Rostokovia magellanica
Schizeilema exiguum
Scleranthus brockiei
S. uniflorus
Senecio revolutus
S. southlandicus
Wahlenbergia albomarginata
W. gracilis

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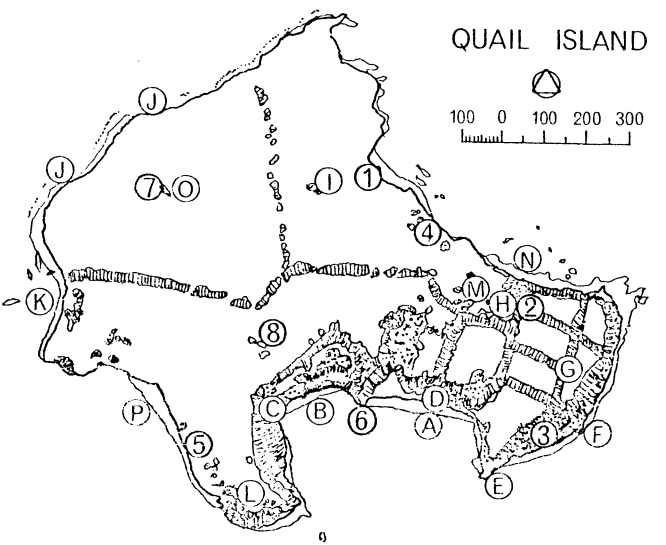
## QUAIL ISLAND, LYTTELTON HARBOUR

E. Mary Chapman




POINTS OF INTEREST

A Main beach
B Waterski beach
C Terraces of old hospital
D Barracks
E Main wharf
F Deep water wharf
G Stables
H Farmhouse
I Wards' Cottage Site
J Quarries
K Scuttled ships
L Lepers' grave
M Basalt 'cap'
N 70 m basalt cliff
O Stock water dam
P South west beach

PLANT COLLECTION SITES 1 - 8 (see text)

Quail Island at the head of Lyttelton Harbour, between Head of the Bay and Charteris Bay, is an island of approximately 81 hectares. It was purchased by the Crown in 1875 and used until 1881 as a quarantine station, firstly for immigrants and later for stock. Terraces and buildings were built between 1874 and 1900 by prisoners from the Lyttelton Gaol. A leprosarium established in 1902 was closed in 1925. Since 1932 the island has been leased as a farm. This tenancy terminated in 1975 when in the following year a Recreation Reserve was gazetted. It is now under consideration as the location for an outdoor education centre.

Within 25 km of the island 300,000 people live so not only is it the focal point of the Lyttelton volcanic crater, providing geological exhibits, evidence of Maori occupation and relics from a varied European past, but it provides a unique visual, recreation and educational experience.

On 22nd March 1977 I visited the island with a group of staff and ten Landscape Architecture students from the Department of Horticulture, Landscape and Parks, Lincoln College. Their programme was designed to:-

1. encourage students to discover in a communal appraisal the values and limitations which the island possesses

2. relate these values and limitations to the impact of potential uses so that appropriate uses and placements may be chosen and problems of inappropriate usages avoided

3. require students to produce as a personal solution a "framework" proposal for the use of the island.

While the basic structure and character of the island is a result of natural processes, they have been considerably modified by man; the present character reflects the activity of the past 125 years. To preserve and enhance its particular attractions and its character the future management will deserve special consideration, thus it is a very real and demanding programme for the students.

Little is known of the original vegetation; at the time of European settlement tussock grassland predominated with flax and scrub in damper areas. These are now modified by grazing and oversowing, while the flatter land on top has been cultivated and is now under introduced grasses.

The following plants from eight different sites were gathered to help the students. If the island is to be used as an Educational Research and Interpretation Centre, as proposed by Lincoln College in September 1976, a full check list would need to be made. Perhaps a weekend for the Botanical Society?

PLANT LIST

| TREES AND SHRUBS | SITE NO. |
|---|---|
| Carmichaelia violacea | 4, 7 |
| Coprosma crassifolia | 5, 8 |
| Coprosma propinqua | 3, 8 |
| Coprosma rotundifolia | 8 |

| TREES AND SHRUBS (Continued) | SITE NO. |
|---|---|
| Corynocarpus laevigatus | 4 |
| Crataegus monogyna | 7 |
| Discaria toumatou | 7 |
| Leptospermum ericoides | 7 |
| Leptospermum scoparium | 8 |
| Olearia paniculata | 1 |
| Olearia traversii | (see note below) |
| **CLIMBERS** | |
| Muehlenbeckia australis | 2 |
| Muehlenbeckia complexa | 4, 7 |
| **HERBS** | |
| Acaena novae-zelandiae | 5 |
| Agropyron scabrum | 4 |
| Agrostis | 4 |
| Chenopodium allanii | 3 |
| Dichondra repens | 3 |
| Gnaphalium audax | 6 |
| Gnaphalium luteo-album | 8 |
| Hydrocotyle moschata | 3 |
| Juncus filicaulis | 4 |
| Juncus gregiflorus | 4 |
| Lepidium | 3 |
| Poa caespitosa | 4 |
| Polycarpon tetraphyllum | 4 |
| Rumex crispus | 4 |
| Phormium tenax | 8 |
| Vicia hirsuta | 4 |
| **FERNS** | |
| Asplenium flabellifolium | 3, 8 |
| Polystichum richardii | 3 |
| Pteridium aquilinum | 8 |
| **MOSSES** | |
| Acrocladium auriculatum | 3 |
| Ptychomnion aciculare | 3 |
| Thuidium furfurosum | 3 |

DESCRIPTION OF THE SITES

1. Dry cliffs on the north-east coastline.

2. Around the homestead.

3. East of the jetty on the south-east point, growing under Cupressus macrocarpa, Pinus radiata, Pinus nigra, Quercus ilex, and introduced pittosporums.

4. Dry sunny slopes above cliffs on the north-east coastline, Poa caespitosa/Muehlenbeckia community.

5. Near quarry on the south-west side, Coprosma/Muehlenbeckia community.

6. Rocks by sea shore.

7. Kanuka/Coprosma scrub around pond on the north-west side.

8. Manuka/Coprosma scrub with scattered Pinus radiata on the south-west side.

Olearia traversii, a Chatham Island species, was collected by Mr. S. Challenger of the Department of Horticulture, Landscape and Parks, on 2nd June 1976. Scattered plants grow on slopes above the cliffs on the south side of the island.

Karaka (Corynocarpus laevigatus) was most probably planted by the Maoris. It is known to grow in very few places in Canterbury.

I thank members of staff of the Botany Division, D.S.I.R. for identifying some plants. Specimens of all the species listed have been placed in the Botany Division Herbarium.

References

Lincoln College: Proposal for the Development and Operation at Quail Island Reserve (unpublished).

Sisson, David: Quail Island. A landscape and development plan for a recreation reserve in Lyttelton Harbour. Thesis. Lincoln College, 1976.