



# The Tasmanian Naturalist

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## A NOTE ON PRIME SEAL ISLAND

J.S. Whinray

PRIME SEAL ISLAND, about 2200 acres in area, lies eight miles off the middle of the west coast of Flinders Island. It is a long narrow island made up of four hummocky granite hills which run from the south end to Prime Seal Point (the north end.) A limestone and limesand veneer covers much of the surface of the island. Grazing began on Prime Seal over a century ago and periodic burning, to improve the grazing, seems to have been the main cause of the reduction in area of the native woodland and shrubland. The remaining remnants of these are fire-modified stands of different age and composition. Prime Seal is still burned periodically. The last two firings were in the late summers of 1967 and 1971.

Tussock grassland is now the major vegetation type and covers about half of the island. The main pasture species are introduced grasses and clovers which grow between the tussocks. During my visits they were mostly too immature to be determined. However Fern Grass \*Catapodium rigidum, Hare's Tail \*Lagurus ovatus and Yorkshire Fog \*Holcus lanatus were noticed.

A list of plants I collected or noted is given below. The most unusual species is a heath called Coast Groundberry Acrotiche cordata. This had not been recorded for Tasmania before I found it on Flinders Island in January 1965 (Whinray, MS). On Prime Seal only three bushes of it were found. These were on the north west slope of North Hill. Specimens were lodged at Melbourne and Hobart. Another unusual species on Prime Seal is a Velvet Bush Lasiopetalum discolor. It was first collected there by Gunn in the 1830s or 1840s (J.H. Willis, pers. comm.). Its distribution elsewhere is the north western coast of Tasmania, South Australia and Western Australia. Some lichens were collected and lodged at Melbourne. Only two species have been determined so far by Mr. Rex Filson. They are Teloschistes chrysothalmus (L.) The. and Xanthoria parietina (L.) Beltr. and came from Prime Seal Point.

Redbellied Pademelons Thylogale billardieri were recorded for the island as early as 1828 (Scott, 1828) and were plentiful during my visits in 1965 and 1966. I was given the heads of twenty two Pademelons shot during one of the 1966 visits and

donated them all to the Monash University Zoology Department. Five of these were later lodged at the National Museum of Victoria (MEL 8024, 8057-8060). One specimen of the Southern Marsupial Mouse Antechinus minimus from Prime Seal was lodged at the British Museum (Natural History) in 1858 (Thomas, 1888). There are no later records. Brushtail Opossums Trichosurus vulpecula were introduced from Flinders Island in the 1920s (Frank Jackson, pers. comm.) and were present still in 1966 (J. W. Wheatley, pers. comm.). House Mice Mus musculus, Feral Cats Felis catus and Southeastern Water Rats Hydromys chrysogaster were present in the 1920s and 1930s (Frank Jackson, pers. comm.) and should still occur there.

I saw a Black Tiger Snake Notechis ater on the island in 1965. Next year I collected some skinks and lodged them at the National Museum of Victoria. The species obtained were White's Skink Egernia whitii, Metallic Skink Leiopisma metallicum, Threelined Skink Leiopisma trilineatum and the Tasmanian endemic Green Skink Leiopisma ocellatum.

There was no time for bird watching, but two Peafowl \*Pavo cristatus were flushed from coastal scrub in 1965. This species was introduced from West Sister Island in the 1920s or 1930s (Frank Jackson, pers. comm.). In August 1966 two Cape Barren Geese Cereopsis novaehollandiae were seen on Prime Seal Point. Prime Seal is shown on some charts as Hummock Island.

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- Whinray, J. S. Manuscript. Some new records of plants on Bass Straits Islands.

### List of Prime Seal Island Plants, 1965 and 1966

An asterisk marks an introduced species, (M) indicates a species determined at the National Herbarium, Melbourne, and (B) an Australian plant that does not occur further south than the Bass Straits islands.

#### FERNS

Pteridium esculentum Austral Bracken

#### Centrolepidaceae

Centrolepis strigosa Hairy Centrolepis

#### MONOCOTYLEDONS

##### Cupressaceae

Callitris rhomboidea Oyster Bay Pine

##### Poaceae

Spinifex hirsutus Hairy Spinifex

Festuca littoralis Shore Fescue

\*Catapodium rigidum Fem Grass

\*Lagurus ovatus Hare's Tail

Stipa teretifolia Prickly Speargrass

\*Holcus lanatus Yorkshire Fog

##### Cyperaceae

Scirpus nodosus Knobby Clubrush

Lepidosperma gladiatum Coast Swordsedge

#### DICOTYLEDONS

##### Casuarinaceae

Casuarina stricta Coast Sheoak

##### Urticaceae

Urtica incisa Scrub Nettle

Parietaria debilis Forest Pellitory

##### Polygonaceae

Muehlenbeckia adpressa Climbing Lignum

\*Rumex acetosella Sheep Sorrel

##### Chenopodiaceae

Atriplex cinerea Coast Saltbush

Rhagodia baccata Seaberry Saltbush

\*Chenopodium murale Nettleleaved

- Threlkeldia diffusa Wallaby Saltbush  
Salicornia quinqueflora Beaded Glasswort  
 Aizoaceae  
Disphyma australe Rounded Noonflower  
Carpobrotus rossii Karkalla  
Tetragonia amplexicoma Bower Spinach  
Tetragonia tetragonoides New Zealand Spinach  
 Portulacaceae  
Calandrinia calyptrata Pink Purslane  
 Caryophyllaceae  
 \*Stellaria media Common Chickweed  
 \*Cerastium fontanum Sticky Mouseear Chickweed  
 (M) Sagina procumbens Creeping Pearlwort  
 \*Polycarpon tetraphyllum Fourleaved Allseed  
 Ranunculaceae  
Clematis microphylla Small-leaved Clematis  
 Cruciferae  
 (M, B) Hymenolobus procumbens Oval Purse  
 Crassulaceae  
Crassula sieberiana Austral Stonecrop  
 Pittosporaceae  
Bursaria spinosa Sweet Bursaria  
 Rosaceae  
Acaena anserinifolia Bidgee Widgee  
 Mimosaceae  
Acacia sophorae Coast Wattle  
 Fabaceae  
 (M) Pultenea tenuifolia Dwarf Bushpea  
 Geraniaceae  
 \*Erodium cicutarium Common Heronsbill  
 Oxalidaceae  
Oxalis corniculata Creeping Woodsorrel  
 Zygophyllaceae  
 (M, B) Zygophyllum billardieri Coast Twinleaf  
 Rutaceae  
Correa alba White Correa  
 (M) Correa reflexa Green Common Correa  
 Polygalaceae  
Comesperma volubile Love Creeper  
 Euphorbiaceae  
Phyllanthus gunnii Shrubby Spurge  
 (B) Beyeria leschenaultii Pale Turpentinebush  
 Sapindaceae  
Dodonea viscosa Giant Hopbush  
 Rhamnaceae  
Pomaderris apetala Dogwood  
Pomaderris oraria  
 Sterculiaceae  
 (M) Lasiopetalum discolor Velvet Bush  
 Dilleniaceae  
Hibbertia sericea Erect Guineaflower  
 Thymeleaceae  
Pimelea serpyllifolia Thyme Riceflower  
 Myrtaceae  
Leptospermum laevigatum Coast Teatree  
Kunzea ambigua White Kunzea  
 Epacridaceae  
Leucopogon parviflorus Coast Beardheath  
 (M, B) Acrotriche cordata Coast Groundberry  
 Apocynaceae  
Alyxia buxifolia Sea Box  
 Convolvulaceae  
Dichondra repens Kidney Weed  
 Labiatae  
 \*Marrubium vulgare White Horehound  
 Solanaceae  
 \*Lycium ferocissimum African Boxthorn  
 Myoporaceae  
 (M) Myoporum insulare Boobialla  
 Rubiaceae  
Galium australe Austral Bedstraw  
 Asteraceae  
Brachycome diversifolia var. maritima Tall Daisy  
 (M) Olearia phlogopappa Dusty Daisybush  
Olearia axillaris Coast Daisybush  
Olearia ramulosa Twiggy Daisybush  
Gnaphalium indutum Tiny Cudweed  
Gnaphalium luteo-album Jersey Cudweed  
Apalochlamys spectabilis Showy Cassinia  
Helichrysum leucopsidium Satin Everlasting

<u>Helichrysum paraliu</u>	Coast Everlasting	* <u>Carduus tenuiflorus</u>	Winged Slender
<u>Calocephalus brownii</u>	Cushion Daisy		Thistle

### A NEW GREENHOOD FOR TASMANIA

J. S. Whinray

ON Christmas Day 1968 I found by accident a few plants of a greenhood orchid about 400 yards north-north-east of the summit of Walker's Hill in the Darling Range, Flinders Island, Tasmania. The locality, about 1100 feet in altitude, carried Paperbark Teatree Melaleuca ericifolia scrub, which is all that remains of the former eucalypt forest. Of the three specimens taken, one flower was sent to Mr. J. H. Willis at the National Herbarium of Victoria, and the remaining flower and bud were sent to the University of Tasmania Herbarium. Mr. Willis determined the specimen as the Blunt-tongue Greenhood Pterostylis obtusa and commented that it seemed to be a new record for Tasmania.

I intended, in an article on Bass Straits plants, to claim my collection as the first Tasmanian record. Recently, however, Mr. Willis mentioned the species again. He wrote that he had come across, at the National Herbarium, a collection obtained at 3000 feet on Mount Wellington, Tasmania, on 25/5/1966 and labelled as "a form of Pterostylis decurva." After examining it Mr. Willis concluded "that this collection by Miss Pat Palmer is really referable to Pterostylis obtusa, thus antedating your record for Flinders Island by nearly three years."

So this gives two Tasmanian records of the Blunt-tongue Greenhood. It seems likely that further collecting could result in the finding of more Tasmanian localities for this species. As yet, though, I have not found Blunt-tongue Greenhoods anywhere else in the Furneaux Group.

The Blunt-tongue Greenhood is described on pages 87-88, and figured on plate 323, of *Orchids of Australia* by W. H. Nicholls, 1969

### THE STATUS OF THE WHITE-BACKED MAGPIE

D. G. Thomas

(Concluded from *Tasmanian Naturalist* No. 26)

### Change in Distribution

Question 6 read - "Has there been a change in distribution, i. e. are magpies now restricted to only parts of the area or have they moved to different parts of the area?"

Only 66 contributors answered this question; thirty one considered that there had been a change in distribution, 35 to the contrary. This is a difficult question to interpret in view of the magpie's group territory. Some losses were almost certainly caused by groups shifting their nesting territories. Gains were recorded as birds extended their range as additional habitat became available, mainly because the bush has been cleared, particularly on King Island. Losses following the felling of nesting trees were recorded.

### Present Status

Question 7 read as follows - "What do you consider to be the present status of the Magpie?" Contributors were asked to use one of the categories "very common", "common", "rare", "local", "absent".

Contributors were asked to use one of the categories "very common", and "common", 1 to "rare" and "local", and 0 to "absent". These values were entered in the appropriate square of the 10,000 yard grid. The mean value was calculated for each square. A mean value of 0.1 to 1.0 was recorded as "1", a mean value greater than 1.0 as "2", and a value of 0 was entered as "0". A blank square indicates that there were no returns for that square. The present distribution of magpies again corresponds well with the distribution of sheep as given by Scott (in Davies 1965).

### Dates of Changes

Question 8 read as follows - "If a change has occurred, or if a trend is thought to exist, is this in your opinion a recent event or part of a long term trend?"

The answers received can be classified as follows :

Part of a long term trend	decrease 27	increase 13
A recent event,	decrease 6	increase 16
No Change,	22	

In combination with the mapped distributions this suggests that there has been a long term decrease in some areas, probably in the North-West, North-East and in the outer suburbs of Hobart. It appears that the magpie has disappeared from the North-West, but this must have occurred before 1958 (Sharland 1958). In view of Littler's remarks it may be that it was never common there. The number of recent increases far outweighs the number of decreases.

The approximate dates, where known, when changes began were analysed. Omitting data for earlier than 1930 because of the few observations, the number of decreases appears to be sensibly constant. However, when allowance is made for decreasing number of returns referable to events in the past (i.e. fewer contributors had experienced of the period 1931 - 1940 than 1941-1950, and so on) it is apparent that the frequency of decreases has not increased with time and may even have decreased. On the other hand, the number of increases has almost certainly increased since 1940. The picture, then, is of an arrested decline with evidence of recovery, particularly since 1960.

### Causes of Changes

Question 9 read - "If you consider a trend exists, or that there has been a change in status, which 3 of the following factors (and in what order) do you consider to be the most important in bringing this about? (If you consider other factors, not listed, to be important, please include them at the bottom of the list)."

Four points were given to the factor listed as most important, three for the next most important, two for the next, and one point for all other factors listed as contributing to the change. The results, summed over all returns are

TABLE II

Factors thought to be contributing to changes ( see text for method of scoring)

	<u>Decrease</u>	<u>Increase</u>
More or less disturbance	3	3
More or fewer road deaths	9	
More or less disease	6	
Loss or gain in habitat	47	23
Increase or decrease of toxic chemicals	30	
Increase or decrease of use of 1080	37	4
Other changes in agriculture	32	37
Increased or decreased breeding success	32	27
Change in habits		9
Increase or decrease in food supply	47	45
Increase or decrease in irresponsible shooting	16	3
Increased interbreeding	1	
Increased control of feral cats		4
Bush Fires	14	
Increased competition from other species	7	
Drought	3	
Increased predation	5	
Move from nearby areas that become unsuitable		4

given in Table II, in which the factors with the highest number of points were those generally considered to be most important. However, a large total does not establish a factor as a proven cause of change because the totals are derived from subjective opinions.

Loss of habitat and decrease of food supply are considered to be the most important causes of decrease. Both are inter-related, as are "other changes in agriculture" and "decreased breeding success". Increase of habitat, increased food supply, other changes in agriculture, and increased breeding success are the four most important reasons given for increases. These opinions strengthen the conclusion drawn earlier that the magpie, and its distribution, is determined by agricultural practice.

The use of pesticides and 1080, both of which score heavily as reasons for decreases, needs further examination. In view of the publicity given to toxic chemicals in recent years it is heartening that these items did not score even more heavily than they did. Allowing for some inevitable bias, it would appear that direct poisoning of magpies has not been serious. This is a generalization and may not apply to certain areas. For example, in fruit growing areas, such as the Huon, the magpie may be absent because toxic chemicals are used extensively, either through direct poisoning or through the reduction of insect numbers below the level necessary to support magpies. It is difficult to see how 1080 could directly affect the magpie which is almost entirely insectivorous. Ian Rowley (pers. comm.) who has conducted extensive rabbit poisoning trials on behalf of C. S. I. R. O. considers that magpies will not take carrots or apples, the major baits for 1080, and that it is doubtful whether they eat poisoned rabbits. Magpies at carcasses are probably foraging for insects.

He has recorded a few killed by eating poisoned oats in New South Wales. The use of 1080 may have indirect effects. One contributor suggested that a reduction in the number of rabbits has led to increased predation on magpie nestlings by raptorial birds.

#### DISCUSSION

The White-backed Magpie is restricted to settled areas in Tasmania, is mainly sedentary, is conspicuous and noisy, is well known to the general public, and cannot be confused with any other species. For such a species the method used in this enquiry is perfectly sensible, although there are few other species in Tasmania to which it could be applied.

The validity of this type of enquiry has been discussed by Prestt (1965). His conclusion can be usefully restated: "In assessing the value of this enquiry, which obviously has its limitations as it is necessarily largely based on subjective impressions, it should be appreciated that in its absence these events would in the main have remained unco-ordinated and unpublished."

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BIRDS SEEN AT LOW ROCKY CAPE - BIRCH INLET, JANUARY 1969

- |   |  |
|---|--|
| Little Penguin - 1 beach washed, Little Rocky River | White-breasted Sea Eagle - 1 Lower Rocky Point |
| Brown Quail - Wanderer River                        | Brown Hawk - 1 seen                            |
| Brush Bronzewing                                    | Black Cockatoo - common, Lower Rocky Point     |
| Native Hen - 1 heard, Lower Rocky Pt.               | White Cockatoo - common, Lower Rocky Point     |
| Short-tailed Shearwater - large numbers off coast   | Green Rosella - nesting                        |
| Black Cormorant - several                           | Ground Parrot - 6 seen in Button Grass         |
| Silver Gull - uncommon. 1 nest c/1                  | Welcome Swallow common                         |
| Pacific Gull  | Tree Martin - common                           |
| Plover sp. - egg found                              | Grey Fantail - several seen                    |
| Pied oystercatcher - numerous                       | Grey Shrike-Thrush - several                   |
| Sooty Oystercatcher numerous                        | Brown Scrub Wren - Fairly common in some areas |
| Hooded Dotterel                                     | Southern Emu Wren - 6 seen, not common         |
| Red-capped Dotterel                                 | Superb Blue Wren - several seen                |
| Japanese Snipe Christmas Junction Creek area        | Yellow-tipped Pardalote -                      |
| White-faced Heron - 1 Lower Rocky Inlet             | Crescent Honeyeater - numerous                 |
| Black Swan - 1 pair, Birch Inlet                    | Pipit - several seen                           |
| Black Duck - Common                                 | Black Currawong                                |
| Chestnut Teal                                       | Forest Raven - common                          |
| Grey Teal   |  |

(A list of plants collected by Mr. Hume is available at the Queen Victoria Museum, Launceston - Ed.)