A PRELIMINARY LIST OF VERTEBRATE FAUNA FROM THE PROPOSED KYBULUP RESERVE

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INTRODUCTION

The proposed Kybulup Reserve comprises some 30,000 ha land between Fitzgerald River National alienated crown (FRNP) and Cocanarup Timber Reserve. It is bound to the east the Ravensthorpe-Hopetoun Road and to the west by farmland in the vicinity of West River. Three farms and several small holdings are enclaves within the proposal, which is bisected in a north by the Phillips River. The proposal direction south major land forms; a greenstone belt in the west. Cambrian granitic country in the north, and some marine plain in the south-east.

Data for this list are derived from three sources: Sites 60A, 61A, 64E were systematically surveyed for vertebrate fauna as part of the FRNP survey, (see Chapman and Newbey 1987). Sites KR1 - KR6 were surveyed from small mammals as part of a reassessment of the distribution of the Heath Mouse in the district.

Each site had a line of 20 Elliott traps run for five consecutive nights in December '87 and January '88. Traps were baited with universal bait, mammals were identified, weighed, marked to identify re-captures, and released. Additionally I have used numerous diary entries for fauna, particularly birds and frogs accumulated over some eight years residency in the district.

It should be emphasized that this list is PRELIMINARY only; in no way does it diminish the need for a comprehensive survey of the proposed reserve's biota. Sites KR1 - KR6 were only principally surveyed for mammals, and the intensity of sampling was very low.

Attachment 1 is a list of mammal species identified from Barn Owl accumulated remains from a Salmon Gum tree at KR6.

Attachment 2 is a summary statement of knowledge about <u>Pseudomys-shortridgei</u> in W.A. Its principal objective is to encourage further research.

| X Species present | 60A | 61A | 64E | KR1 | KR2 | KR3 | KR4 | KR5 | KR6 | , |
|----------------------------|-----|-----|------|------|-------|-----|-----|--------|--------|-----|
| | | | | | | | | | | |
| EMU | | | | | | | | | | 2 |
| PELICAN | | | | | | | | | | 3 |
| HOARY-HEADED GREBE | | | | | | | | | | 3 |
| LITTLE BLACK CORMORANT | | | | | | | | • | | 3 |
| LITTLE PIED CORMORANT | | | | | | | | - 4 | | . 3 |
| WHITE-FACED HERON | | | | | | • | | | | 7 |
| BLACK SWAN | | | | | | | | | | 2 |
| MOUNTAIN DUCK | | | | | | | | | | > |
| BLACK DUCK | | | | | | | | | | 2 |
| GREY TEAL | | | | | | | | | | 2 |
| CHESTNUT TEAL | | | | | | | | | | 3 |
| BLUE-WINGED SHOVELLER | | | | | | | | | | > |
| WOOD DUCK | | | | | | | | | | 3 |
| BLACK-SHOULDERED KITE | | | | | | | | | | 3 |
| SQUARE-TAILED KITE | | | | - F | | | | | | 3 |
| BROWN GOSHAWK | | | | | | | | | 196 | > |
| WEDGE-TAILED EAGLE | | | | | | | | | | > |
| SPOTTED HARRIER | | | | | | | | | | > |
| BROWN FALCON | | | | | 10.00 | | | | | 7 |
| AUSTRALIAN KESTREL | | | 4.10 | | | | | | Lagger | > |
| MALLEE FOWL | | | | 8-40 | | | | | 200 | X |
| BLACK-TAILED NATIVE HEN | | | | | | | | | | 3 |
| COOT | | | | | | | 4 | | | Х |
| AUSTRALIAN BUSTARD | | | | | | | | | | 3 |
| BANDED PLOVER | | | | | | | | | | X |
| BLACK-FRONTED PLOVER | | | | | | | | | | У |
| GREENSHANK | | | | | | | | | | Х |
| COMMON BRONZEWING | | | | X | | | | | X | 2 |
| BRUSH BRONZEWING | | | | | | X | X | X | | |
| CRESTED PIGEON | | | | | | | | 12.000 | | X |
| PURPLE-CROWNED LORIKEET | | X | | | | | | | X | Х |
| REGENT FARROT | | | | | | | | | | X |
| RING-NECKED PARROT | X | | | | | | X | | X | X |
| RED-CAPPED PARROT | - | | | X | | | - | | X | X |
| ELEGANT PARROT | | | ÷ | | | | | | | Х |
| CARNABYS COCKATOO | | | | | | · | · | - 3 | | X |
| GALAH | - 1 | | | | | | | | | N |
| PALLID CUCKOO | • | | | | | | | | | X |
| FAN-TAILED CUCKOO | - | | | | | | | 1 | X | X |
| HORSEFIELD'S BRONZE CUCKOO | X | | | | • | * | | • | X | X |
| SHINING BRONZE CUCKOO | | *** | | | • | | • | • | 21 | X |
| BARN OWL | | • | | • | | • | •: | • | • | X |
| BOOBOOK OWL | • | • | • | • | • | | • | • | • | X |
| TAWNY FROGMOUTH | • | • | • | | • | * | X | • | • | X |

^{*} Other localities with proposed reserve.

| X Species present | 60A | 61A | 64E | KR1 | KR2 | KR3 | KR4 | KR5 | KR6 | <u> </u> |
|---------------------------|-----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | | | | | | | | |
| AUSTRALIAN OWLET NIGHTJAF | ₹ . | | | | | | | | X | X |
| SPOTTED NIGHTJAR | | | | | | | | | | \mathbf{X} |
| LAUGHING KOOKABURRA | | • | | | | | | | \mathbf{X} | X |
| SACRED KINGFISHER | * | | | | | | | | \mathbf{X} | \mathbf{X} |
| RAINBOW BEE-EATER | | | | | | | | | | X |
| WHITE-BACKED SWALLOW | | | | | | | | | | |
| WELCOME SWALLOW | • | | | | | | | | | X |
| TREE MARTIN | | | | | | | | | \mathbf{X} | |
| RICHARD'S PIPIT | | | | | | | | | | X |
| BLACK-FACED CUCKOO SHRIKE | Ξ . | X | | | | | | | X | \mathbf{X} |
| WHITE-WINGED TRILLER | | | | | | | | • • • | | |
| YELLOW ROBIN | X | | | | | | | | | |
| GOLDEN WHISTLER | X | | \mathbf{X} | \mathbf{X} | | | | | | |
| GREY SHRIKE THRUSH | | X | X | \mathbf{X} | | | | | \mathbf{X} | X |
| CRESTED BELLBIRD | | * | • | \mathbf{X} | \mathbf{X} | X | X | \mathbf{X} | | |
| WESTERN WHIPBIRD | | | | \mathbf{X} | \mathbf{X} | \mathbf{X} | \mathbf{X} | X | | X |
| GREY FANTAIL | X | | | | | | | | \mathbf{X} | |
| WILLIE WAGTAIL | | | | | | | - | | | X |
| RESTLESS FLYCATCHER | • | | | * | | | | | \mathbf{X} | |
| SOUTHERN SCRUB ROBIN | | | \mathbf{X} | \mathbf{X} | | | | X | | X |
| WHITE-BROWED BABBLER | | | X | \mathbf{X} | | | | | X | |
| WESTERN FLYEATER | | | | | | | | | | X |
| WEEBILL | X | | X | | X | | 15.5 | | X | |
| BROAD-TAILED THORNBILL | X | | | | \mathbf{X} | | | X | | |
| YELLOW-RUMPED THORNBILL | | | | | | | | | X | |
| WHITE-BROWED SCRUB WREN | X | | X | \mathbf{X} | | Х, | X | | | |
| SHY HYLACOLA | | | X | | | | | | | X |
| CALAMANTHUS | | 4. | | | | | | | | |
| BLUE-BREASTED FAIRY WREN | | | X | X | X | | | | | \mathbf{X} |
| SOUTHERN EMU WREN | | | | | | \mathbf{X} | X | | | |
| SPOTTED PARDALOTE | ? | ? | ? | | | | | • | | |
| YELLOW-RIUMPED PARDALOTE | ? | ? | ? | | | | • | | | |
| STRIATED PARDALOTE | X | \mathbf{X} | X | | | | | | X | |
| GREY-BREASTED WHITE-EYE | X | X | | | | | | | | |
| BROWN HONEYEATER | | | | | | \mathbf{X} | \mathbf{X} | | | |
| YELLOW-PLUMED HONEYEATER | | X | | | | | | | \mathbf{X} | |
| PURPLE GAPED HONEYEATER | X | X | X | X | | | | • | • | \mathbf{X} |
| WHITE-EARED HONEYEATER | X | | • | | • | | | | | • |
| BROWN-HEADED HONEYEATER | | \mathbf{X} | X | | • | | | | | |
| WHITE-NAPED HONEYEATER | * | • | | • | | | | | X | |
| NEW HOLLAND HONEYEATER | X | \mathbf{X} | X | X | | | | X | • | |
| WHITE-CHEEKED HONEYEATER | | | | | | | X. | | • | • |
| TAWNY-CROWNED HONEYEATER | - | X | • | X | \mathbf{X} | X | X | • | | |
| SPINY-CHEEKED HONEYEATER | • | | • | | | | | | \mathbf{X} | X |
| RED WATTLE BIRD | X | X | | • | • | X | | | X | • |
| MAGPIE-LARK | • | • | • | | • | , | | | * | X |
| DUSKY WOODSWALLOW | | * | • | • | | • | | | | X |
| | | | | | | | | | | |

^{*} Other localities within proposed reserve.

TABLE 1.1 (Continued)

| X Species present | 60A | 61A | 64E | KR1 | KR2 | KR3 | KR4 | KR5 | KR6 | * |
|-------------------|-----|-----|--------------|-----|--------------|-----|--------------|--------------|--------------|--------------|
| | | | | | | | | | | |
| | | | | | | | | | | |
| GREY BUTCHERBIRD | | | | X | \mathbf{X} | | \mathbf{X} | | | X |
| PIED BUTCHERBIRD | | | | | | | | | | \mathbf{X} |
| AUSTRALIAN MAGPIE | | | | | | | | • | \mathbf{X} | X |
| GREY CURRAWONG | X | Λ | \mathbf{X} | | | | X | \mathbf{X} | X | X |
| AUSTRALIAN RAVEN | X | X | | | X | | | | | X |

^{*} Other localities within proposed reserve.

TABLE 1.2 MAMMALS TRAPPED IN KYBULUP RESERVE

| | | | | | | | | | To Annual Marie Service Marie | |
|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-------------------------------|---|
| X Species present | 60A | 61A | 64E | KR1 | KR2 | KR3 | KR4 | KR5 | KR6 | ж |
| | | | | | | | | | | |
| Macropus fuliginosus | | X | | | X | | | | | X |
| Macropus irma | | • | . • | | | | | | | X |
| Tarsipes rostratus | X | X | | | | | | • | | X |
| Cercartetus concinnus | X | X | | * | ٠ | | | | * | |
| Rattus fuscipes | | X | X | X | X | | X | | ٠ | X |
| Pseudomys occidentalis | | | | X | X | | • , | | | |
| Pseudomys shortridgei | | | X | | X | | X | - | | |
| Mus musculus | X | X | | X | | | | | | |

^{*} Other localities within proposed reserve.

TABLE 1.3 AMPHIBIANS & REPTILES RECORDED IN KYBULUP RESERVE

| X Species present | 60A | 61A | 64E | KR1 | KR2 | KR3 | KR4 | KR5 | KR5 | * |
|-----------------------------|------------|--------------|--------------|--------------|--------------|--------------|-----|-----|-----|--------------|
| | | | | | | | | | | |
| | | | | | | | | | | |
| Litoria cyclorynchus | • | * | | | | | | • | • | X |
| Heleioporus albopunctatus | | | • | | | | | • | | X |
| Limnodynastes dorsalis | • | | | • | • | • | | | • | X |
| Pseudophryne guentheri | | • | | | | | | | | X |
| Ranidella pseudinsignifera | * | ٠ | , , * | | * | | * - | | X | X |
| Diplodactylus granariensis | X | X | • | | | | | | | |
| Crenadactylus ocellatus | | | | | | | | | | X |
| Phyllodactylus marmoratus | | | | | | | | | | X |
| Phyllurus milii | X | \mathbf{X} | | | | | | 1.0 | | X |
| Ctenophorus maculatus grise | us. | | | | \mathbf{X} | \mathbf{X} | X | X | | X |
| Pogona minor | (K) | | | | X | | | 407 | | |
| Delma australis | | X | | | | | | | | |
| Pygopus lepidopodus | | | | | | | | | | X |
| Cryptoblepharus virgatus | | | | | | | | | | X |
| Hemiergis initialis | X | \mathbf{X} | | | | | | | | X |
| Hemiergis peronii | X | | | | | | | | | |
| Leiolopisma trilineatum | X | | | | | | | | • | |
| Lerista distinguenda | | X | | | | | | | | |
| Menetia greyii | | X | | | | | | | | |
| Morethia obscura | X | \mathbf{X} | | | | | X | X | | |
| Tiliqua rugosa | | | | | | | | | | \mathbf{X} |
| Tiliqua occipitalis | | | | | | | | | | |
| Varanus rosenbergi | | | | \mathbf{X} | X | X | | | | X |
| Ramphotyphlops australis | X | \mathbf{X} | | | | | | | | |
| Notechis scutatus | | | | | | | | | X | X |
| Pseudonaja affinis | | | | | | | | | | X |
| Rhinoplocephalus gouldii | | | | | | | | | | X |

^{*} Other localities with proposed reserve

VEGETATION FORMATION, MUIR CODE AND AUSTRALIAN MAP GRID FOR SITES

| | | MUIR CODE | AUSTRALIAN MAP G | RID REF. 1 | :50,000 |
|-----|-----------|-----------|------------------|------------|---------|
| | | | | | |
| 60A | WOODLAND | LAC | "COCANARUP" | 765.0, | 6262.1 |
| 61A | WOODLAND | LAi | "COCANARUP" | 767.0, | 6269.4 |
| 64E | MALLEE | KSi | "COCANARUP" | 766.8, | 6268.8 |
| KR1 | SHRUBLAND | SAC | "COCANARUP" | 770.0, | 6269.5 |
| KR2 | MALLEE | KSi | "RAVENSTHORPE" | 226.7, | 6272.9 |
| KR3 | MALLEE | KSr | "RAVENSTHORPE" | 227.5, | 6271.8 |
| KR4 | MALLEE | KSr | "COCANARUP" | 774.7, | 6262.7 |
| KR5 | MALLEE | KSi | "COCANARUP" | 772.9, | 6264.2 |
| KR6 | WOODLAND | Мi | "COCANARUP" | 771.7, | 6264.6 |

REFERENCE: CHAPMAN, A. & NEWBEY, K. R. (1987)

A Biological Survey of the Fitzgerald Area, Western Australia. Western Australian Heritage Committee

This work was done as part of a contract for the Department of Conservation and Land Management.

ATTACHMENT 2

Pseudomys shortridgei in Western Australia.

Since its simultaneous re-discovery in Fitzgerald River National Park (FRNP) and the Ravensthorpe Range in 1987, <u>Pseudomysshortridgei</u> has been located in the proposed Kybulup Reserve, which is half way between these two areas. Now known from six separate localities which are all in a continuum of uninterrupted bushland, it is likely that these populations share a common gene pool.

At each site with <u>P. shortridgei</u>, <u>Rattus fuscipes</u> is also present; the latter is always trapped more frequently. At two sites <u>Pseudomys occidentalis</u> is also present, at one <u>P. albocinereus</u> is also present. At the FRNP sites a suite of small mammals including <u>Tarsipes rostratus</u>, <u>Cercartetus concinnus</u>, <u>Sminthopsis griseoventer</u>, <u>S. granulipes</u> and <u>Parantechimus</u>-apicalis are also present.

Here is a potentially very interesting situation for mammal ecologists. Is there a competitive interaction between R. fuscipes and P. shortridgei, and how do the other Pseudomys spp. fit into the picture? Additionally P. shortridgei in W.A. seems to occupy a very different position in post fire seral succession than in Western Victoria. In this general area the alien Mus musculus is a comparatively rare mammal. Elsewhere where the small mammal fauna is depleted ulus is super abundant.

The purpose of this brief statement is to encourage mammal ecologists to the general area to investigate some of these situations, perhaps as Ph.D. projects. I am happy to provide data and details of localities etc., to potential researchers.

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