

Meremere Hill Scenic Reserve October 2018

Mike Butcher

Despite a fine weather forecast, gentle rain fell on our eight Rotorua Botanical Society and Nga Whenua Rahui members as we headed from Opotiki up the old Motu Road on the first Sunday morning in October.

Meremere Scenic Reserve is a relatively large, forest covered reserve (1368 ha), first gazetted in 1919, which straddles this old Opotiki–Gisborne route. The country here is very steep and dissected. The reserve rises in altitude from 120 m at the Wairoa Stream bridge at the base of the Meremere Hill to over 750 m at its highest point. Access into the reserve from the very narrow, winding metal road is quite difficult. The road is cut into an extremely steep hillside and there are only a handful of areas to pull off the road and park vehicles.

Main forest types in the reserve were described by Clarkson in 1983 as tawa forest below about 450 m, hard beech forest on ridges below about 500 m, tawa/tawari forest on beech-free ridges above 450 m, and hard beech/tawari forest on some of the higher altitude ridges.

Our plan for the day was to visit some representative areas of these vegetation types working from three access points off the road so we drove initially to the saddle at the top of Meremere Hill and continued on towards Toatoa (entering the Motu catchment) for approximately a kilometre before parking and entering the reserve in a sheltered area of tawa forest at about 400 m elevation.

Tawa/kamaha formed the main part of the canopy here, with scattered emergent rimu (*Dacrydium cupressinum*) and miro (*Podocarpus dacrydioides*), while the understorey included numerous *Coprosma rhamnoides*, hangehange (*Geniostoma ligustrifolium* var *ligustrifolium*), young miro, thin bark totara (*Podocarpus laetus*), and *Pseudowintera axillaris* (horopito). Flowering *Alseuosmia pusilla* was quite common, and it seemed in this area to have particularly pale and creamy-coloured flowers. We also encountered *Myrsine salicina* (toro), prompting a toro/toru discussion.

After climbing a gentle face, we came on to a more defined ridge where ramarama (*Lophomyrtus bullata*) had established in scattered patches. The largest of these

shrubs was around 3 metres in height, and they were generally in good health, with no evidence of myrtle rust. At one point we passed a very large old totara stump, which had been sawn down, perhaps a hundred years earlier.

Continuing up the ridge we began to encounter tawari (*Ixerba brexioides*) in larger numbers mixed into the canopy, and although deer sign and obvious evidence of browse were present we found some specimens of beautiful *Raukaua edgerleyi*. There was also a great array of filmy ferns present, and we recorded *Hymenophyllum frankliniae* (*ferrugineum*), *H. flabellatum*, *H. rarum*, *H. revolutum* and *H. multifidum* alongside the more common species. Gael found *Hymenophyllum scabrum*, which had not been previously recorded from here. Kidney fern (*Hymenophyllum nephrophyllum*) was also present in large patches on the ridges.

At a peak on the ridge (630 m) I had seen nikau (*Rhopalostylis sapida*) growing right alongside tawari on a previous recce, however with limited time we decided to turn around before reaching this high point, and we descended down a broad gully observing several orchids, including *Corybas acuminatus*, *C. oblongus*, *Pterostylis alobula*, and *P. banksii*.

Returning to the cars we backtracked along the road towards the coast to our second access point, parking at the saddle at the top of Meremere Hill. We scrambled up a steep rocky bank amongst manuka (*Leptospermum scoparium* var. *scoparium* and *Gaultheria antipoda*) and entered the bush on a more exposed ridge. Initially we found ourselves in regenerating bush where broadleaf (*Griselinia littoralis*) and *Raukaua edgerleyi* were common, but this gave way to tawa/kamaha/tawari forest as we climbed higher. There was no beech on this ridge.

Of interest here in the understorey was *Dracophyllum latifolium* (*neinei*), and scattered specimens of the shrub *Archeria racemosa*, which we found as we progressed up the ridge. Some of these were carrying flowers and Elizabeth was able to collect some voucher samples for the herbarium. *Gahnia pauciflora* was present along the ridge.

Returning once again to our vehicles, we surveyed the roadside as we descended Meremere Hill, recording the mix of weedy roadside species on the cuttings and banks in places where we were able to stop. At one point large masses of rengarenga (*Arthropodium cirratum*) adorned a series of cutaway road banks over several

hundred metres, a welcome change from the widespread tutsan (*Hypericum androsaemum*).

Our final foray was onto a very steep spur below the road, dropping into the forks of the Wairoa Stream. This was a drier area of hard beech (*Fuscospora truncata*) forest, with tanekaha (*Phyllocladus trichomanoides*) and kamahi (*Weinmannia racemosa*) also present in the canopy and understorey. Shrub and understorey species included *Leucopogon fasciculatus* (mingimingi), miro, *Archeria racemosa*, *Cyathea dealbata* (silver fern), and large expanses of kiekie (*Freycinetia banksii*) in the steepest areas.

It was an enjoyable day, and while we did not have time to visit the hard beech/tawari ridges in the highest and most remote parts of the Scenic Reserve, we were able to see most of the vegetation types on offer. A number of species not previously recorded from within the reserve were identified. Special thanks to those who travelled over from Tauranga and Rotorua for the trip.

Reference:

Clarkson, B.R. and Regnier, C.E. 1989. West Gisborne. Biological Survey of Reserves Series Report No.16. Department of Conservation, Wellington. 176p.

~~~~~

## Meremere Hill vascular plant species

G. Jane, G. Donaghy

|                                 |                                |
|---------------------------------|--------------------------------|
| <i>Acaena anserinifolia</i>     | bidibid                        |
| * <i>Acaena novae-zelandiae</i> | red bidibid; piripiri          |
| <i>Adiantum cunninghamii</i>    | maiden hair fern               |
| * <i>Agrostis capillaris</i>    | browntop                       |
| <i>Alseuosmia pusilla</i>       | karapapa; mountain honeysuckle |
| * <i>Anthemis cotula</i>        | stinking mayweed               |
| * <i>Anthoxanthum odoratum</i>  | sweet vernal                   |
| <i>Archeria racemosa</i>        |                                |
| <i>Aristotelia serrata</i>      | wineberry; makomako            |
| <i>Arthropodium cirratum</i>    | rengarenga lily                |
| <i>Asplenium bulbiferum</i>     | hen and chickens fern; moku    |
| <i>Asplenium flaccidum</i>      | hanging spleenwort; makawe     |
| <i>Asplenium oblongifolium</i>  | shining spleenwort             |
| <i>Asplenium polyodon</i>       | sickle spleenwort; petako      |
| <i>Astelia hastata</i>          | kahakaha                       |
| <i>Astelia microsperma</i>      |                                |

|                                                   |                                 |
|---------------------------------------------------|---------------------------------|
| <i>Astelia nervosa</i>                            | kahakaha                        |
| <i>Astelia solandri</i>                           | kowharawhara                    |
| <i>Austroderia fulvida</i>                        | kakaho; toetoe                  |
| <i>Beilschmiedia tawa</i>                         | tawa                            |
| <i>Blechnum chambersii</i>                        | nini; lance fern                |
| <i>Blechnum discolor</i>                          | crown fern; piupiu; petipeti    |
| <i>Blechnum fluviatile</i>                        | kiwakiwa; kiwikiwi              |
| <i>Blechnum membranaceum</i>                      |                                 |
| <i>Blechnum novae-zelandiae</i>                   | kiokio                          |
| <i>Blechnum parrisiae</i>                         | pukupuku; rasp fern             |
| <i>Blechnum penna-marina</i> ssp. <i>alpina</i>   | alpine blechnum                 |
| <i>Brachyglottis kirkii</i> var. <i>angustior</i> |                                 |
| <i>Brachyglottis repanda</i>                      | rangiora; bushmans friend       |
| * <i>Callitriche stagnalis</i>                    | starwort                        |
| <i>Cardamine dolichostyla</i>                     |                                 |
| * <i>Cardamine flexuosa</i>                       | wavy bitter cress               |
| <i>Carex banksiana</i>                            |                                 |
| <i>Carex dissita</i>                              |                                 |
| <i>Carex forsteri</i>                             |                                 |
| <i>Carex megalepis</i>                            |                                 |
| <i>Carex secta</i>                                | niggerhead; pukio               |
| <i>Carex uncinata</i>                             | watu                            |
| <i>Carex zotovii</i>                              |                                 |
| <i>Carpodetus serratus</i>                        | putaputaweta; marbleleaf        |
| <i>Centella uniflora</i>                          |                                 |
| * <i>Cerastium fontanum</i> ssp. <i>vulgare</i>   | mouse-eared chickweed           |
| <i>Chiloglottis cornuta</i>                       | green bird orchid               |
| * <i>Cirsium palustre</i>                         | marsh thistle                   |
| * <i>Cirsium vulgare</i>                          | Scotch thistle                  |
| <i>Clematis cunninghamii</i>                      | scented clematis; pokopoko      |
| <i>Clematis forsteri</i>                          | pataua; green clematis          |
| <i>Clematis paniculata</i>                        | clematis; puawhananga           |
| <i>Coprosma colensoi</i>                          | springy coprosma                |
| <i>Coprosma foetidissima</i>                      | stinkwood; hupiro               |
| <i>Coprosma grandifolia</i>                       | raurekau; kanono; mamono        |
| <i>Coprosma lucida</i>                            | karamu; shining karamu          |
| <i>Coprosma rhamnoides</i>                        | thorny coprosma                 |
| <i>Coprosma robusta</i>                           | karamu                          |
| <i>Coprosma spathulata</i> ssp. <i>spathulata</i> |                                 |
| <i>Cordyline banksii</i>                          | forest cabbage tree; ti ngahere |
| <i>Coriaria arborea</i> var. <i>arborea</i>       | tree tutu                       |
| <i>Corybas acuminatus</i>                         |                                 |

|                                                  |                                    |
|--------------------------------------------------|------------------------------------|
| <i>Corybas oblongus</i>                          |                                    |
| <i>Corybas obscurus</i>                          |                                    |
| <i>Corybas rivularis</i>                         |                                    |
| <i>Cotula australis</i>                          | soldier's button                   |
| * <i>Crepis capillaris</i>                       | hawkesbeard                        |
| <i>Cyathea cunninghamii</i>                      | slender tree fern; gully tree fern |
| <i>Cyathea dealbata</i>                          | ponga; silver fern                 |
| <i>Cyathea medullaris</i>                        | mamaku; korau; black tree fern     |
| <i>Cyathea smithii</i>                           | soft-leaved tree fern; katote      |
| * <i>Cyperus congestus</i>                       |                                    |
| <i>Dacrycarpus dacrydioides</i>                  | kahikatea, white pine              |
| <i>Dacrydium cupressinum</i>                     | rimu, red pine                     |
| * <i>Dactylis glomerata</i>                      | cocksfoot                          |
| * <i>Daucus carota</i>                           | carrot                             |
| <i>Dendrobium cunninghamii</i>                   | bamboo orchid                      |
| <i>Dianella nigra</i>                            | blueberry; turutu                  |
| <i>Dichelachne crinita</i>                       | long-hair plume grass              |
| <i>Dicksonia fibrosa</i>                         | wheki-ponga; kuripaka              |
| <i>Dicksonia squarrosa</i>                       | wheki; harsh tree fern             |
| * <i>Digitalis purpurea</i>                      | foxglove                           |
| <i>Dracophyllum latifolium</i>                   | needle-leaved neinei               |
| <i>Dysoxylum spectabile</i>                      | kohekohe                           |
| <i>Earina autumnalis</i>                         | Easter orchid; raupeka             |
| <i>Earina mucronata</i>                          | spring orchid; peka-a-waka         |
| <i>Elaeocarpus dentatus</i> var. <i>dentatus</i> | hinau                              |
| <i>Epilobium nerteroides</i>                     |                                    |
| <i>Epilobium nummulariifolium</i>                | creeping willow-herb               |
| <i>Epilobium pubens</i>                          |                                    |
| <i>Epilobium rotundifolium</i>                   | round-leaved willowherb            |
| * <i>Erigeron sumatrensis</i>                    |                                    |
| <i>Euchiton audax</i>                            |                                    |
| * <i>Foeniculum vulgare</i>                      | fennel                             |
| <i>Freycinetia banksii</i>                       | kiekie                             |
| <i>Fuchsia excorticata</i>                       | fuchsia; kotukutuku                |
| <i>Fuscospora fusca</i>                          | red beech                          |
| <i>Fuscospora truncata</i>                       | hard beech; tawhairaunui           |
| <i>Gahnia pauciflora</i>                         |                                    |
| <i>Gahnia setifolia</i>                          |                                    |
| * <i>Galium aparine</i>                          | cleavers                           |
| <i>Galium propinquum</i>                         |                                    |
| * <i>Gamochaeta coarctata</i>                    |                                    |
| <i>Gaultheria antipoda</i>                       | snowberry; tawiniwini              |

|                                                             |                             |
|-------------------------------------------------------------|-----------------------------|
| <i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i> | hangehange; privet          |
| * <i>Geranium robertianum</i>                               | herb Robert                 |
| <i>Griselinia littoralis</i>                                | broadleaf; kapuka           |
| <i>Griselinia lucida</i>                                    | puka                        |
| <i>Haloragis erecta</i> ssp. <i>erecta</i>                  | toatoa                      |
| <i>Hebe stricta</i> var. <i>stricta</i>                     | koromiko                    |
| <i>Hedycarya arborea</i>                                    | pigeonwood; porokaiwhiri    |
| <i>Histiopteris incisa</i>                                  | water fern                  |
| <i>Hoheria populnea</i>                                     | houhere; lacebark           |
| * <i>Holcus lanatus</i>                                     | Yorkshire fog               |
| <i>Hydrocotyle elongata</i>                                 |                             |
| <i>Hydrocotyle microphylla</i>                              | hydrocotyle                 |
| <i>Hydrocotyle moschata</i> var. <i>moschata</i>            |                             |
| <i>Hymenophyllum bivalve</i>                                |                             |
| <i>Hymenophyllum demissum</i>                               | piripiri; irirangi          |
| <i>Hymenophyllum dilatatum</i>                              | lop-sided filmy fern        |
| <i>Hymenophyllum flabellatum</i>                            | fan fern                    |
| <i>Hymenophyllum frankliniae</i>                            |                             |
| <i>Hymenophyllum multifidum</i>                             |                             |
| <i>Hymenophyllum nephrophyllum</i>                          | kidney fern; raurenga       |
| <i>Hymenophyllum rarum</i>                                  | wire-stemmed filmy fern     |
| <i>Hymenophyllum revolutum</i>                              |                             |
| <i>Hymenophyllum sanguinolentum</i>                         | blood-scented filmy fern    |
| <i>Hymenophyllum scabrum</i>                                | coarse-haired filmy fern    |
| * <i>Hypericum androsaemum</i>                              | tutsan                      |
| * <i>Hypochaeris radicata</i>                               | catsear                     |
| <i>Hypolepis rufobarbata</i>                                | sticky pig fern             |
| <i>Ixerba brexioides</i>                                    | tawari                      |
| * <i>Jacobaea vulgaris</i>                                  | ragwort                     |
| * <i>Juncus articulatus</i>                                 | jointed rush                |
| <i>Juncus edgariae</i>                                      | wiwi                        |
| * <i>Juncus effusus</i> var. <i>effusus</i>                 | soft rush                   |
| <i>Juncus sarophorus</i>                                    |                             |
| * <i>Juncus tenuis</i> ssp. <i>tenuis</i>                   | track rush                  |
| <i>Knightia excelsa</i>                                     | rewarewa; NZ honeysuckle    |
| <i>Lachnagrostis filiformis</i>                             | tumble grass                |
| <i>Lastreopsis glabella</i>                                 | felted fern                 |
| <i>Lastreopsis hispida</i>                                  | hairy fern, hairy legs      |
| <i>Laurelia novae-zelandiae</i>                             | pukatea                     |
| <i>Lemna minor</i>                                          | duckweed                    |
| <i>Leptecophylla juniperina</i> ssp. <i>juniperina</i>      |                             |
| <i>Leptopteris hymenophylloides</i>                         | single crepe fern; heruheru |

|                                                      |                                  |
|------------------------------------------------------|----------------------------------|
| <i>Leptospermum scoparium</i> var. <i>scoparium</i>  | manuka; red teatree              |
| <i>Leucopogon fasciculatus</i>                       | mingimingi; kaikaitau            |
| <i>Libertia grandiflora</i>                          |                                  |
| <i>Libertia micrantha</i>                            | star herb                        |
| <i>Lindsaea trichomanoides</i>                       |                                  |
| <i>Lobelia angulata</i>                              | panakenake                       |
| * <i>Lolium arundinaceum</i>                         | tall fescue                      |
| * <i>Lolium perenne</i>                              | perennial ryegrass               |
| <i>Lophomyrtus bullata</i>                           | ramarama                         |
| * <i>Lotus pedunculatus</i>                          | lotus major                      |
| <i>Loxogramme dictyopteris</i>                       |                                  |
| <i>Luzula picta</i> var. <i>picta</i>                |                                  |
| <i>Lycopodium scariosum</i>                          | creeping clubmoss                |
| <i>Lycopodium volubile</i>                           | waewae-koukou; climbing clubmoss |
| * <i>Lysimachia arvensis</i> ssp. <i>arvensis</i>    | scarlet pimpernel                |
| <i>Melicope simplex</i>                              | poataniwha                       |
| <i>Melicytus lanceolatus</i>                         | narrow-leaved mahoe; mahoe-wao   |
| <i>Melicytus ramiflorus</i> ssp. <i>ramiflorus</i>   | mahoe                            |
| * <i>Mentha suaveolens</i>                           | apple or round-leaved mint       |
| <i>Metrosideros diffusa</i>                          | white climbing rata; akatea      |
| <i>Metrosideros fulgens</i>                          | scarlet rata; winter rata        |
| <i>Metrosideros perforata</i>                        | aka; small white rata; torotoro  |
| <i>Metrosideros robusta</i>                          | northern rata                    |
| <i>Microlaena avenacea</i>                           | bush rice grass; oat grass       |
| <i>Microsorium pustulatum</i> ssp. <i>pustulatum</i> | hounds tongue; kowaowao          |
| <i>Microsorium scandens</i>                          | mokimoki; fragrant fern          |
| <i>Microtis unifolia</i>                             | onion orchid                     |
| * <i>Miscanthus nepalensis</i>                       | Himalayan fairy grass            |
| <i>Morelotia affinis</i>                             |                                  |
| <i>Muehlenbeckia australis</i>                       | poheuheu                         |
| * <i>Mycelis muralis</i>                             | wall lettuce                     |
| <i>Myrsine australis</i>                             | red matipo; mapou                |
| <i>Myrsine salicina</i>                              | toro                             |
| * <i>Nasturtium officinale</i>                       | watercress                       |
| <i>Neomyrtus pedunculata</i>                         | rohutu                           |
| <i>Nertera depressa</i>                              | common nertera                   |
| <i>Nertera villosa</i>                               |                                  |
| <i>Nestegis lanceolata</i>                           | white maire                      |
| <i>Notogrammitis heterophylla</i>                    |                                  |
| <i>Olearia rani</i> var. <i>colorata</i>             | heketara                         |
| <i>Oxalis exilis</i>                                 | yellow oxalis; creeping oxalis   |
| <i>Ozothamnus leptophyllus</i>                       | tauhinu; cottonwood              |

|                                                    |                                 |
|----------------------------------------------------|---------------------------------|
| <i>Paesia scaberula</i>                            | scented fern; matata; ring fern |
| * <i>Parentucellia viscosa</i>                     | tarweed                         |
| <i>Parsonsia capsularis</i> var. <i>capsularis</i> | small flowered jasmine; akakior |
| <i>Pennantia corymbosa</i>                         | kaikomako                       |
| * <i>Persicaria maculosa</i>                       |                                 |
| <i>Phlegmariurus varius</i>                        | hanging clubmoss; iwituna       |
| <i>Phormium cookianum</i> ssp. <i>cookianum</i>    | mountain flax; wharariki        |
| <i>Phyllocladus toatoa</i>                         | toatoa                          |
| <i>Phyllocladus trichomanoides</i>                 | tanekaha; celery pine           |
| <i>Piper excelsum</i> ssp. <i>excelsum</i>         | kawakawa; pepper tree           |
| <i>Pittosporum tenuifolium</i>                     | black matipo; kohuhu            |
| * <i>Plantago lanceolata</i>                       | ribwort; narrow-leaved plantain |
| * <i>Plantago major</i>                            | broad-leaved plantain           |
| <i>Pneumatopteris pennigera</i>                    | gully fern; pakau; pakauharoha  |
| <i>Poa anceps</i>                                  | coastal poa                     |
| * <i>Poa annua</i>                                 | annual poa                      |
| * <i>Poa trivialis</i>                             | rough-stalked poa               |
| <i>Podocarpus laetus</i>                           | Hall's totara; thin bark totara |
| <i>Polystichum silvaticum</i>                      |                                 |
| <i>Polystichum wawranum</i>                        | common shield fern; pikopiko    |
| * <i>Populus alba</i>                              | silver poplar                   |
| <i>Prumnopitys ferruginea</i>                      | miro; brown pine                |
| <i>Prumnopitys taxifolia</i>                       | matai; black pine               |
| * <i>Prunella vulgaris</i>                         | selfheal                        |
| <i>Pseudognaphalium luteoalbum</i>                 | Jersey cudweed                  |
| <i>Pseudopanax arboreus</i>                        | five finger; puhou; whaupaku    |
| <i>Pseudopanax crassifolius</i>                    | lancewood; horoeka              |
| <i>Pseudowintera axillaris</i>                     | horopito                        |
| <i>Pseudowintera colorata</i>                      | pepperwood; mountain horopito   |
| <i>Pteridium esculentum</i>                        | bracken; rauaruhe               |
| <i>Pteris tremula</i>                              | turawera                        |
| <i>Pterostylis alobula</i>                         |                                 |
| <i>Pterostylis banksii</i>                         | tutukiwi                        |
| <i>Pyrrosia eleagnifolia</i>                       | leather-leaf fern               |
| <i>Quintinia serrata</i>                           | Westland quintinia; tawheowheo  |
| <i>Ranunculus reflexus</i>                         | maruru; hairy buttercup         |
| * <i>Ranunculus repens</i>                         | creeping buttercup              |
| <i>Raukawa anomalus</i>                            | whauwhaupaku                    |
| <i>Raukawa edgerleyi</i>                           | rauakawa                        |
| <i>Rhopalostylis sapida</i>                        | nikau                           |
| <i>Ripogonum scandens</i>                          | supplejack; kareao              |
| * <i>Rosa rubiginosa</i>                           | sweet briar                     |

|                                  |                                |
|----------------------------------|--------------------------------|
| <i>Rubus cissoides</i>           | bush lawyer; tataramoa         |
| * <i>Rubus fruticosus</i>        | blackberry                     |
| * <i>Rumex acetosella</i>        | sheep' sorrel                  |
| <i>Rumohra adiantiformis</i>     | butcher's fern                 |
| <i>Rytidosperma gracile</i>      | forest fairy grass             |
| <i>Schefflera digitata</i>       | pate; patae; kotete            |
| * <i>Scrophularia auriculata</i> | water figwort                  |
| * <i>Senecio bipinnatisectus</i> | Australian fireweed            |
| <i>Senecio minimus</i>           | fireweed                       |
| * <i>Sison amomum</i>            | stone parsley                  |
| * <i>Sonchus asper</i>           | prickly sow thistle; puha      |
| * <i>Stachys sylvatica</i>       | hedge woundwort                |
| <i>Stellaria parviflora</i>      |                                |
| <i>Sticherus cunninghamii</i>    | umbrella fern; kotuku; tapuwae |
| * <i>Taraxacum officinale</i>    | dandelion                      |
| <i>Thelymitra longifolia</i>     | white sun orchid               |
| <i>Tmesipteris elongata</i>      |                                |
| <i>Tmesipteris lanceolata</i>    |                                |
| <i>Trichomanes venosum</i>       | veined bristle fern            |
| * <i>Trifolium dubium</i>        | suckling clover                |
| * <i>Trifolium repens</i>        | white clover                   |
| <i>Urtica sykesii</i>            | stinging nettle                |
| <i>Wahlenbergia violacea</i>     | blue harebell; rimu-roa        |
| <i>Weinmannia racemosa</i>       | kamahi; towai; tawhero         |

~~~~~