Beveridge Street Reserve

Reserve No: 37695 "Parkland and Recreation"
Vested with the Denmark Shire

Fauna and Flora Report

Compiled by
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INTRODUCTION

The Beveridge Street Reserve is located on the eastern bank of Denmark River just south east of the Denmark township on the south coast of Western Australia. It is 5.319 hectares in size. The predominant native vegetation community is open karri forest and marri,/jarrah woodland with a riparian zone bordering the river. The vegetation is in good health with very little weed intrusion on the edges. A recreational walking path and a pony riding trail both intersect the reserve with minimal impact on the surrounding vegetation.

Fig. 1 - Marri jarrah open woodland with a thick understorev

Fig. 2 - One of the old marri trees which contains valuable nesting hollows

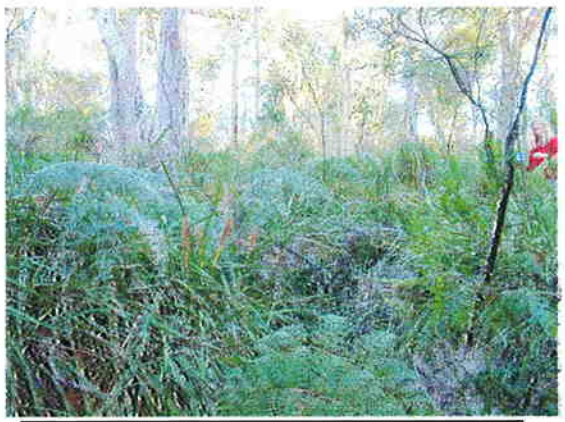

Fig. 3 - Typical riparian vegetation down near the river where Site 4 was located

Fig. 4 - Agonis and Melaleuca bordering the river near the recreation path

Since the founding of the Denmark township the Wilson Inlet area was selectively logged. Many of the larger trees in the reserve area were probably removed. However there are a few of the old marri and karri trees remaining which have trunk diameters exceeding 1.5 metres. These older trees provide the necessary breeding hollows for the larger arboreal mammals like brush tailed possums and brush tailed phascogales and hollows for nesting birds like the western rosellas. The north eastern part of the reserve contains karri loam soils whilst the southern part of the reserve is dominated by grey podsolic soils and coarse quartz sands. Some areas have quite deep soil profiles overlaying laterites and granites.

FAUNA SURVEY METHODOLOGY

Four different vegetation communities within the reserve were selected to install the fauna survey traps. Elliot , cage, and pit traps were used and left open over three consecutive nights; 18th – 20th of November, 2004. The traps were closed during the day time which unfortunately did not allow the survey of more reptile species. The traps installed at each site were determined by physical features of the site (tree roots and thick understorey restrict pit trap installation.) Every effort was made to minimise the stress impact on the fauna and approval was obtained from the Department of Conservation and Land Management's Animal Ethics Committee to run this project. The Elliot traps had plastic bags enclosed over one end and the cage traps had plastic and hessian placed over the top of one end of the trap to provide more waterproofing. The pit traps have the bucket lids positioned above the buckets to provide more shelter from the rain and protection from predation by owls etc. The traps were cleared at 5am in the morning to minimise the stress on the nocturnal animals.

Fig. 5 - Releasing fauna early in the morning from an Elliot Box trap

Fig. 6 - The lids of the pit traps are positioned on sticks above the bucket opening to provide shelter and protection to captive fauna. Survey tape is used to identify each individual trap.

Fig. 7 - A cage trap sitting in the sedge area near the bank of the Denmark River.

FAUNA SURVEY RESULTS

Table 1 – Results of small mammal fauna survey for SITE 1 – Open Karri Forest
Position: latitude: S 34 ° 57' 47.4" longitude: E 117 ° 21' 37.9"
Traps Included; Six pit traps with fencing, seven Elliott box traps and two cage traps.

Trap No.	Species name	Common name	No. of specimens
Night 1			
Pit 4	*Crinea georgiana*	Quacking Frog	one
Pit 5	*Heileiporous psammophilus*	Sand Frog	one
Elliot 1	*Rattus fuscipes*	Western Bushrat	one
Elliot 4	*Rattus fuscipes*	Western Bushrat	one
Elliot 5	*Rattus fuscipes*	Western Bushrat	one
Elliot 6	*Rattus fuscipes*	Western Bushrat	one
Night 2			
Pit 1	*Heileiporous psammophilus*	Sand Frog	one
Elliot 3	*Rattus fuscipes*	Western Bushrat	one
Night 3			
Pit 3	*Bassiana trilineata ?*	Southern Western Cool Skink (4 toes on front and hind feet)	one
Pit 4	*Heileiporous psammophilus*	Sand Frog	two
Pit 6	*Rattus fuscipes*	Western Bushrat	one
Cage 2	*Trichosurus vulpecula*	Brush Tailed Possum	one
Elliot 2	*Rattus fuscipes*	Western Bushrat	one
Elliot 5	*Rattus fuscipes*	Western Bushrat	one
Elliot 6	*Rattus fuscipes*	Western Bushrat	one

Table 2 – Results of small mammal fauna survey for SITE 2 – Marri/Jarrah Woodland
Position: latitude: S 34 ° 57' 52.2" longitude: E 117 ° 21' 44.1"
Traps Included; seven pit traps with fencing, seven Elliott box traps and one cage trap.

Trap No.	Species name	Common name	No. of specimens
Night 1			
Pit 1	*Heileiporous psammophilus* *Crinea geogiana* *Pseudophryne guentheri*	Sand Frog Quacking Frog Crawling Frog	one one one
Pit 2	*Pseudophryne guentheri*	Crawling Frog	one
Pit 3	*Pseudophryne guentheri*	Crawling Frog	one
Pit 5	*Crinea geogiana* *Pseudophryne guentheri*	Quacking Frog Crawling Frog	one one
Elliot 7	*Rattus fuscipes*	Western Bushrat	one (juvenile)
Night 2			
Pit 7	*Heileiporous psammophilus*	Sand Frog	one
Night 3			
Pit 1	*Crinea insignifera* *Crinea georgiana*	Squelching Frog Quacking Frog	one one
Pit 2	*Heileiporous psammophilus*	Sand Frog	one
Pit 3	*Heileiporous psammophilus* *Crinea georgiana*	Sand Frog Quacking frog	One one
Pit 4	*Crinea georgiana*	Quacking Frog	one

Table 3 – Results of small mammal fauna survey for SITE 3 – Open Marri/Jarrah woodland
Position: latitude: S 34 ° 57' 53.8" longitude: E 117 ° 21' 39.6"
Traps included; five pit traps with fencing, seven Elliott box traps and one cage trap.

Trap No.	Species name	Common name	No. of specimens
Night 1			
Pit 3	*Lymnodynates dorsalis*	Banjo Frog	one
Pit 4	*Heileiporous psammophilus*	Sand Frog	one
Elliot 3	*Rattus fuscipes*	Western Bushrat	one
Cage 1	*Isoodon obesulus*	Southern Brown Bandicoot	one
Night 2			
Pit 2	Unnamed insects	Cricket spider	five
Pit 3	*Lymnodynates dorsalis* *Crinea georgiana*	Banjo Frog Quacking Frog	one one
Pit 4	*Heileiporous psammophilus*	Sand Frog	one
Elliot 2	*Rattus fuscipes*	Western Bushrat	one
Elliot 5	*Rattus fuscipes*	Western Bushrat	one
Elliot 6	*Rattus fuscipes*	Western Bushrat	one
Elliot 7	Order - Soleolifera	slug	one
Cage 1	*Rattus fuscipes*	Western Bushrat	one
Night 3			
Pit 3	*Heileiporous psammophilus*	Sand Frog	one
Pit 5	*Crinea insignifera*	Squelching Frog	one
Elliot 1	*Rattus fuscipes*	Western Bushrat	one
Elliot 2	*Rattus fuscipes*	Western Bushrat	one
Elliot 3	*Rattus fuscipes*	Western Bushrat	one

Table 4 – Results of small mammal fauna survey for SITE 4 – Riparian Zone
Position: latitude: S 34 ° 57' 59.2" longitude: E 117 ° 21' 39.6"
Traps Included; Seven Elliott box traps and one cage trap (only for one night).

Trap No.	Species name	Common name	No. of specimens
Night 1			
Elliot 4	*Rattus fuscipes*	Western Bushrat	one
Elliot 6	*Rattus fuscipes*	Western Bushrat	one
Elliot 7	*Rattus fuscipes*	Western Bushrat	one
Night 2			
Elliot 1	*Rattus fuscipes*	Western Bushrat	one
Elliot 4	*Rattus fuscipes*	Western Bushrat	one
Elliot 5	*Rattus fuscipes*	Western Bushrat	one
Elliot 7	*Rattus fuscipes*	Western Bushrat	one
Night 3			
Elliot 1	*Rattus fuscipes*	Western Bushrat	one
Elliot 2	*Rattus fuscipes*	Western Bushrat	one
Elliot 3	*Rattus fuscipes*	Western Bushrat	one
Elliot 5	*Rattus fuscipes*	Western Bushrat	one
Elliot 6	*Rattus fuscipes*	Western Bushrat	one
Elliot 7	*Rattus fuscipes*	Western Bushrat	one

Fig. 8 – A banjo frog *(Limnodynastes dorsalis)* found at Survey Site 3 with a Quacking Frog *(Crinea georgiana)* sitting behind it.

Fig. 9 – The Sand Frogs *(Heleiporous psammophilus)* were found a most sites

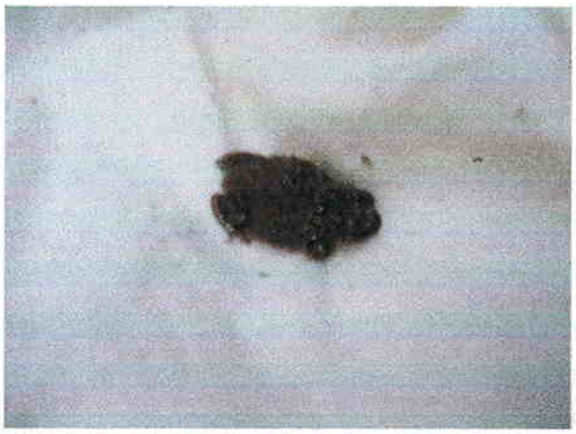

Fig. 10 – A small crawling frog (*Pseudophryne guentheri).*

Fig. 11 – A bush rat *(Rattus fuscipes)* caught at Site 1 in under the Karri forest in a pit trap.

Fig. 12 – Banjo Frog *(Limnodynastes dorsalis)*

Fig. 13 – The sand frogs *(Heleiporous psammophilus)* were found at most sites

Fig. 14 – A western bushrat emerging from an Elliot trap

Fig. 15 – A southern cool skink (*Bassiana trilineata*).

Fig. 16 – A southern brown bandicoot *(Isoodon obesulus)* caught at Site 3 in the marri/jarrah open woodland

Fig. 17 – One of the quacking frogs (*Crinea georgiana*) frogs found in the jarrah/marri woodland area.

FAUNA SURVEY RECORDS

As part of the "Denmark Foreshore, Wilson Inlet Management Plan" report by WIMA, the following fauna were also recorded in the area;

Yellow Footed Antechinus	*Antechinus flavipes*
Honey Possum	*Tarsipes rostratus*
Moaning Frog	*Heleioporus eyrei*
Water Rat	*Hyrdromys chrysogaster*

Tina Smith is a resident of Beveridge Street and lives opposite the bush reserve. Tina is a registered Wildlife Carer so has a good knowledge of the native fauna in the area. Over the years she has recorded all wildlife species that she has sighted from bush walks and occasional spot lighting sessions.

Frogs

Motorbike frog*(Litoria moorei)*
Banjo Frog *(Limnodynastes dorsalis)*
Sand Frog *(Heleiporous psammophilus)*
Quacking Frog *(Crinea georgiana)*
South cCast Froglet *(Crinea subinsignifera)*
Gunthers Toadlet *(Pseudophyrne guentheri)*
Slender Tree Frog *(Litoria adelaidensis)*
Moaning Frog*(Heleioporous eyrei)*
Lea's Frog *(Geocrinea leai)*
Clicking Frog *(Crinea gluaerti)*
Nicholls Toadlet *(Metacrinia nicholsii)*

Reptiles

Race Horse goanna *(Varanus rosenbergii)*
Shingle Back *(Teliqua rugosa)*
Marbled Gecko *(Phyllodactylus marmortus)*
Chain Striped Ctenotus *(Ctenotus catenifer)*
Tiger Snake *(Notechis scutatus)*
King Skink *(Egernia kingii)*
Napoleons Skink *(Egernia napoleonis)*
Red Legged Ctenotus *(Ctenotus labillardieri)*
Orange Tailed Lerista *(Lerista distinguenda)*
Crowned Snake *(Drydalia coronata)*

Mammals

Western Grey Kangaroo *(Macropus fuliginosus)*
Southern Brown Bandicoot *(Isoodon obesulus)*
Phascogale *(Phascogale calura)*
Pygmy Possum*(Cecartetus concinnus)*
Water Rat *(Hyrdromys chrysogaster)*
Brush Tail Possum *(Trichorus vulpecula)*
Bush Rat (*Rattus fescipes)*
Honey Possum *(Tarsipes rostratus)*
Dunnart *(Sminthopsis crassicaudata)*
Chuditch (not confirmed - scat only)

Tina recently found an echidna (*Tachyglossus aculeatus*) near the river reserve as well. (29/04/04)

Birds

Brown Quail
Musk Duck
Black Swan
Shelduck
Wood Duck
Black Duck
Grey Teal
Australian Grebe
Little Pied Cormorant
Pied Cormorant
Little Black Cormorant
Great Cormorant
White Faced Heron
Great Egret
Cattle Egret
Nankeen Night Heron
Aust. White Ibis
Straw Necked Ibis
Yellow Billed Spoonbill
Osprey
Black Shouldered Kite
Square Tailed Kite
White Bellied Sea Eagle
Swamp Harrier
Brown Goshawk
Collared Sparrowhawk
Wedge Tailed Eagle
Little Eagle
Purple Swamphen
Eurasian Coot
Pied Oystercatcher
Sooty Oystercatcher
Pacific Gull
Silver Gull
Common Bronzewing
Brush Bronzewing
Crested Pigeon
Red Tailed Black Cockatoo
Long Billed Black Cockatoo
Short Billed Black Cockatoo
Galah
Purple Crowned Lorikeet
Western Rosella
Southern Boobook Owl
Barn Owl
Tawny Frogmouth
Aust. Owlet Nightjar
Kookaburra
Sacred Kingfisher
Splendid Fairy Wren
Red Fairy Wren
Emu Wren
Spotted Pardalote
Emu Wren
White Browed Scrubwren
Western Greygorne
Inland Thornbill
Western Thornbill
Yellow Rumped Thornbill
Red Wattlebird
Little Wattlebird
White Naped Honeyeater
Brown Honeyeater
New Holland Honeyeater
Western Spinebill
Scarlet Robin
Western Yellow Robin
White Breasted Robin
White Browed Babbler
Varied Sitella
Crested Shrike Tit
Grey Shrike Thrush
Restless Flycatcher
Magpie Lark
Grey Fantail
Willie Wag Tail
Black Faced Cuckoo Shrike
White Winged Triller
Dusky Woodswallow
Australian Magpie
Australian Raven
Richards Pipit
Red Eared Firetail Finch
Welcome Swallow
Tree Martin
Silver Eye

Birds Continued

Aust Ring Neck Parrot
Elegant Parrot
Horsefield Bronze Cuckoo
Red Capped Parrot
Fan Tailed Cuckoo
Shining Bronze Cuckoo

Rare fauna

There is a small possible that the property could form part of a home range for the following rare or threatened wildlife. If any of these are noticed on your property, CALM would be most interested to know. Detailed notes on these species can be found in the Appendix.

Mammals - Chuditch - (fauna that is rare or is likely to become extinct.)
Dibbler - (fauna that is rare or is likely to become extinct.)
Birds - Peregrine Falcon - (specially protected fauna)

FLORA SURVEY

Each site was surveyed for flora doing a collection across the site. Ninety two indigenous species and twenty eight weed species were officially recorded in the reserve by the TAFE trainees.

Table 5 – Flora List Compiled by TAFE Students for the Beveridge Street Bush Reserve

FAMILY	SCIENTIFIC NAME	PRESENT AT SITE:
ANARTHREACEAE	*Anarthria prolifera*	2
ANARTHREACEAE	*Anarthria scabra*	2,3
ANTHERICACEAE	*Johnsonia lupilina*	3
APIACEAE	*Centella asiatica*	3
APIACEAE	*Platysace compresa*	2
APIACEAE	*Xanthosia rotundifolia*	3
CASSUARINACEAE	*Allocassuarina decussata*	1,3
CASSUARINACEAE	*Allocassuarina fraseriana*	2,3
CYPERACEAE	*Isolepis nodosa*	3
CYPERACEAE	*Lepidospaerma gladiatum*	3
CYPERACEAE	*Lepidosperma effusum*	1,2,3
CYPERACEAE	*Lepidosperma angustatum*	3
DASYPOGONACEAE	*Dasypogon bromeliifolius*	2,3
DASYPOGONACEAE	*Lomandra sp.*	3
DENNSTAEDTIACOAE	*Pteridium esculentum*	1,2,3
DILLENEACEAE	*Hibbertia amplexicaulis*	2
DILLENEACEAE	*Hibbertia cunninghammii*	2
DILLENEACEAE	*Hibbertia fufuraceae*	1,2,3
DILLENEACEAE	*Hibbertia pilosa*	2
EPACRIDACEAE	*Leucopgon oxycerlis*	2
EPACRIDACEAE	*Leucopogon australis*	1,3
EPACRIDACEAE	*Leucopogon capitellatus*	1,3
EPACRIDACEAE	*Leucopogon glabellus*	2,3
EPACRIDACEAE	*Leucopogon verticillatus*	1,2
EPACRIDACEAE	*Monotoca tomeriscina*	2
GOODENIACEAE	*Dampiera hederaceae*	2
GOODENIACEAE	*Dampiera linearis*	2
GOODENIACEAE	*Scaevola crassifolia*	3
GOODENIACEAE	*Scaevola striata*	2

FAMILY	SCIENTIFIC NAME	PRESENT AT SITE:
HAEMODORACEAE	*Anigozanthos flavidus*	2
HAEMODORACEAE	*Conostylis setigera*	2
IRIDACEAE	*Patersonia occidentalis*	2
LAURACEAE	*Cassytha flava*	3
LINDSAEACEAE	*Lindsaea linearis*	1,3
LOBELIACEAE	*Obelia alata*	3
LOGANIACEAE	*Logania vaginata*	1
MIMOSACEAE	*Acacia hastulata*	3
MIMOSACEAE	*Acacia myrtifolia*	2
MIMOSACEAE	*Acacia pentadenia*	1,2,3
MIMOSACEAE	*Acacia webbii*	3
MIMOSACEAE	*Acacia wildowenia*	2
MYRTACEAE	*Agonis flexuosa*	3
MYRTACEAE	*Agonis hypericifolia (Now Taxandra)*	2
MYRTACEAE	*Astartea fascicularis*	3
MYRTACEAE	*Corymbia calophylla*	1,2
MYRTACEAE	*Eucalyptus diversicolor*	1
MYRTACEAE	*Eucalyptus marginata*	2
MYRTACEAE	*Eucalyptus megacarpa*	3
MYRTACEAE	*Hypocalymna augustifolium*	2
MYRTACEAE	*Hypocalymna cordifolium*	3
MYRTACEAE	*Melaleuca raphiophylla*	3
MYRTACEAE	*Melaleuca thymoides*	2
MYRTACEAE	*Taxandria juniperina*	3
MYRTACEAE	*Taxandria parviceps*	2
MYRTACEAE	*Taxandria linearifolia (used to be an Agonis)*	3
OLACEAE	*Olax phylanthi*	2
PAPILIONACEAE	*Aotus intermedia*	3
PAPILIONACEAE	*Bossiaea linophylla*	2
PAPILIONACEAE	*Callistachys lanceolata*	3
PAPILIONACEAE	*Gompholobium confertum*	2
PAPILIONACEAE	*Hardenbergia comptoniana*	1
PAPILIONACEAE	*Hovea chorizemifolia*	2
PAPILIONACEAE	*Hovea elliptica*	3
PAPILIONACEAE	*Pultanea reticulata*	2
PITTOSPORACEAE	*Billardiera candida*	1,2
PITTOSPORACEAE	*Billardiera variafolia*	1,2
PITTOSPORACEAE	*Sollya drummondii*	3
PITTOSPORACEAE	*Sollya fusiformus*	2
PODOCARPACEAE	*Podocarpus drounyiana*	2
PROTEACEAE	*Adenanthos obovatus*	2
PROTEACEAE	*Hakea amplexicaulis*	2
PROTEACEAE	*Hakea oleifolia*	1,3
PROTEACEAE	*Persoonia longifolia*	2
RANUNCULACEAE	*Clematis pubescens*	1
RESTIONACEAE	*Desmocladus fascicularis*	1,2
RESTIONACEAE	*Loxocarya cinerea*	1,2,3
RESTIONACEAE	*Meelboldina scariosa*	3
RHAMNACEAE	*Trymalium floribundum*	1,3
RUBIACEAE	*Opercularia hispidula*	1,2,3
RUBIACEAE	*Opercularia volubis*	3
RUTACEAE	*Boronia crenulata*	3
RUTACEAE	*Boronia dentata*	3

FAMILY	SCIENTIFIC NAME	PRESENT AT SITE:
RUTACEAE	*Chorileana quercifolia*	3
SANTALACEAE	*Leptomeria squarulosa*	3
STERCULIACEAE	*Lasipetalum floribundum*	2
STERCULIACEAE	*Thomasia paniculata*	3
STYLIDACEAE	*Stylidium scandens*	3
STYLIDACEAE	*Stylidium sp.*	1,2,3
THYMELACEAE	*Pimelea rosea*	3
TREMANDRACEAE	*Tremandra stelligera*	3
XANTHORRHOEACEAE	*Xanthorrhoeaceae preissii*	1,2
ZAMIACEAE	*Macrozamia riedleii*	3

Weed Species

Twenty eight species of weed at the Beveridge Street Reserve mainly occur on its edges along roads and their verges and diversion drains. The weeds were observed by the TAFE Certificate IV Conservation and Land Management students on the 2/12/2004.

Observations:

- Weed infestations occur on the eastern and northern road verge edges
- A 20 x 20 meter weed infestation occurs at the southern end of Flay Street
- Kikuyu and oxalis are well established along all roadside diversion drains
- Watsonias, *Gladiolus undulatum*, oxalis and bridal creeper occur along the river foreshore pathway

Table 6 – Weed List Compiled by TAFE Students for the Beveridge Street Bush Reserve

COMMON NAME	SCIENTIFIC NAME
Agapanthus	*Agapanthus praecox*
Dock	*Rumex crispus*
Oxalis	*Oxalis incarnata*
Oxalis	*Oxalis purpurea*
Flatweed	*Hypochaeric spp*
Paspalum	*Paspalum spp*
Kikuyu	*Pennisetum clandestinum*
Watsonia	*Watsonia spp*
Bridal creeper	*Asparagus asparagoides*
Honey flower	*Melianthus major*
Honey suckle	*Lonicera sp*
Paramatta grass	*Sporobolus indicus var. capensis*
Fleabane	*Conyza sp*
Plantain	*Plantago sp*
Dolichos pea	*Pipogon lignosus*
Night shade	*Solanum nigrum*
Rose	*Rosa spp*
Blackberry	*Rubus fructicsous*
Wavy gladiolus	*Gladiolus undulatum*
Carrot weed	*Cotula australis*
Sweet pittosporum	*Pittosporum undulatum*
Blowfly grass	*Briza maxima*
Butterfly bush	*Polygala myrtifolia*
Flatweed	*Hypocaeris radicata*
Cootamundra	*Acacia baileyana*
Globulus compacts	
African love grass	*Eragrostis curvula*
Pennyroyal	*Mentha pulegium*

Weed Management and Recommendations

- Current health and vitality of the Beveridge street reserve vegetation is keeping weeds out of the reserve core. If the reserve is burnt then ongoing weed management should be committed by the Shire to ensure ecological integrity in the long term

- Seek advice for controls required for individual weed species as control practices will vary.

FIRE HISTORY

The marri trees had evidence of old fire scars on the tree trunks. Apparently a fire did burn through the area back in the 1940's. Recent fire history is not known. The leaf litter in under the Karri forest is about 2 inches thick. There has been recent concern from FESA and the Denmark Shire Council about the amount of biomass in the form of leaf litter and dead twigs and stems lying on the ground in this reserve (FESA refer to this as 'fuel load').

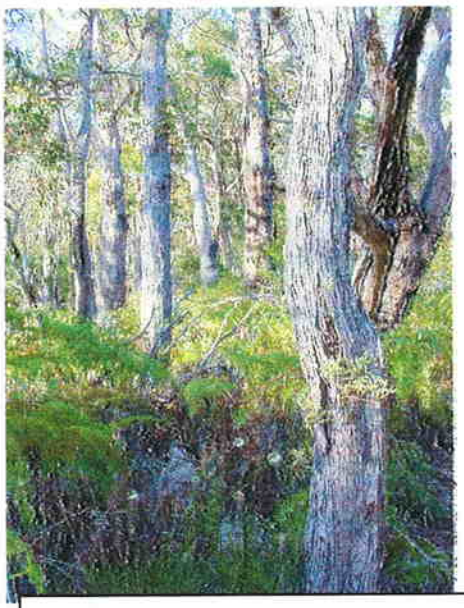

Fig. 19 – There is an accumulation of biomass on the floor of the forest in the form of decaying leaves and sticks and twigs.

Fig. 18 – A western bush rat burrow digging in under the leaf litter. The leaf litter provides a good ground cover to reduce the intrusion of weeds into the site.

Fire Management and Recommendations

- The four major vegetation communities within the reserve should be treated differently when planning prescription burning

- Dry accumulated biomass levels are currently providing excellent habitat/shelter for fauna populations. Post fire mortality of fauna is increased as a consequence of scarce food resources and loss of shelter

- If a prescribed burn escapes into adjacent areas it will possibly destroy indigenous vegetation which forms wildlife corridor linkages to the reserve

- Fire may potentially negatively impact on the riparian vegetation community. Some of the riparian vegetation community and faunal organisms like invertebratesand macro invertebrates are fire sensitive

- Some of the residential neighbours to Beveridge Street reserve have hazardous weeds occurring adjacent to the reserve on their private property. They should be encouraged to remove these.

- Adjoining property owners to the reserve should informed about fire protection sprinkler systems which can be installed in homes to protect buildings during fire.

- Manual fuel reduction along a 15-20 meter perimeter will provide less hazardous fuel zone acting as a fire break along the Karri forest edge – Karri forest are not prone to carry fire

- Fire may increase post fire germination of soil stored seed sources of some species. This is likely to include pioneer and mature phase species. This is however dependant on fire intensity, scale, season and soil stored seed bank. Different fire intensities and season will favour some species over others.

CONCLUSION

Nearly one hundred indigenous floral species were officially recorded in the Beveridge Street Reserve by the TAFE trainees. This is an impressive amount for a small urban reserve in the Denmark district. The vegetation is in exceptionally good health considering it has a recreational walkway extending along its western boundary and a pony riding path cutting through the eastern part of the reserve.

The results from this years small mammal fauna survey in the reserve once again confirm that there is a surprisingly large number of animals living in the reserve. There were; thirty mammal recordings encompassing two native species (the southern brown bandicoot and the western bushrat), twenty five amphibian captures encompassing five native species of frog (squelching frog, sand frog, quacking frog, crawling frog and the banjo frog), one reptile in the form of the Southern Cool Skink and various insect species including spiders and slugs. These results are especially impressive considering the close proximity of the reserve to the townsite and easy access by predatory cats and dogs.

Maintaining the floral and faunal integrity of this reserve requires careful planning and management. Fire risk and weed populations appear to be the two major management issues at present and it is hoped that representatives from the local government, TAFE and the local community can all be involved in developing a good management plan.

We conclude that this reserve well deserves protection and good management from the Shire of Denmark in recognition of its diverse array of species.

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Facsimile (08) 9334 0278
Email: peterm@calm.wa.goc.au

ALL CHIEF INVESTIGATORS – Fauna research and handling

Annual Reporting* under the *Animal Welfare Act 2002

Under the Western Australian *Animal Welfare Act* 2002 and Regulations (2003), CALM is licensed as a Scientific Institution. When handling animals, departmental staff are required to operate following the "*Australian Code of Practice for the Care and Use of Animals for Scientific Purposes*".

Under this Code and the conditions of the Corporate License activities such as fauna research, introduced animal control research, biological survey, fauna monitoring, education or animal handling must be approved by the Department's Animal Ethics Committee (AEC).

CALM is required to provide an annual report to the Dept. of Local Government and Regional Development at the beginning of each calendar year.

We are currently compiling the overdue annual report information for 2003 and will require individual animal usage numbers from all Chief Investigators who have current projects for 2004.

Unfortunately, the current annual report form does not reflect the information that is required under the statement of compliance conditions.

The new annual report form will be sent to Chief Investigators soon. This new format will include a species list for staff to include animal usage statistics.

All annual reports will now be due in December each year to ensure statistics can be gathered in time to prepare and submit the annual report.

For those Chief Investigators who have already provided the information this year, we may have the necessary information for the 2004 annual report. If you have not provided individual species and non-target species information, you will be contacted for this information.

Please contact either Joanne, Keith Morris or myself on (08) 94055143 If you have any queries about this.

Dr Peter Mawson
A/Chair
CALM Animal Ethics Committee

5 October 2004

Department of Local Government and Regional Development
Government of Western Australia

Form 2

Animal Welfare Act 2002

Licence to use animals for scientific purposes

Duration of licence	Licence No:...03/21.....
	Issued for the period:...4th April 2003 to 4th April 2005.....
Scientific establishment	Name: .....Department of Conservation and Land Management (DCLM).....
	Address: ...Dick Perry Drive.....
	...KENSINGTON WA 6151.....
	Contact person: ...Keith Morris.....
Animals may be used for scientific purposes	This licence permits the named scientific establishment, its staff and students, to use animals for scientific purposes in accordance with the scientific use code for the period of the licence.
Conditions	The use of animals for scientific purposes under this licence is subject to the licence conditions imposed by the Act and regulations, and to the following additional conditions: • The licensee must maintain a register of all approved projects and be able to identify current projects. • The licensee must establish and maintain a method of ensuring any person who is to be involved in the conduct of an approved project under the licence has the appropriate veterinary skills for that project. This licence may be suspended or revoked for reasons set out in the *Animal Welfare Act 2002*, section 17.

Minister for Local Government and Regional Development

Date: 2 April 2003

May Holman Centre
32 St George's Terrace PERTH WA 6000
Dumas House
Level 1, 2 Havelock Street WEST PERTH WA 6005

GPO Box R1250
PERTH WA 6844

Tel: (08) 9222 0511 Fax: (08) 9221 2715
Freecall: 1800 620 511 (Country only)
E-mail: info@dlgrd.wa.gov.au
www.dlgrd.wa.gov.au

South Coast Highway, Denmark, Western Australia 6333
Tel (08) 9848 0300 Fax (08) 9848 1985

Our Ref: *Reserve 37965 MT/CPV*
Enquiries: *Matt Thomson*

17th November, 2004

Conservation and Land Management
120 Albany Highway
ALBANY WA 6330

Attention: Sylvia Leighton

Dear Sylvia

Re: Request for Permission to Undertake Fauna Survey – Res 37695

I refer to your facsimile dated 16th November, 2004 requesting permission to undertake a fauna survey on Reserve 37695 – Beveridge Street, Denmark.

I advise that you have approval to conduct the survey in accordance with the details you have provided. Please contact me if you have any queries.

Yours faithfully

Matt Thomson
Manager Engineering Services

All communications to:
Chief Executive Officer, PO Box 183, Denmark WA 6333
Email: denmarkshire@wn.com.au
www.denmark.wa.gov.au

Original

Office Use Only

Agenda Item No. 2.2

Department of Conservation and Land Management
Animal Ethics Committee

COVER SHEET
(To be completed by proponent, copy to be returned to proponent when approved)

1. **PROJECT TITLE:** Beveridge Street Reserve, Reserve No: 37695 "Parkland and Recreation" Vested with the Shire of Denmark, Fauna and Flora Report

2. **CHIEF INVESTIGATOR:** Sylvia Leighton
current appointment: Land For Wildlife Officer, South Coast Region, CALM
contact address: 120 Albany Highway
telephone number: (08) 98 424500 mobile phone no:
fax number: (08) 98 413329
email address: sylvial@calm.wa.gov.au

3. **EXPECTED DATE OF COMMENCEMENT AND DURATION OF PROJECT:**

17th Nov. 2004 (1 week fauna surveying project).

COMMITTEE USE ONLY:

APPROVAL

The CALM AEC has considered this proposal and approves it for the period 27/8/04 to 26/8/04 subject to the following conditions:

1. Annual Report required by 5/08/05
2. Other comments Some minor corrections needed in application and in report. Check for accuracy spelling etc.
3. Chief Investigator to inform AEC Executive Officer immediately of any staff changes to this project.

AEC APPROVAL NUMBER: CAEC 16/2004

CHAIR: _____ DATE: 27/8/04.