

so here two different kinds of leaflets may be noted --those which bear spores and those which function as ordinary leaves." Notice the expression "certain" other ferns. Cheeseman (Manual 1925 p.1) in his general description of ferns implies that all ferns have separate fertile and sterile fronds and Allan, 1961, appears to follow suit. From my own limited observations I regard Cockayne as correct as I have seen ferns with spores on all fronds.

A.D.Mead.

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OUTINGS

CUTTY GRASS TRACK. --- 21st June 1969 ---- K.J.Haydock.

We set off on a cold but fine morning to visit the Cutty Grass Track in the Waitakere Ranges starting at the Scenic Drive end and rejoining the bus on the Anawhata Road. Our first glimpses of the ranges did not look too promising as they were covered in rain clouds but luckily we had only one shower while on the track just before lunch and another as we rejoined the bus.

Before we started off up the track, we learnt that unfortunately Miss M. Crookes was unable to lead us as she was indisposed. In her place, Mr.Mead ably led the party.

At the start of the track there was a Hedycarya arborea with green berries on it and a Podocarpus totara liberally festooned with epiphytes - lichens, mosses, filmy ferns, Earina orchids etc. Scattered throughout the length of the track were P.ferrugineus and P.hallii as was Dacrydium cupressinum, ranging from plants a few inches high, through the juvenile shape to adult trees:

Three Cleararias were noted as being fairly common, O.rani, O.paniculata and O.furfuracea. Of note was the abundance of Quintinia serrata with leaves varying from a yellowish green through to a deep reddish bronze, even on the same plant. Some were noticed in seed. There were patches of sphagnum moss found on the side of the track. Dianella intermedia still had a few of its blue berries on show which had not fallen.

A short diversion up a side track brought us to a large Agathis australis under which was found a single Dracophyllum latifolium. Hopes were held that Pittosporum kirkii would be found but we were unsuccessful, only P.tenuifolium being noted. Large numbers of Ixerba brexioides, which produce such marvellous honey from their flowers, were to be found in bud.

Near the end of the track Pseudopanax edgerleyi had both juvenile and adult forms on the one plant and P. crassifolium was liberally distributed throughout, with both juvenile and adult trees. A single sample of Neopanax anomolum was found.

Olea lanceolata and its relative O. montana, with its striking dark green narrow leaves, were present. Also noted were Eriina mucronata, Dendrobium cunninghamii (both epiphytic orchids), Maloragis erecta, Rubus australis R. cissoides (which was in bud), Coprosma australis C. lucida (with masses of orange and green berries), Cyatodes fasciculata, Laurelia novae-zelandiae, Alseuosmia quercifolia, A. macrophylla, Griselinia lucida (both epiphytic and growing on the ground), Melicytus macrophyllus (many with the large purple berry on), M. ramiflorus, Myrsine salicina, Myrsine australis, Knightia excelsa, Elaeocarpus dentatus, Carpodetus serratus, Bielschmiedia tawa, Hoheria populnea, Rhipogonum scandens and Rhopalostylis sapida.

Ferns noted were Blechnum capense (with some fronds 6'-8' long and pinnae 12" long), Blechnum fraseri, B. discolor, B. minus (with its bronze fronds strikingly abundant at our lunch stop), Histiopteris incisa, Lindsaea trichomanoides (found under the kauri), Grammitis heterophylla, Trichomanes reniforme, Mecodium dilatum, M. flabellatum (as well as other species of filmy ferns), Paesia scaberula (growing in profusion beside the track), Phymatodes diversifolium, Lygodium articulatum, Rumohra adiantiformis, Asplenium lucidum and A. bulbiferum. Dicksonia squarrosa was found in profusion compared to the relatively few Cyathea dealbata and C. medullaris. At the place where the bus parked there was a small colony of Cyathea smithii and Dicksonia squarrosa with either Rumohra adiantiformis, or Polyphlebium venosum covering their trunks.

On one part of the track we saw a small North Island tom-tit flitting from tree to tree.

When the end of the track was reached, a short walk down the road towards Anawhata was made and we went up a short track to McElwans Lookout, which gave us extensive views from Usher's Farm, Piha, Muriwai and to the Kaipara Harbour as well as the magnificent bush on the adjacent ridges and gullies. One feature of the top of the knoll was the extensive area of Phormium tenax, where one could more logically have found Phormium colensoi in what must be such an open, windswept place.

We then returned to Auckland after a most interesting and enjoyable day (having ignored the universal sea of mud on the track) full of interest, with a large variety of species noted and examined.

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