

APPENDIX 3

SPECIES PLANTED IN BOLD PARK

* = introduced species (note this includes non-native species)
 + = native Australian species not naturally occurring in Bold Park

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|--|--------------------------------------|
| + <i>Acacia microbotrya</i> | + <i>Grevillea tridentifera</i> |
| + <i>Acacia ?aneura</i> | * <i>Genista alba</i> |
| * <i>Amaryllis belladonna</i> | + <i>Hakea bucculenta</i> |
| + <i>Anigozanthos x flavidus</i> | + <i>Hakea francisiana</i> |
| + <i>Banksia ashbyi</i> | + <i>Hakea multilineata</i> |
| + <i>Banksia baxteri</i> | + <i>Hakea laurina</i> |
| + <i>Banksia burdettiana</i> | + <i>Hakea cucullata</i> |
| + <i>Banksia caleyi</i> | + <i>Hakea petiolaris</i> |
| + <i>Banksia hookeriana</i> | <i>Hibbertia cueniformis</i> |
| + <i>Banksia loricata</i> | (not the native population) |
| + <i>Banksia nutans</i> | + <i>Kunzea baxteri</i> |
| + <i>Banksia occidentalis</i> | + <i>Eremophila decipiens</i> |
| + <i>Banksia quercifolia</i> | + <i>Melaleuca cardiophylla</i> |
| <i>Banksia prionotes</i> | + <i>Melaleuca diosmifolia</i> |
| (not the native population) | + <i>Melaleuca lanceolata</i> |
| + <i>Banksia septum</i> | + <i>Melaleuca quinquinervia</i> |
| + <i>Banksia sphaerocarpa</i> | + <i>Melaleuca raphiophylla</i> |
| + <i>Banksia speciosa</i> | + <i>Melaleuca violacea</i> |
| + <i>Banksia victoriae</i> | + <i>Melaleuca</i> sp. |
| + <i>Callistemon</i> cv. "Captain Cook" | * <i>Melia azederach</i> |
| + <i>Calothamnus</i> sp. | * <i>Myrsiphyllum declinatum</i> cv. |
| + <i>Casuarina obesa</i> | * <i>Nerium oleander</i> |
| <i>Chamelaucium uncinatum</i> | * <i>Olea europea</i> |
| (several cultivars — not the | * <i>Washingtonia filifera</i> |
| native population) | * <i>Westringia dampieri</i> |
| + <i>Eucalyptus</i> aff. <i>foecunda</i> | |

VERTEBRATE FAUNA OF BOLD PARK, PERTH

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ABSTRACT

Bold Park, situated 11 km west of Perth and occupying coastal dunes, has the richest vertebrate fauna of any area in the metropolitan region. Sixty one birds, 29 reptiles, 3 frogs and 6 mammals (including 3 introduced species) have been recorded in the 300+ ha of bushland. Many additional bird species are associated with the adjacent wetlands of Perry Lakes. The endangered Black-lined Snake (*Vermicella calonotos*) and the Painted Button-quail, White-winged and Splendid Fairy-wrens are now very rarely seen in metropolitan areas. The significance of the Park as a conservation area for fauna is discussed.

INTRODUCTION

In the last decade there has been a remarkable upsurge in interest and commitment to the role of nature conservation in urban areas worldwide (Dickman & Doncaster 1987, Goode 1989 and references therein). Fundamental to this focus is the need for a thorough documentation of the natural resources in urban areas for both conservation and educational purposes (Feinsinger 1987). This paper documents the present day vertebrate fauna of one of the largest and least altered areas of natural bushland remaining in the Perth metropolitan area.

Bold Park occupies an area of over 300 ha and is situated close to the coast, 11 km west of Perth. The area is not only relatively large, but encompasses several landform and soil types and has a rich and diverse vegetation assemblage consisting of over 350 plant species Keighery *et al.* (1990). Maps in Keighery *et al.* indicate the location of Bold Park and the boundaries of the different vegetation associations.

The region around Bold Park and consisting of what are now Perry Lakes and Reabold Hill, was taken up in the early years of selection for agriculture. The general area was purchased from Mr Perry by the Perth Council in 1919 and set aside as endowment lands. With the rapid spread of metropolitan Perth in the mid and later 1900's there have been major modifications imposed on the region surrounding Bold Park. These modifications include the alienation of land for urban development, enlarging and extending roads and an increase in the frequency of fires and predators in the bushland resulting from encroaching urban areas. In 1981 the region of Bold Park was recommended for a reserve (M47) under the Conservation Through Reserves Committee Report for the System 6 area (CTRC 1981) in recognition of its importance in preserving our natural landforms, soils, vegetation and fauna.

In 1986 the Western Australian Museum undertook a survey of the ground vertebrate fauna of Bold Park as part of its study to determine the distribution, relative abundance and habitat preferences of native species in the Perth metropolitan region.

METHODS

Since December 1986 vertebrate fauna in Bold Park has been documented from opportunistic observations and fenced pit-fall traps. Sampling was over five days at monthly intervals during 1987, but during 1988 and 1989 was concentrated in spring and summer.

Six pit traps of 50 cm deep, 17 cm diameter PVC piping were placed 7 m apart and connected by a 50 m long 30 cm high fence of aluminium flywire mesh. Each pit trap was covered at the base by flywire.

Four principal formations were sampled: Tuart *Eucalyptus gomphocephala* Woodland, *Banksia* Woodland, *Dryandra sessilis* Tall Shrubland and Mixed coastal Heath. Extensive trapping has also been undertaken in numerous other heath and shrubland sites (Jiang unpubl. data) in Bold Park in a related study focussing on habitat use by the herpetofaunal assemblage.

All species of reptile, amphibian and mammal were measured and released. Birds were recorded opportunistically whilst checking the fenced pitlines, generally between 5 am and 7 am.

RESULTS

Mammals

Since 1986 only one species of native mammal has been recorded in Bold Park, the Brushtail Possum, *Trichosurus vulpecula*. This species can be seen in the Flooded Gums, *Eucalyptus rudis* around Perry Lakes and in the Tuart woodlands of the swales; nowhere is it abundant. The Western Grey Kangaroo, *Macropus fuliginosus* had a small family group in the Park until 1986 (B. Connell pers. comm.) but no recent sightings or signs of the species are evident now. The introduced Mouse, *Mus musculus* is by far the most widespread and abundant mammal in the Park, occupying all habitats. Rabbits, *Oryctolagus cuniculus*, Foxes, *Vulpes vulpes* and Cats, *Felis catus* can also be observed in all areas, attesting to the success of introduced species.

Although no mist-netting has been undertaken to assess the bat fauna present, nocturnal observations suggest the presence of at least two species, one of which, the Mastiff Bat, *Tadarida australis*, can be identified from its characteristic call.

An examination of the records of the Western Australian Museum indicate the richness of the species present in the western suburbs in the past. Table I is a list of species that occur or may have occurred in Bold Park, and the date and location of their last sighting or record.

Birds

Sixty-one species of birds (Table 2) have been recorded in the bushland parts of Bold Park during the past 3 years. Another twenty species have been recorded on or around Perry Lakes (Table 2). Other species, especially migrants such as cuckoos, aerial birds of prey, and birds using the Park while in transit through the metropolitan area, are likely to be recorded during additional surveys.

The most abundant birds in Bold Park are the honeyeaters. The sedentary Singing Honeyeater feeds on all species of *Banksia* and is most abundant throughout the *Banksia* woodland. Seasonally, numbers increase in the western parts of the Park when *Calothamnus quadrifidus* and *Templetonia retusa* are in bloom. The Brown Honeyeater is the commonest bird in the Park especially in the *Dryandra sessilis* thickets, *C. quadrifidus* shrubland and *Banksia* woodlands. It breeds in spring/early summer while *D. sessilis* is flowering.

The White-cheeked, New Holland and Tawny-crowned Honeyeaters mainly occur in the low shrublands on the western side of the Park and are chiefly attracted to *C. quadrifidus* blossom. the White-cheeked also moves into blossoming *D. sessilis* thickets in large numbers. The Red and Little Wattlebirds are mainly attracted to flowering *Banksias* with the Red Wattlebird frequently breeding in the Tuart woodlands and the Flooded Gums near Perry Lakes.

Some species, such as Australian Magpie and Australian Raven, are attracted to areas regularly frequented by people where they feed on food scraps. The Magpie-lark and Willie Wagtail are similarly mainly found in partly disturbed areas.

Breeding records of the Painted Button-quail in the Tuart Woodland site during spring are the only recent records of this species in near coastal parts of the coastal plain.

The Tuart woodlands provide nesting hollows for an array of species ranging from the tiny Striated Pardalote, and the Tree Martin to the various species of parrots and cockatoos all of which (except for Carnaby's and the Sulphur-crested Cockatoos) breed in Bold Park. The Striated Pardalote normally only nests in tree hollows but in October and November 1989 several were feeding young in nests in the quarry walls of the amphitheatre. During some years as many as twenty nests are present at the same time in the quarry walls (B. Connell pers. comm.).

Tall dead Tuart trees in the *Banksia* woodland provide resting trees for various birds of prey such as Black-shouldered Kite and Australian Kestrel.

Dense, long unburnt, shrublands around Reabold Hill are important to small insectivorous species such as White-browed Scrub-wren and Broad-tailed Thornbill. The two Fairy-wrens also require unburnt shrublands on the dunes on the western side of the Park.

In winter several species of small insectivorous birds move northwards through the Perth metropolitan area. During this period the Grey Fantail and Western Flyeater are abundant in Bold Park, as is the Spotted Pardalote in some years.

Herpetofauna

Three species of frogs and 29 reptiles (Table 3) have been recorded over the past 3 years, and museum records suggest several more may yet be recorded there.

The Turtle Frog, *Myobatrachus gouldii* is not dependent on water for development, has no tadpole stage and is found throughout the Park but is not abundant. Other burrowing frogs, *Heleioporus eyrei* (Moaning Frog) and *Limnodynastes dorsalis*, (Banjo Frog), are more common, although the former is infrequently captured on the western side of the main dune suggesting it is less vagile than the widespread *Limnodynastes dorsalis*.

The Western Bearded Dragon, *Pogona minor* is more abundant in vegetation where the shrub layer is well developed, while *Tympanocryptis adelaidensis* is confined to areas which have bare sand over which it forages. This species was captured only during November.

Three species of geckos occur in Bold Park. The arboreal Spiny-tailed Gecko, *Diplodactylus spinigerus* is common in all habitats with a well developed shrub layer, and consequently is absent from Tuart Woodlands where the Marbled Gecko, *Phyllodactylus marmoratus* is common, but is seldom seen on the ground and has never been pit trapped. The small areas of Quindalup dunes on the western extremities of the Park are the only areas where *Diplodactylus alboguttatus* has been recorded by us and F.H. Pough (pers. comm.), although B. Maryan (pers. comm.) has observed an individual more centrally.

Burton's Legless Lizard, *Lialis burtonis*, is the most abundant and widespread of the legless lizards and occupies all habitats in Bold Park. *Aprasia repens* is infrequently trapped, and then generally in Tuart Woodland, it is rare in all other sites. *Pletholax gracilis* is known from several captures in a dense mixed heath (Jiang, pers. comm.).

The skinks are the most numerous group of reptiles in the Park, and vary markedly in their abundance and use of habitat types. The fossorial *Lerista lineopunctulata* occurs in all habitats as does the epigeic *L. elegans*, *Hemiergis quadrilineata*, *Ctenotus fallens*, *Menetia greyi* and *Tiliqua rugosa*. The arboreal and widespread *Cryptoblepharus plagiocephalus* is not found in low heaths, whereas *Ctenotus lesueurii* is most abundant in them, and *Cyclodomorphus branchialis* is confined to them. The two species of *Morethia* have been captured in Banksia woodland on only one or two occasions while *Lerista praepedita* is known from the Banksia woodlands and *Dryandra* shrubland adjacent to Reabold Hill.

Two species of monitor *Varanus gouldii* and *V. rosenbergi* occur in the Park. Two individuals of the former have been captured in the south-west corner, and *V. rosenbergi* was sighted in the Reabold Hill area by one of us (JD). B. Connell (pers. comm.) has sighted monitors, presumably *V. gouldii*, frequently around Reabold Hill and the pine plantation.

The blind snake *Ramphotyphlops australis* has been trapped in all sites except the near-coastal heath, but never in large numbers.

The elapid snakes are represented by six species. The Dugite *Pseudonaja affinis* has not been caught in pitfall traps but has been observed in all areas of the Park. Five species of burrowing snake, *Vermicella* spp., have been trapped. The most abundant and widespread is Jan's Banded Snake, *V. bertholdi*, but the Black-striped Snake, *V. calonotos*, has also been trapped in our four study sites. The three other species were caught less frequently and in fewer sites.

B. Connell (pers. comm.) has recorded Tiger Snakes, *Notechis scutatus* on Stepenson Avenue on two occasions and believes that they may occur around Camel Lake; the last Museum record is from Herdsman Lake in 1989. He has also seen Carpet Pythons, *Morelia spilota* on several occasions.

Museum records indicate that several species may still occur in the area. These include the following (with the nearest suburb and date of last collection bracketed) skinks *Egernia kingii* (Scarborough 1978), *E. luctuosa* (Herdsman Lake 1968), *E. napoleonis* (North Beach 1963), *Leiopisma trilineatum* (Herdsman Lake 1978) geckos *Underwoodisaurus milii* (Claremont 1975), *Diplodactylus polyophthalmus* (Kings Park 1985), legless lizards (*Delma fraseri* (Hollywood <1960), *D. grayi* (Ocean Reef Wanneroo 1976), *Pygopus lepidopodus* (Hollywood <1960), the goanna *Varanus tristis* (Floreat Park 1965), snakes *Notechis curtus* (Bold Park 1964, City Beach 1972), *Rhinoplocephalus gouldii* (City Beach 1979), *Demansia reticulata* (Hollywood 1933).

DISCUSSION

Of all the vertebrate groups, mammals have fared worst at the hands of change since European settlement in Australia (Marlow 1958, Kitchener *et al.* 1980, How *et al.* 1987). Bold Park has similarly shown a marked decline in species judging from past museum records and our knowledge of the coastal areas less influenced by development.

There is a likelihood that several additional species to those recorded in Table 1 may have occurred in the Bold Park area in the last 100 years, but there are no positive records of their presence. Species such as the Tammar, *Macropus eugenii*, and Quokka, *Setonix brachyurus*, probably occupied one or several of the diverse vegetation types around Bold Park and Perry Lakes, however, there are no museum or literature records from the adjacent western suburbs.

All the small marsupial species appear to be locally extinct. That they occurred in the area is evidenced by early museum records and our knowledge of their habitat preferences and current occurrence in similar near coastal locations. The record of the Western Quoll from the Wembley Downs area may represent an escapee from captivity as there have been no other records of this species from urban areas since 1930.

It is possible that all five species of bats listed in Table 1 still occur in the region, however, regular fires that destroy roosting sites in hollow limbs and under bark have probably resulted in the loss of several species.

The use of the area by cattle, horses, sheep and camels (the latter were quarantined there around the turn of the century) has probably aided in the spread of several weed species within the Park, these in turn have provided fuel for increased fire frequency.

The bird assemblage consist of several species that are now threatened with local extinction. The breeding populations of Painted Button-quail in Bold Park and the White-winged and Splendid Fairy-wrens in of Bold Park and in adjacent areas (Wykes pers. comm.) represent very important refuge populations of these species in urban areas. Although not recorded in Kings Park by Tingay and Tingay (1982) the Variegated Fairy-wren has recently colonised Kings Park via the Swan River and now breeds in the Botanic Gardens. It may also colonise the south western sections of Bold Park from dunes to the west and south.

The principal value of Bold Park to the avifauna is its extent and diversity of habitat types. This diversity is responsible for species such as Grey Fantail, Spotted and Striated Pardalotes and Western Flyeaters using the area in May-June during their winter migrations to the north and the Rainbow Bee-eater and Sacred Kingfisher using the area during their spring migration southwards. The habitat richness also provides feeding and breeding refuge areas for many species that frequent suburban gardens. The relatively large area of bushland also provides suitable habitat for species such as hawks, kestrel and kites which forage over large areas. There have also been unconfirmed reports of nightjars (possibly Spotted) and the Masked Owl from the Bold Park bushland.

The three species of frogs were captured only after rain or on nights with high humidity. Only the Banjo Frog *Limnodynastes dorsalis* is both widespread and abundant.

The richness and diversity of the herpetofauna of Bold Park is the highest recorded for urban bushland in the Perth metropolitan area, and is comparable to a similar sized, but rural, study area 75 km north of Perth where Bamford (1986) recorded 35 reptile species.

Lizards account for 22 of the 29 species of reptiles recorded by us in Bold Park, with representatives of all 5 families present. This richness alone is remarkable for an isolated urban area and highlights the conservation value of the area.

Arboreal, fossorial and epigeic forms are all present in Bold Park suggesting that the assemblage has been little changed from its original composition, an observation supported by the presence of both species of *Varanus* still occurring in the region and the sightings of Carpet Pythons, albeit in very low numbers.

The Dugite and five species of burrowing snake *Vermicella* spp. still occur in the Park. These colourful and prominently marked burrowing species show major differences in dietary pattern (Shine 1984). The Southern Shovel-nosed Snake, *V. semifasciata* feeds exclusively on reptile eggs, while the remaining species feed principally on lizards but with different species preferences. The diversity of burrowing snakes is closely related to the diversity and abundance of fossorial and semi-fossorial lizard species in the Park, and together these form an important assemblage of reptiles in many habitats.

The importance of Bold Park bushland as a conservation area for vertebrates is illustrated by the rich assemblage of both bird and reptile species. The area is frequented by over 60 bird species of which three (the White-winged and Splendid Fairy-wrens and Painted Button-quail) have very restricted breeding populations in urban bushlands. Bold Park also has about 30 reptile species which is considerably more than the 17 species known from Kings Park (W.A. Museum records), and greatly in excess of the few species recorded at Star Swamp, Trigg Dunes and Mindarie Keys (see references) during short term environmental surveys.

Although Bold Park contains one species that is listed as rare and in need of protection (the burrowing Snake, *Vermicella calonotos*), the prime significance of the region lies in its relatively large area that provides essential habitats for resident and migratory bird species and a rich assemblage of reptiles. These groups could soon follow native mammals into a serious decline in urban areas without the protection of large areas of native bushland.

ACKNOWLEDGEMENTS

We would like to thank the Perth City Council for allowing us to undertake this study on land under their control. Peter Luff of the P.C.C. was helpful in providing background data on Bold Park. We are particularly grateful to Barry Connell for his generosity in providing extensive local expertise, data and commenting on an earlier draft of the manuscript. Jiang Wang Gao also allowed access to his unpublished data. Margaret Turpin, Michelle Pekovich and Sue Sheridan assisted with trapping while Karen, Jason and Emma How provided unstinting assistance on numerous occasions.

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Table I: List of mammal species known from Perth's western suburbs and the last known date of recording.

SPECIES	SCIENTIFIC NAME OF LAST RECORD	LOCATION AND DATE OF LAST RECORD
MONOTREMES		
Short-beaked Echidna	<i>Tachyglossus aculeatus</i>	The Boulevard 1985
MARSUPIALS		
Western Pygmy-Possum	<i>Cercartetus concinnus</i>	Scarborough 1939
Common Brushtail Possum	<i>Trichosurus vulpecula</i>	Bold Park 1988
Western Grey Kangaroo	<i>Macropus fuliginosus</i>	Bold Park 1986
Western Brush Wallaby	<i>Macropus irma</i>	Perth 1945
Western Brown Bandicoot	<i>Isodon obesulus</i>	Perth 1962
Chuditch (Western Quoll)	<i>Dasyurus geoffroii</i>	Wembley Downs 1969
Coastal Dunnart	<i>Sminthopsis griseoventer</i>	Karrakatta 1940
Honey Possum	<i>Tarsipes rostratus</i>	Shenton Park 1939
RODENTS		
House Mouse	<i>Mus musculus</i>	Bold Park 1989
Black Rat	<i>Rattus rattus</i>	City Beach 1989
Water-rat	<i>Hydromys chrysogaster</i>	Claremont 1927
BATS		
White-striped Mastiff-bat	<i>Tadarida australis</i>	Bold Park 1989
Gould's Wattled Bat	<i>Chalinolobus gouldii</i>	Perth 1985
Chocolate Wattled Bat	<i>Chalinolobus morio</i>	Perth 1951
Lesser Long-eared Bat	<i>Nyctophilus geoffroii</i>	Mt Hawthorn 1964
King River Eptesicus	<i>Eptesicus regulus</i>	Charles Street 1973
LAGOMORPHA		
Rabbit	<i>Oryctolagus cuniculus</i>	Bold Park 1989
CARNIVORA		
Cat	<i>Felis catus</i>	Bold Park 1989
Fox	<i>Vulpes vulpes</i>	Bold Park 1989

Table 2: List of bird species known from Bold Park. Birds only known from Perry Lakes and its margins are marked with an asterisk. Breeding species are marked (B).

* Australian Pelican <i>Pelecanus conspicillatus</i>	* Grey Teal <i>Anas gibberifrons</i>
* Little Black Cormorant <i>Phalacrocorax sulcirostris</i>	* Wood Duck <i>Chenonetta jubata</i>
* Little Pied Cormorant <i>Phalacrocorax melanoleucos</i>	* Musk Duck <i>Biziura lobata</i>
* White-faced Heron <i>Ardea novaehollandiae</i>	Blue-billed Duck <i>Oxyura australis</i>
* Great Egret <i>Egretta alba</i>	Black-shouldered Kite <i>Elanus caeruleus</i>
* Sacred Ibis <i>Threskiornis aethiopicus</i>	Brown Goshawk <i>Accipiter fasciatus</i>
* Black Swan <i>Cygnus atratus</i> (B)	Collared Sparrowhawk <i>Accipiter cirrocephalus</i>
* Mountain Duck <i>Tadorna tadornoides</i> (B)	Little Eagle <i>Aquila morphnoides</i>
* Black Duck <i>Anas superciliosa</i> (B)	Australian Kestrel <i>Falco cenchroides</i>
* Swamphehen <i>Porphyrio porphyrio</i> (B)	Peregrine Falcon <i>Falco peregrinus</i>
* Dusky Moorhen <i>Gallinula tenebrosa</i> (B)	Painted Button-quail <i>Turnix varia</i> (B)
	Grey Fantail <i>Rhipidura fuliginosa</i>
	Willie Wagtail <i>Rhipidura leucophrys</i> (B)
	Western Flyeater <i>Gerygone fusca</i>

* Coot <i>fulica atra</i> (B)	Weebill <i>Smicromis brevirostris</i>
* Black-fronted Plover <i>Charadrius melanops</i>	Broad-tailed Thornbill <i>Acanthiza apicalis</i>
* Black-winged Stilt <i>Himantopus himantopus</i>	Yellow-rumped Thornbill <i>Acanthiza chrysorrhoa</i> (B)
* Silver Gull <i>Larus novaehollandiae</i>	White-browed Scrub-wren <i>Sericornis frontalis</i>
Spotted Dove <i>Streptopelia chinensis</i>	White-winged Fairy-wren <i>Malurus leucopterus</i>
Laughing Dove <i>Streptopelia senegalensis</i> (B)	Splendid Fairy-wren <i>Malurus splendens</i>
Rainbow Lorikeet <i>Trichoglossus haematodus</i> (B)	* Clamorous Reed Warbler <i>Acrocephalus stentoreus</i>
Ring-necked Parrot <i>Platycercus zonarius</i> (B)	* Little Grassbird <i>Megalurus gramineus</i>
Western Rosella <i>Platycercus icterotis</i>	Australian Sittella <i>Daphoenositta chrysoptera</i>
Red-capped Parrot <i>Platycercus spurius</i>	Mistletoebird <i>Dicaeum hinundinaceum</i>
Elegant Parrot <i>Neophema elegans</i>	Spotted Pardalote <i>Pardalotus punctatus</i>
Carnaby's Cockatoo <i>Calyptrorhynchus latirostris</i>	Striated Pardalote <i>Pardalotus striatus</i> (B)
Galah <i>Cacatua roseicapilla</i> (B)	Grey-breasted Silveryeye <i>Zosterops lateralis</i> (B)
Sulphur-crested Cockatoo <i>Cacatua galerita</i>	Brown Honeyeater <i>Lichmera indistincta</i> (B)
Corella <i>Cacatua sp.</i> (B)	Singing Honeyeater <i>Meliphaga virescens</i> (B)
Pallid Cuckoo <i>Cuculus pallidus</i>	White-naped Honeyeater <i>Melithreptus lunatus</i>
Shining Bronze Cuckoo <i>Chrysococcyx lucidus</i>	New Holland Honeyeater <i>Phylidonyris novaehollandiae</i>
Horsefield's Bronze Cuckoo <i>Chrysococcyx basalis</i>	White-cheeked Honeyeater <i>Phylidonyris nigra</i>
Boobook Owl <i>Ninox novaeseelandiae</i>	Tawny-crowned Honeyeater <i>Phylidonyris melanops</i>
Barn Owl <i>Tyto alba</i>	Western Spinebill <i>Acanthorhynchus superciliosus</i>
Tawny Frogmouth <i>Podargus strigoides</i>	Little Wattlebird <i>Anthochaera chrysoptera</i>
Laughing Kookaburra <i>Dacelo gigas</i> (B)	Red Wattlebird <i>Anthochaera canunculata</i> (B)
Sacred Kingfisher <i>Halcyon sancta</i> (B)	Magpie-lark <i>Grallina cyanoleuca</i> (B)
Rainbow Bee-eater <i>Merops ornatus</i>	Australian Magpie <i>Cracticus tibicen</i> (B)
White-backed Swallow <i>Cheramoeca leucosterna</i>	Grey Butcherbird <i>Cracticus torquatus</i>
Welcome Swallow <i>Hirundo neoxena</i>	Australian Raven <i>Corvus coronoides</i> (B)
Tree Martin <i>Hirundo nigricans</i>	
Richard's Pipit <i>Anthus novaeseelandiae</i>	
Black-faced Cuckoo-shrike <i>Coracina novaehollandiae</i> (B)	
Rufous Whistler <i>Pachycephala rufiventris</i>	
Grey Shrike-thrush <i>Colluricincla harmonica</i>	

Table 3. Herpetofauna of Bold Park as determined by trapping between 1986 and 1989.

Site numbers are: 1 = coastal heath, 2 = *Dryandra sessilis* thicket, 3 = *Banksia* woodland, 4 = Tuart Woodland, 0 = sighting only.

		No. of captures in each site			
		1	2	3	4
AMPHIBIANS					
Leptodactylidae					
Moaning Frog	<i>Heleioporus eyrei</i>		12	15	-
Banjo Frog	<i>Limnodynastes dorsalis</i>	34	29	19	6
Turtle Frog	<i>Myobatrachus gouldii</i>	1	1	4	2
REPTILES					
Agamidae					
Western Bearded Dragon	<i>Pogona minor</i>	8	1	6	-
	<i>Tympanocryptis adelaidensis</i>	1	14	1	-
Gekkonidae					
Spiny-tailed Gecko	<i>Diplodactylus alboguttatus</i>	1	-	-	-
Marbled Gecko	<i>Diplodactylus spinigerus</i>	28	28	32	-
	<i>Phyllodactylus marmoratus</i>	-	-	0	0
Scincidae					
	<i>Cryptoblepharus plagiocephalus</i>	-	1	2	13
	<i>Ctenotus fallens</i>	114	33	49	20
	<i>Ctenotus lesueurii</i>	36	2	6	-

	<i>Cyclodomorphus branchialis</i>	7	-	-	-
	<i>Hemiergis quadrilineata</i>	53	100	135	132
	<i>Lerista elegans</i>	9	19	12	40
	<i>Lerista lineopunctulata</i>	26	14	22	7
	<i>Lerista praepedita</i>	-	3	4	-
	<i>Menetia greyii</i>	3	2	4	17
	<i>Morethia lineoocellata</i>	-	-	1	-
	<i>Morethia obscura</i>	-	-	2	-
Bobtail	<i>Tiliqua rugosa</i>	8	5	4	5
Pygopodidae			1	-	5
	<i>Aprasia repens</i>	1			
	<i>Lialis burtonis</i>	8	12	16	1
	<i>Pletholax gracilis</i>	0	-	-	-
Varanidae			-	-	-
Gould's Goanna	<i>Varanus gouldii</i>	1			
Rosenberg's Goanna	<i>Varanus rosenbergi</i>	-	-	0	-
Typhlopidae					
	<i>Ramphotyphlops australis</i>	-	4	2	2
Elapidae					
Dugite	<i>Pseudonaja affinis</i>	0	0	0	0
Jan's Banded Snake	<i>Vermicella bertholdi</i>	10	9	23	14
Black-naped Snake	<i>Vermicella bimaculata</i>	1	-	3	1
Black-striped Snake	<i>Vermicella calonotos</i>	1	3	4	3
Narrow-banded Snake	<i>Vermicella fasciolata</i>	2	-	2	-
Southern Shovel-nosed Snake	<i>Vermicella semifasciata</i>	5	-	-	5

ECOLOGICAL APPRAISAL OF AN ISOLATED BANKSIA WOODLAND RESERVE No. 3694 SOUTH OF THE SWAN RIVER, PERTH.

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INTRODUCTION

European man has greatly modified the environment of the Swan Coastal Plain. The greatest change has occurred in the last two decades at a time when the destruction of the natural environment is accelerating and there is an increasing awareness of the need for areas of natural bushland to be set aside for conservation.

The dominant vegetation type of the Perth area is *Banksia* woodland. A review of its importance was made in the *Banksia* Woodland Symposium where Hopper and Burbidge (1987) estimate only 7% of the original *Banksia* woodlands of the Swan Coastal Plain are on conservation reserves.

Little is known of which fauna survives on remnants south of the Swan River. Previous published studies (How *et al.* 1979, and How and Dell 1990) have concentrated on sites north of the river.

Few areas were previously set aside in the older established suburbs. Therefore any area of bushland within the inner metropolitan area assumes great value for conservation.

An examination of recent aerial photographs of the South Perth/Victoria Park area reveals very few remnants of natural bushland. One of these, Reserve 3694, (Figure 1) of c. six hectares vested with the City of Perth, is situated in Baron-Hay Court, Victoria Park. It is currently vested for Public Recreation.

In 1990 I undertook a trapping program on this reserve as part of my studies for the degree of Bachelor of Education.



How, R A and Dell, John. 1990. "Vertebrate Fauna of Bald Park, Perth." *The Western Australian Naturalist* 18(4/5), 122-131.

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