

LEADING THE WAY
IN ENVIRONMENTAL
MANAGEMENT

**PRE-CLEARANCE
FAUNA HABITAT
REPORT**

**97 COURTNEY DRIVE,
UPPER COOMERA**

WINSLOW

September 2023

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1. Introduction

Biodiversity Australia Pty Ltd was commissioned by Winslow ('the client') to produce a Pre-clearing Fauna Habitat Report as part of the clearing works at 97 Courtney Drive, Upper Coomera ('the site').

1.1 Site Description

The site is located north of the Wongawallan Road Reserve, with Yaun Creek running from the south to the east around site. The broader Upper Coomera region is experiencing continual residential growth.

The majority of the surveyed site features a consistent vegetation community. The vegetation within the clearing extent consists of a mixed diversity of eucalypt species in the canopy consisting of naturally regenerated species.

The groundcover consists of a variety of native and introduced grasses. Weed abundance is generally high. Dense leaf litter and woody debris is present throughout most woody areas. A grassland is located to the north west.

The site is regrowth open eucalypt woodland consisting of Grey Ironbark (*E. siderophloia*), Pink Bloodwood (*Corymbia intermedia*) and Forest Red Gum (*Eucalyptus tereticornis*) as dominant canopy species. Native wattles dominate the midstory with weeds throughout. The ground cover of site includes introduced forbes, dense leaf litter and coarse woody debris.

1.2 Legislative Context

Legislation applicable to the management of fauna during vegetation clearing is governed by state and federal authorities. These include:

- *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act);
- *Nature Conservation Act 1992* (NC Act) and associated regulations;
 - Nature Conservation (Animals) Regulations 2020
 - Nature Conservation (Plants) Regulation 2020
- Nature Conservation (Koala) Conservation Plan 2017;
- *Environmental Protection Act 1994*;
- *Animal Care and Protection Act 2011*;
- *Fisheries Act 1994*,
- State Planning Policy 2017, &
- Local councils may also provide specific development consent conditions.



Biodiversity Australia also holds a current Department of Environment and Science (DES) Rehabilitation Permit (Rehabilitation Permit No. WA0023755 & Fauna Spotter Catcher Permit No. WA0014880), allowing for the handling and relocation of native fauna.

1.3 Aims and Objectives

1.3.1 Nature Conservation Act

Biodiversity Australia aims to provide compliancy for all tampering of animal breeding places. The *Nature Conservation Acts 1992 (NCA)* objective is to ensure that the conservation of nature is upheld, which is achieved through the protection of wildlife, breeding places and the ecological sustainability of all protected wildlife. Our objective is to accommodate this through the management of the site via surveys to confirm Ecological Impact Assessments, Species Management Plans and Fauna Spotter Catchers throughout vegetation clearing periods.

1.3.2 DA Conditions

Our services aim to ensure that vegetation clearing works onsite are compliant with all Development Consent Conditions. These conditions vary between sites, so our objectives are to ensure we understand the requirements of each site and provide services and recommendations that meet these standards.

1.3.3 Animal Care and Protection Act

The *Animal Care and Protection Acts 2011* purpose is largely to promote the responsible care and use of animals, provide standards of the care and use of animals and protect animals from unnecessary pain. Our objectives onsite are to comply with this act, via the management (i.e. SMPs, Fauna Spotter Catchers) of all wildlife that are observed.

1.3.4 Fisheries Act

Our objectives to comply with the *Fisheries Act 1994*, is to manage all fish habitats so ecological processes which life depends on are maintained, and to ensure total quality of life for the near and distant future are maintained and improved.



2. Methodology

2.1.1 Preclearing survey

A pre-clearing fauna habitat survey was carried out by one Biodiversity Australia Ecologist on September 27th, 2023. This survey was undertaken to determine the presence of native fauna breeding places, particularly any species designated under the *Nature Conservation Act 1992* as being Endangered, Vulnerable or Near-threatened (EVNT).

The overarching objectives of the pre-clearance survey works are to:

- Identify any breeding places which may be disturbed during the clearing works,
- Identifying signs of Koala usage or preferred habitat,
- Minimise the harm to native wildlife during clearing works,
- Minimise the potential for disruption to works due to the unanticipated occurrence of EVNT species within the clearing area, and
- Satisfy conditions for development approvals and ensure compliance with the relevant legislation.

Survey methodologies involved meandering the site, identifying fauna presence, habitat features. Habitat features were marked by wrapping blue flagging tape around the habitat feature at eye level. If the habitat feature was inaccessible or on the ground, the flagging tape was hung at eye level in surrounding vegetation. One ring has been placed to notify habitat features. Two rings have been placed to notify native fauna observed (e.g. active birds nest, bees, wasps) and three rings have been placed to notify Koala presence.

All evidence of animals observed on site was documented. Key breeding places include:

- Hollow branches,
- Hollow stumps and logs,
- Bird nests,
- Arboreal and terrestrial termite mounds,
- Possum dreys,
- Decorticating bark,
- Water bodies and/or creeks,

Also noted where present were features such as:

- Scratch marks, digs and scats,



- Call(s) or actual sightings,
- Koala habitat.

2.2 Method Limitations

Whilst the survey method seeks to achieve the overarching objectives (Section 1.3), the survey has limitations. These are addressed by the desktop habitat evaluation and through implementation of recommendations to monitor the works with consideration of the various behaviours of potentially impacted fauna.

The fauna pre-clearance survey provides a snapshot of fauna assemblages and habitat conditions at the time of the survey and are strongly influenced by weather and season. It is therefore likely that not all fauna present on the site, and not all breeding places were identified as a result of the survey. Specifically, some life cycle stages and cryptic fauna such as amphibians are hard to identify/locate and as works progress, these species may be observed. These limitations are addressed by the habitat evaluation and recommendations to monitor the works.



3. Results

3.1 Preclear Survey

3.1.1 Habitat Feature Assessment

The site featured a variety of habitat types that are suitable to a range of fauna. **Table 1** below provides a description of key habitat attributes on the site and the associated value for potential fauna.

The significant habitat features were marked with blue flagging tape and are presented in **Figure 1**.

Table 1: Habitat Attributes within the site.

Habitat / Attribute Type	Subject Site	Value to Potentially Occurring Fauna
Aquatic ponds or waterways	Multiple Dams were observed onsite.	Aquatic species such as fish, birds and turtles utilise these habitats. Most fauna populations increase around waterbodies.
Decortivating Bark	Some mature and dead trees had shedding bark.	Reptiles such as geckos, skinks and tree monitors use loose bark as refugia. Microbats and gliders are also known to use loose bark to reside in overnight.
Fruiting and Flowering Species	Fruiting and flowering plant species such as eucalypts, wattles, melaleucas, callistemon, ficus, syzygium, etc. were present on the subject site.	These flowering species provide food sources for many species of birds and mammals. Insects will also feed on nectar increasing the populations of insectivorous fauna such as microbats on site.
Grasslands	One grassland was present to the northwest of site.	Grassbirds, quails, finches, snakes, rodents, bettongs and macropods all use grasslands for feeding and shelter.
Hollow-bearing Trees	Large multi hollow-bearing trees and stags were present on site.	Arboreal fauna such as possums, gliders, snakes, frogs, skinks, dragons, monitors, microbats, owls, parrots and other nesting birds may seek refuge or live in hollow-bearing trees.
Koala Browse Species	Tree species from the eucalyptus, corymbia, angophora and melaleuca genus' were present on site.	With riparian connectivity and favourable fodder species such as Forest Red Gum (<i>Eucalyptus tereticornis</i>) present on site, koala presence is likely to occur.
Leaf Litter	Leaf litter varied from sparse to dense across the site.	Snakes, frogs and skinks will seek refuge in large leaf litter deposits. Ground birds such as quails forage in light and dense leaf litter.
Termitaria	Arboreal termitaria were consistent across the site. Few of these had excavations.	Excavations are evidence of activity of breeding avian species such as kingfishers. Once excavated, arboreal mammals may use these excavations as habitat.



Figure 1. Habitat features on site



This mapping is to be considered indicative only and all derivations (eg of areas of EECs and vegetation communities) are at best approximations and subject to errors including individual interpretation and reliance on information provided to Biodiversity Australia where were not independently verified. All information is intended to be indicative only and no reliance for extrapolation, mapping, ect. should be placed upon this map without independent validation of the information by the user. Biodiveristy Australia takes no responsibility for any subsequent error losses etc. that may arise from use of this data without independent verification.	Project Manager TG	Figure Name: Habitat Features		Legend Habitat Features - Arboreal Termitaria - Dam - European Beehive - Hollow-Bearing Tree - Stagg
	Drawn By: JH	Site: 97 Courtney Drive, Upper Coomera		
	Date: September 2023	Client: Winslow		
	Map Projection: MGA Zone 56			
	Datum: GDA 94		Job Number FSQ6146 Page: 1 of 1	Scale: 1:6384 Variation A



3.1.2 Fauna Observed

All fauna species observed during the pre-clearance survey on September 27th 2023 are presented in Table 2.

Table 1. Observed Fauna within the site

Common Name	Scientific Name	Presence on site	*EPBC Status	†NC Act Status
Aves				
Australian Magpie	<i>Cracticus tibicen</i>	Observed		C
Channel-billed Cuckoo	<i>Scythrops novaehollandiae</i>	Observed		C
Grey Butcherbird	<i>Cracticus torquatus</i>	Observed		C
Golden-headed Cisticola	<i>Cisticola exilis</i>	Calls Heard		C
Laughing Kookaburra	<i>Dacelo novaeguineae</i>	Observed		C
Magpie Lark	<i>Grallina cyanoleuca</i>	Calls Heard		C
Nankeen Kestrel	<i>Falco cenchroides</i>	Observed		C
Noisy Friarbird	<i>Philemon corniculatus</i>	Observed		C
Noisy Miner	<i>Manorina melanocephala</i>	Calls Heard		C
Rainbow Lorikeet	<i>Trichoglossus haematodus moluccanus</i>	Calls Heard		C
Rufous Whistler	<i>Pachycephala rufiventris</i>	Calls Heard		C
Striated Pardalote	<i>Pardalotus striatus</i>	Calls Heard		C
Suphur Crested Cockatoo	<i>Cacatua galerita</i>	Observed		C
Torresian Crow	<i>Corvus orru</i>	Observed		C
Mammals				
Eastern Grey Kangaroo	<i>Macropus giganteus</i>	Scat Found		C
European Fox	<i>Vulpes vulpes</i>	Observed		Y
European Hare	<i>Lepus europaeus</i>	Observed		Y
*Environment Protection and Biodiversity Conservation Act 1999 †Nature Conservation Act 1992 Value Codes: Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Vulnerable (V), Near Threatened (NT), Special Least Concern (SC), Least Concern (C), Introduced but Naturalised (Y) or not protected (.).				



4. Recommendations

4.1 Fauna Spotter Catcher

- A Fauna Spotter Catcher will be present for all vegetation clearing on site.
- One Fauna Spotter Catcher will be required per clearing machine to minimise harm to wildlife across all clearing fronts.
- The Fauna Spotter Catcher will conduct a short preclear survey of the clearing area prior to works each morning to identify and flag any new breeding features as per the method mention in section 2.0.
- The Fauna Spotter Catcher will discuss with the clearing operator and site supervisor any concerns outlined in this report, and any other concerns that may arise after daily preclear or during clearing works.
- Upon commencement of site clearing the Fauna Spotter Catcher will continually survey the site during vegetation removal for any additional breeding features unidentified previously. All major habitat features have been noted within this report, however breeding features on site may alter in the time elapsed prior to clearing.
- The Fauna Spotter Catcher will be responsible for all fauna handling and management as per the Biodiversity Australia Fauna Handling Procedure available on request.
- Any terrestrial fauna captured during the clearing will be released secured in a clean calico catch bag and hung in a dark quiet location away from the disturbance area. All uninjured wildlife will be released into nearby bush land away from major roads at an appropriate time (i.e. after dark for nocturnal species), as deemed suitable by the Fauna Spotter Catcher,
- Any injured wildlife will be transported by the Fauna Spotter Catcher to an appropriate vet or wildlife carer dependant on the injury or age of the animal.

4.2 Directional clearing

- The Fauna Spotter Catcher will implement directional clearing, allowing fauna to self-disperse away from roads and into adjacent habitat. This method can reduce the number of fauna interactions during a clearing event. I

4.3 Two stage clearing

- It is recommended that two stage clearing be implemented on this site. This involves clearing the midstory and ground cover vegetation 24 hours prior to clearing the larger trees / breeding features onsite. This process allows arboreal fauna to disperse over night after the initial disturbance and can reduce the number of animal interactions during the clearing event.

4.4 Breeding feature removal

- All breeding features will be managed in accordance with the *Nature Conservation Act 1992*.
- With the assistance of the operator, the Fauna Spotter Catcher will ensure enough disturbance prior to felling to encourage fauna to disperse away from the tree.



- Where possible, trees supporting arboreal hollows and termitaria will be felled slowly so the habitat feature is intact and is accessible to the Fauna Spotter Catcher.
- Each breeding feature will be thoroughly inspected by the Fauna Spotter Catcher for the presence of any fauna.
- Where practical, avian nests will be felled at the end of the day to allow the Fauna Spotter Catcher to leave site to travel to a vet or carer if necessary. Any chicks will be captured and transported to a wildlife carer to be raised. Any eggs will be transferred to a vet or carer with an incubator or destroyed.

4.5 Koala management

- One Fauna Spotter Catcher trained in koala spotting is recommended during all vegetation clearing of the site.
- All precautionary measures will be undertaken before clearing takes place; including; dedicated koala searches for individuals, scat and claw marks on trees, as well as identification of koala significant habitat.
- If a koala is encountered on site it will be managed in accordance with the *Nature Conservation (Koala) Conservation Plan 2017*.
- If a koala is encountered on site, works will be temporarily stopped and an exclusion zone of 50m plus a corridor of the same width will be established.
- Works may be resumed outside of the koala exclusion area. Once the koala has self-dispersed off site, works may continue within the koala exclusion area.
- Koalas will not be interfered with in any way unless they are at immediate risk of harm (traffic, drowning, injury etc).

4.6 Wetland Habitat Clearing & De-watering

- It is recommended that a team of suitably qualified Fauna Spotter Catchers be present for any major dewatering works in order to monitor works and undertake relocation of native fauna.
- Dewatering of minor features should be conducted under the supervision of a suitably qualified Fauna Spotter Catcher.

4.7 Native bee hives

- If a Native Bee Hive is encountered on site, it will be managed in conjunction with Biodiversity Australia's Native Bee Rescue procedural document. This involves the removal and relocation of the hive into adjacent bushland.
- The Fauna Spotter Catcher will contact the Biodiversity Australia meliponist for site specific details in removal and relocation of the hive. The site supervisor will be consulted with for best practice in the successful relocation of the hive.

4.8 Stockpiles

- Biodiversity Australia recommends a Fauna Spotter Catcher to be present for the mulching, shearing, or movement of vegetation stockpiles if the timber has been on the ground for more



than 24hrs. This is due to the likelihood of fauna moving back into these structures as a means of temporary shelter, or because their usual territory has been dismantled and they are unable to disperse due to encroachment on neighbouring territories.

5. Closure

This report has been undertaken for the specific purposes of Winslow as detailed in our correspondence to them and is solely for the use of Winslow. This report is only to be used in full, and may not be used to support objectives other than those set out herein, except where written approval, with comments, is provided by Biodiversity Australia. Biodiversity Australia accepts no responsibility for the accuracy of information supplied to them by second and third parties. Should more detail be required please do not hesitate to call our office on the details below.

Yours sincerely,

Biodiversity Australia



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