eastwards to Tahiti, and Whistler (1991) notes their names: nuganuga in Fiji, nu'anu'a in Samoa, nukonuka in Tonga, and (possibly) anu'a in Tahiti. Clearly these names and ours are cognate. A twist to the story is that *Decaspermum* is not found in the Cook Islands, so if this was the Maori homeland, as many suppose, then it has to be hypothesised that some memory of the plant was retained from a previous country (presumably Tahiti), perhaps in song or proverb.

The meanings of the prefixes ma- and ka- are not clear to me, but the first may be indicative of whiteness, and the second, perhaps, of the ability to burn (Williams 1971). The recently published New Zealand English Dictionary (Orsman 1997) traces these two words through our literature, and is particularly interesting on their pronunciation.

It is not quite true that *Leptospermum* is lacking from the Cook Islands. Rather incredibly, *L. scoparium* was collected by Cheeseman in his 1899 visit to Rarotonga. The specimens (AK 74313-5) are undoubtedly correctly identified. They came from Maungaroa, a fairly accessible and well-botanised location. Manuka has never again been seen on the island. All this is a mystery at least as deep as the origin of the Maori name.

Cheeseman did not get a Cook Islands name for his collection. In a notebook he wrote: "Several plants scattered over the eastern slope of Maungaroa growing among *Gleichenia dichotoma* and *Lycopodium cernuum*. Far from all cultivation, and apparently truly wild", and then in his published account (1903) he says: "Several clumps on the south-eastern slopes of Mt Maungaroa ... Doubtless introduced, but I could obtain no evidence of this". Gill & Sykes (1996) note that Cheeseman's diary of his Rarotongan trip ends abruptly, apparently several days before he left to come back. They suggest that wet weather may have forced him to stay inside and work on drying his plants, this boring work not needing to be diarised; but I wonder whether the opposite explanation might be true, and whether between showers Cheeseman went for one last walk up Maungaroa, only to be shocked into silence by a plant that simply should not have been there ...

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Lepidium flexicaule survey, Rangitoto Island 12 - 14 January 1998

Bec Stanley, Steve Benham and Brent Torrens

In January, as part of a joint co-operation between Department of Conservation and Auckland Regional Council Botanic Gardens the northern and western coast of Rangitoto island was surveyed for *Lepidium flexicaule*, ranked as nationally endangered but presumed extinct in Auckland. The last time this cress was collected on Rangitoto was by Cheeseman in 1882 (AK 4481). Whilst we did not find *L. flexicaule* after searching this stretch of coastline focusing particularly on what looked like suitable sites, this survey was worthwhile as we can at least confirm this species is extinct on Rangitoto. Other parts of the Rangitoto coastline are more accessible and have been searched for this species in the past. The survey also enabled us to investigate possible future translocation sites and make some notes on the vegetation of this less frequently visited area of Rangitoto coastline.

There were several likely habitats for *L. flexicaule* including some seepage areas just north of McKenzie Bay, and a gull colony about halfway between McKenzie Bay and Boulder Bay. It was at the gull colony that we stumbled upon the similar (but introduced) *Coronopus didymus* or twin cress that made our hearts race for a second. This cress has distinctive seeds (from *L. flexicaule*), the mature fruits separate into two ovoid nutlets. The leaves are distinctly pungent, bitter and pepper-like to taste.

Our survey covered from Boulder Bay west to beyond McKenzie Bay, including the small 'offshore' islands around the lighthouse. The coastline from Boulder Bay was interesting in terms of both the lower numbers of weeds species, and also lower diversity of native coastal species. The most abundant coastal species on this part of the coastline (outside pohutukawa forest) were needle grass (*Stipa stipoides*), *Lobelia anceps*, glasswort (*Sarcocornia quinqueflora*), ngaio (*Myoporum laetum*), and *Isolepis nodosa*. There were occasional patches or individuals of *Peperomia urvilleana, Calystegia soldanella*, iceplant (perhaps *Disphyma x Carpobrotus* hybrid), *Apium prostratum*, scarlet pimpernel (*Anagalis arvensis* var. *arvensis*), and ivy-leaved toadflax (*Cymbarlaria muralis*). The Urticaceae annual *Parietaria debilis* was fairly common on the shady scoria overhangs. Several populations of ngaio (*Myoporum laetum*) were heavily in fruit with their attractive reddish purple drupes. Only two individuals of beach spinach (*Tetragonia trigyna*) were seen, and it wasn't until well beyond McKenzie Bay (towards Flax Point) that we saw any *Selliera radicans*.

Beyond McKenzie Bay there was a marked change in the coastal vegetation with the above species and also mangroves, ferns (*Asplenium polyodon, A. flaccidum*), *Juncus maritimus* var. *australiensis*, *Psilotum nudum, Dichondra repens* and mingimingi as common coastal species. *Bulbophyllum pygmaeum* was found to be growing on scoria close to the high water mark and neighbouring mangroves, an unlikely habitat for this mat spreading orchid. It was at this point that garden escapes appeared including *Crassula multicava, Phoenix canariensis* (Canary Is. date palm), *Aloe saponaria* and *Polygala myrtifolia* (sweet pea-like shrub) which is a new record for the island. We also saw plenty of boneseed (*Chrysanthemoides monilifera*) and evergreen buckthorn (*Rhamnus alaternus*) in this part of the coastline.

L. flexicaule is extinct in the North Island (Norton et al. 1997) and now grows only in Nelson/Marlborough and the West Coast of the South Island. The extinction of *L. flexicaule* on Rangitoto may be due to a number or combination of factors including possum and wallaby browse and the decrease in nesting seabirds (commonly associated with *L. flexicaule*). These factors probably exacerbated a typically locally distributed species.

The Department of Conservation is currently writing a Recovery Plan for the coastal cresses (including *L. flexicaule*), which will recommend further steps for the conservation of this species as part of a nationally coordinated program.

Field trip based at Te Paki Farm Park
13-18 November 1997

Maureen Young

This field trip was planned to coincide with the estimated time of flowering of the white-flowered tree rata found only in the far north, *Metrosideros bartlettii*. With some people coming and going, between twelve to fourteen were accommodated in the very comfortable shearers' quarters near the Te Paki DoC headquarters.

In a unanimous decision it was resolved that the first day's outing should be to find the main object of our visit, the Bartlett's rata. Accordingly we parked our vehicles just past the Te Hapua turnoff on the Spirits Bay Road, and headed first up a clay track, and then into the scrub. The first gully we came to yielded *Adiantum diaphanum*, *Ranunculus urvilleanus*, and whau, but alas, no rata. The second gully was threatening to be equally barren, when we spied a white snowball at the head of the valley. With quickened footsteps we sidled along the edge of a raupo swamp, past some swamp maire, then stood gazing in wonder at the sight of a mature *Metrosideros bartlettii* at the peak of flowering. The combination of the bright green of the new shoots, the mounds of white flowers and the humming of countless bees was best appreciated from the other side of the swamp, and muddy boots were a small price to pay for the view. Lunch was eaten while sitting in front of clumps of *Lepidosperma filiforme* on the Earth Wall Track, then the afternoon was spent at Spirits Bay. While the young and fit climbed the steep hill behind Hoopers Point the rest walked to the little island that is accessible at low tide, passing the grass *Austrofestuca littoralis*, and *Pimelea arenaria* on the dunes, and finding *Asplenium northlandicum* on the island. Back at the cars some lay on the grass and gazed at Venus, and others crossed the lilaeopsis lawn at the stream's edge, and found a very healthy population of *Mimulus repens* with pretty mauve and yellow flowers.