

Fauna Survey and Report – Tamborine Mountain Landcare Centre, Hartley Road, North Tamborine, Scenic Rim Regional Council.



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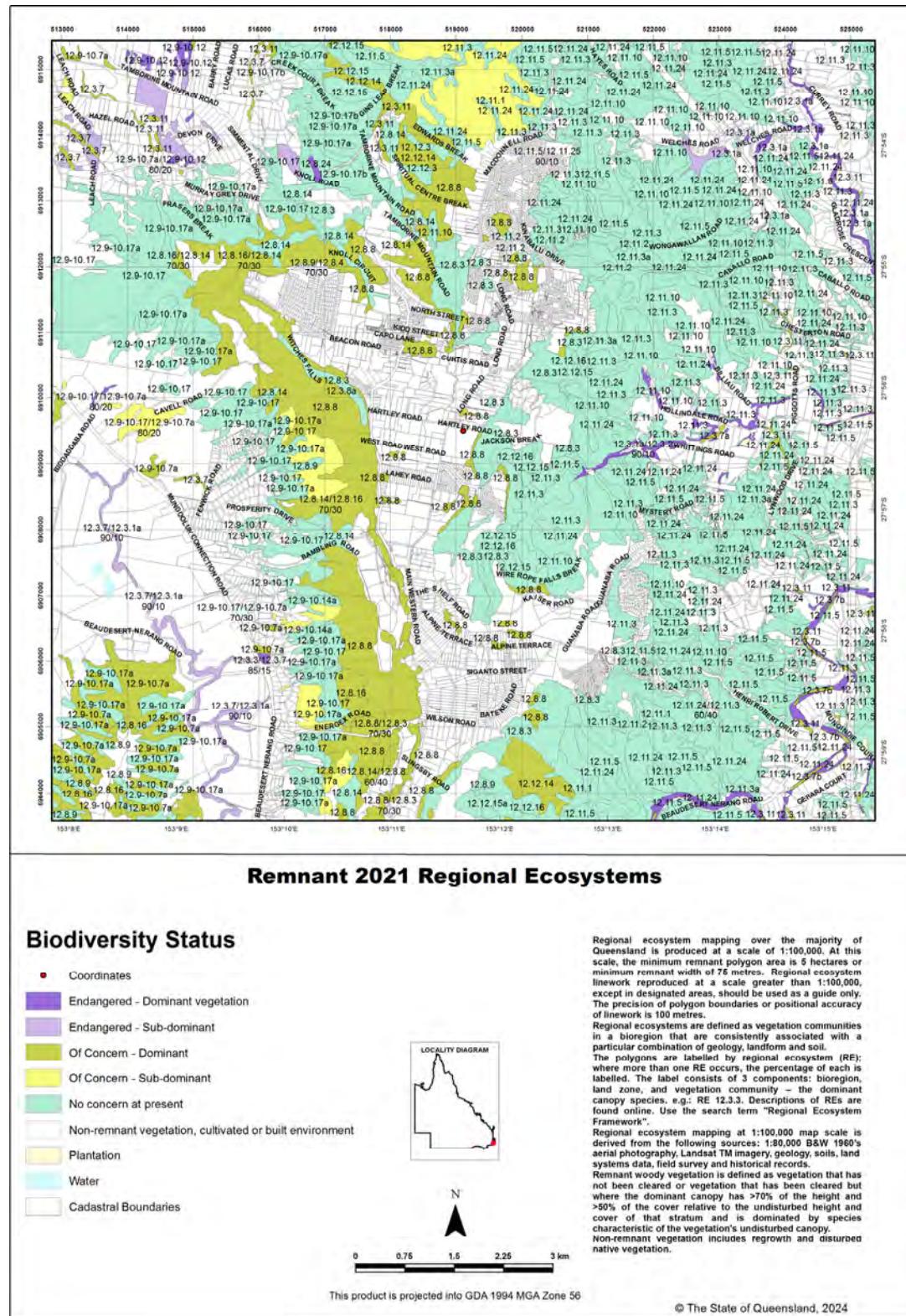
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Introduction and Scope

ddwfauna were commissioned to undertake a Fauna Survey and Report of the Tamborine Mountain Landcare Centre located on Hartley Road, North Tamborine, henceforth termed the subject site. The subject site has a mixture of habitats present including cleared lawn, planted native gardens and non-remnant bushland. The Landcare Centre was established in 2014, a shed and greenhouse have since been erected, educational signage installed, native gardens planted, weed removal and restoration of the creek and waterhole undertaken. A pond is present and is fed by a spring located south of the subject site, this then forms Kelso Creek to the north which flows into Cedar Creek.

The subject site is currently mapped as having no remnant regional ecosystems present (see Fig. 1).

Figure 1: Map showing the regional ecosystems present in the local area.



Methodology

Field investigations

The field survey techniques utilised were those commonly adopted in vertebrate and invertebrate fauna surveys in southeastern Queensland. The subject site was surveyed systematically for mammals, birds, reptiles, frogs, fishes and select invertebrates. A comprehensive range of fauna survey techniques were employed to target both specific faunal groups and individual species of conservation significance. To achieve this, the Terrestrial Vertebrate Fauna Survey Assessment Guidelines for Queensland (Eyre *et al.* 2014) guidelines for conducting fauna surveys was consulted.

The fauna investigation was conducted over a five-day period between the 3rd and 7th of November 2023 with a return visit on the 14th of February 2024. The survey included a single trapline consisting of – 25 Elliott A aluminium box traps and two Elliott B aluminium box traps. Two pitfall traplines (10 metre long drift fence) consisting of three 10 litre buckets and two funnel traps were also deployed. In addition to this, a number of other fauna survey techniques were also undertaken including, arboreal camera traps, terrestrial camera traps, nocturnal call playback, spotlighting, bird surveys, microbat ultrasonic call detection recorders, song meter recorders, frog surveys, fish and aquatic decapod surveys, diurnal search for vertebrates and invertebrates and scat searches.

All surveys were carried out under - Ethics Permit - CA 2021/02/1479 and Research Permit – WA0026562.

Detailed description of survey methods

Mammals

Elliott traps (sampling for small and medium ground mammals)

Traps were baited with the standard mixture of rolled-oats, peanut butter and honey, with pieces of apple added to the larger traps. Traps were checked early each morning and any animals captured released after identification.

Pitfall trapping (sampling for small ground mammals)

Pitfall traps consisted of three 10 litre buckets, two funnel traps and a 10m long drift fence. Traps were checked early each morning and in the late afternoon and any animals captured released following identification.

Terrestrial remote sensing cameras

Remote sensing cameras were set approximately 50 cm off the ground attached to a stake adjacent to (approximately 3 metres from the camera) a bait station consisting of apple, mushroom and rolled oat bait, and tuna oil. Cameras were checked at regular intervals and re-baited as required.

Arboreal remote sensing cameras

Arboreal camera traps were set approximately two metres off the ground attached to a wooden platform. The camera faced a 60 mm diameter x 150 mm long pvc pipe with numerous holes drilled in it also attached to the platform, and contained an absorbent sponge baited with 50 mls of honey, a piece of apple and a standard bait ball added as an attractant.

General diurnal observation

All incidental observations were recorded.

Spotlighting

Spotlighting searches were conducted on foot using 50-watt headlamps to locate arboreal mammals (gliders, possums and koalas) and other night active species

including bats. Surveys began approximately 30 minutes after dusk and lasted for 2 - 3 hours.

Ultrasonic call microchiroptern bat detection

This involved remote overnight sampling with the recorder placed at numerous locations including along open areas, closed forest and near to watercourses. These record the characteristic calls/vocalisation of various species, which are identified following analysis at a later date.

Acoustic meters (Remote sound recorders)

This involved remote sampling with the recorder placed at numerous locations including in open areas, closed forest and near to watercourses. These record the characteristic calls/vocalisation of various species, which are identified following analysis at a later date.

Nocturnal species call playback

This technique is useful in determining the presence of nocturnal species, which can be difficult to find during spotlight surveys. Call playback was performed using a 25-watt megaphone, with calls played for five minutes and then five minutes spent listening for replies.

Species played:

- Sugar glider
- Squirrel glider
- Yellow-bellied glider
- Koala

Scat, pellet and other trace searches

Predator and non-predator scat searches were undertaken during both diurnal and nocturnal ground searches. Traces such as scratches on trees and diggings in the ground layer were examined during diurnal searches.

Birds

General observation and call recognition – Point counts (10 min) and transect searches

Diurnal searches were performed both early morning and early evening when higher bird diversity is generally observed. Birds were identified from either direct observation and/or vocalisation.

Spotlighting

Spotlighting searches were conducted on foot using 50-watt headlamps to locate nocturnal bird species including owls and nightjars. Surveys began approximately 30 minutes after dusk and lasted approximately 3 hours.

Nocturnal species call playback

This technique is useful in determining the presence of nocturnal species, which can be difficult to find during spotlight surveys. Call playback was performed using a 25-watt megaphone, with calls played for five minutes and then five minutes spent listening for replies.

Species played:

- Powerful owl
- Barking owl
- Southern boobook
- Sooty Owl
- Plumbed frogmouth
- White-throated nightjar

Acoustic meters (Remote sound recorders)

See earlier discussion

Reptiles

General search and observation - diurnal and nocturnal

Active ground searches involved the investigation of the ground layer including under rocks, fallen timber, leaf litter, raking soil, searching under exfoliating bark on logs and examining dead and live trees.

Pitfall traps

See earlier discussion.

Frogs

Nocturnal general search and observation, including call recognition.

Searches for frogs were conducted during spotlight activities particularly in and around any waterbodies present.

Pitfall traps

See earlier discussion.

Acoustic meters (Remote sound recorders)

See earlier discussion.

Dip netting

Dip sweep netting using an aquatic net was also undertaken to survey for fish and aquatic decapod species.

Invertebrates - Butterflies, dragonflies, cicadas, lacewings and land snails

General observation, aural survey (cicadas) and hand netting

Each invertebrate group surveyed was done while undertaking general searches.

Figure 2: Location of fauna survey techniques.



Survey timing, conditions and limitations

The survey was undertaken in early November 2023 with an additional visit in mid-February 2024 i.e. late summer/early autumn. The timing of the survey is considered suitable to sample the majority of faunal groups present in SEQ. Conditions during the survey consisted of both fine and wet conditions with a significant amount of rain falling during the November survey and average temperatures. The limited duration of the survey means this ‘snapshot’ approach fails to record cryptic or uncommon species, or species likely to utilise the survey site on an intermittent basis.

Results and Discussion

General

In total there were 100 Elliott A trap nights, 8 Elliott B trap nights, 24 pitfall trap nights, 16 funnel trap nights, 12 arboreal camera trap nights, 28 terrestrial camera trap nights, three nights of microbat echolocation surveying, eight nights of acoustic recording, two nocturnal call playback sessions, spotlighting and many hours of general search and insect observation.

During the current survey – 84 vertebrate and 66 invertebrate species (of the groups surveyed) were recorded, including - 17 mammal, 52 bird, seven reptile, eight frog, 36 butterfly, 13 cicada, 13 dragonfly, one aquatic decapod, one lacewing and two land snail species, a full species list and be seen in Attachment 1.

Photographs of various species recorded during the current survey can be seen in Attachment 2.

Significant species

State

During the current survey three species scheduled *threatened* under the Nature Conservation Act 1992 were recorded, the Richmond birdwing butterfly (*Ornithoptera richmondia*) and Tuskedfrog (*Adelotus brevis*) both listed as *vulnerable* and the koala (*Phascolarctos cinereus*) listed as *endangered*.

Commonwealth

During the current survey one species scheduled as *threatened* under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) was recorded (via its characteristic call) the Koala (*Phascolarctos cinereus*) listed as *endangered*.

Migratory bird Agreements

During the current survey one bird species listed on international migratory agreements under the EPBC Act was recorded the Rufous fantail (*Rhipidura rufifrons*).

Faunal group descriptions

Mammals

In total 17 mammal species were recorded during the current survey. This included four small/medium ground mammals - the Bush rat (*Rattus fuscipes*), Black rat (*Rattus rattus*), Long-nosed bandicoot (*Perameles nasuta*) and northern-brown bandicoot (*Isoodon macrourus*). It is probable that other small ground mammals also occur on site, including additional native rodent species and *Antechinus* spp. Six arboreal mammals were recorded - the Short-eared brushtail possum (*Trichosurus caninus*), Common brushtail possum (*Trichosurus vulpecula*), Common ringtail possum (*Pseudocheirus peregrinus*), Sugar glider (*Petaurus breviceps*), Feathertail glider (*Acrobates pygmaeus*) and Koala (*Phascolarctos cinereus*), several of these species utilise hollows for denning and shelter. The greatest mammalian diversity was that of bats with six microchiropteran (insectivorous) and one macrochiropteran species recorded.

Birds

A total of 52 bird species were recorded during the current survey, including six pigeon/dove species, 10 parrot species and four honeyeater species. The bird species diversity was comprised several guilds including - open-country, forest and understorey species. The well-developed ground layer and understorey vegetation supports many species which rely on these variables for foraging and nesting purposes. Other species inhabit the mid and upper canopy and utilise these layers for nesting and feeding activities.

Reptiles

A total of seven reptile species were recorded during the current survey and it is likely additional species utilise the subject site. This number included five skink, one dragon and one snake species. In general, reptiles require many of the ground-level habitat complexity variables as do small ground mammals. The subject site contains many of these attributes including a large amount of leaf litter, rocky ground cover and fallen timber, favoured by many reptile species.

Frogs

A total of eight frog species were recorded during the current investigation, including the *vulnerable* Tuskedfrog. Considering the size of the subject site this is a relatively high number and is likely due to the quality of the habitat present and included both groundfrog and treefrog species.

Invertebrates

In total 66 invertebrate species of the groups surveyed were recorded including the *vulnerable* Richmond birdwing butterfly (*Ornithoptera richmondia*). While most of the invertebrate species recorded are considered relatively common on Tamborine Mountain, one uncommon damselfly species was recorded the Coastal flatwing (*Griseargiolestes albescens*), known only from one other location on Tamborine Mountain and one uncommon cicada species the Phantom knight (*Psaltoda brachypennis*) was also recorded with few records recorded on Tamborine Mountain.

Conclusions

The result of the current survey indicates that the subject site has an overall high diversity of fauna present. It was found to contain many of the habitat and vegetation attributes required by fauna species – medium and large hollow bearing trees, fallen timber, thick leaf litter, areas of rocky cover, variations in vegetation i.e. canopy, subcanopy and shrub layer and a permanent waterbody.

Key aspects of the habitat assessment and fauna survey results

- The subject site was found to have overall high ecological values and provides important habitat that supports a large number of fauna species;
- The presence of a large and diverse faunal assemblage including – 17 mammal, 52 bird, seven reptile, eight frog, 36 butterfly, 13 cicada, 13 dragonfly, one aquatic decapod, one lacewing and two land snail species;
- Several State and Commonwealth listed threatened species including – the Richmond birdwing butterfly (*Ornithoptera richmondia*), Tuskedfrog (*Adelotus brevis*) and the koala (*Phascolarctos cinereus*), with other threatened species also likely to occur.

Important habitat areas/features include:

- A small tract of wet forest which provides suitable habitat for a large number of vertebrate and invertebrate species and which is improving in quality due to weed removal and associated restoration activities currently being undertaken;
- The presence of medium and large hollow bearing/habitat trees which provide both denning and breeding locations for microchiropteran bats, possums and gliders, reptiles and nesting opportunities for numerous bird species;
- The presence of a permanent waterbody which provides habitat and a water source for many species;
- A large amount of fallen timber, leaf litter and areas of rocky ground cover which provides habitat for numerous smaller mammal, reptile and frog species.

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Attachment 1 - Species List

Key to columns

Status

As listed in the Queensland Nature Conservation, (Wildlife) Regulation 2020 (Nature Conservation Act 1992).

E = Endangered, V = Vulnerable, LC = Least Concern, () = Not protected, I = introduced species

OR

As listed in the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act).

E*= Endangered

Family	Genus	Species	Common Name	Status
LAND SNAILS				
CAMAENIDAE	<i>Sphaerospira</i>	<i>fraseri</i>	Fraser's Banded Snail	-
ATHORACOPHORIDAE	<i>Triboniophorus</i>	<i>graeffei</i>	Red-triangle Slug	-
DECAPODS				
PARASTACIDAE	<i>Cherax</i>	<i>depressus</i>	Orange-fingered Crayfish	-
DRAGONFLIES				
SYNLESTIDAE	<i>Episynlestes</i>	<i>albicauda</i>	Southern Whitetip	-
LESTIDAE	<i>Austrolestes</i>	<i>leda</i>	Wandering Ringtail	-
ARGIOLESTIDAE	<i>Griseargiolestes</i>	<i>albescens</i>	Coastal Flatwing	-
ARGIOLESTIDAE	<i>Austroargiolestes</i>	<i>icteremeles</i>	Common Flatwing	-
COENAGRIONIDAE	<i>Ischnura</i>	<i>heterosticta</i>	Common Bluetail	-
AESHNIDAE	<i>Adversaeschna</i>	<i>brevistyla</i>	Blue-spotted Hawker	-
AESHNIDAE	<i>Anax</i>	<i>papuensis</i>	Australian Emperor	-
SYNTHEMISTIDAE	<i>Choristhemis</i>	<i>flavoterminata</i>	Yellow-tipped Tigertail	-
CORDULIIDAE	<i>Hemicordulia</i>	<i>australiae</i>	Australian Emerald	-
CORDULIIDAE	<i>Hemicordulia</i>	<i>continentalis</i>	Fat-bellied Emerald	-
LIBELLULIDAE	<i>Diplacodes</i>	<i>bipunctata</i>	Wandering Percher	-
LIBELLULIDAE	<i>Orthetrum</i>	<i>caledonicum</i>	Blue Skimmer	-
LIBELLULIDAE	<i>Orthetrum</i>	<i>villosovittatum</i>	Fiery Skimmer	-
CICADAS				
CICADIDAE	<i>Aleeta</i>	<i>curvicosta</i>	Floury Baker Cicada	-
CICADIDAE	<i>Atrapsalta</i>	<i>corticina</i>	Bark Squeaker	-
CICADIDAE	<i>Birrima</i>	<i>castanea</i>	Red Treeticker	-
CICADIDAE	<i>Birrima</i>	<i>varians</i>	Black Treeticker	-
CICADIDAE	<i>Chlorocysta</i>	<i>vitripennis</i>	Small Bottle Cicada	-
CICADIDAE	<i>Cyclochila</i>	<i>australasiae</i>	Greengrocer	-
CICADIDAE	<i>Cystosoma</i>	<i>saundersii</i>	Bladder Cicada	-

Family (cont.)	Genus	Species	Common Name	Status
CICADIDAE	<i>Ewartia</i>	<i>oldfieldi</i>	Broad-striped Wattle Cicada	-
CICADIDAE	<i>Glaucopsaltria</i>	<i>viridis</i>	Bottle Cicada	-
CICADIDAE	<i>Henicopsaltria</i>	<i>eydouxii</i>	Razor Grinder	-
CICADIDAE	<i>Popplepsalta</i>	<i>annulata</i>	Sprinkler Squeaker	-
CICADIDAE	<i>Psaltoda</i>	<i>brachypennis</i>	Phantom Knight.	-
CICADIDAE	<i>Tamasa</i>	<i>tristigma</i>	Brown Bunyip	-
LACEWINGS				
NYMPHIDAE	<i>Nymphes</i>	<i>myrmeleonides</i>	Blue Eyes Lacewing	-
BUTTERFLIES				
PAPILIONIDAE	<i>Graphium</i>	<i>eurypylus</i>	Pale Triangle	-
PAPILIONIDAE	<i>Graphium</i>	<i>sarpedon</i>	Blue Triangle	-
PAPILIONIDAE	<i>Ornithoptera</i>	<i>richmondia</i>	Richmond birdwing	V
PAPILIONIDAE	<i>Papilio</i>	<i>aegeus</i>	Orchard Swallowtail	-
PAPILIONIDAE	<i>Protographium</i>	<i>leosthenes</i>	Four-barred Swordtail	-
HESPERIIDAE	<i>Cephrenes</i>	<i>augiades</i>	Orange Palm-dart	-
HESPERIIDAE	<i>Euschemon</i>	<i>rafflesia</i>	Regent Skipper	-
HESPERIIDAE	<i>Hasora</i>	<i>khoda</i>	Narrow-banded Awl	-
HESPERIIDAE	<i>Ocybadistes</i>	<i>flavovittata</i>	Narrow-brand Grass-dart	-
HESPERIIDAE	<i>Ocybadistes</i>	<i>walkeri</i>	Green Grass-Dart	-
HESPERIIDAE	<i>Suniana</i>	<i>sunias</i>	Wide-brand Grass-dart	-
HESPERIIDAE	<i>Trapezites</i>	<i>symmomus</i>	Splendid Ochre	-
PIERIDAE	<i>Appias</i>	<i>paulina</i>	Yellow Albatross	-
PIERIDAE	<i>Catopsilia</i>	<i>pomona</i>	Lemon Migrant	-
PIERIDAE	<i>Catopsilia</i>	<i>pyranthe</i>	White Migrant	-
PIERIDAE	<i>Cepora</i>	<i>perimale</i>	Capper Gull	-
PIERIDAE	<i>Delias</i>	<i>argenthona</i>	Scarlet Jezabel	-
PIERIDAE	<i>Elodina</i>	<i>angulipennis</i>	Southern Pearl-white	-

Family (cont.)	Genus	Species	Common Name	Status
PIERIDAE	<i>Eurema</i>	<i>hecabe</i>	Large Grass-yellow	-
NYMPHALIDAE	<i>Charaxes</i>	<i>semprionus</i>	Tailed Emperor	-
NYMPHALIDAE	<i>Danaus</i>	<i>petilia</i>	Lesser Wanderer	-
NYMPHALIDAE	<i>Danaus</i>	<i>plexippus</i>	Monarch	-
NYMPHALIDAE	<i>Euploea</i>	<i>corinna</i>	Common Crow	-
NYMPHALIDAE	<i>Heteronympha</i>	<i>merope</i>	Common Brown	-
NYMPHALIDAE	<i>Hypocysta</i>	<i>metirius</i>	Brown Ringlet	-
NYMPHALIDAE	<i>Hypolimnas</i>	<i>bolina</i>	Varied Eggfly	-
NYMPHALIDAE	<i>Junonia</i>	<i>villida</i>	Meadow Argus	-
NYMPHALIDAE	<i>Melanitis</i>	<i>leda</i>	Evening Brown	-
NYMPHALIDAE	<i>Phaedyma</i>	<i>shepherdi</i>	White-banded Plane	-
NYMPHALIDAE	<i>Tirumala</i>	<i>hamata</i>	Blue Tiger	-
LYCAENIDAE	<i>Candalides</i>	<i>absimilis</i>	Common Pencilled Blue	-
LYCAENIDAE	<i>Catopyrops</i>	<i>florinda</i>	Speckled Line-blue	-
LYCAENIDAE	<i>Lampides</i>	<i>boeticus</i>	Long-tailed Pea-blue	-
LYCAENIDAE	<i>Nacaduba</i>	<i>kurava</i>	White-banded Line-blue	-
LYCAENIDAE	<i>Prosotas</i>	<i>dubiosa</i>	Purple Line-blue	-
LYCAENIDAE	<i>Psychonotis</i>	<i>caelius</i>	Small Green-banded Blue	-
LYCAENIDAE	<i>Zizina</i>	<i>otis</i>	Common Grass-blue	-
FROGS				
LIMNODYNASTIDAE	<i>Adelotus</i>	<i>brevis</i>	Tusked Frog	V
LIMNODYNASTIDAE	<i>Platyplectrum</i>	<i>fletcheri</i>	Black-soled Frog	LC
LIMNODYNASTIDAE	<i>Limnodynastes</i>	<i>peronii</i>	Striped Marshfrog	LC
LIMNODYNASTIDAE	<i>Limnodynastes</i>	<i>terraereginae</i>	Scarlet-sided Pobblebonk	LC
MYOBATRACHIDAE	<i>Mixophyes</i>	<i>fasciolatus</i>	Great Barredfrog	LC
PELODRYADIDAE	<i>Litoria</i>	<i>balatus</i>	Slender bleating Treefrog	LC
PELODRYADIDAE	<i>Litoria</i>	<i>chloris</i>	Southern orange-eyed Treefrog	LC

Family (Cont.)	Genus	Species	Common Name	Status
PELODRYADIDAE	<i>Litoria</i>	<i>fallax</i>	Eastern Sedgefrog	LC
REPTILES				
SCINCIDAE	<i>Bellatorias</i>	<i>frerei</i>	Major Skink	LC
SCINCIDAE	<i>Bellatorias</i>	<i>major</i>	Land Mullet	LC
SCINCIDAE	<i>Calyptotis</i>	<i>scutirostrum</i>	Scute-snouted Calyptotis	LC
SCINCIDAE	<i>Lampropholis</i>	<i>delicata</i>	Garden Skink	LC
SCINCIDAE	<i>Saproscincus</i>	<i>challengeri</i>	Orange-tailed Shadesskink	LC
AGAMIDAE	<i>Intellagama</i>	<i>lesueurii</i>	Eastern Water Dragon	LC
ELAPIDAE	<i>Hemiaspis</i>	<i>signata</i>	Black-bellied Swamp Snake	LC
BIRDS				
MEGAPODIDAE	<i>Alectura</i>	<i>lathami</i>	Australian Brush-turkey	LC
PHASIANIDAE	<i>Coturnix</i>	<i>ypsilophora</i>	Brown Quail	LC
ANATIDAE	<i>Chenonetta</i>	<i>jubata</i>	Australian Wood Duck	LC
ANATIDAE	<i>Anas</i>	<i>superciliosa</i>	Pacific Black Duck	LC
COLUMBIDAE	<i>Columba</i>	<i>leucomela</i>	White-headed Pigeon	LC
COLUMBIDAE	<i>Macropygia</i>	<i>amboinensis</i>	Brown Cuckoo-Dove	LC
COLUMBIDAE	<i>Geopelia</i>	<i>humeralis</i>	Bar-shouldered Dove	LC
COLUMBIDAE	<i>Leucosarcia</i>	<i>picata</i>	Wonga Pigeon	LC
COLUMBIDAE	<i>Ptilinopus</i>	<i>magnificus</i>	Wompoo Fruit-Dove	LC
COLUMBIDAE	<i>Lopholaimus</i>	<i>antarcticus</i>	Topknot Pigeon	LC
PODARGIDAE	<i>Podargus</i>	<i>strigoides</i>	Tawny Frogmouth	LC
TYTONIDAE	<i>Tyto</i>	<i>javanica</i>	Eastern Barn Owl	LC
STRIGIDAE	<i>Ninox</i>	<i>boobook</i>	Southern Boobook	LC
ACCIPITRIDAE	<i>Accipiter</i>	<i>fasciatus</i>	Brown Goshawk	LC
ALCEDINIDAE	<i>Dacelo</i>	<i>novaeguineae</i>	Laughing Kookaburra	LC
ALCEDINIDAE	<i>Todiramphus</i>	<i>macleayii</i>	Forest Kingfisher	LC
CACATUIDAE	<i>Zanda</i>	<i>funereus</i>	Yellow-tailed Black-cockatoo	LC

Family (cont.)	Genus	Species	Common Name	Status
CACATUIDAE	<i>Eolophus</i>	<i>roseicapillus</i>	Galah	LC
CACATUIDAE	<i>Cacatua</i>	<i>sanguinea</i>	Little Corella	LC
CACATUIDAE	<i>Cacatua</i>	<i>galerita</i>	Sulphur-crested Cockatoo	LC
PSITTACULIDAE	<i>Trichoglossus</i>	<i>moluccanus</i>	Rainbow Lorikeet	LC
PSITTACULIDAE	<i>Trichoglossus</i>	<i>chlorolepidotus</i>	Scaly-breasted Lorikeet	LC
PSITTACULIDAE	<i>Glossopsitta</i>	<i>pusilla</i>	Little Lorikeet	LC
PSITTACULIDAE	<i>Alisterus</i>	<i>scapularis</i>	Australian King-parrot	LC
PSITTACULIDAE	<i>Platycercus</i>	<i>elegans</i>	Crimson Rosella	LC
PSITTACULIDAE	<i>Platycercus</i>	<i>adscitus</i>	Pale-headed Rosella	LC
PTILONORHYNCHIDAE	<i>Ptilonorhynchus</i>	<i>violaceus</i>	Satin Bowerbird	LC
CLIMACTERIDAE	<i>Cormobates</i>	<i>leucophaea</i>	White-throated Treecreeper	LC
MALURIDAE	<i>Malurus</i>	<i>cyanurus</i>	Superb Fairy-wren	LC
MELIPHAGIDAE	<i>Meliphaga</i>	<i>lewinii</i>	Lewin's Honeyeater	LC
MELIPHAGIDAE	<i>Manorina</i>	<i>melanocephala</i>	Noisy Miner	LC
MELIPHAGIDAE	<i>Lichmera</i>	<i>indistincta</i>	Brown Honeyeater	LC
MELIPHAGIDAE	<i>Philemon</i>	<i>corniculatus</i>	Noisy Friarbird	LC
ACANTHIZIDAE	<i>Sericornis</i>	<i>frontalis</i>	White-browed Scrubwren	LC
ACANTHIZIDAE	<i>Sericornis</i>	<i>magnirostra</i>	Large-billed Scrubwren	LC
ACANTHIZIDAE	<i>Acanthiza</i>	<i>lineata</i>	Striated Thornbill	LC
ACANTHIZIDAE	<i>Acanthiza</i>	<i>pusilla</i>	Brown Thornbill	LC
ORIOLIDAE	<i>Sphecotheres</i>	<i>vieilloti</i>	Australasian Figbird	LC
ORIOLIDAE	<i>Oriolus</i>	<i>sagittatus</i>	Olive-backed Oriole	LC
PACHYCEPHALIDAE	<i>Colluricincla</i>	<i>megarhyncha</i>	Rufous Shrike-thrush	LC
PACHYCEPHALIDAE	<i>Colluricincla</i>	<i>harmonica</i>	Eastern Grey Shrike-thrush	LC
PSOPHODIDAE	<i>Psophodes</i>	<i>olivaceus</i>	Eastern Whipbird	LC
CAMPEPHAGIDAE	<i>Coracina</i>	<i>novaehollandiae</i>	Black-faced Cuckoo-shrike	LC
CAMPEPHAGIDAE	<i>Coracina</i>	<i>tenuirostris</i>	Cicadabird	LC

Family (cont.)	Genus	Species	Common Name	Status
ARTAMIDAE	<i>Cracticus</i>	<i>nigrogularis</i>	Pied Butcherbird	LC
ARTAMIDAE	<i>Gymnorhina</i>	<i>tibicen</i>	Australian Magpie	LC
ARTAMIDAE	<i>Strepera</i>	<i>graculina</i>	Pied Currawong	LC
RHIPIDURIDAE	<i>Rhipidura</i>	<i>rufifrons</i>	Rufous Fantail	LC
RHIPIDURIDAE	<i>Rhipidura</i>	<i>albiscapa</i>	Grey Fantail	LC
DICRURIDAE	<i>Dicrurus</i>	<i>bracteatus</i>	Spangled Drongo	LC
CORVIDAE	<i>Corvus</i>	<i>orru</i>	Torresian Crow	LC
PETROICIDAE	<i>Eopsaltria</i>	<i>australis</i>	Eastern Yellow Robin	LC
HIRUNDINIDAE	<i>Hirundo</i>	<i>neoxena</i>	Welcome Swallow	LC
MAMMALS				
PERAMELIDAE	<i>Isoodon</i>	<i>macrourus</i>	Northern Brown Bandicoot	LC
PERAMELIDAE	<i>Perameles</i>	<i>nasuta</i>	Long-nosed Bandicoot	LC
ACROBATIDAE	<i>Acrobates</i>	<i>pygmaeus</i>	Feathertail Glider	LC
PSEUDOCHIRIDAE	<i>Pseudocheirus</i>	<i>peregrinus</i>	Common Ringtail Possum	LC
PETAURIDAE	<i>Petaurus</i>	<i>breviceps</i>	Sugar Glider	LC
PHALANGERIDAE	<i>Trichosurus</i>	<i>caninus</i>	Short-eared Brushtail Possum	LC
PHALANGERIDAE	<i>Trichosurus</i>	<i>vulpecula</i>	Common Brushtail Possum	LC
PHASCOLARCTIDAE	<i>Phascolarctos</i>	<i>cinereus</i>	Koala	E,E*
MURIDAE	<i>Rattus</i>	<i>fuscipes</i>	Bush Rat	LC
MURIDAE	<i>Rattus</i>	<i>rattus</i>	Black Rat	I
PTEROPODIDAE	<i>Pteropus</i>	<i>alecto</i>	Black Flying-fox	LC
RHINOLOPHIDAE	<i>Rhinolophus</i>	<i>megaphyllus</i>	Eastern Horseshoe Bat	LC
EMBALLONURIDAE	<i>Saccopteryx</i>	<i>flaviventris</i>	Yellow-bellied Sheath-tailed Bat	LC
MINIOPTERIDAE	<i>Miniopterus</i>	<i>australis</i>	Little Bent-wing Bat	LC
VESPERTILIONIDAE	<i>Chalinolobus</i>	<i>gouldii</i>	Gould's Wattled Bat	LC
VESPERTILIONIDAE	<i>Nyctophilus</i>	<i>bifax/gouldi</i>	-	LC
VESPERTILIONIDAE	<i>Scoteanax</i>	<i>rueppellii</i>	Greater Broad-nosed Bat	LC

Attachment 2: Photos



Photograph 1: Constructed walking track through the subject site



Photograph 2: Springfed creekline running through the subject site



Photograph 3: Pond filled after heavy rain



Photograph 4: Orange-fingered crayfish



Photograph 5: Coastal flatwing damselfly



Photograph 6: Southern whitetip damselfly



Photograph 7: Bladder cicada



Photograph 8: Phantom knight cicada



Photograph 9: Splendid ochre butterfly



Photograph 10: Regent skipper butterfly



Photograph 11: Great barredfrog tadpoles



Photograph 12: Great barredfrog



Photograph 13: Scarlet-sided pobblebonk



Photograph 14: Scute-snouted Calyptotis



Photograph 15: Orange-tailed shadekink



Photograph 16: Juvenile land mullet



Photograph 17: Marsh snake



Photograph 18: White-browed scrubwren



Photograph 19: Eastern yellow robin



Photograph 20: Female satin bowerbird



Photograph 21: Satin bowerbird bower



Photograph 22: Short-eared possum, mother and young



Photograph 23: Sugar glider



Photograph 24: Feathertail glider



Photograph 25: Bush rat



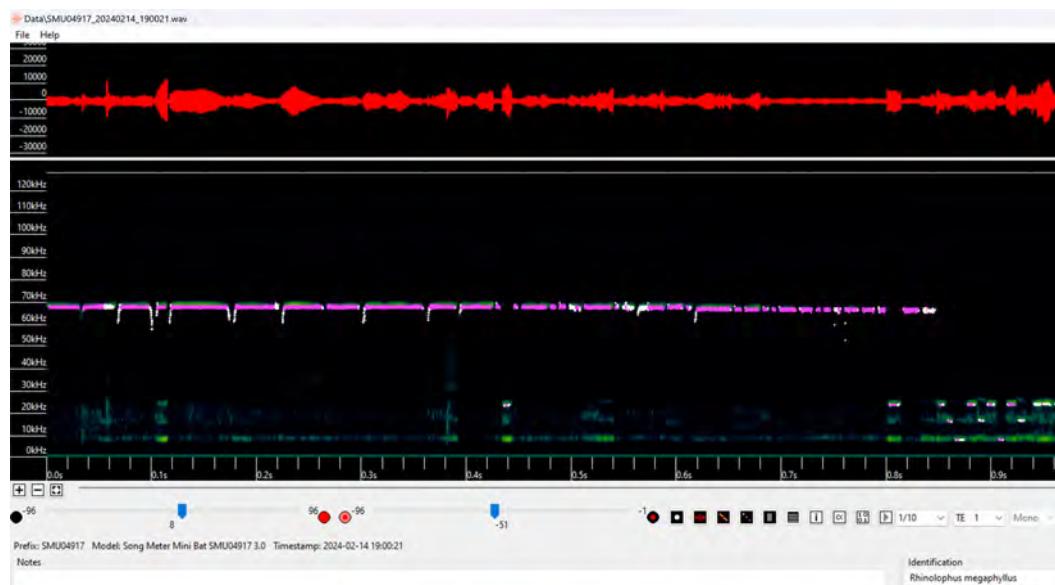
Photograph 26: Bush rat in hand



Photograph 27: Northern-brown bandicoot



Photograph 28: Long-nosed bandicoot



Photograph 29: Eastern horseshoe bat call