

004075

THE M

DEPAR.

LAND MANAGEMENT
WESTERN AUSTRALIA



004075

FAUNA STUDY

(April-May, 1980)

ARGYLE DIAMOND PROJECT

FOR

C.R.A. EXPLORATION - ASHTON JOINT VENTURE

by

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APPENDIX I

SYSTEMATIC LIST OF MAMMALS RECORDED FROM THE EXPLORATION LEASES

Specimens are registered under the Western Australian Museum mammal collection registration numbers between M16863 and 17000.

METATHERIA - MARSUPIALS

POLYPROTODONTA - Carnivorous Marsupials

DASYURIDAE

Planigale ingrami (Thomas, 1906) Long-tailed Planigale

Area 3: Two females captured in pit traps

Sminthopsis macroura (Gould, 1845) Stripe-faced Dunnart

Area 2: Two males and two females captured in pit traps

Two males captured in Elliott traps

Area 4: One male captured in pit trap.

DIPROTODONTA - Herbivorous marsupials

MACROPODIDAE

Petrogale brachyotis Gould, 1841, Short-eared Rock Wallaby

One observation near top of range S. of Area 7 on rocky spinifex covered slope.

Macropus agilis (Gould, 1842) Sandy Wallaby

Two observations, one of three animals 3 km S. of Area 1, in mixed open woodland of Lysiphyllum cunninghamii, Terminalia sp. and Adansonia gregorii over mixed bunch grass, on reddish brown sandy loam; one of two animals between Area 4 and Area 5, mixed open woodland over mixed grasses on reddish brown sandy loam.

Macropus robustus (Gould, 1841) Euro

Five observations, one of one animal, one of two animals 5 km N-E of main camp in open woodland of Eucalyptus pruinosa and E. brevifolia over spinifex on rocky clay soil; three of one animal between main camp and

Area 7 on rocky slope with spinifex and emergent bloodwoods and other eucalypts.

Onychogalea unguifera (Gould, 1841) Northern Nailtail Wallaby

Four observations of single animals in mixed open woodland over bunch grass and spinifex.

EUTHERIA - PLACENTAL MAMMALS

RODENTIA - Rodents

MURIDAE

Zyzomys argurus (Thomas, 1889) Common Rock-rat

Area 6: Two males and one female captured in Elliott traps

Area 7: One female captured in Elliott trap

Leggadina forresti (Thomas, 1906) Forrest's Mouse

Area 2: Two males and one female captured in pit traps

Area 3: Three males captured in pit traps

Pseudomys delicatulus (Gould, 1842) Delicate Mouse

Area 1: Twelve males and two females captured in pit traps

Area 2: One male captured in pit trap

Area 4: One female captured in pit trap

Area 8: Two males captured in pit traps

Pseudomys nanus (Gould, 1858) Western Chestnut Mouse

Area 3: One male captured in pit trap

Area 7: One female captured in Elliott trap

CHIROPTERA - Bats

MOLOSSIDAE

Tadarida jobensis (Miller, 1902) Northern Mastiff-bat

Two shot while active at night at "Pitt Falls"

EMBALLONURIDAE

Taphozous georgianus Thomas, 1915, Common Sheath-tailed-bat

Six mist-netted during day from cave at "Lissadell Gap"

One shot while active at night at "Pitt Falls"

PTEROPODIDAE

Pteropus alecto Temminck, 1837 Black Flying-fox

One mist-netted over Smoke Creek near Area 1. "Camp" containing probably in excess of 1000 individuals observed in riverine woodland on Flying Fox Creek.

CARNIVORA - Carnivores

CANIDAE

Canis familiaris Linnaeus, 1758 Dingo

Sightings made by C.R.A. personnel near the main camp and near Area 1

FELIDAE

Felis catus Linnaeus, 1758 Cat

One observed while active at night 4 km south of main camp

One observed while active at night 2 km east of Area 4.

PERISSODACTYLA - Horses, etc.

EQUIDAE

Equus caballus Linnaeus, 1758 Horse

Several small herds of from three to thirteen animals were seen west of Area 1 and east of Area 2 during the helicopter flight on 26 April 1980.

Equus asinus Linnaeus, 1758 Donkey

One observation east of area 7 during helicopter flight on 26 April 1980

ARTIODACTYLA - Cloven-hoofed Mammals

BOVIDAE

Bos taurus Linnaeus, 1758 European Cattle

There were large herds of station cattle throughout the lease

CAMELIDAE

Camelus dromedarius Linnaeus, 1758 Arabian Camel

Reported by the manager of Lissadell Station to be present in low numbers

APPENDIX II

SYSTEMATIC LIST OF BIRDS RECORDED FROM THE EXPLORATION LEASES

CASUARIIDAE

Dromaius novaehollandiae (Latham) Emu

Two birds in sparse eucalypt woodland over grass

ARDEIDAE

Ardea pacifica Latham, Pacific Heron

Four observations of single birds on creek bed and flying over riverine Terminalia woodland

Ardea novaehollandiae Latham, White-faced Heron

Single birds seen twice on banks of Smoke Creek; two seen at cattle trough in open woodland; one seen on dam near Lissadell Homestead.

Nycticorax caledonicus (Gmelin) Rufous Night Heron

N.c. hilli (Mathews)

Observation of immature bird flushed from riverine Terminalia

CICONIIDAE

Ephippiorhynchus asiaticus (Latham) Black-necked Stork

Eleven observations of one to three birds in and near Smoke Creek

THRESKIORNITHIDAE

Threskiornis spinicollis (Jameson) Straw-necked Ibis

Two birds on freshwater dam near Lissadell Homestead

ANATIDAE

Dendrocygna eytoni (Eyton) Plumed Whistling Duck

Six birds sleeping on bank of Smoke Creek

Anas superciliosa Gmelin, Black Duck

Two in an ephemeral pool soon after heavy rain on spinifex plain

ACCIPITRIDAE

Lophoictinia isura (Gould) Square-tailed Kite

Single bird over open eucalypt woodland

Hamirostra melanosternon (Gould) Black-breasted Kite

Single bird over riverine vegetation

Haliastur sphenurus (Vieillot) Whistling Kite

Thirteen observations of one to three birds near and over Smoke Creek

Milvus migrans (Boddaert) Black Kite

M. m. affinis (Gould)

Fifty-two observations; mainly two to eight birds, occasionally singly, or in flocks of up to sixty-five birds.

Flocks were mainly concentrated at rubbish tip near Camp Nicholas, along, and up to 1 km from Smoke Creek.

Accipiter fasciatus (Vigors and Horsfield) Brown Goshawk

Two observations of single birds, one observation of two birds over or near Smoke Creek.

Accipiter cirrocephalus (Vieillot) Collared Sparrowhawk

A. c. cirrocephalus

Four observations of single birds in riverine Lysiphyllum cunninghamii woodland, mixed woodland with grasses, and open eucalypt woodland over spinifex.

Circus assimilis Jardine and Selby, Spotted Harrier

Six observations on single birds mostly in riverine Terminalia woodland. One sighting in open eucalypt woodland over mixed grasses.

FALCONIDAE

Falco longipennis Swainson, Australian Hobby

F. l. longipennis

Single bird in riverine Lysiphyllum cunninghamii woodland

Falco hypoleucos Gould, Grey Falcon

Single bird hunting over sparse Acacia shrubland over spinifex

Falco berigora Vigors and Horsfield, Brown Falcon

F. b. berigora

Sixteen observations; mainly single birds, occasionally in groups of up to four. Recorded in open eucalypt woodland over spinifex, sparse eucalypt woodland at base of range, riverine Terminalia woodland, Acacia shrubland over grasses and Melaleuca woodland over grasses.

Falco cenchroides Vigors and Horsfield, Australian Kestrel
F.c. cenchroides

Nineteen observations; mainly single birds, with some groups of up to seven. Recorded in most woodland habitat types, mainly riverine Lysiphyllum cunninghamii woodland. Also at base of range and grassy plains near Lissadell Homestead.

PHASIANIDAE

Coturnix ypsilophora Bosc, Brown Quail
C.y. australis (Latham)

Group of four birds in riverine Lysiphyllum cunninghamii woodland.

TURNICIDAE

Turnix velox (Gould) Little Button-quail

Two observations of single birds in sparse Adansonia gregorii woodland over grasses.

GRUIDAE

Grus rubicundus (Perry) Brolga

One observation of a single bird in mixed woodland over grasses and two birds on alluvial flat with riverine Lysiphyllum cunninghamii.

OTIDIDAE

Otis australis Gray, Australian Bustard

Sightings on grassy plains reported by C.R.A. personnel

CHARADRIIDAE

Vanellus miles (Boddaert) Masked Plover
V.m. miles

One bird calling over riverine Lysiphyllum cunninghamii woodland

COLUMBIDAE

Geopelia humeralis (Temminck) Bar-shouldered Dove

Single bird in lush riverine vegetation at Flying Fox Creek

Geopelia striata (Linnaeus) Peaceful Dove
G.s. placida (Gould)

Eighty-five observations; mainly one to five birds, some groups of up to fourteen birds. Throughout all riverine and alluvial habitats.

Some birds observed feeding in open eucalypt woodland over grasses up to 10 km from river.

Geopelia cuneata (Latham) Diamond Dove

Forty-fix observations; mainly one to four birds, some groups of up to twelve. Recorded from most riverine habitats and extending out into eucalypt woodland, also some birds at base of range.

Geophaps plumifera (Temminck) Spinifex Pigeon

Two observations of single birds. One in open eucalypt woodland over spinifex and one in Lysiphyllum cunninghamii woodland over tall grasses.

Ocyphaps lophotes (Temminck) Crested Pigeon

Thirty observations; mainly one to five birds - one group of seventeen. Most records from riverine Lysiphyllum cunninghamii woodland, grassy plains and open eucalypt woodland over spinifex.

PSITTACIDAE

Trichoglossus haematodus (Linnaeus) Rainbow Lorikeet
T.h. rubritorquis (Vigors and Horsfield)

Nine observations, mainly two to five birds, one group of nine in riverine Lysiphyllum cunninghamii woodland.

Trichoglossus versicolor Lear. Varied Lorikeet

One observation of nine birds over riverine Lysiphyllum cunninghamii woodland.

Aprosmictus erythropterus (Gmelin) Red-winged Parrot

Twenty observations of two to six birds, mainly in riverine Lysiphyllum cunninghamii woodland. Occasionally in mixed woodland over grasses.

Platycercus venustus (Kuhl) Northern Rosella

Three observations of two to three birds - two birds at base of range in open Lysiphyllum cunninghamii woodland over grasses. Two and three birds in mixed woodland over grasses.

Melopsittacus undulatus (Shaw) Budgerigar

A pair, and a flock of twelve birds in riverine Lysiphyllum cunninghamii woodland, and three birds in open eucalypt woodland over spinifex.

Nymphicus hollandicus (Kerr) Cockatiel

Five observations of four to ten birds in riverine Lysiphyllum cunninghamii woodland, Melaleuca woodland and open eucalypt woodland over spinifex.

Calyptrorhynchus magnificus (Shaw) Red-tailed Black Cockatoo

Eleven observations of two to seven birds, as well as one flock of forty-seven. Mainly in Eucalyptus pruinosa woodland over grasses and occasionally in riverine Lysiphyllum cunninghamii.

Cacatua roseicapilla Vieillot, Galah

Nine observations of one to seven birds; mainly in riverine Terminalia with Adansonia gregorii and occasionally in riverine Lysiphyllum cunninghamii woodland.

Cacatua tenuirostris (Kuhl) Corella

C.t. sanguinea (Gould)

Twenty-three observations of one to twelve birds. Recorded from most riverine Terminalia woodland and riverine Lysiphyllum cunninghamii woodland. Six birds at Lissadell Homestead.

Cacatua galerita (Latham) Sulphur-crested Cockatoo

C.g. fitzroyi (Mathews)

Twenty-four birds at Lissadell Homestead in Adansonia gregorii around dam.

CUCULIDAE

Cuculus pallidus (Latham) Pallid Cuckoo

Four observations of single birds, three in mixed woodland, one in riverine Lysiphyllum cunninghamii woodland.

Centropus phasianinus (Latham) Pheasant Coucal

C.p. phasianinus

One bird in lush riverside vegetation at Flying Fox Creek.

STRIGIDAE

Ninox connivens (Latham) Barking Owl

N.c. connivens

Single bird in open eucalypt woodland over spinifex.

Ninox novaeseelandiae (Gmelin) Boobook Owl
N.n. boobook (Latham)

Nine observations of one or two birds in most riverine woodlands and open grassy plains.

PODARGIDAE

Podargus strigoides (Latham) Tawny Frogmouth

Five observations of one or two birds in open eucalypt woodland grasses and Lysiphyllum cunninghamii woodland.

AEGOTHELIDAE

Aegotheles cristatus (White) Australian Owlet-nightjar
A.c. leucogaster (Gould)

Nine observations of single birds in open eucalypt woodland over grasses and in riverine Lysiphyllum cunninghamii woodland.

CAPRIMULGIDAE

Eurostopodus guttatus (Vigors and Horsfield) Spotted Nightjar

Sixteen observations of one to three birds in mixed woodland over grasses, riverine Lysiphyllum cunninghamii woodland, open eucalypt woodland over spinifex and one bird at "Lissadell Gap".

ALCEDINIDAE

Dacelo leachii Vigors and Horsfield, Blue-winged Kookaburra
D.l. leachii

Fifteen observations of one to three birds; mainly in riverine Lysiphyllum cunninghamii woodland, occasionally in open mixed woodland over grasses.

Halcyon pyrrhopygia Gould, Red-backed Kingfisher

Ten observations of single birds mainly in Eucalyptus pruinosa and mixed woodland over grasses, and occasionally in Lysiphyllum cunninghamii woodland.

Halcyon sancta Vigors and Horsfield, Sacred Kingfisher
H.s. sancta

Two observations of single birds; one in Melaleuca woodland and mixed woodland over spinifex, and one in riverine Terminalia woodland.

MEROPIDAE

Merops ornatus Latham, Rainbow Bee-eater

Forty-seven observations of one to eleven birds in most riverine and alluvial woodlands.

ALAUDIDAE

Mirafra javanica Horsfield, Horsfield's Bushlark

Four observations of one to three birds in open grassland and riverine Lysiphyllum cunninghamii woodland.

HIRUNDINIDAE

Hirundo nigricans Vieillot, Tree Martin
H.n. nigricans

Eighteen observations of up to eighteen birds over riverine Terminalia woodland and riverine Lysiphyllum cunninghamii woodland.

Hirundo ariel (Gould) Fairy Martin

Two observations; three birds over riverine Lysiphyllum cunninghamii woodland and six over riverine Terminalia woodland. Several old nests by cave entrance at "Lissadell Gap".

MOTACILLIDAE

Anthus novaeseelandiae (Gmelin) Richard's Pipit
A.n. australis (Vieillot)

Two observations; one in open grassland and two in open eucalypt woodland over spinifex.

CAMPEPHAGIDAE

Coracina maxima (Ruppell) Ground Cuckoo-shrike

Single bird in open mixed woodland and Eucalyptus pruinosa over spinifex

Coracina novaehollandiae (Gmelin) Black-faced Cuckoo-shrike
C.n. novaehollandiae

Twenty-six observations of one to five birds; in mixed woodland over grasses, open eucalypt woodland over spinifex, and riverine Lysiphyllum cunninghamii woodland.

Coracina papuensis (Gmelin) Little Cuckoo-shrike
C.p. hypoleuca (Gould)

Two observations; two birds in open eucalypt woodland over spinifex, one bird in riverine Lysiphyllum cunninghamii woodland.

Lalage suerii (Vieillot) White-winged Triller
L.s. tricolor (Swainson)

Forty observations of one to thirteen birds; in open eucalypt woodland over spinifex, mixed woodland over grasses and riverine Lysiphyllum cunninghamii woodland.

PACHYCEPHALIDAE

Microeca leucophaea (Latham) Jacky Winter
M.l. leucophaea

One bird in open eucalypt woodland

Pachycephala rufiventris (Latham) Rufous Whistler
P.r. rufiventris

Thirty-one observations of one to five birds; in most woodland habitats.

Colluricincla harmonica (Latham) Grey Shrike-thrush
C.h. harmonica

Five observations of one or two birds in riverine Terminalia near base of range.

MONARCHIDAE

Rhipidura leucophrys (Latham) Willie Wagtail
R.l. leucophrys

Forty-nine observations of one to four birds; in most habitats, but mainly near waterside vegetation.

Rhipidura rufiventris (Vieillot) Northern Fantail
R.r. isura (Gould)

Two observations of single birds. One in lush riverside vegetation at Flying Fox Creek, one in mixed woodland over spinifex and other grasses.

Myiagra inquieta (Latham) Restless Flycatcher
M.i. nana (Gould)

Twenty-four observations of one to four birds in riverine woodland.

ORTHONYCHIDAE

Pomatostomus temporalis (Vigors and Horsfield) Grey-crowned Babbler
P.t. rubeculus (Gould)

Thirty-one observations of one to seven birds; in riverine Lysiphyllum cunninghamii woodland and in mixed woodland over grasses and spinifex.

ACANTHIZIDAE

Smicrornis brevirostris (Gould) Weebill

One bird calling from low Acacia shrubland

MALURIDAE

Malurus melanocephalus (Latham) Red-backed Fairy-wren

Nine observations of one to eight birds; in open eucalypt woodland over spinifex and in riverine Terminalia woodland.

DAPHOENOSITTIDAE

Daphoenositta chrysoptera (Latham) Australian Sittella
D.c. leucoptera (Gould)

Three observations of one to four birds in Lysiphyllum cunninghamii woodland over grasses and mixed woodland over mixed grasses.

CLIMACTERIDAE

Climacteris melanura Gould, Black-tailed Tree-creeper
C.m. melanura

Twelve observations of one to three birds in open eucalypt woodland over spinifex

DICAEIDAE

Dicaeum hirundinaceum (Shaw) Mistletoebird
D.h. hirundinaceum

Three observations of single birds; in riverine Lysiphyllum cunninghamii woodland, and mixed woodland over grasses.

PARDALOTIDAE

Pardalotus rubricatus Gould Red-browed Pardalote

Three observations of one or two birds in riverine Lysiphyllum cunninghamii woodland.

Pardalotus striatus (Gmelin) Striated Pardalote
P.s. uropygialis (Gould)

Thirteen observations of one to four birds; in riverine Lysiphyllum cunninghamii woodland and mixed woodland.

MELIPHAGIDAE

Lichmera indistincta (Vigors and Horsfield) Brown Honeyeater
L.i. indistincta

Ninety-five observations of mostly two to seven birds, occasionally singly or in groups of up to sixteen. Recorded in every habitat type. Particularly numerous in riverine associations where it was attracted to flowering Acacia sp. and Grevillea sp.

Meliphaga virescens (Vieillot) Singing Honeyeater

Three observations of one to three birds in open eucalypt woodland over spinifex, riverine Lysiphyllum cunninghamii woodland and mixed woodland.

Meliphaga plumula (Gould) Yellow-fronted Honeyeater

Five observations of three to eight birds; mainly in dense riverine Terminalia thickets, one group in open Acacia shrubland over spinifex.

Meliphaga flavescens (Gould) Yellow-tinted Honeyeater
M.f. flavescens

Eleven observations of one or two birds, occasionally groups of up to eight. Mainly riverine Lysiphyllum cunninghamii and Terminalia woodlands, some in open eucalypt woodland over spinifex.

Meliphaga unicolor (Gould) White-gaped Honeyeater

Single bird in lush riverside vegetation at Flying Fox Creek.

Melithreptus albogularis Gould White-throated Honeyeater

Two observations of birds in riverine Terminalia woodland.

Melithreptus gularis (Gould) Black-chinned Honeyeater
M.g. laetior (Gould)

Seven birds in open eucalypt woodland with Terminalia, Acacia and Adansonia gregorii over grasses and spinifex.

Philemon citreogularis (Gould) Little Friarbird
P.c. citreogularis

Forty-four observations of one to ten birds; in riverine vegetation, particularly associated with Adansonia gregorii.

Philemon argenteiceps (Gould) Silver-crowned Friarbird
Single bird in mixed woodland over spinifex

Cissomela pectoralis (Gould) Banded Honeyeater
Five observations of one or two birds in Melaleuca woodland over mixed grasses. Attracted to flowering Melaleuca.

Ramsayornis fasciatus (Gould) Bar-breasted Honeyeater
One adult with one very young bird in riverine Lysiphyllum cunninghamii

Conopophila rufogularis (Gould) Rufous-throated Honeyeater
Two observations of two and four birds in riverine Terminalia woodland.

Manorina flavigula (Gould) Yellow-throated Miner
Seventeen observations of one to twelve birds. Most records from base of range, some from riverine woodland.

PLOCEIDAE

Neochmia phaeton (Hombron and Jacquinot) Crimson Finch
N.p. phaeton

Single bird in open eucalypt woodland with Terminalia canescens over spinifex.

Poephila guttata (Vieillot) Zebra Finch
P.g. castanotis (Gould)

Seven observations of two to eight birds; in open eucalypt woodland over spinifex and mixed woodland.

Poephila bichenovii (Vigors and Horsfield) Double-barred Finch
P.b. annulosa (Gould)

Two observations of one and two birds. One bird in riverine Lysiphyllum cunninghamii woodland and two in dense Acacia and Melaleuca woodland.

Poephila personata Gould, Masked Finch
P.p. personata

Two observations of single birds. One in open eucalypt woodland over spinifex and one in riverine Lysiphyllum cunninghamii woodland over tall grasses.

Poephila acuticauda (Gould) Long-tailed Finch

Eighteen observations, mainly one to five birds, occasionally up to ten; in riverine Lysiphyllum cunninghamii woodland, riverine Terminalia woodland and open eucalypt woodland over spinifex.

Lonchura pectoralis (Gould) Pictorella Mannikin

Single bird in open eucalypt woodland with Terminalia, Acacia and Adansonia gregorii over grasses and spinifex.

ORIOLIDAE

Oriolus sagittatus (Latham) Olive-backed Oriole

Single bird in riverine Lysiphyllum cunninghamii woodland.

GRALLINIDAE

Grallina cyanoleuca (Latham) Magpie-Lark

Eighty-eight observations mainly one to five birds, occasionally up to eight. Recorded from most habitats, particularly riverine woodlands. Old nest in Eucalyptus sp. by Smoke Creek.

ARTAMIDAE

Artamus cinereus Vieillot, Black-faced Woodswallow
A.c. melanops (Gould)

One hundred and twenty-two observations of mainly one to six birds, occasionally up to ten. Recorded throughout all habitat types, particularly open woodland.

Artamus minor Vieillot, Little Woodswallow

Forty-eight observations; mainly one to five birds, occasionally up to thirteen; over all riverine woodlands, also open eucalypt woodland over spinifex.

CRACTICIDAE

Cracticus nigrogularis (Gould) Pied Butcherbird

Sixty-five observations of one to four birds in all types of woodlands, particularly riverine and alluvial.

Cracticus tibicen (Latham) Australian Magpie
C.t. tibicen

Two observations of single birds. One in open eucalypt woodland with Adansonia gregorii over spinifex and other grasses, and one in sparse Acacia shrubland over mixed grasses.

PARADISAEIDAE

Ptilonorhynchus nuchalis Jardine and Selby, Great Bowerbird
P.n. nuchalis

Five observations of single birds and one of two birds in riverine Lysiphyllum cunninghamii woodland and riverine Terminalia woodland along creek.

CORVIDAE

Corvus orru Bonaparte Australian Crow
C.o. salvadorii (Finsch)

Thirty observations of one to six birds; mainly two or three. Recorded from most habitats, mainly riverine associations.

Corvus bennetti North, Little Crow

Two observations of thirteen and eighteen birds were probably of this species. Eighteen birds over Eucalyptus pruinosa woodland with spinifex, and thirteen birds over riverine Lysiphyllum cunninghamii woodland.

APPENDIX III

SYSTEMATIC LIST OF REPTILES RECORDED FROM THE EXPLORATION LEASES

Following each species' name is a short summary, including an estimate of abundance, based only upon this survey, and short notes on habitat preferences. Below this is tabulated numbers of individuals, habitats and localities (cf. Map 1). The estimates of abundance are based on the author's local knowledge and on the number of observations recorded during this survey.

Specimens collected were lodged in the Western Australian Museum: registration numbers R - series between R70026 and R70689.

REPTILIA - REPTILES

LACERTILIA - Lizards

GEKKONIDAE - Geckoes

Diplodactylus ciliaris Boulenger, 1885

Scarce. One collected in low tree in grassy riverine area

1 Headtorched in low Melaleuca shrub "Smoke Creek Pool"

Diplodactylus conspicillatus Lucas and Frost, 1897

Scarce. One collected in low open eucalypt woodland over grasses on sandy clay loam.

1 In pit trap in open eucalypt woodland Area 3
over tall grasses

Diplodactylus stenodactylus Boulenger, 1896

Moderately common in sandy and loamy soils with spinifex and grasses.

1 In pit trap in open eucalypt woodland Area 1
over grasses

4 In pit traps in open spinifex grassland Area 2

5 In pit traps in open spinifex grassland Area 8

Diplodactylus taeniatus (Lonnberg and Anderson, 1913)

Uncommon. Two collected from spinifex on loamy clay soils.

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|--|-------------------|
| 1 Headtorched in open spinifex grassland | Area 2 |
| 1 Headtorched in open spinifex grassland | 4 km NE of Area 2 |

Gehyra australis Gray, 1845

Collected on trees in riverine areas, spinifex plains and on rock faces.

- | | |
|-------------------------------|--------------------|
| 15 Headtorched on rock faces | "Lissadell Gap" |
| 4 Headtorched on baobabs | 3 km S of Area 4 |
| 3 Headtorched on rock faces | "Pitt Falls" |
| 5 Under bark of dead eucalypt | "Smoke Creek Pool" |
| 1 Headtorched on tree | Area 8 |
| 3 Headtorched on baobabs | Area 1 |
| 2 Headtorched on trees | 4 km NE of Area 2 |

Gehyra nana Storr, 1978

Probably moderately common. Probably restricted to rocky hills.

- | | |
|--|--------------|
| 3 Headtorched from cracks in isolated boulders | "Pitt Falls" |
|--|--------------|

Gehyra pilbara Mitchell, 1965

Very common. Apparently every large termite mound has its own colony, some housing up to 20 geckoes

- | | |
|------------------------------------|------------------|
| 1 Headtorched from termite mound | "Pitt Falls" |
| 30 Headtorched from termite mounds | Area 8 |
| 58 Headtorched from termite mounds | 4 km S of Area 4 |

Heteronotia binoei (Gray, 1845)

Very common in riverine areas and spinifex plains

- | | |
|---|---------------------|
| 7 In pit traps in open <u>Melaleuca</u> woodland | Area 4 |
| 1 In pit trap in open spinifex grassland | Area 2 |
| 2 In pit traps in open eucalypt woodland over tall grasses | Area 3 |
| 3 In leaf litter in open eucalypt woodland over grasses | Area 1 |
| 2 Under logs adjacent to pool | "Smoke Creek Pool" |
| 2 Under rocks in open baobab and <u>Lysiphyllum</u> woodland | "Smoke Creek Bore" |
| 5 In burrows and headtorched in open spinifex grassland on stony soil | 4 km NE of Area 2 |
| 1 In pit trap in open spinifex grassland | Area 8 |
| 4 In soil and spinifex litter | 4.5 km NE of Area 2 |
| 1 Under litter | 4 km W of Area 2 |
| 1 In ant nest | 2 km NE of Area 2 |

- | | |
|-----------------------|---------------------|
| 1 Under log | 3 km NE of Area 2 |
| 1 In litter | Area 3 |
| 1 Burnt from spinifex | 4.5 km NE of Area 2 |

Heteronotia spelea (Kluge, 1963)

Uncommon. One collected from rocky hills. Summer collecting would undoubtedly prove this species to be more abundant.

- | | |
|----------------------------------|--------------|
| 1 Headtorched from crack in rock | "Pitt Falls" |
|----------------------------------|--------------|

Nephrurus asper Gunther, 1876

Uncommon. One collected from rocky hills. Summer collecting would undoubtedly prove the species to be more abundant.

- | | |
|---------------------|-----------------|
| 1 Collected in cave | "Lissadell Gap" |
|---------------------|-----------------|

Rhynchoedura ornata Gunther, 1867

Moderately common. In lightly wooded country with spinifex, and spinifex plains.

- | | |
|--|--------|
| 2 In pit traps in open spinifex grassland | Area 2 |
| 1 In pit trap in open spinifex grassland | Area 8 |
| 1 In pit trap in sparse eucalypt woodland
over tall heath | Area 5 |

PYGOPODIDAE - Legless Lizards

Delma borea Kluge, 1974

Moderately common. Collected from open woodland over grasses and spinifex on sandy loam.

- | | |
|---|---------------------|
| 1 In pit trap in open eucalypt woodland
over grasses | Area 1 |
| 1 In soil and spinifex litter | 4.5 km NE of Area 2 |

Delma nasuta Kluge, 1974

Moderately common. Collected from open grassy woodland over grasses on sandy loam and spinifex on stony clay.

- | | |
|---|---------------------|
| 1 In pit trap in open eucalypt woodland
over grasses | Area 1 |
| 1 Burnt from spinifex | 4.5 km NE of Area 2 |

Lialis burtonis Gray, 1835

Moderately common. Collected from open woodland over grass and spinifex on sandy loam, and in litter in riverine areas.

- | | |
|---|--------------------|
| 1 In pit trap in open eucalypt woodland | Area 1 |
| 1 In leaf litter | "Smoke Creek Pool" |

Pygopus nigriceps (Fischer, 1882)

Scarce. One collected from eucalypt woodland over grasses on sandy clay loam.

- | | |
|---|--------|
| 1 In pit trap in open eucalypt woodland over tall grasses | Area 3 |
|---|--------|

AGAMIDAE - Dragons

Amphibolurus inermis (de Vis, 1888)

Common in low open eucalypt woodland with spinifex on sandy clay

- | | |
|---|-------------------|
| 1 In pit trap in open spinifex | Area 8 |
| 1 In pit trap in open spinifex | Area 2 |
| 1 Under rock | 2 km S of Area 2 |
| 1 Basking on termite mound in open eucalypt woodland over grasses | Area 1 |
| 1 Dug from burrow | 2 km NE of Area 2 |
| 2 Basking on rocks | 1 km SW of Area 1 |

Chlamydosaurus kingii Gray, 1825

Scarce. One collected in open eucalypt woodland over grasses on sandy loam.

- | | |
|---|--------|
| 1 In cage trap in open eucalypt woodland over grasses | Area 1 |
|---|--------|

Diporiphora arnhemica Storr, 1974

Common. Prefers rocky spinifex habitats though one was found in open woodland over grasses on sandy loam.

- | | |
|--|------------------|
| 9 Basking on rocks in low open eucalypt woodland over spinifex | Main camp |
| 1 Basking on rocks in low open eucalypt woodland over spinifex | 1 km S of Area 3 |
| 1 In pit trap in open eucalypt woodland over grasses | Area 1 |
| 1 Observed in open <u>Melaleuca</u> woodland | Area 4 |
| 3 Basking on rock | 4 km W of Area 2 |

Diporiphora bennettii (Gray, 1845)

Scarce. One from rocky hillslope.

- | | |
|---|--------|
| 1 Basking on rocks in sparse eucalypt over spinifex | Area 6 |
|---|--------|

Diporiphora magna Storr, 1974

Very common. This, the most common agamid, was found in most habitats where either spinifex or grass was present. The only habitat it was absent from was rocky hillslopes.

- 14 In pit traps and active in open eucalypt woodland over grasses Area 1
- 3 Active in open spinifex Area 2
- 3 Basking on spinifex crowns in open eucalypt woodland over tall grasses Area 3
- 1 In pit trap in open Melaleuca woodland Area 4
- 1 Active in sparse eucalypt woodland over tall heath Area 5
- 11 In pit traps and active in spinifex Area 8
- 1 Burnt from spinifex
- 2 Headtorched, asleep in low shrubs over grasses 200 m S of Area 8

Lophognathus g. gilberti (Gray, 1842)

Very common in all riverine areas. Most specimens recorded were juveniles.

- 7 In pit traps and active in open eucalypt woodland over grasses Area 1
- 34 Observed in vicinity of creek. Individuals may have been sighted more than once "Smoke Creek Pool"
- 4 Basking on low shrubs and active 2 km W of Area 1
- 1 Observed active in low shrubs over spinifex Area 2
- 1 In pit trap in open spinifex with occasional baobabs Area 8

SCINCIDAE - Skinks

Carlia triacantha (Mitchell, 1953)

Scarce. One recorded from open Melaleuca woodland over grass and spinifex.

- 1 In pit trap in open Melaleuca woodland Area 4

Cryptoblepharus megastictus Storr, 1976

Scarce. One from rocky hilltop

- 1 Active on rock face Top of pipe

Cryptoblepharus plagiocephalus (Cocteau, 1836)

Common on trees, mainly eucalypts and Lysiphyllum

- 4 Active on low trees in open eucalypt woodland over grasses Area 1
- 4 Active on low trees along creek margin "Smoke Creek Pool"
- 1 Active on low tree at base of rockface "Lissadell Gap"
- 1 In pit trap in open eucalypt woodland over tall grasses Area 3
- 1 Active on tree in open eucalypt woodland 2 km W of Area 2
- 1 Active on tree in open eucalypt woodland 2 km WNW of Main Camp

Ctenotus inornatus (Gray, 1845)

Moderately common in grassy and spinifex habitats on sandy and loamy soils.

- | | |
|--|--------------------|
| 6 In pit traps and active in open eucalypt woodland over grasses | Area 1 |
| 1 Under rubbish in open baobabs over <u>Lysiphyllum</u> | "Smoke Creek Bore" |

Ctenotus militaris Storr, 1975

Very common. Collected in all habitats where grass or spinifex was present, except rocky hills.

- | | |
|--|--------|
| 5 In pit traps and active in open eucalypt woodland over grasses | Area 1 |
| 6 In pit traps and active in open spinifex | Area 2 |
| 8 In pit traps and active in <u>Melaleuca</u> woodland | Area 4 |
| 13 In pit traps and active in open spinifex | Area 8 |

Ctenotus pantherinus calx Storr, 1970

Moderately common. Collected from grasses on sandy loam, spinifex plains, rocky hills and open Melaleuca woodland over spinifex.

- | | |
|--|---------------------|
| 1 In pit trap in open eucalypt woodland over grasses | Area 1 |
| 1 Observed in open <u>Melaleuca</u> woodland | Area 4 |
| 2 Burnt from spinifex | 4.5 km NE of Area 2 |
| 4 Observed active in spinifex | Main camp |

Ctenotus piankai Storr, 1969

Very common in grasses and spinifex on sandy loam and one from open Melaleuca woodland over spinifex

- | | |
|---|------------------|
| 21 In pit traps and active in open eucalypt woodland over grasses | Area 1 |
| 1 In pit trap in open spinifex | Area 2 |
| 1 In pit trap in open <u>Melaleuca</u> woodland | Area 4 |
| 1 In pit trap in open eucalypt woodland over tall grasses | Area 3 |
| 1 Active in grass tussocks | 2 km W of Area 1 |

Ctenotus saxatilis Storr, 1970

Scarce. One collected from rocky spinifex covered hillslope and one in open eucalypt woodland over grasses.

- | | |
|---|--------|
| 1 In pit trap in open eucalypt woodland over grasses | Area 1 |
| 1 Observed active in sparse eucalypt woodland over spinifex on rocky hill | Area 7 |

Ctenotus schomburgkii (Peters, 1863)

Scarce. In low open eucalypt woodland over tall heath and spinifex on reddish brown sandy loam.

- 1 Active among spinifex clumps in low open eucalypt woodland Area 5

Eremiascincus richardsonii (Gray, 1845)

Moderately common in riverine areas and associated alluvia

- 3 In soil beneath logs and in rotten tree stumps "Smoke Creek Pool"
1 Under dead cow "Smoke Creek Pool"
2 Under rocks in open baobabs over Lysiphyllum "Smoke Creek Pool"

Lerista borealis Storr, 1972

Very common. In loose soil under leaf litter in riverine areas and associated alluvia

- 3 In soil beneath leaf litter below Lysiphyllum bushes Area 1
15 In soil beneath leaf litter below Lysiphyllum bushes "Smoke Creek Pool"
7 Dug up by bulldozer in open baobabs / low Lysiphyllum bushes 400 m N of Area 1
4 In soil beneath leaf litter below eucalypt Area 5
1 In pit trap Area 4
3 In leaf litter below eucalypt Area 4

Menetia greyii Gray, 1845

Common. In spinifex on sandy loams and clays (where leaf litter was present) and grassy riverine alluvia.

- 5 In leaf litter in low eucalypt woodland with spinifex Area 5
1 In litter in open baobabs / Lysiphyllum "Smoke Creek Bore"
2 In pit traps in open Melaleuca woodland Area 4
1 In pit trap in open spinifex Area 2
1 In pit trap in open eucalypt woodland over tall grasses Area 3
1 In litter 3 km S of Area 4
1 Dug up by bulldozer in open baobabs / Lysiphyllum 400 m N of Area 1

Morethia r. ruficauda (Lucas and Frost, 1895)

Scarce. One collected in open eucalypt woodland over tall grasses on sandy clay loam.

- 1 In pit trap in open eucalypt woodland over tall grasses Area 3

Notoscincus ornatus wotjulum (Glauert, 1959)

Common. In leaf litter on riverine alluvia covered with spinifex and grasses.

- 4 Active in litter in vicinity of creek "Smoke Creek Pool"
1 In pit trap in open baobabs over grasses Area 8
4 In pit traps and active in litter in open eucalypt woodland over grasses Area 1

Proablepharus tenuis (Broom, 1896)

Moderately common. In leaf litter, in open Melaleuca woodland over spinifex and in sparse eucalypts over spinifex adjacent to creek

- | | |
|---|--------|
| 1 Active in eucalypt litter amongst spinifex clumps | Area 5 |
| 1 In pit trap in open <u>Melaleuca</u> woodland | Area 4 |

Tiliqua multifasciata Sternfeld, 1919

Uncommon. One collected in spinifex on stony clay soil.

- | | |
|--|---------------------|
| 1 Burnt from open spinifex on stony soil | 4.5 km NE of Area 2 |
|--|---------------------|

VARANIDAE - Monitors

Varanus gouldii (Gray, 1838)

Uncommon. Two in open woodland over grasses on sandy loam.

- | | |
|---|--------|
| 1 In pit trap in open eucalypt woodland | Area 1 |
| 1 Active in open spinifex | Area 8 |

Varanus mertensi Glauert, 1951

Uncommon. Restricted to riverine habitats where water is present

- | | |
|--|--------------------|
| 1 Observed active in riverine vegetation | "Smoke Creek Pool" |
|--|--------------------|

Varanus mitchelli Mertens, 1958

Uncommon. Restricted to riverine habitats where water is present.

- | | |
|---|------------------|
| 1 Observed basking in <u>Pandanus</u> palms | Flying Fox Gorge |
| 1 Headtorched asleep in rock pool | "Pitt Falls" |
| 1 Active in riverine vegetation | 6 km E of Area 1 |

Varanus storri ocreatus Storr, 1980

Uncommon. In spinifex on stony clay loam.

- | | |
|--|------------------|
| 1 Active in open spinifex and grass tussocks | Area 2 |
| 1 Active in open spinifex and grass tussocks | 2 km N of Area 2 |

Varanus timorensis scalaris Mertens, 1941

Moderately common. Two in open Melaleuca woodland with spinifex and grasses and one in eucalypt woodland over grasses on sandy clay loam.

- | | |
|---|--------|
| 2 In pit traps in open <u>Melaleuca</u> woodland | Area 4 |
| 1 In pit trap in open eucalypts over tall grasses | Area 3 |

Varanus tristis (Schlegel, 1839)

Moderately common. One in dead tree in spinifex on rocky soil and one in open eucalypt woodland over grasses on sandy clay loam.

- | | |
|--|------------------|
| 1 Headtorched. Asleep in standing dead tree in open spinifex | 3 km S of Area 4 |
| 1 In pit trap in open eucalypt woodland over tall grasses | Area 3 |

SERPENTES - SNAKES

TYPHLOPIDAE - Blind Snakes

Typhlina guentheri (Peters, 1865)

Moderately common. One in soil in dead tree in riverine area and two in spinifex on stony clay loam.

- | | |
|--|--------------------|
| 1 In soil in rotten stump | 3 km NE of Area 2 |
| 1 In pit trap in open baobabs/grasses | Area 8 |
| 1 Under soil under log in open <u>Lysiphyllum</u> shrubs | "Smoke Creek Pool" |

BOIDAE - Pythons

Aspidites melanocephalus (Krefft, 1864)

One in open eucalypt woodland over spinifex on rocky soil. Reported to be common by manager of Lissadell Station.

- | | |
|---|---------------------|
| 1 Road kill in open eucalypt woodland over spinifex | 1 km E of Main Camp |
|---|---------------------|

Liasis childreni Gray, 1842

Common. In termite mounds and rocky hills

- | | |
|--|-------------------|
| 1 Headtorched while active on rockface | "Lissadell Gap" |
| 1 Headtorched while active on rockface | "Pitt Falls" |
| 1 Crossing road through open grasses | 1 km W of Area 1 |
| 1 Headtorched active in termite mound in open spinifex | Area 8 |
| 1 Bulldozed out of termite mound in open baobabs / grasses | 500 m N of Area 1 |
| 2 Headtorched at base of termite mounds in open spinifex | 3 km S of Area 4 |

COLUBRIDAE - Back-fanged Snakes

Boiga fusca (Gray, 1842)

- | | |
|--|-----------------|
| 1 Headtorched. Active in thicket at base of rockface | "Lissadell Gap" |
|--|-----------------|

ELAPIDAE - Front-fanged Snakes

Acanthophis antarcticus (Shaw, 1794)

Reported by manager of Lissadell Station. Probably moderately common.

Denisonia punctata Boulenger, 1896

One collected in spinifex on stony clay loam. Probably common.

- | | |
|--------------------------------|---------------------|
| 1 Headtorched in open spinifex | 4.5 km NE of Area 2 |
|--------------------------------|---------------------|

Furina christieana (Fry, 1915)

Reported by manager of Lissadell Station.

Pseudechis australis (Gray, 1842)

Reported as being common by C.R.A. personnel and the manager of Lissadell Station.

Vermicella semifasciata roperi (Kinghorn, 1931)

One in open Melaleuca woodland over spinifex and grasses.

1 In pit trap in open Melaleuca woodland

Area 4

APPENDIX IV

SYSTEMATIC LIST OF FROGS RECORDED FROM THE EXPLORATION LEASES

Following each species' name is a short summary, including an estimate of abundance, and short notes on habitat preferences. Below this is tabulated numbers of individuals, habitats and localities (cf. Map 1). The estimate of abundance is based on the author's local knowledge and on the number of observations recorded during this survey.

Specimens collected were lodged in the Western Australian Museum: registration numbers R series between R70026 and R70689.

AMPHIBIA - AMPHIBIANS

ANURA - FROGS

LEPTODACTYLIDAE - Ground Frogs

Cyclorana australis (Gray, 1842)

Moderately common. Collected mainly from riverine areas and their associated alluviums, though one was found near a creek in rocky hills.

3	Headtorched on edge of pool	"Smoke Creek Pool"
2	In soil in hollow trees on edge of pool	"Smoke Creek Pool"
1	In pit trap in open spinifex grassland	Area 8
1	Headtorched in creek	"Pitt Falls"

Cyclorana longipes Tyler and Martin, 1977

Uncommon. Three specimens from riverine areas and their associated alluviums.

1	In pit traps in open spinifex grassland	Area 8
1	Headtorched on edge of pool	"Smoke Creek Pool"
1	Dug from soil by bulldozer	ca 300 m N of Area 1

Limnodynastes ornatus (Gray, 1842)

Very common in all riverine and creek areas and their associated grassy alluviums.

- | | | |
|----|--|--------------------|
| 25 | Headtorched around margins of pool | "Smoke Creek Pool" |
| 3 | In pit traps in sparse eucalypt woodland over tall heath | Area 5 |
| 11 | In pit traps in open eucalypt woodland over grasses | Area 1 |
| 2 | In pit traps in open <u>Melaleuca</u> woodland | Area 4 |
| 1 | In pit trap in open spinifex grassland | Area 2 |

Limnodynastes depressus Tyler, Martin and Davies, 1979

Uncommon. One collected from creek in rocky hills.

- | | | |
|---|--|--------------|
| 1 | Headtorched. Active in vicinity of rock pool | "Pitt Falls" |
|---|--|--------------|

Notaden melanoscapus Hosmer, 1962

Uncommon. Two collected, both from spinifex covered clay soils adjacent to creeks.

- | | | |
|---|--|--------|
| 1 | In pit trap in open spinifex grassland | Area 2 |
| 1 | In pit trap in open spinifex grassland | Area 8 |

Uperoleia sp.

Scarce. One collected in open Melaleuca woodland adjacent to creek

- | | | |
|---|---|--------|
| 1 | In pit trap in open <u>Melaleuca</u> woodland | Area 8 |
|---|---|--------|

HYLIDAE - Tree Frogs

Litoria caerulea (White, 1790)

Moderately common. Found in rocky hills in the vicinity of water and on baobabs on sandy riverine soils.

- | | | |
|---|---|-----------------|
| 4 | Active at night on baobabs | Area 1 |
| 1 | In pit trap in open eucalypt woodland over grasses | Area 1 |
| 2 | Headtorched in vicinity of creek | "Pitt Falls" |
| 1 | Headtorched 3 m up a tree at the base of a limestone hill | "Lissadell Gap" |

Litoria coplandi (Tyler, 1968)

Restricted to creeks in rocky hills where they are very common.

- | | | |
|------|---|--------------|
| ca70 | Perching on rocks at night, Many on edge of pools with some up to 70 m from water | "Pitt Falls" |
|------|---|--------------|

Litoria sp. (possibly related to Litoria latopolmata Gunther, 1867)

Very common. Found in riverine areas and their associated alluviums.

8 In pit traps in open spinifex grassland

Area 8

5 Headtorched on edge of water

"Smoke Creek Pool"

1 In pit trap in open Melaleuca woodland

Area 4

Litoria rothii (de Vis, 1884)

Moderately common. Restricted to riverine areas.

2 Perching in low vegetation along edge of creek
at night

"Smoke Creek Pool"

Litoria rubella (Gray, 1842)

Probably very common. Restricted to riverine areas and their associated alluviums.

2 Active at night in vicinity of baobab trees

Area 1

Litoria splendida Tyler, 1977

Common. In creeks in rocky hills.

6 Headtorched in the vicinity of rock pools.

"Pitt Falls"

APPENDIX 1 - 1980

FAUNA STUDY

(October, 1980)

Argyle Diamond Project

for

C.R.A. Exploration - Ashton Joint Venture

by

Wolf G. Martinick (Ph. D., Agric.)

- Environmental Co-ordinator -

November, 1980

Table 2: A listing of animals caught in the various traplines, date of capture, live weights of specimens and registration numbers given to specimens by the Western Australian Museum.

MAMMALS				
Specimen	Trapline	Wt(g)	Date	Registration No.
<u>Planigale ingrami</u> (male)	3	4.5	11 Oct	M 18793
" " (male)	2	4.5	7 Oct	M 18795
" " (female)*	3	4.5	10 Oct	M 18794
" " (female)*	3	4.3	15 Oct	M 18831
<u>Pseudomys forresti</u> (male)	2	13.0	18 Oct	M 18833
<u>Sminthopsis cf. macroura</u> ****	4	8.5	11 Oct	M 18792
" " "	4	9.8	15 Oct	M 18832
" " "	3	4.5	19 Oct	M 18835
" " "	4	13.7	18 Oct	M 18834
REPTILES				
<u>Amphibolurus inermis</u>	**	27.3	9 Oct	R 70955
<u>Ctenotus saxatilis</u>	2	6.0	8 Oct	R 70952
" "	2	9.3	15 Oct	R 70960
<u>Delma nasuta</u>	3	1.2	8 Oct	R 70953
<u>Diplodactylus ciliaris</u>	4	5.1	13 Oct	R 70959
" <u>conspilillatus</u>	1	1.6	9 Oct	R 70954
<u>Eremiascincus richardsonii</u>	4	20.3	18 Oct	R 70962
<u>Heteronotia binoei</u>	1	1.4	19 Oct	R 70963
" "	2	1.3	16 Oct	R 70961
" "	3	2.8	12 Oct	R 70958
" "	2	1.3	10 Oct	R 70956
" "	2	2.0	8 Oct	R 70951
" "	1	2.3	8 Oct	R 70950
" "	2	2.6	6 Oct	R 70949
" "	2	1.2	5 Oct	R 70948
<u>Menetia greyii</u>	2	0.5	10 Oct	R 70957
<u>Lophognathus g. gilberti</u>	***	26.5	7 Oct	R 70947

* Both Females caught had three juveniles

** Caught by hand at junction of haulroad and airport road

*** Caught by hand in Camp Nicholas

**** All four were females

Wet Season Fauna Survey (February - March, 1981)

Argyle Diamond Project

for

C.R.A. Exploration - Ashton Joint Venture

by

Gregory Harold

Edited by

Wolf G. Martinick, (Ph. D., Agric.)

- Consultant Environmental Co-ordinator -

and written in consultation with

Alexander Baynes, (Ph. D., Zoology)

- Consultant Zoologist -

May, 1981

APPENDIX I

SYSTEMATIC LIST OF MAMMALS

RECORDED DURING THIS SURVEY

Mammals collected are lodged in the Western Australian Museum:
mammal collection registration numbers M19273-M19297

METATHERIA - MARSUPIALS

POLYPRODONTA - Carnivorous Marsupials

DASYURIDAE

Planigale ingrami (Thomas, 1906) Long-tailed Planigale

Area 9 - Five males and one female in pit traps in grassland on black soil plain.

Sminthopsis macroura (Gould, 1845) Stripe-faced Dunnart

Area 10 - One male and one female in pit traps in open eucalypt woodland over spinifex

Area 2 - Two males and three females in pit traps in open spinifex grassland

DIPRODONTA - Herbivorous Marsupials

MACROPODIDAE

Macropus robustus (Gould, 1841) Euro

Eight observations of one to three animals plus one group of seven; open eucalypt woodlands over spinifex.

- 2 - 1 km S.W. of Area 10
- 2 - 2 km S.W. of Area 1
- 1 - 1 km E. of Camp Nicholas
- 2 - 2 km N.E. of Area 10
- 3 - 2 km S.W. of Area 10
- 2 - 3 km S.W. of Area 10
- 2 - Near H.M.S. Plant
- 7 - Near H.M.S. Plant
- 1 - 1 km W. of Camp Nicholas

EUTHERIA - PLACENTAL MAMMALS

RODENTIA - Rodents

MURIDAE

Leggadina forresti (Thomas, 1906) Forrest's Mouse

Area 2 - Two males in pit traps in open spinifex grassland

Pseudomys delicatulus (Gould, 1842) Delicate Mouse

Area 1 - Five males and one female in pit traps in open eucalypt woodland over grasses.

Pseudomys sp.

Area 10 - Four males in open eucalypt woodland over spinifex.

CARNIVORA - Carnivores

CANIDAE

Canis familiaris Linnaeus, 1758 Dingo

Five recordings of single animals plus one pack of approximately six animals

- 1 - 6.5 km E. of Lissadell turn-off
- 1 - Calling near Pitt Falls
- c. 6 - Calling near Area 10
- 1 - 5 km E. of Lissadell turn-off
- 1 - 9.5 km E. of Lissadell turn-off
- 1 - 2 km N.W. of Camp Nicholas

FELIDAE

Felis catus Linnaeus, 1758 Cat

One observed at night 1 km N.E. of Camp Nicholas

One observed at night 7 km N.E. of Camp Nicholas

APPENDIX IISYSTEMATIC LIST OF BIRDS RECORDED
FROM THE EXPLORATION LEASES

PELICANIDAE

Pelecanus conspicillatus Temminck Australian Pelican

Single bird observed on pool on Smoke Creek

ARDEIDAE

Ardea pacifica Latham Pacific Heron

Three observations of single birds on banks of Smoke Creek.

Ardea novaehollandiae Latham White-faced HeronSingle bird on bank of Smoke Creek and single bird by ephemeral pool
on spinifex grassland.

CICONIIDAE

Ephippiorhynchus asiaticus (Latham) Black-necked Stork

Single bird over low open eucalypt woodland over spinifex grassland.

ANATIDAE

Anas superciliosa Gmelin Black DuckSeven observations of single birds on ephemeral water on spinifex
grassland.

ACCIPITRIDAE

Elanus caeruleus (Desfontaines) Black-shouldered KiteE. c. notatus GouldSingle bird hunting in snappy gum over low open eucalypt woodland over
spinifex grassland.Haliastur sphenurus (Vieillot) Whistling KiteSingle bird in riverine Lysiphyllum cunninghamii woodland.Milvus migrans (Boddaert) Black KiteM. m. affinis Gould

Seven observations of one or two birds: one flock of nine birds.

Riverine Lysiphyllum cunninghamii woodland and around H.M.S. plant.

Accipiter fasciatus (Vigors and Horsfield) Brown Goshawk

Two birds in low open eucalypt woodland over spinifex woodland.

Accipiter cirrocephalus (Vieillot) Collared Sparrowhawk

A.c. cirrocephalus

Single bird over H. M. S. plant and single bird in riverine Melaleuca sp. belt.

Aquila audax (Latham) Wedge-tailed Eagle

Two birds in low open eucalypt and Melaleuca woodland over spinifex and other grasses.

FALCONIDAE

Falco peregrinus Tunstall Peregrine Falcon

F.p. macropus Swainson

Single bird in dead tree in low open eucalypt woodland over spinifex grassland.

Falco berigora Vigors and Horsfield Brown Falcon

F.b. berigora

Twenty-one observations of one to four, mainly single birds. Mostly seen on termitaria in open spinifex grassland.

Falco cenchroides Vigors and Horsfield Australian Kestrel

F.c. cenchroides

Twelve observations of single birds, one observation of two birds; seen in most grassland and open woodland habitats.

PHASIANIDAE

Coturnix ypsilophora Bosc Brown Quail

C.y. australis (Latham)

Single bird in riverine Lysiphyllum cunninghamii.

TURNICIDAE

Turnix pyrrhorostris (Gould) Red-breasted Button-quail

Three observations of one to three birds; black soil grassland on grey friable stony loam.

Turnix velox (Gould) Little Button-quail

Two observations of single birds in low open eucalypt woodland over spinifex grassland.

GRUIDAE

Grus rubicundus (Perry) Brolga

Fifteen observations of one or two birds. Mainly riverine Lysiphyllum cunninghamii woodland and mixed grasslands.

OTIDIDAE

Otis australis Gray Australian Bustard

Thirteen observations of one to four, mainly single, birds. Spinifex and other grasslands.

CHARADRIIDAE

Charadrius melanops Vieillot Black-fronted Plover

Six observations of single, one or two birds around ephemeral pools in woodland and grassland habitats.

SCOLOPACIDAE

Tringa glareola Linnaeus Wood Sandpiper

Four observations of one or two birds around ephemeral pools in woodland and grassland habitats.

RECURVIROSTRIDAE

Himantopus himantopus (Linnaeus) Black-winged Stilt

H.h. leucocephalus Gould

Four birds on edge of Smoke Creek.

GLAREOLIDAE

Stiltia isabella (Vieillot) Australian Pratincole

Four birds over low open eucalypt woodland over spinifex grassland on rocky soil.

COLUMBIDAE

Geopelia striata (Linnaeus) Peaceful Dove

G.s. placida Gould

Sixty observations of one to eleven, mainly two or three birds. Most woodland and open woodland habitats, particularly riverine Lysiphyllum cunninghamii woodland.

Geopelia cuneata (Latham) Diamond Dove

Thirty-seven observations of one to four birds. Most open woodland habitats, particularly those with a spinifex understorey.

Geophaps plumifera Gould Spinifex Pigeon

Five observations of one or two birds. Low open eucalypt woodland over spinifex grassland.

Ocyphaps lophotes (Temminck) Crested Pigeon

Thirty-four observations of mainly one or two birds, four groups of four birds. Recorded from most habitats particularly riverine Lysiphyllum cunninghamii woodland.

PSITTACIDAE

Trichoglossus haematodus (Linnaeus) Rainbow Lorikeet

T.h. rubritorquis Vigors and Horsfield

Seven observations of one to six birds. Riverine Lysiphyllum cunninghamii woodland and eucalypt woodland over spinifex grassland.

Trichoglossus versicolor Lear

Varied Lorikeet

Thirty-one observations of mainly one to seven birds, some groups up to thirty-two. Recorded from most open woodlands and spinifex grassland.

Aprosmictus erythropterus (Gmelin)

Red-winged Parrot

Thirty-seven observations of one to five birds. Mainly riverine Lysiphyllum cunninghamii woodland though also from low open eucalypt woodland over spinifex and other grasses.

Platycercus venustus (Kuhl)

Northern Rosella

Seven observations of one or two birds. Mainly dense Acacia shrubland, low open eucalypt woodland over spinifex grassland and riverine Lysiphyllum cunninghamii woodland.

Melopsittacus undulatus (Shaw)

Budgerigar

Seven observations of one to five birds. Low open eucalypt woodland over spinifex grassland and riverine Lysiphyllum cunninghamii woodland.

Nymphicus hollandicus (Kerr)

Cockatiel

Twenty-four observations of mainly one to nine birds, some groups up to twenty. Favouring riverine Lysiphyllum cunninghamii woodland also recorded from low open eucalypt woodland over spinifex grassland.

Calyptorhynchus magnificus (Shaw)

Red-tailed Black Cockatoo

C.m. macrorhynchus Gould

Nineteen birds in Eucalyptus pruinosa woodland over grassland, three birds on rocky spinifex covered hillslope and six birds in dense Acacia scrub.

Cacatua roseicapilla Vieillot

Galah

Eleven observations of mainly one to three birds, one group of fourteen. Mainly low open eucalypt woodland over spinifex grassland, also two birds in riverine Lysiphyllum cunninghamii woodland.

Cacatua tenuirostris (Kuhl)

Corella

C.t. sanguinea Gould

Thirty-nine observations of mainly one to thirteen birds, some groups to sixty-nine birds. Recorded from most woodland and open woodland

habitats, favouring riverine Lysiphyllum cunninghamii woodland and Terminalia woodland. Roosts in large numbers in Adansonia gregorii.

CUCULIDAE

Cuculus pallidus (Latham)

Pallid Cuckoo

Ten observations of single birds in mainly riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over spinifex grassland.

Chrysococcyx osculans (Gould)

Black-eared Cuckoo

Single bird in low open eucalypt woodland over spinifex grassland.

STRIGIDAE

Tyto alba (Scopoli)

Barn Owl

T.a. delicatula (Gould)

Single bird sheltering under boulder on side of range.

Ninox connivens (Latham)

Barking Owl

N.c. connivens

Single bird in low open eucalypt woodland over spinifex grassland.

Ninox novaeseelandiae (Gmelin)

Boobook Owl

N.n. boobook (Latham)

Nine observations of single birds in most riverine woodland and open grassy plains.

PODARGIDAE

Podargus strigoides (Latham)

Tawny Frogmouth

Four observations of single birds. Recorded from low open eucalypt woodland over spinifex grassland, riverine Terminalia forest and one calling at Pitt Falls.

AEGOTHELIDAE

Aegotheles cristatus (White)

Australian Owlet-nightjar

A.c. leucogaster Gould

Two observations of single birds in low open eucalypt woodland over spinifex grassland.

CAPRIMULGIDAE

Eurostopodus guttatus (Vigors and Horsfield) Spotted Nightjar

Eight observations of one, one observation of two birds. Most open woodlands and grassy plains particularly low open eucalypt woodland over spinifex grassland.

ALCEDINIDAE

Dacelo leachii Vigors and Horsfield

Blue-winged Kookaburra

D.l. leachii

Twenty-four observations of mainly one to three birds, single groups of seven and eight birds. Riverine Lysiphyllum cunninghamii woodland, low open eucalypt woodland over spinifex grassland and open spinifex grassland.

Halcyon pyrrhopygia Gould

Red-backed Kingfisher

Forty-two observations of one or two birds. Recorded from all woodland and grassland habitats.

Halcyon sancta Vigors and Horsfield

Sacred Kingfisher

H.s. sancta

Eleven observations of one or two birds. Mainly riverine Lysiphyllum cunninghamii and Terminalia woodlands also low open eucalypt woodland over spinifex grassland.

MEROPIDAE

Merops ornatus Latham

Rainbow Bee-eater

Seventy observations of mainly one to eight birds, one flock of one hundred

and forty-two birds at Pitt Falls. Recorded from most habitats particularly riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over spinifex grassland.

CORACIIDAE

Eurystomus orientalis (Linnaeus) Dollarbird

E.o. pacificus (Latham)

Single bird and pair in riverine Lysiphyllum cunninghamii woodland.

ALAUDIDAE

Mirafrja javanica Horsfield Horsfield's Bushlark

Fifty-four observations of one to eight birds, mainly one or two. Recorded from most grassland habitats particularly black soil grassland and stony spinifex. Also riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over spinifex grassland.

HIRUNDINIDAE

Hirundo ariel (Gould) Fairy Martin

Five birds over low open eucalypt woodland over spinifex grassland.

CAMPEPHAGIDAE

Coracina novaehollandiae (Gmelin) Black-faced Cuckoo-shrike

C.n. novaehollandiae

Fifty-one observations of one to five, mainly one or two birds. Recorded from riverine Lysiphyllum cunninghamii woodland, low open eucalypt woodland over spinifex grassland, base of Pitt Range, and open spinifex grassland.

Coracina papuensis (Gmelin) Little Cuckoo-shrike

C.p. hypoleuca (Gould)

Five observations of single birds in low open eucalypt woodland over spinifex grassland and riverine Lysiphyllum cunninghamii woodland.

Lalage sueurii (Vieillot)

White-winged Triller

L.s. tricolor (Swainson)

Sixty observations of one to seven birds. Recorded from most open woodlands and grasslands particularly riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over spinifex grassland.

PACHYCEPHALIDAE

Microeca leucophaea (Latham)

Jacky Winter

M.l. leucophaea

Six observations of single birds in low open eucalypt woodland over spinifex grassland.

Pachycephala rufiventris (Latham)

Rufous Whistler

P.r. rufiventris

Seventeen observations of single birds, one of two. Most woodland habitats particularly riverine Lysiphyllum cunninghamii and low open eucalypt woodland over spinifex grassland.

Colluricincla harmonica (Latham)

Grey Shrike-thrush

C.h. harmonica

Eight observations of one to three birds. Mostly in riverine Terminalia near base of range, also low open eucalypt woodland over spinifex grassland.

MONARCHIDAE

Rhipidura leucophrys (Latham)

Willie Wagtail

R.l. leucophrys

Sixty-five observations of one to seven, mainly one or two birds. Most open woodland and grassland habitats.

Myiagra inquieta (Latham)

Restless Flycatcher

M.i. nana (Gould)

Thirteen observations of one and four observations of two birds. Mainly riverine Lysiphyllum cunninghamii woodland, low open eucalypt woodland

over spinifex grassland and riverine Terminalia.

ORTHONYCHIDAE

Pomatostomus temporalis (Vigors and Horsfield) Grey-crowned Babbler
P.t. rubeculus (Gould)

Thirty observations of one to eleven, mainly two or three birds. Most open woodland habitats, mainly riverine Lysiphyllum cunninghamii and low open eucalypt woodland over spinifex grassland.

ACANTHIZIDAE

Smicrornis brevirostris (Gould) Weebill

Ten observations of one to three birds. In canopy of Eucalyptus spp. and Melaleuca sp. in open woodlands over spinifex grasslands.

MALURIDAE

Malurus melanocephalus (Latham) Red-backed Fairy Wren

Thirty-three observations of one to eleven, mainly two or three birds. Observed in spinifex and other grasses in most open woodlands and grasslands.

SYLVIIDAE

Cinclorhamphus mathewsi Iredale Rufous Songlark

Seventy-six observations of one to three, mainly one, birds. Observed in most habitats visited, mainly riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over spinifex grassland.

CLIMACTERIDAE

Climacteris melanura Gould Black-tailed Tree-creeper
C.m. melanura

Forty-two observations of one to five, mainly one, birds in low open eucalypt woodland over spinifex grassland.

DICAETIDAE

Dicaeum hirundinaceum (Shaw)

Mistletoebird

D.h. hirundinaceum

Twelve observations of one or two birds. Riverine Lysiphyllum cunninghamii woodland, Terminalia woodland and low open eucalypt woodland over spinifex grassland.

PARDALOTIDAE

Pardalotus rubricatus Gould

Red-browed Pardalote

Five observations of one or two birds. Riverine Lysiphyllum cunninghamii woodland, low open eucalypt woodland over spinifex grassland and riverine Terminalia woodland.

Pardalotus striatus (Gmelin)

Striated Pardalote

P.s. uropygialis Gould

Seventeen observations of one to five, mainly two, birds. Riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over spinifex grassland.

MELIPHAGIDAE

Lichmera indistincta (Vigors and Horsfield) Brown HoneyeaterL.i. indistincta

Fifty-three observations of one to seven, mainly two or three, birds. Most woodland and grassland habitats particularly riverine associations and dense Acacia shrubland.

Meliphaga virescens (Vieillot)

Singing Honeyeater

Two single birds and a pair in low open eucalypt woodland over spinifex grassland.

Meliphaga plumula (Gould)

Yellow-fronted Honeyeater

Nineteen observations of mainly one to seven birds, one flock of fifteen birds. Most open woodlands, particularly riverine Lysiphyllum cunninghamii woodland, riverine Terminalia woodland, and low open eucalypt woodland over spinifex grassland.

Meliphaga flavescens (Gould)

Yellow-tinted Honeyeater

M.f. flavescens

Two observations of two birds in riverine Lysiphyllum cunninghamii woodland and a single bird and a pair in mixed eucalypt woodland over spinifex grassland.

Philemon citreogularis (Gould)

Little Friarbird

P.c. citreogularis

Eighty-five observations of mainly one to three birds; also single groups of four, six and twelve birds. Recorded from most woodland habitats, occasionally in grassland. Mainly seen around Adansonia gregorii in riverine Lysiphyllum cunninghamii woodland.

Cissomela pectoralis (Gould)

Banded Honeyeater

Thirty-four observations of one to five birds. Most woodlands, favouring those with dense Acacia understorey.

Conopophila rufogularis (Gould)

Rufous-throated Honeyeater

Fourteen observations of one to five, mainly two, birds. Riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over spinifex grassland.

Manorina flavigula (Gould)

Yellow-throated Miner

Twenty-nine observations of one to eight, mainly two, birds. Recorded from most woodland and grassland habitats, particularly low open eucalypt woodland over spinifex grassland.

PLOCEIDAE

Poephila guttata (Vieillot)

Zebra Finch

P.g. castanotis (Gould)

Seventeen observations of two to seven, mainly two, birds. Riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over spinifex and other grasses.

Poephila bichenovii (Vigors and Horsfield) Double-barred Finch
P.b. annulosa (Gould)

Single bird in riverine Terminalia woodland.

Poephila personata Gould Masked Finch
P.p. personata

Two observations of two birds. Riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over Acacia shrubland.

Poephila acuticauda (Gould) Long-tailed Finch

Fourteen observations of one to five birds, mainly two birds. Riverine Lysiphyllum cunninghamii woodland and low open eucalypt woodland over spinifex grassland.

Erythrura gouldiae (Gould) Gouldian Finch

Male and female of the black-headed form feeding on spinifex heads in low open eucalypt woodland over spinifex grassland.

Lonchura pectoralis (Gould) Pictorella Mannikin

Twenty-four observations of one to nine, mainly two or three, birds. Most woodland and grassland habitats, particularly low open eucalypt woodland over spinifex grassland and riverine Lysiphyllum cunninghamii woodland.

GRALLINIDAE

Grallina cyanoleuca (Latham) Magpie Lark

Two hundred and thirty-three observations of mainly one to five birds, some groups up to twenty-six. Recorded from every habitat type, particularly riverine associations.

ARTAMIDAE

Artamus superciliosus (Gould) White-browed Woodswallow

Single bird on termitarium on spinifex grassland.

Artamus cinereus Vieillot

Black-faced Woodswallow

A.c. melanops Gould

One hundred and ninety-one observations of mainly one to five, with groups up to nineteen birds. Recorded from all habitats particularly riverine associations and low open eucalypt woodland over spinifex grassland.

Artamus minor Vieillot

Little Woodswallow

Thirty observations of one to eight birds. Most woodlands particularly those with Acacia and spinifex understorey, and open spinifex grassland.

CRATICIDAE

Cracticus nigrogularis (Gould)

Red Butcherbird

Sixty-three observations of one to seven, mainly one or two birds. Favours riverine woodlands, also spinifex grassland, base of Pitt Range and low open eucalypt woodland over spinifex grassland.

Cracticus tibicen (Latham)

Australian Magpie

C.t. tibicen

Twenty five observations of one to five, mainly two birds. Mostly spinifex grass plains with little overstorey, also black soil grassland, and riverine Lysiphyllum cunninghamii woodland.

PARADISAEIDAE

Ptilonorhynchus nuchalis Jardine and Selby Great BowerbirdP.n. nuchalis

Eight observations and one to three birds. Riverine Terminalia and Lysiphyllum cunninghamii woodlands.

CORVIDAE

Corvus orru Bonaparte

Australian Crow

C.o. salvadorii Finsch

Thirty-one observations of one to three birds, also one flock of eleven

birds feeding on a Euro (Macropus robustus) carcass. Open woodland habitats and grasslands, particularly riverine associations.

REPTILIA - REPTILES

Reptiles and amphibians collected are lodged in the W. A. Museum under collection registration numbers R 75001 to R 75551.

LACERTILIA - Lizards

GEKKONIDAE - Geckoes

Diplodactylus stenodactylus Boulenger, 1896

Moderately common on sandy and loamy soil with spinifex and other grasses.

7 in pit traps in open eucalypt woodland over grasses	Area 1
1 under log in open eucalypt woodland over grasses	Area 11
1 in pit trap in open eucalypt woodland over grasses	Area 11

Diplodactylus taeniatus (Lönnberg and Andersson, 1913)

Uncommon. Two collected from spinifex on loamy soils.

1 in pit trap in open spinifex grassland	Area 2
1 in spinifex clump in open eucalypt woodland over spinifex	0.5 km N of Area 10

Gehyra australis Gray, 1845

Common in rocky ranges, riverine areas and open eucalypt woodlands

7 on rocks at base of rocky range	Pitt Falls
1 on building at H. M. S. plant	
5 on trees in open eucalypt - <u>Melaleuca</u> woodland over grasses	1 km S of Area 4
4 on trees in open eucalypt woodland over spinifex	1 km E of Camp Nicholas
1 on road through open eucalypt woodland over spinifex	3 km N. W of H. M. S. plant

Gehyra pilbara Mitchell, 1965

Very common. Apparently every large termite mound has its own colony, some housing up to 20 geckoes.

20 active on termite mound at night	1 km S of Area 4
7 active on termite mound at night	H. M. S. plant
1 under tent in open eucalypt woodland over spinifex	0.5 km N of Area 10
1 under rock at base of rocky hill	Lissadell turn-off

Heteronotia binoei (Gray, 1845)

Moderately common in open eucalypt woodland over spinifex and in spinifex grassland.

- | | |
|--|-------------------------|
| 6 under spinifex spoil in open eucalypt woodland over spinifex | 0.5 km N of Area 10 |
| 1 active at night in open eucalypt woodland over spinifex | 1 km E of Camp Nicholas |
| 1 in pit trap in open eucalypt woodland over spinifex | Area 10 |
| 2 in pit traps in open spinifex grassland | Area 2 |

Heteronotia spelea (Kluge, 1963)

Uncommon. One collected from granite hill

- | | |
|---|--------------------|
| 1 under exfoliated rock at base of hill | Lissadell turn-off |
|---|--------------------|

Rhynchoedura ornata Gunther, 1867

Uncommon

- | | |
|---|------------------|
| 2 active at night in open eucalypt woodland over spinifex | 1 km S of Area 4 |
|---|------------------|

PYGOPODIDAE - Legless Lizards

Delma borea Kluge, 1974

Moderately common. Collected from spinifex in open eucalypt woodland.

- | | |
|--|---------------------|
| 2 under spinifex spoil in open eucalypt woodland over spinifex | 0.5 km N of Area 10 |
| 2 in pit traps in open eucalypt woodland over grasses | Area 1 |
| 1 active in open eucalypt woodland over grasses | Area 1 |
| 1 active in open eucalypt woodland over spinifex | Area 10 |

Lialis burtonis Gray, 1835

Uncommon. Collected from open eucalypt woodland over grasses including spinifex.

- | | |
|---|---------|
| 1 in pit trap in open eucalypt woodland over grasses | Area 1 |
| 1 in pit trap in open eucalypt woodland over spinifex | Area 10 |

Pygopus nigriceps (Fischer, 1882)

Uncommon. One collected in open eucalypt woodland over grasses on sandy loam.

1 in pit trap

Area 1

AGAMIDAE - Dragons

Amphibolurus inermis (de Vis, 1888)

Common in open eucalypt woodland over spinifex and other grasses.

1 basking in open eucalypt woodland over spinifex	1 km S of Area 4
1 active in open eucalypt woodland over grasses	Area 1
1 active in low open eucalypt woodland over spinifex	Lissadell turn-off
1 active in open spinifex grassland	Area 2
1 active in low open eucalypt woodland over spinifex	12 km W of Area 2
1 active in low open eucalypt woodland over spinifex	11 km W of Area 2
1 active in low open eucalypt woodland over spinifex	3 km S.E of Lissadell turn-off
1 active in low open eucalypt woodland over spinifex	3.5 km E of Lissadell turn-off
1 active in low open eucalypt woodland over spinifex	4.5 km E of Lissadell turn-off

Chlamydosaurus kingii Gray, 1825

Three in open eucalypt woodland over spinifex on stony clay loam

2 on trees	1 km S of Area 4
1 on tree	4 km S of Area 4

Diporiphora arnhemica Storr, 1974

Uncommon. Three collected from open eucalypt woodland over spinifex on rocky soil

1 basking on rocks	0.5 km S.W of Area 10
2 active among rocks	1 km N of Camp Nicholas

Diporiphora magna Storr, 1974

Very common. Found in most habitats where either spinifex or other grasses were present. Absent from rocky ranges.

3 basking on low dead shrubs	4.5 km E of Lissadell turn-off
1 basking on low dead shrub	3 km S.E of Lissadell turn-off
1 basking on low dead shrub	5 km W of Area 2
9 active amongst grass tussocks	Area 1
7 in pit traps in open eucalypt woodland over grasses	Area 1
1 basking on fence post in open spinifex grassland	Area 2
2 basking on dead shrubs	3 km S of H.M.S. plant

Lophognathus g. gilberti (Gray, 1842)

Common in riverine areas and their associated grassy alluvia.

3 active in shrubs in open eucalypt woodland over grasses	Area 1
1 in pit trap	Area 1
2 active in creekside vegetation	4 km N.E of Area 2
1 active in creekside vegetation	1 km E of Area 2

SKINCIDAE - Skinks

Carlia triacantha (Mitchell, 1953)

Scarce. One recorded from open eucalypt woodland over spinifex

1 active at camp site	0.5 km N of Area 10
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Cryptoblepharus megastictus Storr, 1976

Locally common on rocky hill.

10 active on granite boulders at base of hill	Lissadell turn-off
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Cryptoblepharus plagiocephalus (Cocteau, 1836)

Uncommon. On trees in open grassland on loamy soils and in open eucalypt woodland over spinifex.

2 on trees in open eucalypt woodland over grasses	Area 1
1 on tree in open eucalypt woodland over spinifex	0.5 km N of H.M.S. plant

Ctenotus inornatus (Gray, 1845)

Very common. Recorded from grassland on loamy soils, grassland on black soil and open eucalypt woodland over spinifex.

5 in pit traps in open eucalypt woodland over grasses	Area 1
9 in pit traps in open eucalypt woodland over spinifex	Area 10
1 active in open eucalypt woodland over spinifex	0.5 km N of Area 10
2 active in open grassland on black soil	Area 9

Ctenotus militaris Storr, 1975

Very common. Collected from open eucalypt woodland over grasses and/or spinifex.

5 in pit traps in open eucalypt woodland over grasses	Area 1
2 active in open eucalypt woodland over grasses	Area 1
3 active in open eucalypt woodland over spinifex	Area 10
6 in pit traps in open eucalypt woodland over spinifex	Area 10
3 in pit traps in open spinifex grassland	Area 2
1 active in open eucalypt woodland over spinifex	Lissadell turn-off
2 active in open eucalypt woodland over spinifex	0.5 km N of Area 10

Ctenotus pantherinus calx Storr, 1970

Common. Collected from grassland on black soil, open eucalypt woodland over spinifex and open spinifex grassland.

3 in pit traps in open spinifex grassland	Area 2
1 in pit trap in open eucalypt woodland over spinifex	Area 10
2 in pit trap in grassland on black soil	Area 9

Ctenotus piankai Storr, 1969

Very common in open eucalypt woodland over grasses including spinifex.

9 in pit traps in open eucalypt woodland over grasses	Area 1
3 active in open eucalypt woodland over grasses	Area 1
4 in pit traps in open spinifex grassland	Area 2
10 in pit traps in open eucalypt woodland over spinifex	Area 10
6 active in open eucalypt woodland over spinifex	Area 10
2 in pit traps in open eucalypt woodland over grasses	Area 11

Ctenotus saxatilis Storr, 1970

Uncommon. Collected from open eucalypt woodland over grasses including spinifex.

- 1 in pit trap in open eucalypt woodland over grasses Area 1
 1 in pit trap in open eucalypt woodland over spinifex Area 10

Lerista borealis Storr, 1972

Uncommon. Collected from open eucalypt woodland over grasses including spinifex.

- 1 in pit trap in open eucalypt woodland over grasses Area 1
 2 in soil beneath leaf litter in open eucalypt woodland over spinifex Lissadell turn-off

Menetia greyii Gray, 1845

Locally common. Collected from open eucalypt woodland over grasses where leaf litter was present.

- 4 in pit traps in open eucalypt woodland over grasses and leaf litter Area 1

Notoscincus ornatus wotjulum (Glauert, 1959)

Rare. In open eucalypt woodland over grasses where leaf litter was present.

- 1 in pit trap in open eucalypt woodland over grasses and leaf litter Area 1

Proablepharus tenuis (Broom, 1896)

Rare. In open eucalypt woodland over grasses where leaf litter was present.

- 1 in leaf litter in open eucalypt woodland over grasses Area 1

Tiliqua multifasciata Sternfeld, 1919

- 1 in open eucalypt woodland over spinifex H.M.S. Plant

Tiliqua scincoides (Shaw, 1790)

- 1 in open eucalypt woodland over Acacia shrubland over spinifex on rocky soil 1 km S.W of Area 10

VARANIDAE - Monitors

Varanus acanthurus Boulenger, 1885

1 in open eucalypt woodland over spinifex 4 km W of Area 2

Varanus gouldii (Gray, 1838)

Uncommon. Recorded from grassland on black soil and open eucalypt woodland over grasses including spinifex.

1 in pit trap in open eucalypt woodland over grasses Area 1

1 active in grassland on black soil plain Area 9

1 active in open eucalypt woodland over spinifex 2 km E of Area 2

Varanus p. panoptes Storr, 1980

Rare.

1 dead on road through open eucalypt woodland over spinifex 1 km S of Area 4

Varanus storri ocreatus Storr, 1980

Very common. Collected from open spinifex grassland and grassland on black soil plain.

10 in pit traps in grassland on black soil plain Area 9

3 in pit traps in open spinifex grassland Area 2

1 under log in open spinifex grassland Area 2

Varanus timorensis scalaris Mertens, 1941

Moderately common. Three collected from open eucalypt woodland over grasses.

2 in pit traps in open eucalypt woodland over grasses Area 1

1 in pit traps in open eucalypt woodland over grasses Area 11

Varanus t. tristis (Schlegel, 1839)

Moderately common. Associated with dead trees and termite mounds in open eucalypt woodlands.

1 basking on dead standing tree in open eucalypt woodland over spinifex Area 10

1 basking on dead standing tree in open eucalypt woodland over spinifex 1 km S of Area 2

- 1 basking on dead standing tree in open eucalypt
woodland over spinifex 4 km S.W of Area 2
- 1 basking on termite mound in open eucalypt
woodland over spinifex H. M. S. plant

SERPENTES - SNAKES

TYPHLOPIDAE - Blind Snakes

Ramphotyphlops ligatus (Peters, 1879)

- 1 in pit trap in open eucalypt woodland over grasses Area 1

Ramphotyphlops unguirostris (Peters, 1867)

Moderately common. Collected from open eucalypt woodland over
grasses including spinifex.

- 2 in pit traps in open eucalypt woodland over grasses Area 1
- 1 dead on road through open eucalypt woodland over
spinifex 2 km E of Area 2

BOIDAE - Pythons

Liasis childreni Gray, 1842

Common. In rocky ranges and valley black soil plains and eucalypt
woodlands over spinifex.

- 3 dead on road through open eucalypt woodland over
spinifex H. M. S. plant
- 2 active at night in grassland on black soil plain 2 km W of H. M. S. plant
- 3 active at night amongst rocks near creek in rocky
range Pitt Falls
- 1 active at night in open eucalypt woodland over
spinifex 1 km S of Area 4
- 1 dead on road through open eucalypt woodland
over spinifex 0.5 km E of Lissadell
turn-off

COLUBRIDAE - Back-fanged Snakes

Boiga fusca (Gray, 1842)

Scarce.

1 headtorched in tree adjacent to creek at base of
of rocky ranges

Pitt Falls

ELAPIDAE - Front-fanged Snakes

Demansia atra (Macleay, 1885)1 dead on road through open eucalypt woodland
over spinifex1 km N. W of H. M. S.
plantFurina "ornata" (Storr, M. S. name)1 in open eucalypt woodland over spinifex on
rocky hillslope

1 km E of Area 3

Vermicella semifasciata roperi (Kingshorn, 1931)

2 in pit traps in open eucalypt woodland over spinifex

Area 10

APPENDIX IV

AMPHIBIA - AMPHIBIANS

ANURA - FROGS

LEPTODACTYLIDAE - Ground Frogs

Cyclorana australis (Gray, 1842)

Very common in riverine areas, their associated alluvia and black soil plains areas.

32 in pit traps in grassland on black soil	Area 9
7 in pit traps in open spinifex grassland	Area 2
5 in flooded grassy depression in open <u>Lysiphyllum cunninghamii</u> woodland	Lissadell turn-off
2 on road at night, riverine area	4 km N.E of Area 2
14 active at night in vicinity of H. M. S. plant	
1 active at night at Camp Nicholas	
2 active at night in open eucalypt woodland over spinifex	0.5 km N.E of Area 10
27 active at night on edge of dam in grassland on black soil	2 km W of H. M. S. plant
1 active at night in open eucalypt - <u>Melaleuca</u> wood- land over grasses	1 km S of Area 4

Cyclorana longipes Tyler and Martin, 1977

Very common in riverine areas, their associated alluvia and black soil areas.

1 active at night in open eucalypt woodland over spinifex	0.5 km N of Area 10
35 in pit traps in open eucalypt woodland over grasses	Area 1
3 active at night in open eucalypt - <u>Melaleuca</u> wood- land over grasses and spinifex	1 km S of Area 4
45 in pit traps in open spinifex grassland	Area 2
13 in pit traps in open eucalypt woodland over spinifex	Area 10
1 under rock	Lissadell turn-off
3 in pit traps in grassland on black soil plain	Area 9

- 1 active at night in creek in rocky hills Pitt Falls
 2 active at night on edge of dam on black soil plain 2 km W of H. M. S. plant

Limnodynastes ornatus (Gray, 1842)

Very common in riverine areas, their associated alluvia, black soil areas and open eucalypt woodlands.

- 1 active at night in creek 1 km E of Camp Nicholas
 119 in pit traps in open eucalypt woodland over grasses Area 1
 3 active at night in open eucalypt - Melaleuca woodland over grasses 1 km S of Area 4
 30 in pit traps in open spinifex grassland Area 2
 15 in pit traps in open eucalypt woodland over spinifex Area 10
 2 active at night at Camp Nicholas
 1 in pit trap in grassland on black soil Area 9
 3 at tailings dam H. M. S. plant
 1 active at night in open eucalypt woodland over spinifex 0.5 km N of Area 10
 23 in pit traps in open eucalypt woodland over grasses Area 11
 2 active at night on edge of dam on black soil plain 2 km W of H. M. S. plant

Limnodynastes depressus Tyler, Martin and Davies, 1979

Common in creek in rocky ranges.

- 24 freshly metamorphosed juveniles under rocks at edge of pool Pitt Falls

Notaden melanoscaphus Hosmer, 1962

Uncommon.

- 4 calling from open Melaleuca woodland over grasses 1 km S of Area 4

Uperoleia sp.¹

Uncommon.

- 3 collected from creek at Pitt Falls

Uperoleia sp²

Uncommon.

4 in pit traps in black soil plain

Area 9

HYLIDAE - Tree Frogs

Litoria caerulea (White, 1790)

Common in creek in rocky ranges.

9 active at night on rocks on edge of creek

Pitt Falls

1 active at night on rock on edge of creek

1 km E of Camp
Nicholas

Litoria coplandi (Tyler, 1968)

Restricted to creeks in rocky ranges where they are very common.

ca. 80 perching on rocks at night, many on edges of
pools

Pitt Falls

Litoria rothii (de Vis, 1884)

Uncommon.

4 calling from Melaleuca woodland over grasses

1 km S of Area 4

Litoria rubella (Gray, 1842)

Moderately common in vicinity of artificial pools, also recorded from
creek in rocky ranges.

3 calling at night at Camp Nicholas

1 active at night on edge of tailings dam

H. M. S. plant

4 active at night on trees along edge of creek

Pitt Falls

Litoria splendida Tyler, 1977

Common in creek in rocky ranges

10 perching on rocks at night

Pitt Falls

Litoria wotjulumensis (Copland, 1957)

Rare.

1 in creek at night.

1 km E of Camp
Nicholas

Litoria sp (possibly related to L. latopalmata)

Common in one locality.

15 calling at night in flooded open Melaleuca woodland
over grasses

1 km S of Area 4

7 active at night at tailings dam

H.M.S. plant

3 active at night on edge of dam on black soil plain

2 km W of H. M. S
plant