

## THE TE KARAKA MEMORIAL SCENIC RESERVE PORT WAIKATO-WAIKARETU ROAD

B. Oldham

Some 19 members and friends visited this varied reserve in the Limestone Downs area about 20 km south of Port Waikato on 15 March, 1986. It was new ground for the Society and a chance to see what grew on the alkaline limestones and shales that give the generally poor soils of that remote and isolated region. The reserve is noted for its regenerating kauri, perhaps the only area of any size of true kauri forest on the west coast south of Auckland.

There had been a small swampy scenic reserve alongside the rough road from Port Waikato to Waikaretu but in 1984 the Land and Survey Dept. bought nearly 50 Ha of bush to amalgamate with it, making a total of 53.5 Ha of a most varied reserve.

The whole area from Port Waikato to Raglan is so varied in geology and landforms, and so complex in soil types. This reserve is typical of that variability over very short distances.

The area lies to the north-east under a high north-south ridge that shelters it from the fierce winds off the Tasman Sea some four kilometres away. Two secondary ridges run off the main ridge, the northern one appears to be of an andesite origin and has about six hectares of true kauri forest while the southern one is on poor alkaline shale that carried an apparent climax of kanuka forest and ends in a rocky escarpment with its own rupestral community.

The broad valley between the ridges lacks running water, but is wet enough to carry the usual broadleaved combination of kohekohe, nikau, puriri and tawa with some giant pukatea. Rewarewa is particularly common on the ridge sides. On the wet but very shallow soils on a rock base, the tree-ferns seem to be the climax.

The area had been milled in the late 1920's, mainly for the huge Hall's totara that were cut for fence posts for the developing farmlands. Of course the poor timber of that type of totara did not last and few very rotten stumps are all that remain. The kauri adults were taken for the local buildings, but the puriri, pukatea and tawa were all left. Post-war there was a big cutting of the mature tree ferns for their trunks.

Thereafter the bush had been thoroughly grazed and later over-run by feral goats, but the area is now adequately ring fenced and all browsing animals removed. We found only wild pigs and the sulphur-crested cockatoos as exotic fauna. The swamp has never been drained and remains pretty much in its pristine state, apart from a minor invasion of pussy willow.

A number of interesting features was apparent to the party. The forest floor was particularly open and this did not seem to be due to previous grazing and logging. The open nature of the bush was apparently always a feature of the whole area and probably reflects the poor and varied soil types. Individual trees appear large, but very widely spaced and regeneration is particularly slow.

The kauri grove of approximately six hectares is of well-advanced rickers and poles, all healthy and growing rapidly, but no seedlings were seen off that particular ridge.

The other ridge of kanuka shows no secondary understorey developing and strangely, no podocarp appearance. The canopy was however shared by extremely tall mapou (Myrsine australis).

Much of the rest of the reserve is dominated by Coprosma arborea. Huge 10 metre and more trees form the canopy over large areas and plants of all sizes are extremely common elsewhere. Its great dominance in an area that would appear to be frost-prone was a real surprise.

Hall's totara was very much in evidence, but a diligent search did not reveal any P. totara.

We also failed to find the rarish Gratiola sexdentata in the swamp.

A series of Maori diggings were very much in evidence on the kanuka-covered southern ridge, both foodpits and whare sites under huge puriris.

It is a pity such a varied and interesting reserve is so far from the usual routes. We all felt it was worth careful preservation, with the need for constant vigilance to keep out stock and feral goats. It will be interesting too to see what regenerates in another five and ten years.

Some 42 vascular species were added to the species list prepared by R. Irwin and M. Skinner in 1984. Visual and confirmed sightings of new genera were by Dr Ross Beever, Mr Jack Mackinder and Dr Brian Oldham. Mosses and liverworts were not recorded on this trip.

#### SPECIES LIST

\* denotes exotic

+ denotes new listing

##### Trees and shrubs

Agathis australis	Hedycarya arborea +
Alectryon excelsus	Knightia excelsa
Alseuosmia macrophylla +	Laurelia novae-zelandiae
Aristotelia serrata +	Leptospermum ericoides
Beilschmiedia tarairi +	L. scoparium
Carmichaelia aligera +	Leucopogon fasciculatus
Carpodetus serratus	L. forsteri
Cassinia retorta +	Libocedrus plumosa
Coprosma arborea	Litsea calicaris +
C. areolata +	Macropiper excelsum
C. lucida +	Melicope ternata +
C. robusta	Melicytus ramiflorus
C. spathulata	Metrosideros excelsa
C tenuicaulis (not seen this trip)	M. robusta +
Cordyline australis	Mida salicifolia +
C. banksii	Myrsine australis
Corynocarpus laevigatus	M. salicina
Dacrycarpus dacrydoides	Nestegis lanceolata + (suspect <u>N. cunninghamii</u> on 1984 list is a misidentification)
Dacrydium cupressinum	Olearia furfuracea
Dysoxylum spectabile	O. rani
Elaeocarpus dentatus	Paratrophis microphylla +
Fuchsia excorticata +	Phyllocladus trichomanoides
Geniostoma rupestre	
Griselinia lucida	

Podocarpus hallii + (suspect  
P. totara on 1984 list is  
a misidentification  
Pomaderris phyllicifolia var.  
ericifolia  
Prumnopitys ferrugina  
Pseudopanax crassifolius

#### Other dicots

Acaena sp.  
Callitriche stagnalis  
Calystegia sepium  
C. tuguriorum +  
Centaurium erythraea\* +  
Centella uniflora  
Clematis ?paniculata + (seedlings)  
Chrysanthemum leucanthemum\*  
Daucus carota\* +  
Drosera peltata var. auriculata  
Elatostema rugosum  
Gnaphalium spp.  
Gonocarpus incana  
Gratiola sexdentata  
Haloragis erecta  
Hydrocotyle dissecta  
Lagenophora pumila  
Linum trigynum\* +  
Lobelia anceps  
Lotus pedunculatus\*  
Ludwigia peploides\*

#### Other monocots

Acianthus fornicatus var.  
sinclairii  
Aira caryophyllea\*  
Anthoxanthum odoratum\*  
Astelia solandri +  
Axonopus affinis\* +  
Bulbophyllum pygmaeum +  
Caladenia catenata  
Carex dissita  
C. flagellifera  
C. geminata  
C. lambertiana  
C. longebrachiata\*  
C. secta var. secta  
C. virgata  
Chiloglottis cornuta  
Collosporum hastatum  
Corybas macranthus  
C. rivularis  
C. trilobus  
Collosporum hastatum  
Cyperus eragrostis

Quintinia serrata  
Rhabdothamnus solandri  
Rhopalostylis sapida  
Salix cinerea\*  
Schefflera digitata  
Vitex lucens

Metrosideros fulgens  
M. perforata  
Muehlenbeckia australis  
Nertera dichondraefolia  
N. setulosa  
Parsonsia heterophylla +  
Passiflora tetrandra  
Peperomia urvilleana  
Physalis peruviana\*  
Phytolacca octandra\*  
Ranunculus repens\*  
Rubus cissoides  
Rubus fruticosus agg\*  
Senecio bipinnatisectus\* +  
S. jacobaea\* +  
S. minimus +  
Solanum nigrum\*  
Stellaria parviflora  
Veronica plebeia\* +  
Wahlenbergia gracilis

C. ustulatus  
Dendrobium cunninghamii  
Dianella nigra  
Drymoanthus adversus +  
Earina autumnalis  
E. mucronata  
Echinopogon ovatus +  
Eleocharis acuta  
Freycinetia banksii  
Gahnia lacera  
G. xanthocarpa +  
Isachne australis  
Juncus acuminatus +  
J. gregiflorus  
J. pallidus  
Lepidosperma australe  
Luzula congesta  
Microlaena avenacea +  
M. stipoides  
Microtis uniflora  
Notodanthonia spp.  
Oplismenus undulatifolius

Paspalum dilatatum\* +  
 Phormium tenax  
 Potamogeton cheesemanii  
 Pterostylis alobula  
 P. banksii  
 P. montana  
 Ripogonum scandens

Schoenus tendo  
 Thelymitra longifolia  
 T. pauciflora  
 Typha orientalis  
 Uncinia banksii  
 U. uncinata

Ferns and fern allies

Adiantum cunninghamii  
 A. fulvum  
 Anarthropteris lanceolata  
 Asplenium bulbiferum  
 A. flaccidum ssp. flaccidum  
 A. lamprophyllum +  
 A. oblongifolium +  
 A. polyodon  
 Blechnum chambersii  
 B. filiforme  
 B. membranaceum  
 B. procerum  
 Cyathea dealbata  
 C. medullaris  
 Dicksonia squarrosa  
 Doodia media  
 Hymenophyllum demissum  
 H. rarum  
 H. sanguinolentum

Lastreopsis hispida +  
 Lindsaea linearis +  
 L. trichomanoides  
 Lycopodium deuterodensum  
 L. varium  
 L. volubile  
 Lygodium articulatum  
 Paesia scaberula  
 Pellaea rotundifolia  
 Phymatosorus diversifolius  
 P. scandens  
 Pneumatopteris pennigera  
 Pteridium esculentum  
 Pteris macilentata +  
 P. tremula  
 Pyrrosia serpens +  
 Tmesipteris elongata  
 T. tannensis

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## NEXT EDITION

The deadline for the January 87 edition is 10 December 1986. Doubtless members will wish to ensure that Newsletters during the Jubilee Year are as impressive as this one. Two articles have been held over for that edition:

- The Indigenous Flora of Te Kauri Scenic Reserve, Kawhia (Tainui Ecological District 13b) - P.J. deLange.  
 Notes on Pterostylis plumosa - E.D. Hatch.