

207/63



000505



DEPARTMENT OF
FISHERIES AND WILDLIFE

DISTRICT OFFICE
PERTH
Telephone 273

Chief Wildlife Officer,
Dept. of Fisheries and Wildlife,
PERTH, 6000.

THE LIBRARY
DEPARTMENT OF CONSERVATION
& LAND MANAGEMENT
WESTERN AUSTRALIA
Enquiries

Your Ref:
Our Ref:

FAXED
10/4/96

LAKE TOOLIBIN NATURE RESERVE

Please find enclosed for your information a copy
of my report to Research Officer J. Goodsell on the
"Terrestrial Fauna of Lake Toolibin Nature Reserve".

The report will accompany others on the lake which are
at present being compiled by Mr. Goodsell as a publication
on "Guidelines to the Management of the fauna of Lake
Toolibin Nature Reserve".

Pauline
WILDLIFE OFFICER
March 31, 1978

ARCHIVAL

591.

9

(9412)

T00

25/4
Burridge *10/4/96*

4

[Signature]

VIII

(ii) TERRESTRIAL FAUNA OF LAKE TOOLIBIN AND MANAGEMENT NATURE RESERVE WESTERN AUSTRALIA

Mammals were recorded on the Lake Toolibin Nature Reserve between the 12th and 16th of December, 1977. The annotated list of species of mammals were collected and lodged with the Western Australian Museum. The specimens were numbered for our purposes M1 - 5. M4 has been recorded at the Museum as R58863. Other records are based on scat samples and actual sightings of reptiles and mammals which were not collected.

METHODS

Mammal traps were set in all vegetation formations on the reserve and on areas of privately owned land where it is included in the proposed acquisition.

Trap effort comprised of nine trap lines set in situations where they would be most effective in each vegetation formation.

Traps used were as follows:

Large Elliott 50 cm x 17 cm x 17 cm.
Medium Elliott 32 cm x 10 cm x 8 cm.
Small Elliott 23 cm x 8 cm x 7 cm.
Cage Trap 46 cm x 23 cm x 30 cm.
Standard Break-back rat trap.
P.V.C. Pit Trap 60 cm long and 10 cm in diameter. Pit traps were placed where ever the soil type permitted.

The bait used for trapping was "universal" based on rolled oats, peanut paste and raisins. Walnuts were used on the Break-back traps. A little honey was used to a limited degree where traps were set near blossoming Callistemon phoeniceus. The P.V.C. pit traps were not baited.

At dusk and after dark traverses were conducted by vehicle and spotlight and also on foot using headtorches. Sightings of reptiles and mammals were recorded in this manner. Mammals, especially bats, were collected utilising this method also. Daylight observations and collections were also carried out, mainly on foot.

MAMMALS

ANNOTATED LIST

WESTERN GREY KANGAROO (*Macropus fuliginosus*)

This specie was often sighted throughout the reserve and on adjacent neighbouring properties, especially at dusk and after dark. During the course of one nights spotlighting 19 Grey Kangaroos were recorded throughout the traversed area.

BRUSH-tailed POSSUM (*Trichosurus vulpecula*)

Only one such animal was sighted during the course of night observations.

2. ju
It was observed on the reserve just north of Lake Toolibin feeding on the seeds of a small Jam tree (*Acacia acuminata*) in a woodland of York Gum (*Eucalyptus loxophleba*) associated with *Casuarina huegeliana*. Signs of other occupations were observed such as scats and claw marks on trees, however these were rare and appeared to be restricted to the York Gum region.

HOUSE MOUSE (*Mus musculus*)

Found not to be common on the reserve. Two were caught using universal bait in a medium and a large Elliott trap. The medium Elliott trap was set north of the lake in a line of twenty five varied traps which traversed a Low open-forest of *Casuarina huegeliana* associated with *Acacia acuminata* on sandy soils. The large Elliott was set in a line of nine large Elliotts north of the lake along the eastern bank of the creek inlet which is lined with *Melaleucas* and *Eucalyptus rudis*.

LITTLE BAT (*Eptesicus regulus*)

One specimen was shot at dusk on the north western perimeter of the lake where the lake bed was dry and supporting a Low open-woodland of *Casuarina*.

This little bat was often seen around dusk and after dark of each evening and appeared to be common where ever the vegetation supplied shelter and hollow limbs.

ECHIDNA (*Tachyglossus aculeatus*)

Some scratchings amongst fallen White Ant infested timber were observed in the York Gum woodland north of the lake and scats were also recorded in a similar area suggesting this animal's presence.

RABBIT (*Oryctolagus cuniculus*)

A few of these animals were sighted after dark, especially along the perimeter of the lake where the sandy ridges of the lake's shore adjoins privately owned property. Numbers were not considered to be in pest proportions.

CAT (*Felis catus*)

One cat was observed at a distance during a traverse of the reserve after dark on the eastern shoreline of the lake. We were unable to collect the specimen for gut content analysis.

FOX (*Vulpes vulpes*)

Fox scats were observed along the creek inlet where it enters Lake Toolibin from the north.

REPTILES AND FROGS

ANNOTATED LIST

AGAMIDAE

Amphibolurus barbatus minor.

One specimen was observed on a stump of a *Banksia* on the sandy eastern perimeter of the lake.

SCINCIDAE

Trachysaurus apogon.

Reasonably common throughout the entire area. One specimen was trapped in a large Elliott using universal bait.

Cryptoblepharus plagiocephalus.

Several observed on fallen timber and trunks of trees in the Low open-woodland of *Banksia prionotes* along the eastern perimeter of the reserve and in the Open - woodland of York Gum to the north of the lake.

VARANIDAE

Varanus gouldii.

A common species throughout the reserve, especially in the sandy soil types, associated with *Banksia*, *Eucalypts* and *Acacias*, where their typically excavated burrows were found to be numerous.

Four were caught in Elliott traps, three in large Elliotts and one in a medium Elliott. Three were baited with universal bait and one with honey.

LEPTODACTYLIDAE

Heleioporus albopunctatus.

One collected from a pit trap set in deep yellow soils on the eastern boundary of the reserve amongst a woodland of *Banksia prionotes*, *Eucalyptus loxophleba* and *Acacia acuminata*.

These frogs are found to be common throughout this particular section of Western Australia where they often emerge from cover following summer thunderstorms and first winter rains.

Heleioporus cyrei.

One collected from a pit trap set in a sandy Open-heath of *Melaleuca* and *Callistemon pemonisius* with emergents of *Banksia prionotes*.

(iii)

DISCUSSION

Five days and four nights were spent on the reserve. Species of mammals and reptiles collected and observed were found to be typical of the area.


Trap lines were well placed and usually did not comprise of more than twenty five traps per line.

4. 546
Each form of habitat was represented by a trap line.

December was chosen as the most likely time of the year when the mammal population should be at it's peak. Lake Toolibin was dry and had been for some months and it was thought that the availability of the large expanse of the lake bed would disperse the terrestrial fauna, thus making the task of trapping them greater. Usually, when the lake is full the terrestrial fauna are restricted to the narrow vegetated perimeters of the reserve, caught between the waters edge and neighbouring cleared properties.

Trapping results were poor and indicated an even less variety and quantity as first anticipated. The preceding dry years to this December has not contributed either to the availability of mammal numbers on the reserve. In fact it is probably one of the causes for the apparent low in numbers. This can be further shown by the fact of Bungarras (*Varanus gouldii*) entering traps, much smaller than their overall length, for universal bait and honey. In the recent past this goanna has experienced a dramatic rise in population followed by two dry years causing a serious depletion of food stocks which is normally attracted by the lake situation. It appears now that there is little food in the area for them.

poor
The extremely restricted vegetated areas and diversity of habitats on the reserve probably accounts for the lack of variety of terrestrial fauna and places these few existing species in a delicately balanced situation. The acquisition and securing of additional adjoining bushland will contribute considerably to the continued existence of the resident fauna.


(P.M. Lambert)
WILDLIFE OFFICER

31 March, 1978

PINGELLY