsus Alseuosmia banksii Alseuosmia quercifolia Beilschmiedia tarairi Beilschmiedia tawa Callitriche muelleri Carmichaelia australis Carpodetus serratus Centella uniflora Clematis paniculata + Coprosma arborea Coprosma areolata Coprosma grandifolia Coprosma lucida Coprosma rhamnoides Coprosma robusta + Coprosma spathulata Corynocarpus laevigatus Drosera auriculata + Dysoxylum spectabile Geniostoma ligustrifolium Gonocarpus incana + Griselinia lucida Hydrocotyle elongata + Hebe stricta Hedycarya arborea Knightia excelsa Kunzea ericoides Leptospermum scoparium Leucopogon fasciculatus Lobelia angulata Melicope simplex Melicytus macrophyllus Melicytus micranthus Melicytus ramiflorus Metrosideros diffusa Metrosideros fulgens Metrosideros perforata Myrsine australis Nertera depressa + Nertera dichondrifolia Nestegis lanceolata

Olearia rani Parsonsia sp. Pseudopanax arboreus + Pseudopanax crassifolius Rubus australis + Rubus cissoides Schefflera digitata Streblus heterophyllus Veronica plebeian + Vitex lucens

Monocotyledons

Acianthus sinclairii + Astelia solandri Caladenia sp.+ Carex dissita Carex virgata + Collospermum hastatum Cordyline australis Cordyline pumilio Dianella nigra Diplodium trullifolium + Drymoanthus adversus + Earina mucronata Freycinetia banksii Gahnia setifolia Gahnia xanthocarpa + Isolepis reticularis Microlaena stipoides Nematoceras macranthum + Nematoceras trilobum + Oplismenus hirtellus Pterostylis agathicola + Pterostylis banksii + Pterostylis graminea + Rhopalostylis sapida Ripogonum scandens Schoenus tendo Simpliglottis cornuta + Singularybas oblongus + Thelymitra sp. + Uncinia banksii Uncinia uncinata Uncinia zotovi