

## Moturemu, Kaipara Harbour - another visit

E K Cameron & A E Wright

On a pleasant summery day (13 December 1990) four botanists set out from the Hoteo River Bridge for Moturemu Island (5.3 hectares) in the Kaipara Harbour (grid reference 260 Q09 354301). We two were accompanied by Willie Shaw from DoC, Rotorua and Bill Sykes of DSIR Land Resources, Lincoln. Willie was visiting the island to study the recently rediscovered kaka beak (*Clianthus puniceus*) and Bill was up from Lincoln on his annual northern botanical explorations.

### Kaka beak update

On the Auckland Bot Soc trip (19 August 1989) 20 kaka beak seedlings were found at two sites: 4 seedlings (Site 1) and 16 seedlings (Site 2). This was the first record of this species on the island for nearly 30 years (Cameron & Beard 1990). Wright visited the island on 16 April 1990 and recorded a single 10 cm tall seedling at Site 1 and failed to relocate Site 2 (Wright 1991). On 13 December 1990 we relocated the single seedling at Site 1 which was c. 15 cm tall and bare-stemmed except for three leaves at the growing tip. At Site 2 we relocated seven seedlings, most of which looked very healthy. The tallest had a curving stem and was almost 80cm tall. None were in flower and there were no new seedlings. On 14 December 1992 Willie Shaw revisited the island to study the kaka beak. He found only two of the earlier plants, one with a single seed pod and the other with two seed pods. All pods were immature. He found 4 new seedlings at Site 1 and 27 at Site 2, most were less than 6 cm tall. Thus after nearly 17 months (from August 1989) the population had dropped from 20 to eight plants and over the next two years from eight to two plants plus 31 new seedlings (W. Shaw pers. comm.).

### General notes

Seedlings were abundant, especially of houpara (*Pseudopanax lessonii*). The native vine, *Muehlenbeckia australis* and the exotic vine, mile-a-minute (*Dipogon lignosus*) dominated the vegetation on the south-east part of the island. They both reached to the top of the native trees and were smothering them.

Dead leaves of eel grass (*Zostera muelleri*) formed a thick tidal drift line more than 1 m wide on the shores of Moturemu. Extensive "green" mud flats were visible to the west of the island; presumably these are dominated eel grass.

The Department of Conservation laid poison (Talon 50 WB) on the island in July 1992 to kill the Norway rats which were known to be present. Signs of mice were discovered during the rat eradication. A visit in December 1992 found the know sticks untouched, which suggests both Norway rats and mice have now been eradicated from the island (Ian McFadden pers. comm.). Well done DoC!

### Vascular plant species list

The species list of Cameron & Beard (1990) is updated and follows. Fifteen additions from Wright (1991) and 11 from this present trip, bring the total flora to 175 vascular plant taxa. Records not seen on the island by us are marked separately to indicate their rarity or possible local extinction.

AK = Auckland Museum herbarium voucher number

AKU = University of Auckland herbarium voucher number

E = recorded only by Esler (1972)

M = recorded only from scraps collected by I. McFadden (30 xi 1988)

McK = R. McKenzie record between 1953-65 (Department of Conservation files)

no symbol = seen by us but not vouchered

P = planted

\* = adventive species

Ferns (23)

*Adiantum cunninghamii*  
*A. hispidulum*  
*Asplenium flaccidum* subsp. *flaccidum*  
*A. oblongifolium* AK 195843  
*A. polyodon*  
*Blechnum chambersii*  
*B. filiforme*  
*B. sp.* (*B. capense* of Allan)  
*Cyathea dealbata* AK 195845  
*C. medullaris*  
*Deparia petersenii* AK 206064  
*Diplazium australe* AK 206065

Gymnosperms (7)

*Cupressus macrocarpa* \* P (x1)  
*Dacrycarpus dacrydioides*  
*Phyllocladus trichomanoides* E  
*Pinus muricata* \* P (x8), AK 209454

Dicotyledons (106)

*Acacia longifolia* \*  
*Alectryon excelsus*  
*Anagallis arvensis* subsp. *arvensis* \*  
*?Aster subulatus* \* M  
*Avicennia marina* AK 198000  
*Brachyglottis repanda* E  
*Carduus tenuiflorus* \* AK 209448  
*Carmichaelia aligera* AK 195847  
*Centaurium erythraea* \*  
*Cerastium glomeratum* \*  
*Cirsium vulgare* \*  
*Clianthus puniceus* AK 206068  
*Conyza albida* \*  
*Coprosma areolata*  
*C. lucida*  
*C. macrocarpa*  
*C. macrocarpa* x *C. propinqua*  
*C. repens*  
*C. repens* x *C. rhamnoides* AKU 21808  
*C. rhamnoides*  
*C. robusta*  
*Coriaria arborea* E  
*Coronopus didymus* \*  
*Corynocarpus laevigatus*  
*Cotula australis*  
*Crepis capillaris* \*  
*Dichondra repens*  
*Dipogon lignosus* \* AKU 21807  
*Drosera auriculata*  
*Duchesnea indica* \*  
*Entelea arborescens*  
*Eucalyptus botryoides* \* P (x2)  
*E. pulilaris* \* P (x1)  
*E. saligna* \* P (x2)  
*Euphorbia peplos* \*

*Doodia media* subsp. *australis*  
*Histiopteris incisa* M, AK 195851  
*Lastreopsis glabella* AKU 21809  
*L. microsora* AKU 21810  
*Paesia scaberula*  
*Pellaea rotundifolia* AK 206067  
*Phymatosorus pustulatus*  
*P. scandens*  
*Pteridium esculentum*  
*Pteris tremula* AK 195844  
*Pyrrosia eleagnifolia* AK 198007

*Pinus pinaster* \*  
*P. radiata* \*  
*Podocarpus totara* AKU 21812

*Galium aparine* \*  
*Gaultheria antipoda* E  
*Geniostoma ripestre*  
*Gnaphalium auidax*  
*G. coarctatum* \*  
*G. gymnocephalum*  
*G. sphaericum* E  
*Gonocarpus incanus* E  
*Hakea sericea* \*  
*Haloragis erecta*  
*Hebe macrocarpa*  
*H. stricta* var. *stricta*  
*Hedera helix* \*  
*Hypericum humifusum* \* AK 198005  
*Hypochoeris radicata* \*  
*Knightsia excelsa* (1 small plant, now extinct? M. Dill pers. comm.)  
*Kunzea ericoides* AKU 21811  
*Lagenifera pumila* AK 198003  
*Leontodon taraxacoides* \*  
*Lepidium oleraceum* McK  
*Leptospermum scoparium*  
*Leucopogon fasciculatus*  
*L. fraseri* E  
*Ligustrum sinense* \*  
*Lobelia anceps*  
*Lotus angustissimus* \*  
*L. pedunculatus* \*  
*L. suaveolens* \*  
*Lycium ferocissimum* \*  
*Melicope ternata*  
*Meliclytus ramiflorus*  
*Metrosideros excelsa*  
*Muehlenbeckia australis*  
*M. complexa*

*Myrsine australis*  
*Olearia furfuracea* AK 195846  
*Orobanche minor* \*  
*Paraserianthes lophantha* \*  
*Parsonsia* sp.  
*Physalis peruviana* \*  
*Phytolacca octandra* \*  
*Pimelea prostrata* agg.  
*Pittosporum crassifolium*  
*P. tenuifolium* E  
*Plantago lanceolata* \*  
*Pomaderris ericifolia* E  
*Pseudognaphalium luteoalbum*  
*Pseudopanax arboreus* E  
*P. crassifolius*  
*P. crassifolius* x *P. lessonii*  
*P. lessonii*  
*Rubus fruticosus* agg. \* E  
*Rumex conglomeratus* \*

#### Monocotyledons (39)

*Acianthus sinclairii*  
*Aira caryophylla* subsp.  
*caryophylla* \* AKU 22584  
*Anthoxanthum odoratum* \*  
*Astelia banksii*  
*Carex lambertiana* AK 198006  
*C. spinirostris*  
*Collospermum hastatum*  
*Cordyline australis*  
*C. banksii*  
*C. pumilio* AK 206066  
*Cortaderia jubata* \* AK 198001  
*C. splendens*  
*Dactylis glomerata* \*  
*Dianella nigra*  
*Dichelachne crinita* AK 195849  
*Elymus multiflorus* AK 198002  
*Festuca arundinacea* \*  
*Gahnia lacera*  
*G. setifolia* E

#### Acknowledgements

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#### References

- Cameron, E.K. & Beard, C.M. 1990. Moturemu Island - Kaipara Harbour. *Auckland Botanical Society Journal* 45(1): 5-8.  
Esler, A.E. 1972. Moturemu Island Scenic Reserve. Unpublished report.  
Wright, A.E. 1991. Moturemu Island revisited. *Auckland Botanical Society Journal* 46(1): 9.

*R. obtusifolius* \* E  
*Sagina procumbens* \*  
*Senecio bipinnatisectus* \*  
*S. biserratus* E  
*S. hispidulus*  
*S. lautus* AK 206070  
*S. sylvaticus* \* AK 206071  
*Silene gallica* \*  
*Solanum americanum*  
*S. mauritianum* \*  
*Sonchus oleraceus* \*  
*Sophora microphylla* E  
*Spargularia media*  
*S. rubra* \* AK 209449  
*Trifolium dubium* \*  
*Ulex europaeus* \*  
*Vicia sativa* \* E  
*Wahlenbergia gracilis* AK 209452

*Holcus lanatus* \* E  
*Isolepis nodosa*  
*Lachnagrostis "littoralis"*  
*Lolium perenne* \*  
*Microlaena stipoides*  
*Microtis unifolia* AK 206074  
*Morelotia affinis*  
*Oplismenus imbecillis* AK 206069  
*Parapholis incurva* \* E  
*Paspalum dilatatum* \*  
*Phormium tenax*  
*Poa anceps*  
*P. annua* \*  
*Rhopalostylis sapida*  
*Ripogonum scandens*  
*Rytidosperma biannulare* AK 195850  
*Thelymitra longifolia* AK 195848  
*T. ? pauciflora* AK 205960 & 206073  
*Vulpia bromoides* \*  
*Zostera muelleri*

