Expedition to Cuvier Island (Repanga) and Coromandel Peninsula, 1999

Ross Beever, Jessica Beever & Carol McSweeney

Bot. Soc. planned to visit Cuvier Island 29 January - 2 February 1999 to undertake a range of botanical studies. Unfortunately, weather conditions prevented the party landing on the island, so after spending a day at sea, we reverted to spending three days doing field work in the vicinity of Coromandel township.

Party members

Paul and Enid Asquith, Ross and Jessica Beever, Steve Benham, Helen Cogle, Geoff Davidson, Graeme Hambly, Sandra Jones, Carol McSweeney, Juliet Richmond, Alison Wesley & Maureen Young.

Narrative

29 January

The group rendezvoused at Tairua wharf at 7.00 am, and travelled in convoy to Whitianga marina. Our skipper Maurry Morris ("Star Trek") advised that he had concerns about the swell but felt it was worthwhile to "go and have a look". The absence of boats in the immediate area of the island meant he didn't have any local reports. It was virtually windless at Whitianga and the forecast indicated a deterioration of the weather the next day, so we agreed to proceed. We departed in good spirits about 9.00 am. Soon after leaving the protection of Great Mercury, some of the party became affected by seasickness. We arrived at Cuvier and anchored in Landing Bay about 1.00 pm. The swell was marginal and we had to anchor further out than would have been desirable. Maurry's assistant Liz handled the rubber inflatable, and two of the strongest swimmers in the party were landed first. The landing site was awkward on the boulder beach, with the swell and the boulders slippery because of the low tide. Subsequently two further pairs were landed, but by this stage the wind has risen and handling the inflatable at the stern of the Star Trek was becoming progressively more difficult. Maurry took up the anchor and motored around to inspect the landing on the north-easterly (Scott's Monument) side of the peninsula. However, the swell was higher and the wind more intense there, and landing from that side was clearly not possible. We returned to Landing Bay, after losing the inflatable briefly when the shackle attachment broke, and after a brief discussion we decided to abort the landing. Those who had been landed were brought back on board, and we motored around to a more sheltered side of the island to rest up for a short time, and for those with good sealegs to enjoy some lunch. We left the island about 4.00 and motored back to Whitianga arriving about 8.15 pm, disappointed but all glad to be back on land.

A cell-phone call had secured us accommodation at the Whitianga motor camp for the night, where we made some inroads into our mountain of food and wine.

30 January

We confirmed discussions of the previous night and decided to all go to Castle Rock near Coromandel to botanise. We initially met up at the Waiau Kauri Grove to view the magnificent stand of kauri, and debate, amongst other things, the identity of a tree fern which we eventually resolved to be *Cyathea smithii* rather than *Cyathea cunninghamii*. We moved on down to Waiau Falls to inspect the native *Oxalis magellanica* which was in good flower. Unfortunately one of our party fell and cut his/her knee on a sharp rock, and had to be taken to the local doctor, after professional first aid treatment in the field (the local GP was very impressed). The somewhat depleted party continued (Fig. 1) on to Castle Rock, and were rewarded with magnificent views in rather blustery conditions - a highlight of the tops was the abundant *Chionochloa conspicua* ssp. *cunninghamii* tussocks. Three of the party decided to return to Auckland after the climb, the others headed to the welcome haven of the McSweeney family bach in Wyuna Bay, Coromandel.

31 January

Two of the party left in the morning for family reasons , and a small group of enthusiasts botanised the track to Kaipawa Trig from the Tokatea side. We were glad for the altitude gained by driving to the ridge crest - nevertheless we took 3 hours to cover the "one hour" stretch. Our return was somewhat faster. Highlights along the ridge included abundant raukawa (*Raukaua edgerleyi*) with a diverse range of juvenile leaf forms, clumps of the high altitude *Collospermum microspermum*, and a population of *Blechnum nigrum* on the walls of a shaded miners' old ditch. Some of the karamu (*Coprosma robusta*) at high altitude was infected by a conspicuous black spotting fungus on the underside of the leaves. This was later identified by Peter Johnston (Landcare Research) as *Endomelioa dingleyae* previously known only from the type collection made by Bot Soc stalwart Joan Dingley in 1965 in the Kauaeranga Valley.

Fig. 1. Back row: Graeme Hambly, Edith Asquith, Paul Asquith, Geofff Davidson, Sandra Jones, Jessica Beever, Steve Benham, Front row: Ross Beever, Maureen Young, Helen Cogle

1 February

Break-up day. Some decided to inspect the bush from the Driving Creek railway system, others returned the DoC "island" barrels. Ross Beever returned up the Waiau Valley to check the health status of karamu there, having noticed conspicuous dieback on some plants earlier. He found some 23% of plants in the Waiau Kauri Grove/ Waiau Falls/ Chiltern Scenic Reserve area showed tip and branch dieback with 5% dead. Such figures are comparable with those found in the Waitakere Ranges west of Auckland. The Australian passionvine planthopper (*Scolypopa australis*), suspected of being a vector of *phytoplasma* diseases in NZ, was abundant feeding on karamu, mahoe (*Melicytus ramiflorus*), and also on sapling northern rata (*Metrosideros robusta*). After gathering for lunch at "The Pepper Tree" we headed for home.

Mosses known from Cuvier Island

In preparation for the trip, database searches of moss specimens from Cuvier Island were requested from the major New Zealand herbaria. These produced a total of only 6 species, 5 from WELT (Te Papa): *Bryum billardierei, Campylopus introflexus, Leptostomum macrocarpum, Leucobryum candidum*, and *Thuidium furfurosum*. These were collected by Ray Forster in 1943 while he was stationed on the island during the Second World War, and are all conspicuous, common species. In addition there is one specimen in AK (Auckland Museum), *Pulchrinodus inflatus*, collected by P.J. de Lange and G. M. Crowcroft in 1994. This is a large, spectacular species, occurring in New Zealand, New Caledonia and Tasmania. In New Zealand it is commonest in the North Auckland Land District, but there are records scattered throughout the country. Only male plants have ever been found in this moss, not female, and consequently capsules (the sporophyte generation) are never formed. Details of the sporophyte generation, important for understanding the taxonomy are thus completely unknown, and the puzzle of its correct family placement has attracted considerable interest. The name of the moss has been changed (from *Eucamptodon inflatus*) to its own monotypic genus, *Pulchrinodus,* and its family placement from *Dicnemonaceae* to *Pterobryaceae* (Allen 1987), but confirmation that this is correct awaits the discovery of capsules, or the use of molecular techniques.

Acknowledgements

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Reference:

Allen, B.H. (1987) A systematic account of *Pulchrinodus inflatus* (Musci: Pterobryaceae), genus novum. *New Zealand Journal of Botany 25:* 335-342.