

Pakihi Track, Opotiki

Gael Donaghy & Graeme Jane

Courtesy of Mike Butcher, six of us stayed overnight in Opotiki to allow plenty of time to reach the far end of the Pakihi Track and hopefully cover a good part of the track the next day. On the way to Opotiki we stopped off for a short walk at Ohiwa. Serendipitously and unexpectedly we first encountered two of the expected group from Rotorua and then 15 minutes later, another pair from Hamilton.

Next day, along with two more botsoccers and our host, we headed to the Motu Road end of the Pakihi Track. That end of the track is the highest point and from there it was a very easy downhill grade on a wide, old pack track. One of the group retreated later, picked up his bike and descended down and out to Opotiki. From the road we could look out over the forest. The forest consisted of kamahi, quintinia, tawari and beech. From the road we could also see tanekaha and the odd *Cordyline indivisa* among the mahoe, pate and tree ferns such as wheki and *Cyathea smithii* with its skirt of dead stipes.

At the start there were numerous large *Alseuosmia pusilla* to 2 m tall, in abundant fruit, and the odd toatoa and *Dracophyllum latifolium*. The area was very rich in ferns so we made very slow progress. Initially we concentrated on filmy ferns with *Hymenophyllum revolutum*, *H. multifidum* and *H. dilatatum* in abundance on the upper track bank. Filmy ferns of special interest included brownish, softly hairy *H. frankliniae*, the flat-fronded *H. bivalve* and the cryptic *Trichomanes elongatum* in the darker corners of the bank. Other noteworthy ferns were the leathery *Blechnum colensoi*, *B. vulcanicum* and the much debated *Blechnum membranaceum* which is always difficult to separate from small *B. chambersii* and which was also present. On the lower track side crown fern was abundant and above the bank *Gabnia pauciflora* and *Astelia solandri* provided a rather open ground cover.

Patches of beech brought discussion about telling red and hard beech apart (both were present) and identifying hybrids. Epiphytes were uncommon but *Pyrrosia eleagnifolia*, *Microsorium pustulatum* and *Astelia solandri* occurred sporadically. One eagle eye spotted the

tiny *Drymoanthus adversus*. In the damper (and cooler) corners. *Sellaginella kraussiana* was present on the track and *Lastreopsis glabella* and *L. hispida* appeared. The greatest number of new species were added though, in the more open areas created by small slips and windfalls. Most of these were adventives such as lotus, foxglove and cocksfoot but there were also patches of waterfern and smaller plants such as *Ranunculus reflexus*, and *Nertera depressa*. The odd wet opening had many herbs including *Epilobium rotundifolium*, *Plantago lanceolata*, *Agrostis capillaris*, *Urtica sykesii* and wall lettuce.

Further on, as we descended, tawa and hinau appeared in the canopy and willow-leaved maire and white maire growing together challenged us. We were too late to see many orchids but *Earina autumnalis* scented the air and leaves and occasional seed heads of *Corybas acuminatus*, *C. oblongus* and *Pterostylis banksii* allowed them to be identified. Finally, we had to move on a little faster to find a lunch spot in the sun.

After lunch we were soon on a warmer, sunny face where tawa, pigeonwood and hinau were more common and *Hoberia sexstylosa* and *Coprosma spathulata* appeared. *Astelia solandri* and *A. trinervis* formed a dense ground cover above the bank, and on the steep slopes below the track kiekie, supplejack and small nikau were common. In the sunniest places rangiora appeared, *Microlaena avenacea*, *Carex uncinata* and *C. imbecilla* occurred in the ground cover. New ferns included *Sticherus cunninghamii*, *Polystichum wawranum* and *P. silvaticum*, but there was no sign of *P. vestitum*. In the clearings now *Libertia grandiflora*, *Gabnia setifolia* and *Aceana anserinifolia* appeared. Damper corners here included tree fuchsia, *Lobelia angulata*, *Epilobium nerteroides* and *Carex cockayneana*. Too soon we had to turn and retreat to the vehicles, with a promise to go further next time.

The long uphill trudge was broken by a small diversion as Mike Butcher set off up the steep slope to the ridge above, in search of a probable *Libocedrus bidwillii* he had seen on an earlier trip. There were suggestions that expert opinion was required for confirmation but there were no volunteers. Needless to say, he returned empty handed.

Pakihi Track species list – from Motu Rd, halfway to hut

Gymnosperm trees and shrubs

Dacrydium cupressinum
Phyllocladus toatoa
Phyllocladus trichomanoides
Podocarpus laetus
Prumnopitys ferruginea

Monocotyledonous trees and shrubs

Cordyline banksii
Cordyline indivisa
Rhopalostylis sapida

Dicotyledonous trees and shrubs

Alseuosmia pusilla
Aristotelia serrata
Beilschmiedia tawa
Brachyglottis repanda
Carpodetus serratus
Coprosma grandifolia
Coprosma lucida
Coprosma rhamnoides
Coprosma robusta
Coprosma rotundifolia
Coprosma spathulata ssp. *spathulata*
Coriaria arborea var. *arborea*
Dracophyllum latifolium
Elaeocarpus dentatus
Fuchsia excorticata
Fuscospora fusca
Fuscospora truncata
Gaultheria antipoda
Geniostoma ligustrifolium var.
ligustrifolium
Griselinia littoralis
Griselinia lucida
Hebe stricta var. *stricta*
Hedycarya arborea
Hoheria sexstylosa
Ixerba brexioides
Knightia excelsa
Laurelia novae-zelandiae
Leucopogon fasciculatus
Melicytus ramiflorus
Mida salicifolia
Myrsine australis
Myrsine salicina
Nestegis lanceolata
Olearia rani var. *colorata*
Pittosporum tenuifolium

Pseudopanax arboreus
Pseudopanax crassifolius
Pseudowintera axillaris
Quintinia serrata
Raukaua anomalus
Raukaua edgerleyi
Schefflera digitata
Weinmannia racemosa

Monocotyledonous lianes

Freycinetia banksii
Ripogonum scandens

Dicotyledonous lianes and related trailing plants

Clematis cunninghamii
Clematis foetida
Clematis forsteri
Clematis paniculata
Metrosideros diffusa
Metrosideros fulgens
Metrosideros perforata
Muehlenbeckia australis
Parsonsia capsularis var. *capsularis*
Parsonsia heterophylla
Rubus cissoides

Psilopsids, Lycopods & Quillworts

Lycopodium volubile
Phlegmariurus varius
* *Selaginella kraussiana*

Ferns

Adiantum cunninghamii
Asplenium bulbiferum
Asplenium flaccidum
Asplenium oblongifolium
Asplenium polyodon
Blechnum chambersii
Blechnum colensoi
Blechnum discolor
Blechnum fluviatile
Blechnum membranaceum
Blechnum novae-zelandiae
Blechnum procerum
Blechnum vulcanicum
Cyathea cunninghamii
Cyathea dealbata
Cyathea medullaris

Cyathea smithii
Dicksonia squarrosa
Histiopteris incisa
Hymenophyllum bivalve
Hymenophyllum demissum
Hymenophyllum dilatatum
Hymenophyllum flabellatum
Hymenophyllum frankliniae
Hymenophyllum multifidum
Hymenophyllum nephrophyllum
Hymenophyllum rarum
Hymenophyllum revolutum
Hymenophyllum sanguinolentum
Hymenophyllum scabrum
Hypolepis rufobarbata
Lastreopsis glabella
Lastreopsis hispida
Leptopteris hymenophylloides
Lindsaea trichomanoides
Loxogramme dictyopteris
Microsorium pustulatum ssp. pustulatum
Microsorium scandens
Notogrammitis billardierei
Notogrammitis ciliata
Notogrammitis heterophylla
Paesia scaberula
Pneumatopteris pennigera
Polystichum silvaticum
Polystichum wawranum
Pteris macilenta
Pyrrosia eleagnifolia
Rumohra adiantiformis
Sticherus cunninghamii
Tmesipteris elongata
Tmesipteris lanceolata
Tmesipteris tannensis
Trichomanes venosum

Orchids

Caladenia chlorostyla
Corybas acuminatus
Corybas macranthus
Corybas oblongus
Dendrobium cunninghamii
Drymoanthus adversus
Earina autumnalis
Earina mucronata
Pterostylis banksii
Pterostylis cardiostigma

Grasses

* *Agrostis capillaris*
* *Dactylis glomerata*
* *Lolium perenne*
Microlaena avenacea
Rytidosperma gracile

Sedges

Carex cockayneana
Carex imbecilla
Carex megalepis
Carex uncinata
Gahnia pauciflora
Gahnia setifolia
Schoenus maschalinus

Rushes and allied plants

Juncus edgariae
* *Juncus effusus* var. *effusus*
Juncus pauciflorus
* *Juncus tenuis* ssp. *tenuis*
* *Luzula multiflora*
Luzula subclavata

Remaining Monocotyledonous herbs

Astelia fragrans
Astelia hastata
Astelia solandri
Astelia trinervia
Libertia grandiflora

Daisy-like herbs

* *Cirsium palustre*
* *Cirsium vulgare*
* *Erigeron sumatrensis*
Euchiton audax
Euchiton japonicus
* *Gamochaeta coarctata*
* *Hypochaeris radicata*
* *Mycelis muralis*
Pseudognaphalium luteoalbum
Senecio wairauensis

Dicotyledonous herbs other than Daisies

Acaena anserinifolia
Cardamine "Narrow Petal"
Cardamine debilis
* *Cardamine flexuosa*
* *Digitalis purpurea*
Epilobium nerteroides

Epilobium pedunculare
Epilobium rotundifolium
Galium perpusillum
* *Geranium molle*
Hydrocotyle microphylla
Hydrocotyle moschata var. *moschata*
Lobelia angulata
* *Lotus pedunculatus*

* *Nasturtium officinale*
Nertera depressa
* *Plantago lanceolata*
Ranunculus reflexus
* *Ranunculus repens*
Stellaria parviflora
Urtica sykesii

Recent discoveries concerning the flora of the Rotorua Lakes Ecological District

John F.F. Hobbs

1. New record for New Zealand

Juncus marginata Rostk. (grass-leaved rush) was collected by Neil Fitzgerald and Steve Bartram from the south-eastern wetland area of Lake Rerewhakaaitu and sent to the Allan Herbarium for identification and lodged there as CHR 641914. Native to North America.

2. New species for the Rotorua ED

Hydrocotyle bowlesioides Mathias & Constance (large-leaved marsh pennywort). Collected from Te Arero Bay, Lake Rotoiti. Specimen deposited as NZFRI 30900. This species had previously been recorded from Northland and the Chatham Islands. Native to Central America.

Lepidium virginicum L. (pepper cress). Collected from the Ngongotaha Lakefront Reserve near the Waiteti Stream. Specimen deposited as NZFRI 30866. This species has been previously recorded in the Bay of Plenty in the Taneatua and Te Teko EDs.

Gypsophila paniculata L. (babies breath). A very much past its prime specimen of this plant was recorded on the Ngongotaha Lakefront Reserve near the Waiteti Stream.

3. A significant population of *Korthalsella salicornioides* (A.Cunn.) Tiegh. (dwarf mistletoe) was found during a plot resurvey on the Raepuku Point, at Lake Rerewhakaaitu.