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NOTES ON BETSEY ISLAND

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BETSEY ISLAND extends to 170 hectares (420 acres) and is owned by the Tasmanian Museum.

Thirty-two members of the Tasmanian Conservation Trust visited the island on 7th April, 1974. The trip from Hobart was made in the M.L. "Lorne" in ideal weather conditions. The party was transferred to a dinghy for landing on the rocky, northern coastline, not far from the north-eastern corner of the island.

The only general information available about the island is published in the *Tasmanian Naturalist*, Volume II, No. 2 (August, 1951), in which a visit to the island by members of the Tasmanian Field Naturalists' Club in March 1951, is described. In the 1974 visit, time spent on the island was limited to 2½ hours and only a cursory inspection could be made in the time. However, with possible assistance to future visitors in mind, it was considered worthwhile to collate the observations made by various members of the party. Where possible a comparison has been made of the 1951 and 1974 findings.

1. Discovery by Europeans and History (Contributed by D.R. Gregg)

The island was sighted by Tasman in 1642. D'Entrecasteaux charted it in 1773 and gave it the name *Isle Willaumez* after his sailing officer Lieutenant Willaumez.

John Hayes in 1793 renamed the island *Betsey Island*. In later years the island was given to Jane Franklin, wife of the Governor, who wished to use it as a place to introduce plants and animals. Parts of the island were cleared and a few buildings erected. Lack of permanent water proved a real difficulty and the island never fulfilled the high hopes of Lady Franklin.

In 1868 the island was presented to the people of Tasmania by Lady Franklin and in 1903 it was vested in the Trustees of the Tasmanian Museum under the name *Franklin Island*.

The island was officially named *Betsey Island* in 1955.

Several attempts have been made to farm the island with sheep and even with rabbits. It was leased in the 1910's and 1920's for rentals of something like 25 shillings per year.

In 1928 the island was declared a sanctuary and there were reports that mutton-birds were once more breeding there. In 1936 the Trustees dealt with complaints that the "Military" had used the island during manoeuvres. In 1937 the Department of Agriculture requested permission to carry out experiments on the island on the control of rabbits by myxomatosis.

2. Geology (Contributed by D. R. Gregg)

The geology of the island has been described by David Green (1961 : Papers and Proceedings of the Royal Society of Tasmania, Volume 95 : 17-34).

Quartzose sandstone of probable Triassic Age crops out on the north-eastern end of the island. This sandstone is in fault contact with the dolerite, of Jurassic Age, which forms the rest of the island.

3. Vegetation (Contributed by J. Jarman, and R. R. Shepherd)

From a floristic point of view the island is rather similar to the nearby mainland with the possible exception of a larger range of grass species.

Trees are found only on the northern half of the island and present a savannah-like landscape. The main species is Eucalyptus globulus but a few E. viminalis are scattered throughout the woodland. In places Acacia melanoxylon and Dodonea viscosa make a closed understorey.

The introduced species Albizzia sp. and Agave americana are common to the northern side of the island but appear to be absent elsewhere. Fairly tall Acacia melanoxylon occur along the eastern side and Casuarina stricta are found mainly along the western side. The southern side is treeless with grasses and sedges forming a low, open community. The dominant sedge, Lomandra longifolia is widespread on the island.

A species list is given in Appendix 1.

4. Introduced Mammals

About six dark-coloured rabbits were seen during the visit and four dried bodies and several skulls were collected.

5. Birds (Contributed by Mr. L. E. Wall)

Two lists of birds were compiled, one while travelling by boat to and from the island, the other while on the island. A comparison of these lists with lists made in March 1951 showed little difference in the birds recorded. The lists are given in Appendix 2.

6. Invertebrates (Contributed by Miss A. Green)

(a) Crustacea. Two species of terrestrial Isopoda were found under stones on the shore, near the high tide level :-

- (i) Ligia australiensis Dana - the shore slater. This is a native species which occurs near high tide level, on rocky shores in south-eastern Australia, including Tasmania.

(ii) Porcellio scaber Latreille - the garden slater. An introduced species originally from Europe but now cosmopolitan. P. scaber normally lives inland but it is not unusual to find it on the sea shore.

(b) Mollusca

(i) Tasmanembryon tasmanicus Pleiffer - a tree snail.

Two animals were found on dead, exotic wattle trees.

T. tasmanicus occurs only in northern and eastern Tasmania near the coast.

(ii) Caryodes dufresnii Leach - a land snail.

C. dufresnii is endemic to Tasmania.

7. General

Previously cleared areas in the north and centre of the island are still visible - no trees, old ploughing lines and many heaps of stones gathered off the cultivated areas. The bush is encroaching slowly around the perimeters of these old clearings, the advancing species being mainly A. melanoxylon, D. viscosa and E. globulus. The old pastures contain a range of introduced weed species, notably Hypochaeris radicata and Leontodon leysleri. The clearings are grazed closely by rabbits and several burrows and scrapings were seen around the stones and the remains of an old hut near the centre of the island.

The island is classified by the National Parks and Wildlife Service as a Conservation Area, primarily because of its important Mutton Bird rookeries. In many parts the ground is honeycombed with rookeries and penguin burrows.

The Tasmanian Conservation Trust is indebted to the Trustees of the Museum for permission to land on the island.

APPENDIX I

Plant Species List

(Compiled from observations by Miss J. Jarman, Mrs. J. E. S. T. Townrow, Messrs. A. Beswick, A. M. Hewer, L. E. Wall and R. R. Shepherd).

Dicotyledons

(a) Indigenous species

CAMPANULACEAE

Wahlenbergia sp. (o)

CARYOPHYLLACEAE

Colobanthus apetalus (lf)

CASUARINACEAE

Casuarina stricta (o)

CHENOPODIACEAE

Chenopodium glaucum (o)

CONVOLVULACEAE

Dichondra repens (o)

Dicotyledons - (cont'd.)

COMPOSITAE

Cassinia aculeata (r), Gnaphalium sp. (o), Senecio sp. (o)

EPACRIDACEAE

Astroloma humifusum (r), Leucopogon parviflorus (f), Lissanthe strigosa (lf)

EUPHORBIACEAE

Amperea xiphoclada (r)

FICOIDEAE

Carpobrotus rossii (f), Tetragonia implexicoma (o)

GERANIACEAE

Geranium microphyllum (o)

LEGUMINOSAE

Acacia melanoxylon (lf), A. mearnsii (r), A. verticillata (lf), Kennedia prostrata (o)

MYOPORACEAE

Myoporum insulare (f)

MYRTACEAE

Eucalyptus globulus (f), E. viminalis (o)

ONAGRACEAE

Epilobium sp. (o)

OXALIDACEAE

Oxalis corniculata (lf)

PITTOSPORACEAE

Bursaria spinosa (r)

ROSACEAE

Acaena novae-zelandia (f)

RUBIACEAE

Galium australe (r)

RUTACEAE

Correa alba (o)

SAPINDACEAE

Dodonaea viscosa (o)

UMBELLIFERAE

Hydrocotyle sp. (o)

(b) Introduced species

CARYOPHYLLACEAE

Cerastium fontanum (r)

CHENOPODIACEAE

Atriplex hastata (o), Chenopodium glaucum (r)

COMPOSITAE

Carduus pycnocephalus (r), Cirsium arvense (o), C. vulgare (r),Hypochaeris radicata (o), Leontodon leysleri (lf), Sonchus asper (r)

GENTIANACEAE

Centaurium erythraea (o)

LEGUMINOSAE

Albizzia sp. (f)

PRIMULACEAE

Anagallis arvensis (f)

POLYGONACEAE

Rumex acetosella (o), R. pulcher (o)

SCROPHULARIACEAE

Verbascum thapsus (o)Monocotyledons

(a) Indigenous species

CYPERACEAE

Lepidosperma gladiatum (o), L. longitudinale (o), L. concavum (o),Scirpus nodosus (o)

GRAMINAE

Agropyrum scabrum (f), Agrostis avenacea (o), Aira caryophyllea (o),
Danthonia caespitosa (o), Danthonia purpurascens (o), D. racemosa (o),
D. setacea (f), Deyeuxia quadrisecta (o), Dichelachne crinita (o), D. sciurea (o)Distichlis distichophylla (f), Monerma cylindrica (r), Poa poiformis (f),P. sieberana var sieberana (f), Stipa compacta (o), S. stiposa (o)

LILLIACEAE

Dianella revoluta (f), Lomandra longifolia (f)

(b) Introduced

AMARYLLIDACEAE

Agave americana (f)

Monocotyledons - (cont'd.)

GRAMINAE

Holcus lanatus (f), Cortaderia sp. (r)Pteridophytes

DENNSTAEDTIACEAE

Asplenium flabellifolium (o), Pteridium esculentum (lf)

POLYPODIACEAE

Phymatodes diversifolium (o)

r = rare
 o = occasional
 f = frequent
 lf = locally frequent

Of the 11 species recorded in 1951, all were seen with the exception of Carduus lanceolatus.

APPENDIX 2

Bird Species List

		<u>1951</u>	<u>1974</u>
A.	<u>Birds seen while travelling by boat to and from the island</u>		
	Little Penguin	<u>Eudyptula minor</u>	- *
	Black-browed Albatross	<u>Diomedea melanophris</u>	* -
	Muttonbird	<u>Puffinus tenuirostris</u>	* *
	Australian Gannet	<u>Morus serrator</u>	o o
	Black Cormorant	<u>Phalacrocorax carbo</u>	- *
	Little Pied Cormorant	<u>Phalacrocorax melanoleucos</u>	- *
	Black-faced Cormorant	<u>Phalacrocorax fuscescens</u>	* *
	Artic Skua	<u>Stercorarius parasiticus</u>	* *
	Pacific Gull	<u>Larus pacificus</u>	* o
	Dominican Gull	<u>Larus dominicanus</u>	- *
	Silver Gull	<u>Larus novaehollandiae</u>	* *
	Crested Tern	<u>Sterna bergii</u>	* *
B.	<u>Birds seen on the island</u>		
	Little Penguin	<u>Eudyptula minor</u>	* *
	Black-faced Cormorant	<u>Phalacrocorax fuscescens</u>	- *
	White-faced Heron	<u>Ardea novaehollandiae</u>	* 9
	Wedge-tailed Eagle	<u>Aquila audax</u>	- 3
	White-breasted Sea Eagle	<u>Haliaeetus leucogaster</u>	* -
	Brown Hawk	<u>Falco berigora</u>	- *

		<u>1951</u>	<u>1974</u>
Quail sp.		-	*
Pacific Gull	<u>Larus pacificus</u>	*	*
Silver Gull	<u>Larus novaehollandiae</u>	*	*
Eastern Rosella	<u>Platycercus eximius</u>	*	*
Blackbird	<u>Turdus merula</u>	-	*
Spotted Pardalote	<u>Pardalotus punctatus</u>	*	*
Grey-breasted Silveryeye	<u>Zosterops lateralis</u>	-	*
Black-headed Honeyeater	<u>Melithreptus affinis</u>	-	*
Crescent Honeyeater	<u>Phylidonyris pyrrhoptera</u>	*	-
New Holland Honeyeater	<u>Phylidonyris novaehollandiae</u>	-	*
Noisy Miner	<u>Manorina melanocephala</u>	*	*
Grey Butcher-bird	<u>Cracticus torquatus</u>	*	*
White-backed Magpie	<u>Gymnorhina hypoleuca</u>	*	-
Forest Raven	<u>Corvus tasmanicus</u>	*	*

EASTER CAMP 1975 - WADDAMANA

THE Club held its annual Easter Camp for 1975 at Waddamana in the Central Highlands. The accommodation was at the Chalet, now a field study centre for the Education Department.

The main object of the Club was to carry out a botanical survey of an area within 2 km of the township for the Education Department so that a comprehensive list of herbarium material could be prepared for study on site by students of the various schools who now attend this centre at regular intervals.

Waddamana, meaning "large river" in the dialect of the Big River tribe of aborigines, was established in 1916 when water of the Great Lake was directed by means of canals and pipelines to a power station in the valley of the River Ouse, over 1000 feet lower in altitude.

The rapid change in physiography from montane to sub-alpine conditions within a short distance from the township gave added interest to the field study.

Field excursions were made to Lake Echo and Penstock Lagoon. A wide range of plants were noted, details of which are given in this report.

We are indebted to Mrs. Allan for valuable assistance in identification.

PLANTS RECORDED AT WADDAMANA 29.3. '75

Acacia dealbataAcaena anserinifoliaAcaena ovinaAjuga australisAsperula confertaBedfordia linearisBillardiera longifloraBlechnum procerumBossiaea ripariaBrachyloma ciliatumCallistemon pallidusCarex appressaCassinea aculeataCoprosma hirtella

Plants recorded at Waddamana 29.3. '75 - cont'd.

<u>Cotula filicula</u>	<u>Leucopogon hookeri</u>
<u>Cyathodes parvifolia</u>	<u>Lomatia tinctoria</u> fruit
<u>Cynoglossum suaveolens</u>	<u>Muehlenbeckia adpressa</u>
<u>Daviesia latifolia</u>	<u>Notelea ligustrina</u>
<u>Epilobium sp.</u>	<u>Olearia algida</u>
<u>Eucalyptus amygdalina</u>	" <u>myrsinoides</u> fls.
" <u>delegatensis</u>	" <u>phlogopappa</u>
" <u>pauciflora</u>	" <u>ramulosa</u>
" <u>rubida</u>	" <u>viscosa</u>
" <u>viminalis</u>	<u>Oxylobium ellipticum</u>
<u>Geranium microphyllum</u>	<u>Pimelea humilis</u>
<u>Gnaphalium sp.</u>	<u>Pittosporum bicolor</u> fruit
<u>Hakea microcarpa</u>	<u>Plantago sp.</u>
" <u>lissosperma</u>	<u>Polystichum proliferum</u>
<u>Helichrysum antennarium</u>	<u>Pomaderris apetala</u>
" <u>dendroideum</u>	<u>Pultenaea juniperina</u>
" <u>scorpioides</u>	<u>Richea procera</u>
" <u>semipapposum</u>	<u>Rubus parvifolius</u> fls. & fruit
" <u>thyrsoides</u>	<u>Scleranthus biflorus</u>
<u>Hypericum gramineum</u>	<u>Senecio linearifolius</u>
" <u>japonicum</u>	<u>Senecio sp.</u>
<u>Juncus pallidus</u>	<u>Stylidium graminifolium</u>
<u>Lagenophora stipitata</u>	<u>Themeda australis</u>
<u>Leptorhynchus squamatus</u>	<u>Viola hederacea</u>
<u>Leptospermum lanigerum</u>	<u>Wahlenbergia consimilis</u>
<u>Leptospermum nitidum</u>	

PLANTS RECORDED AT LAKE ECHO VIA BASHAN PLAINS 29.3. '75

<u>Acacia dealbata</u>	<u>Helichrysum scorpioides</u>
<u>Acaena anserinifolia</u>	<u>Hydrocotyle sp.</u>
<u>Acaena ovina</u>	<u>Hymenanchera angustifolia</u> fruit
<u>Ajuga australis</u>	<u>Leptorhynchus squamatus</u>
<u>Coprosma sp.</u>	<u>Leucopogon hookeri</u>
<u>Cyathodes parvifolia</u>	<u>Olearia algida</u>
<u>Eucalyptus amygdalina</u>	<u>Poa sp.</u>
<u>Eucalyptus pauciflora</u>	<u>Ranunculus sp.</u>
<u>Geranium microphyllum</u>	<u>Veronica gracilis</u>
<u>Hakea lissosperma</u>	<u>Wahlenbergia consimilis</u>
<u>Haloragis sp.</u>	