Survey of Vertebrate Fauna at Glen Rock in the Gatton Shire

George Krieger & Peter Lehmann

March 2000

QUEENSLAND GOVERNMENT

QUEENSLAND PARKS AND WILDLIFE SERVICE

TABLE OF CONTENTS

MAPS

PHOTOGRAPHS

ACKNOWLEDGEMENTS

Field work for this report was undertaken by staff from QPWS, Moggill office.
Special thanks should be given to Dr David Stewart, Murray Haseler and Shawn Capararo for their efforts in the field under sometimes difficult conditions; Paul Grimshaw for the vegetation mapping and incidental fauna records; Lisa Ford for aquatic fauna records and summary (QPWS Cleveland); Rayelene Brown and Harriet Preece for the technical support and assistance with GIS; Shelley Novello for digitising the vegetation map, Kathy Julian for preparation of report layout and cover design; Peter Lawson and Dr Wendy Drake for editing the report.

Finally, we would like to thank Ken and Christine Morris for their extensive local knowledge of the area and warm hospitality during the surveys.

Cover

Photographs from top left clockwise
Dry scrub community on rocky scree regional ecosystem of concern;
View of Mt Machar from Blackfellow Creek valley;
Vulnerable Brush-tailed rock-wallaby;
Eastern water dragon;
Vulnerable Glossy black-cockatoo;
Stony-creek frog;
Background photo: vegetation growing on steep rocky slopes of Cooks Tableland gorge.

INTRODUCTION

This report details the vertebrate fauna species recorded during four separate field survey periods conducted between October 1996 and December 1999 at Glen Rock within Gatton Shire. Included in the report are a vegetation map and preliminary plant species list for the area.

Glen Rock property is 6,300 hectares in area and is located approximately 35 kilometres south of the township of Gatton in southeast Queensland. The Gatton area is noted primarily for its beef cattle production and vegetable enterprises. The eastern boundary of Glen Rock adjoins the Mount Mistake section of the Main Range National Park for a distance of about 17 kilometres. The southern boundary forms part of the Great Dividing Range *(see Map 1).*

Much of the landscape in the Blackfellow Creek valley below Glen Rock has been modified, leading to a mosaic of vegetation remnants often degraded in the understorey by weeds such as *Lantana camara*. The isolation of these remnant vegetation communities over time can have a serious impact on ecosystem processes leading to a decline in biodiversity, (Boyes, 1999). The large area of continuous intact native vegetation within Glen Rock and its links with conservation areas to the east are critical for the long-term viability of fauna for the greater area.

The aim of the surveys was to determine the distribution and habitat preference of fauna within Glen Rock. Fauna survey sites were chosen using a random stratified technique so as to sample the full range of habitats in the survey area given the time and resources available. Interpretation of recent aerial photographs and preliminary ground truthing of vegetation communities of the area formed the basis of fauna site selection. For practical purposes most sites were selected within reasonable walking distance of known vehicle tracks. Additional site information was obtained on target fauna species in remote areas away from vehicle tracks.

Fauna records obtained during the survey were used to assess the conservation value of the land and will provide baseline information for future land management decisions.

SUMMARY

The survey recorded 187 native fauna species. This included 16 mammals, 130 birds, 23 reptiles, 9 amphibians, 6 freshwater fish and 3 freshwater shrimp species. Of these, four species are listed under the Queensland Nature Conservation (Wildlife) Act as rare or threatened. These include two vulnerable species the Brush-tailed rock-wallaby and the Glossy black-cockatoo and two rare species the Sooty owl and Red-browed treecreeper. A number of noteworthy species was also recorded including the New Holland mouse which is only known from two other locations in Queensland. Of particular note was the number of bird species recorded, in particular the abundance of rosellas, lorikeets, galahs, parrots and cockatoos. Two major core refuge areas for the brush-tailed rock-wallaby were identified. These refuge areas are critical for the dispersal of young and the long term viability of this species in this area.

Glen Rock supports a diverse range of habitat for fauna with ten vegetation types recorded. Of these, three communities are listed as “of concern”.

PHYSICAL ENVIRONMENT

Geology and Land Forms

The area is situated in Province 1 *(Scenic Rim)* within the Southeast Queensland Bioregion. Three Land Zones represented in the study area are:

- **Land Zone 3**—comprised of Quaternary alluvium, recently transported material and landforms characterised by plains and river flats;
- **Land Zone 8—**comprised of Cainozoic igneous rocks, consisting of either basalt, trachyte and rhyolite with land forms of low hills and uplands;
- **Land Zone 9/10—**Consolidated fine, medium and coarse-textured sediments, mostly of Cretaceous, Jurassic or Triassic age but including Tertiary sedimentary rocks. Rock types are either siltstones, mudstones, shales, calcareous sediments and lithic sandstones, siliceous sandstones or conglomerates, landforms are plains, low hills, plateaus and scarps (Sattler, and Williams, 1999).

The main valley system that runs through the property is Blackfellow Creek. This valley separates the Mt Mistake plateau from the Cooks Tableland plateau. The elevation ranges from 350 metres to 1000 metres. The deep alluvium river flats on the valley floor give way to steep slopes and ridge lines of the Main Range volcanics comprised mostly of olivine basalt. Along Blackfellow Creek sandstone outcrops may be seen forming overhanging shelters. An example of this can be seen at the main park entrance within the Angophora day use area.

Climate

Gatton Shire has a sub-humid, subtropical climate with 68% of the 820 mm annual rainfall occurring in summer. Southern elevated ranges such as those within Glen Rock receive in excess of 1000 mm per annum. Much of the rainfall occurs in summer from storms which form in the Mt Mistake plateau area. Because of the steep and extensive catchment area, flash flooding is common within the Blackfellow Creek and Black Duck Creek valleys. Average summer temperatures range from 15°C minimum to 30°C maximum and winter temperatures range from 5°C minimum to 20°C maximum. Temperatures in summer may exceed 38°C and may fall below 0°C in winter. Frost may occur frequently in winter.

Vegetation

The vegetation mapping was compiled by Paul Grimshaw (QPWS Moggill, Conservation Management Group). Map 3 shows the vegetation units present within Glen Rock. Lists of the vegetation codes, species composition and Regional Ecosystems are shown in Appendix 1 and a preliminary plant species list for the area is shown in Appendix 2.

The vegetation of the Glen Rock area is predominantly tall open forests/woodlands. It is largely dependent on geology, topography, elevation and aspect. The northern section of Blackfellow Creek valley near the entrance to the property have been cleared in the past for agriculture either for crop production or for improved pasture for beef cattle. On some ridges above the valley regenerating forest communities occur that are often degraded in the understorey with weeds such as *Lantana camara.* There is a possibility that, within 15-20 years with appropriate management strategies (no overgrazing, no high frequency fires and with weed control), some of these regrowth areas may recover sufficiently to function as remnant vegetation (Grimshaw, 1999).

Of the nine regional ecosystems types identified within Glen Rock, three are listed as “of concern” (Sattler, and Williams, 1999).

Ten major vegetation types identified during the mapping process were:

Vegetation type 3a on alluvial river flats with species such as *Eucalyptus tereticornis, Casuarina cunninghamiana, Angophora subvelutina/floribunda, Callistemon viminalis* and *Melaleuca bracteata* dominate the river flats and adjacent water course areas. The riparian community along Blackfellow Creek is partially intact, although sections are either totally cleared or have weed species such as *Lantana camara* in the understorey.

Vegetation type 3c has a minor occurrence within Glen Rock and is usually mixed with other vegetation units such as 3a. This community occurs within the Blackfellow Creek valley. The dominant tree species is *E. tereticornis* in association with *Corymbia citriodora, C. intermedia,* and *Lophostemon suaveolens.*

In the lower, mid and upper slopes vegetation communities are characteristic of the Main Range volcanics. On the high elevation areas of Cooks Tableland and the eastern boundary adjoining Mt Mistake section of Main Range National Park very tall open forests **Vegetation type 8a** dominated by *E. biturbinata, E. eugenioides* and *E. melliodora* occur. Due to the higher elevation in these areas cooler summer temperatures prevail, promoting dense ground cover including *Themeda triandra, Poa spp* and *Sorghum leiocladum.*

The dominant vegetation communities within Glen Rock are represented as **Vegetation type 8b and 8d**. On the lower and mid slopes species such as *E. crebra, E. melanophloia, E. tereticornis* and *E. melliodora* occur. Variations in species composition and dominance are illustrated by the mosaic patterns of vegetation communities. This variation in vegetation patterns is evident on the drive from the homestead to Mt Machar where the dominance of *E. crebra* and *E. melanophlioa* changes frequently as one proceeds along the road.

In the deep gullies between the dry open forest ridges **Vegetation type 8e** is dominated by *Lophostemon confertus*, *E. tereticornis, Allocasuarina torulosa,* and rainforest species including *Ficus spp, Toona ciliata, Argyodendron actinophyllum,* and fern species.

In the deep gorges such as those that occur in the Cooks Tableland area *Araucaria cunninghamii* emergents protrude above the uniform *Lophostemon confertus* canopy. These communities are in sharp contrast to the dry, hot open forest/woodland ridgelines that dominate much of the landscape at Glen Rock.

The steeper slopes and exposed rock surfaces adjoining the Main Range National Park to the east of Blackfellow Creek valley are representative of **Vegetation type 8j.** The vegetation is mid-high woodland/open woodland of a heterogeneous mix of trees, stunted shrubs, forbs and grasses, including *E. tereticornis, E. melliodora, Angophora floribunda, Jacksonia scoparia, Xanthorrhoea glauca* and *Doryanthes palmeri.*

Surrounded totally by dry open forest an area of rocky scree on the northern slopes of Mt Machar supports a community of closed forest/vine thicket **Vegetation type 8m.** Species such as *Flindersia australis, Vitex lignumvitae, Flindersia collina* and *Ficus obliqua/platypoda* and *Ficus virens* dominate the rocky scree. These communities provide refuge areas from predators, and in times of fire and drought. Although only 2 hectares in size the diversity in microhabitat at this site is critical in supporting a diverse range of fauna including the vulnerable Brush-tailed Rock-wallaby.

This vegetation community also occurs in the steep gorge in the Cooks Tableland area and in the upper reaches of Black Duck Creek.

Usually restricted to the higher elevation areas of Mt Mistake National Park, the very tall closed forest **Vegetation type 8n** of *Argyrodendron actinophyllum, Sloanea woollsii* and *Elaeocarpus kirtonii* occurs on the eastern boundary of Glen Rock on the steep, south facing slopes of the right hand branch of Flaggy Creek.

At the northern entrance to Glen Rock near the Angophora day use area and along Blackfellow Creek **Vegetation type 9h** occurs. This community occurs on fine sedimentary rock including labile and sublabile sandstone. The vegetation is very tall/tall woodland dominated by *E.crebra.* Although this vegetation type occurs in Glen Rock, remnants are too small or too degraded to map.

SIGNIFICANT VEGETATION COMMUNITIES

Regional Ecosystems of concern

Regional Ecosystem type **12.3.3** vegetation type **3c**. Location: Along Blackfellow Creek.

Regional ecosystem type **12.8.21** vegetation type **8m.** Location: Site 7, Site 10 and in the head waters of Black Duck Creek.

Regional Ecosystem type **12.9/10.7** vegetation type **9h**. Only remnants occur within Glen Rock, and are often degraded. Location: Northern entrance to Glen Rock Angophora day use area and along Blackfellow Creek below Flaggy Creek junction.

Note: A stand of the rare plant species *Callitris baileyi* was located near Site 30 in the north east corner of Glen Rock *(see Map 4).*

FAUNA SURVEY METHODS

Trapping effort

Map 5 shows the locations of the fauna survey sites undertaken at Glen Rock. Map 6 shows the location of the small mammal elliott trap sites.

The locations, physical characteristics of the sites and survey methods used at each site are listed in Appendix 3. These include:

Elliott Traps

Small Type A (90x90x320 mm) aluminium Elliott box traps were used to capture small ground dwelling mammals and reptiles. Trapping was undertaken at 19 sites. Twenty five traps were set at 10 metre intervals along a transect within each habitat type. Traps were left open for a period of three nights. Baits used were made up of a mixture of peanut paste, oats, and honey. A total of 1425 Elliott trap nights was spent during this survey period.

Cage Traps

Cage trapping was undertaken at 19 sites. Baits used were the same as for elliott traps. Three cage traps (21x21x45cm) were used at each site for a period of three nights. A total of 171 trap nights was spent using this method.

Pit Traps

Pitfall traps were used to capture reptiles, frogs and small mammal species which are cryptic and difficult to detect. They are labour intensive to erect and because of this were not used at each site.

Five 10 litre buckets were placed along a 20 metre mesh fence with a height of 30 centimetres. Pitfall lines were left open for three nights, and were checked early each morning for captures. Animals were identified and released, unless collected for voucher specimens. Pitfall traps were only used at sites 5, 27 and 29. A total of 60 nights trapping was conducted using this method.

Bird Census

Standard bird censusing was carried out at each of the trap sites. Observations were carried out along a 200 metre transect for a period of 30 minutes. Censusing took place once a day during the morning between 0600 hrs and 1000 hrs. A total of 9 hours bird censusing was carried out during the survey period. Opportunistic bird sightings were also recorded.

Diurnal Herpetofauna Searches

One person-hour of diurnal herpetofauna searches was conducted at each systematic site. Searches were conducted between 1100 hrs and 1600 hrs. Active searching techniques included turning rocks and logs, removing exfoliated bark and searching leaf litter and grass for individuals. Hand tools such as jemmy bars were used during the active searches. Individuals were caught for verification and released back on site.

Harp Traps

Collapsible harp traps were used to capture microchiropteran bats and small megachiropterans within the survey area. Traps were usually set at suitable flyways in either gullies or along tracks. Traps were checked each morning and individuals were identified on site and released in hollow logs or held in calico bags until dusk that day to be released. Three nights harp trapping were undertaken at site 10.

Nocturnal bird call play back

Nocturnal call playback tape sessions were used at sites to detect nocturnal birds such as the powerful owl *Ninox strenua,* masked owl *Tyto novaehollandiae,* sooty owl *Tyto tenebricosa,* and the Marbled frogmouth *Podargus ocellatus plumiferus.* Each session involved the playing of prerecorded tapes of forest dwelling owls for 3 minutes each, followed by a listening period of 2 minutes. After the end of the session, each observer scanned the forest by spotlight for any eye shine.

Spotlighting

The spotlighting census involved two observers traversing 300 metre transects with 30 watt "powabeam" spotlights for 0.5 hour *(ie.one person-hour*) at each of the standard sites. Start times varied depending on the season but usually commenced within 2 hours after dusk. All transects were traversed on foot. Spotlighting conditions during the survey were ideal, clear, windless with no moon.

Additional spotlight transects were undertaken by vehicle traversing tracks throughout the property. This method proved successful as it enabled large distances to be covered with minimal physical effort.

A total of 20 person-hours of handheld spotlighting and 10 person-hours vehicle spotlighting was undertaken during the survey

Incidental observations

These include observations made outside the standard survey periods. They were based on chance encounters during the day or night, or identified by skeletal remains, scars on trees or scats.

Opportunistic Searches

Additional nocturnal herpetofauna search effort targeted frog species after summer rain periods when this group of fauna is most active. Positive identification was obtained by catching individuals or from calls heard. Calls were either identified on site or recorded and later identified using a field guide CD of Australian Frog Calls Subtropical East by David Stewart.

Scat collection

Scats of priority species such as koala *Phascolarctos cinereus* and brush-tailed rock-wallaby *Petrogale penicillata* found during the survey were identified or collected for verification. Rocky outcrops were targeted for scats of the brush-tailed rock-wallaby.

Survey Effort

Survey effort was calculated as the number of spotlight-hours expended *(number of spotlights by time taken*). Survey success was expressed as the number of observations per spotlight hour.

Trapping success was calculated by the formula:
number of animals caught / number of trap nights x 100.

Nomenclature

Nomenclature for mammals follows Strahan (1983); for birds Slater (1991); for reptiles and amphibians Cogger (1991); for bats Parnaby (1992); and for butterflies Wilson (1987).

RESULTS AND DISCUSSION

A total of 197 species was recorded during the surveys. This included 23 mammals, 132 birds, 23 reptiles, 10 amphibians, 6 freshwater fish and 3 freshwater shrimp species. Of these, ten are introduced species: house mouse *Mus musculus,* brown hare *Lepus capensis,* wild dog *Canis familiaris,* cattle *Bos taurus,* horse *Equus caballus,* cat *Felis catus,* fox *Vulpes vulpes,* cane toad *Bufo marinus*, common starling *Sturnus vulgararis* and common myna *Acridotheres tristis.* Results of the fauna species recorded at each of the sites are shown in Appendix 4. A complete list of the fauna recorded at Glen Rock is shown in Appendix 5.

Small and Medium Sized Mammals

Eighty individuals were captured, and of these 40 (50%) were of the one species, bush rat *Rattus fuscipes.*

Capture rates for small mammals based on elliott and cage traps was 5%. Six species of small ground dwelling mammals were recorded in the survey. These included the bush rat *Rattus fuscipes,* fawn footed melomys *Melomys cervinipes,* yellow footed antechinus *Antechinus flavipes*, New Holland mouse *Pseudomys novaehollandiae*, common dunnart, *Sminthopsis murina* and the introduced house mouse *Mus musculus.*

The bush rat *Rattus fuscipes* was recorded at six of the 19 trap sites. This species inhabits a wide range of communities preferring areas where substantial ground cover exists. Capture rates for this species were low at 2.5%. Sites 1, 4, 7 and 10 recorded the highest number of individuals of this species. All these sites are gully sites where the moisture gradient is high and where the ground cover is dense, dominated by grasses and ferns dispersed among either substantial rocky substrates or fallen logs.

The fawn footed melomys *Melomys cervinipes* was only recorded at Site 4 in the left branch of Shady Creek which flows into Blackfellow Creek. This species prefers habitats of moist closed forest or wet sclerophyll type forests.

The Shady Creek area is highly suited to this species habitat requirements. It is semi arboreal, climbing vines and smaller tree trunks which are common at this site.

The yellow footed antechinus *Antechinus flavipes* was recorded at Sites 2, 4, 7, 8, 28 and 30. It was most common at Site 7 where individuals were trapped among the rocky scree and fern ground cover. This site is surrounded by dry open forest communities.

The New Holland mouse *Pseudomys novaellandiae* was recorded at Site 27 on the boundary of Glen Rock and Mt Mistake section of Main Range National Park. A single individual was trapped and taken to the Queensland Museum for verification. Little is known about this species' habitat preferences in Queensland. This capture at Glen Rock represents only the third known locality in Queensland.

The site is located 80 metres from Blackfellow Creek where habitat consists of tall open forest dominated by *Allocasuarina torulosa, Eucalyptus tereticornis* and *E. crebra.* The ground cover is sparse. This site is in an area that is frequently burnt and grazed by cattle. However the vegetation on the other side of Blackfellow Creek is very tall open forest dominated by *E. biturbinata, E. melliodora* where the ground cover is very dense and dominated by ferns and grasses.

The common dunnart *Sminthopsis murina* was recorded during a diurnal reptile search at Site 9. The individual was found under a log after the area had been recently burnt. This species is often difficult to detect by standard elliott trapping and is usually found using pitfall trap methods.

The introduced house mouse *Mus musculus* was recorded at 11 sites. This species occurs as an early coloniser in recently burnt communities which may explain its high presence within the area.

Macropods

The vulnerable brush-tailed rock-wallaby *Petrogale penincillata* was recorded at 2 standard sites and 10 incidental sites. In the majority of locations individuals were recorded in habitats of open forest although at sites 7 and 13 dry rainforest communities were present. Significant resident populations are present at sites 7 and 13 in the Mt Machar and Cooks Tableland area. The Mt Machar site provides individuals with significant daytime refuge. These two sites are characterised by rocky scree and cliffs. The rocky escarpments bordering the Blackfellow Creek valley provide suitable habitat for this species and it is likely that additional sites exist in the Glen Rock area.

The eastern grey kangaroo *Macropus giganteus* was recorded at site 8 southeast of Mt Machar. A single individual was sighted in the open forest after the area had been recently burnt. Anecdotal information from Barry McKay a local resident from Gatton suggests that about 40 years ago the area once supported a significant population of whiptail wallabies *Macropus parryi*. This species was not recorded during the surveys.

Arboreal mammals

During the Glen Rock survey six species of arboreal mammals were recorded using two standard methods. These included hand held spotlight transects and vehicle spotlight transects. Appendix 4 lists the species recorded at each of the sites. The most commonly recorded species was the common brush-tailed possum, which was recorded at 6 sites. This species was particularly common in the open forest communities in the Blackfellow Creek valley where a 1 kilometre vehicle transect recorded 5 individuals.

The second most common species were the koala and the greater glider each of which was recorded at two sites. These two species were only recorded at the higher elevation areas of Glen Rock west of Blackfellow Creek valley.

The least frequently recorded species were the sugar glider, squirrel glider and the ring-tailed possum.

Amphibians

Ten species of amphibians were recorded within the study area. Of these, one species *Bufo marinus* is introduced.

The most commonly recorded species during the survey were the striped marshfrog *Limnodynastes peronii* and the clicking froglet *Crinia signifera.* The least frequently recorded species were the bleating treefrog *Litoria dentata,* and the broad palmed rocketfrog *L. latopalmata.*

The stony creek frog *L. lesueuri* was recorded in very high numbers along Blackfellow, Flaggy, and Shady Creeks during the December 1999 surveys of that area.

Factors such as seasonality have a significant influence on the detectability of this group of fauna. Thunder storms and heavy rain triggered frog activity during the December 1999 survey.

Reptiles

During the surveys 23 species of reptiles were recorded using three standard survey methods including diurnal herpetofauna searches, pitfall traps, and spotlighting. Appendix 4 lists the species recorded at the various sites. Diurnal herpetofauna searches were the most successful, detecting 20 species. Several species were also recorded incidentally off and on site. The most commonly recorded species was the wall skink *Cryptoblepharus virgatus.* Water dragons were common along the stream edge of Blackfellow Creek. The dry hot exposed rocky ridges provide suitable habitat for reptiles throughout much of the Glen Rock area.

Birds

A total of 132 bird species was recorded during the survey. All but one species, Sooty owl, were recorded during diurnal bird surveys. Two of these species, red browed treecreeper and the sooty owl are listed as rare while the glossy black-cockatoo is listed as vulnerable under the nature conservation act. The Rainbow Bee-eater *Merops ornatus* is listed under the "JAMBA" agreement *(Japan and Australian Migratory Birds Agreement)*. Two introduced species of bird, the common starling and the common myna were observed in the area. Appendix 4 list species of birds recorded at the sites.

The abundance of rosellas, lorikeets, galahs, parrots and cockatoos recorded particularly in the Blackfellow Creek valley is noteworthy. Many of these species are reliant on *Eucalyptus tereticornis* for both nesting hollows and for their flowering food source.

The riparian communities of Glen Rock including Blackfellow, Flaggy, Shady and Black Duck Creeks and the Hoop Pine gorge in the vicinity of Cooks Tableland are critical refuge areas for a wide variety of bird species. They are also a vital source of habitat for water birds in a predominantly dry landscape. Breeding pairs of Satin Bowerbirds were also observed in sections of remnant vegetation along Blackfellow Creek.

Several species such as the red-browed tree creeper and the yellow-tufted honeyeater were restricted in their distribution to higher elevation areas above 700 metres.

Freshwater fish

A very brief survey of the freshwater fish of Flaggy and Blackfellow Creeks was conducted by Lisa Ford (QPWS Cleveland). A total of 15 hours survey was undertaken. Methods used to detect fish were visual identification whilst snorkeling, bait traps, scoop nets, and spotlighting.

During the survey six species of native fish and three species freshwater shrimp were recorded. The aquatic fauna of Flaggy and Blackfellow Creeks is abundant. The fish caught in these creeks were consistently larger and healthier than those commonly caught in creeks closer to Brisbane. The only feral animal species recorded was the cane toad, *Bufo marinus* which was abundant.

The fish populations contained very large individuals, and there were no signs of fungal infections. The purple spotted gudgen, *Morgurnda adspersa* was particularly abundant and large in size.
Eel-tailed catfish, *Tandanus tandanus* are very common and in high densities in the section of Blackfellow Creek below the junction of Shady Creek. *(Refer to sites 46 and 47 for species lists.)*

The creeks were heavily colonised by a filamentous green algae, indicating eutrophication. However, other than this algae, the creeks both appear to be healthy and support a wide range of aquatic fauna. Both Flaggy and Blackfellow Creeks support healthy populations of native fish, and are noteworthy due to the absence of the introduced mosquito fish *Gambusia affinis.*

Survey Limitations

The survey was conducted over a brief period of time and therefore, could only identify a portion of the full range of vertebrate fauna which utilise the area. A more comprehensive list of species would require greater survey effort over a range of seasons. Additional effort needs to be put into bat fauna particularly in areas where creeks, gorges and suitable flight paths exist. Target fauna surveys for species such as the Hasting River Mouse and the Eastern Bristlebird should include areas along the eastern boundary of Glen Rock in the high elevation tall open forest communities adjoining the Mt Mistake section of the Main Range National Park. These areas potentially contain suitable habitat but are remote, steep and have access problems thus requiring additional survey effort.

SIGNIFICANT FAUNA SPECIES RECORDED AT GLEN ROCK

Brush-tailed rock-wallaby *(Petrogale penincillata)*

The brush-tailed rock-wallaby *(Petrogale penicillata)* is listed as vulnerable by the *Nature Conservation (Wildlife) Regulation 1994*. In Queensland it inhabits rocky outcrops throughout the Great Dividing Range from the NSW border north to Nanango. It has declined from the western edge of its range around Stanthorpe, Warwick and Toowoomba and from the east of its range around Lamington.

Due to its specialised habitat requirements, its distribution is naturally fragmented and seemingly disjunct or isolated colonies often occur. Secure populations of this species remain close to the centre of the Divide, where due to the rugged terrain, colonies continue to be linked by natural corridors of undisturbed vegetation and rocky escarpment.

Development and its consequences, such as clearing of native vegetation and the invasion of feral animals, increases the isolation of colonies by making the intervening lands inhospitable to activity and movement. Introduced predators *(foxes and cats)* can prey successfully on young brush-tailed rock-wallabies resulting in aging colonies with no recruitment. Goats can compete aggressively with rock-wallabies for both food and shelter. These events can lead to the local extinction of colonies ultimately resulting in the loss of the species from an area. Management of this species should aim to, not only maintain habitat within colonies, but also the intervening lands between colonies.

Habitat at Glen Rock

Map 7 shows the Brush-tailed Rock-Wallaby sightings at Glen Rock during the survey. On Glen Rock two significant core areas were identified. These are sites 7 and 13, (G.Krieger in 1996). At Mt Machar a colony is concentrated within an area of rocky scree below a cliff *(Core area 1).* At Mt Hennessy a colony is concentrated on the southern cliffs of Hoop Pine Gorge *(Core area 2).* There are probably similar core areas elsewhere on Glen Rock or on adjoining properties. Due to the concentration of rock-wallabies within these core areas animals are readily observed. The presence of individuals in secondary areas was determined by observation of scats on rocky outcrops. At least ten animals were observed in a traverse of the Mt Machar site *(Core area 1)* on 21 July 1999. In the initial survey of this site seven animals were seen (G.Krieger). Animals appeared healthy and young were present, indicating that the colony is reproducing successfully.

The habitat used by rock wallabies at Glen Rock is representative of the surrounding region. The steep sided valleys associated with the north flowing catchments of Blackfellow, Black Duck, Laidley and Tenthill Creeks contain bands or contours of outcropping rock high on the slopes interspersed and surrounded by grassy woodland. The outcropping rock and associated vegetation such as figs provide diurnal refuge for rock-wallabies. The warmer northern aspects are more commonly inhabited and provide opportunities for basking.

Rock wallabies are not evenly distributed throughout this rocky terrain. Within it there are pockets where, due to rock falls or creeks cutting the rocky contour, the structure of the rock outcrop becomes more complex. Rock-wallaby activity is concentrated within these pockets and result in ‘core’ areas where groups of animals form socially interacting colonies. The size of the colony may vary depending upon the size of the ‘pocket’.

The two core areas are relatively small in size but are vital in ensuring the persistence of rock wallabies on the property (Krieger and Capararo, 1999). Glen Rock has relatively low rainfall and the abundance of dry grass makes it fire prone. Moisture is concentrated in the core areas and the rocky areas provide natural barriers to fire which results in more mesic vegetation communities supported at these sites. The wetter vegetation in these areas is an important source of food and moisture for rock wallabies. The succulent leaves of King Orchids were observed to be heavily browsed during this study. Fruits from species such as figs are also eaten. These areas provide refuge for the population in crisis times such as during and following wildfire, and during periods of drought.

Recent signs of rock wallabies were observed for approximately five kilometres along the rocky steep north-east slopes of Grave Gully Ridge and below Mt Machar in the Blackfellow Creek valley. Rock-wallaby activity was centred around a broken band of rock outcrop occurring at about the 700m contour. Suitable habitat extends beyond the area surveyed and it is expected that rock wallabies are distributed for great distances along the steep slopes on favourable aspects. Although this habitat is considered 'secondary' to the core areas it does maintain resident populations of rock wallabies, albeit at a lower density. The contour of rock which forms the secondary habitat is a continuous feature in the landscape. It is an important aspect of the habitat as it links core areas and allows the dispersal of animals, especially juveniles.

Rock-wallaby diet consists predominantly of grasses. The outcrops on Glen Rock are surrounded by areas of grassy woodland. Signs observed during our survey indicated that rock wallabies grazed on the ridges above the outcrops and the slope below. Rock wallabies graze these open areas at night, leaving their rocky refuge in the late afternoon and returning early in the morning. On a previous survey by G.Krieger an animal observed at night was feeding on the side of the road below Mt Machar and another at the head of Hoop Pine Gorge valley below Mt Hennessy. Previous studies suggest that *P. penicillata* has a Home Range size between 5.8 and 28.7 hectares (Short, 1980).

The most immediate threat to the rock wallabies at Glen Rock is the degradation of its habitat by the invasion of weeds, namely *Lantana camara*. Lantana is currently limited to the more fertile lower slopes and valleys. On the dry and rocky higher slopes where rock wallabies occur Lantana is present but sparse. Extensive invasions by weeds can shade suitable refuge areas or grassy feeding areas adjacent to rock outcrops. The wetter climates of the core areas make them more vulnerable to weed invasion. Signs of cattle were observed during the survey from within the secondary habitat of *P. penicillata* and on the periphery of the core areas. In these areas cattle and horses cause disturbance to the soil encouraging colonisation by Lantana and other weeds. This was particularly noticeable at Core Area 1 near Mt Machar. Extensive areas of flattened grass, cattle paths and cattle dung were observed in the open forest fronting the rocky scree.

At a landscape level isolation of colonies through fragmentation of habitat is a potential threat. Often the progression of this threat is insidious and difficult to monitor. Management of the population at Glen Rock should aim to maintain connectivity.

Koala *(Phascolarctos cinereus*)

The koala is listed as being of management interest for its cultural significance under the *Nature Conservation (Wildlife) Regulation 1994*. The koala is an arboreal folivore, restricted in its distribution to the eucalypt forests and woodlands of eastern Australia. In southeast Queensland high population densities of this species occur in fragmented areas of remnant bushland within Brisbane, Redlands, and Ipswich local government boundaries.

Koalas mainly feed on eucalypt species although some foliage of the genera *Lophostemon, Angophora* and *Melaleuca* are also eaten. Within southeast Queensland food tree preferences include blue gum *E. tereticornis,* grey gum *E. propinqua,* tallowwood *E. microcorys* and flooded gum *E. grandis.* The highest density populations tend to occur at lower altitudes such as those in the coastal areas. The forest ranges, such as those in the vicinity of Glen Rock, tend to support low density populations. Home ranges of individual koalas vary, depending on the quality of habitat, from about 2 hectares in high quality habitat up to 30 hectares in poor habitat. Major threats to this species include loss of habitat and habitat fragmentation, inappropriate fire regimes, road kills in built up areas and injury and deaths from dog attacks.

Habitat at Glen Rock

Both sightings of this species were recorded in the high elevated Cooks Tableland area of Glen Rock west of Blackfellow Creek valley *(see Map 8)*. Although only two individuals were sighted at Glen Rock, the property supports extensive areas of suitable potential habitat for this species. In the vicinity of Cooks Tableland vegetation types 8a, 8b and 8e all support koala food trees including blue gum *E. tereticornis* and grey gum *E. biturbinata.* In the Blackfellow Creek valley vegetation type 3a also supports food trees, notably blue gum *E. tereticornis.* The low population estimates at Glen Rock for this species are consistent with other populations along the Main Range.

New Holland mouse *(Pseudomys novaehollandiae)*

The New Holland mouse *Pseudomys novaehollandiae* is a small ground dwelling mammal. It is a species of very limited distribution in Queensland and is only known from three locations within the state. Records of this species indicate that its distribution ranges from Tasmania and along the east coast of mainland Australia to southeast Queensland. Very little ecological information is known about this species and this population at Glen Rock is significant as it may provide additional habitat information.

Habitat at Glen Rock

The site is located on the southern boundary of Glen Rock along Blackfellow Creek *(see Map 9).* The habitat consists of tall open forest dominated by *Allocasuarina torulosa, Eucalyptus tereticornis* and *E. crebra.* The ground cover is sparse. This site is in an area that is frequently burnt and grazed by cattle. However, the vegetation on the eastern side of Blackfellow Creek is very tall open forest dominated by *E. biturbinata, E. melliodora.* The ground cover is very dense dominated by ferns and grasses. Further survey work including intensive trapping is needed to determine the full extent of the species population at Glen Rock. Management practices such as appropriate fire regimes and cattle stocking rates appear to be the major issues for the conservation of this species.

Glossy black-cockatoo *(Calyptorhynchus lathami)*

The glossy black-cockatoo *Calyptorhynchus lathami* is listed as vulnerable by the *Nature Conservation (Wildlife) Regulation 1994.* Its distribution extends from Eungella in north Queensland to eastern Victoria. Cockatoos are wide ranging specialist seed-eaters that require fruiting *Allocasuarina* trees (Saunders 1988). The glossy black-cockatoo occurs in eucalypt forests and woodland with casuarina stands. The species requires tree hollows for nesting, often in the form of hollows or cavities in dead trees (Forshaw and Cooper, 1978).

Habitat at Glen Rock

At Glen Rock the cockatoos feed mainly on the fruits of *A. torulosa* and *Casuarina cunninghamiana.* Glossy black-cockatoos were recorded in the Blackfellow Creek valley feeding on *C. cunninghamiana* usually in groups of three or more individuals. They were also recorded feeding on *A .torulosa* in the open forest areas of Cooks Tableland and the steep open forest slopes on the eastern side of Blackfellow Creek *(see Map 10).* They are rarely seen far from their food source and spend a significant part of the day quietly feeding among the branches of the casuarinas. Glossy black-cockatoos are conspicuous due to their large size and their distinctive call making this species easy to detect. It is likely that, Glen Rock has a significant resident population due to its size and the abundance of some of its main food source species *Allocasuarina torulosa* and *C. cunninghamiana.* It is likely that, as long as these food sources and their habitats are maintained, this species will continue to inhabit the Glen Rock area, particularly as it is contiguous with extensive areas of National Park and State Forests along the Great Dividing Range (Main Range).

The major threatening processes for this species include inappropriate fire regimes and clearing of food and nest trees. As high intensity fire kills *A. torulosa* the intensity, frequency and timing of prescribed burns in areas where glossy black-cockatoos occur should aim to achieve the following:

- to ensure a mosaic of burnt and unburnt areas is maintained;
- to ensure the interval between fire on any site is greater than seven years;
- to exclude fire from the area during the breeding season from March to August;
- ensure that nest trees and mature eucalypts and bloodwoods with large hollows are protected;
- to retain a minimum of approximately 25% of ground cover vegetation and 25% of leaf litter (Park and Borsboom, 1996).

Sooty Owl *(Tyto tenebricosa)*

Sooty Owl *Tyto tenebricosa* is listed as rare by the *Nature Conservation (Wildlife) Regulation 1994.* Its distribution extends through eastern Australia from the Conondale and Blackall Ranges of southeast Queensland to Victoria. Recently two isolated populations have been recorded at Eungella National Park and Kroombit Tops in Queensland. A nocturnal predator, the Sooty Owl is restricted to rainforests and tall wet and dry sclerophyll forests. It feeds mainly on small terrestrial mammals (eg. house mouse, bush rat, and fawn footed melomys) and arboreal mammals (eg. common ringtail possum, sugar gliders, common brushtail possum and greater glider) (Calaby, 1984). The sooty owl prefers to roost during the day in large hollows in tall trees or in dense vegetation, often located in gullies (Debus, 1994).

Habitat at Glen Rock

The Sooty Owl was recorded at the southern boundary of the property along Blackfellow Creek *(see Map 11.)* The forest type is very tall open forest with wet sclerophyll species and adjoins extensive areas of open forest and closed forests of the Mount Mistake section of the Main Range National Park. The topography is steep and the open forest ridges are separated by moist, often densely vegetated gullies of brush box and shrub layers.

Given that this species maintains territories of 2 to 8 square kilometres (Blakers, Davies and Reilly 1984), it is likely that this individual is utilising habitat areas at some distance from its recorded location. Spotlighting in nearby open forest communities revealed that a high density of arboreal mammals was present, in particular, the common brush-tailed possum a preferred prey species.
Another potential area of habitat for this species is the Hoop Pine Gorge area which is south of Mt Hennessy.

The major threatening processes for this species include fragmentation of habitat, destruction of hollow habitat trees and inappropriate fire regimes all of which may reduce the prey source.

A high frequency of low intensity, autumn prescribed burns reduces the quality of habitat available to owls and some prey species by simplifying the floristic structure of the forest (Gilmore and Parnaby 1994).

Red-Browed Treecreeper *(Climacteris erythrops)*

The red browed treecreeper *Climacteris erythrops* is listed as rare by the *Nature Conservation (Wildlife) Regulation 1994.* Its distribution extends from southeast Queensland through eastern New South Wales to eastern Victoria. In southeast Queensland its distribution is restricted to the wet tall open forests at higher elevations *(above 500 metres).* Its main diet consists of insects which are gleaned from the bark of eucalypt trees.

Habitat at Glen Rock

The red-browed treecreeper was recorded in the cooler, higher elevated areas such as Cooks Tableland and ranges to the south in the head waters of Black Duck Creek *(see Map12.)* This area is characterised by very tall open eucalypt forests sometimes with shrub layers. One individual was observed entering and exiting a tree hollow. It is most likely that breeding is occurring and populations are locally resident.

Other areas of potential habitat for this species at Glen Rock include the tall open forests adjoining the Main Range National Park.

The major threatening processes are habitat modification and inappropriate fire regimes, particularly during breeding season. This can result in the loss of hollow trees for nesting and roosting. Where possible an appropriate fire regime for the habitat, both temporally and spatially, needs to be implemented. (QLD CRA/RFA Steering Committee 1997b).

Rainbow bee-eater *(Merops ornatus)*

The rainbow bee-eater *Merops ornatus* is listed under the "JAMBA" agreement *(Japan and Australian Migratory Birds Agreement)*. This species breeds in southern Australia and migrates to northern Australia, New Guinea and Indonesia in winter. It is insectivorous, and is often seen flying swiftly in pursuit of prey. Nests are built by tunnelling into sandy creek banks.

Habitat at Glen Rock

The rainbow bee-eater was recorded in the Blackfellow Creek valley in surveys conducted late in November 1999.

NOTEWORTHY BIRD SPECIES

Painted button-quail

Although this species is not considered rare or threatened, it is not commonly encountered due to restriction of its habitat to mountainous areas, mostly away from human disturbance and habitation. The predominantly grassy understorey of the open forests and woodlands on steep, often rocky slopes, is this species' preferred habitat. It is likely to be more common than indicated, with four sightings on the Glen Rock property.

Musk lorikeet

This highly nomadic species should probably be regarded as being uncommon in Queensland. However, of the four lorikeet species observed on the Glen Rock property during the survey it was the most commonly observed species. Together with other lorikeet species it is attracted mainly to bloodwoods, *Corymbia clarksoniana* and *C. intermedia,* which were flowering in the Blackfellow Creek and Black Duck Creek valleys.

Eastern rosella, pale-headed rosella, blue-cheeked (crimson) rosella

Although none of these rosella species is uncommon in southeast Queensland it is unusual to see all three inhabiting the same valleys in close proximity.

Spotted quail-thrush

Due to its shy and furtive habits, and choice of hilly or mountainous habitats, this species is seldom seen and often thought to be rare. However, during the brief survey on the Glen Rock property, individuals and pairs were encountered on a number of occasions at various sites, ranging from lower slopes of the valleys to the range crests. Except for the wider valley floors, it is likely that this species is thinly but widely distributed on the property, wherever there is suitable habitat.

Red wattlebird

In Queensland this species is confined to the southeast corner and would be nearing the northern extent of its general range at the Glen Rock property. In southeast Queensland the red wattlebird is usually found at higher altitudes within its range. However, at Glen Rock some birds were observed in the lower valley areas of Black Duck and Blackfellow Creeks.

Yellow-tufted honeyeater

This species was observed only twice, on separate occasions, at the Glen Rock property. There is a possibility that this species is a relatively common resident, particularly in the taller moist open forests in gullies at higher altitudes where the species was sighted during visits to the area. The species appeared to be absent in the more exposed drier woodlands and open woodlands.

CONCLUSION

The habitat at Glen Rock supports a diversity of fauna, especially bird species. Significant areas of habitat for the vulnerable Brush-tailed Rock-wallaby are present throughout much of the steeper rocky escarpment areas facing Blackfellow Creek valley. The very tall open forests at higher elevations support the greatest number of rare and vulnerable fauna species. These areas include Cooks Tableland including the head waters of Black Duck Creek and the adjoining ridgelines of the eastern side of Blackfellow Creek valley. The very tall open forest in the vicinity of the southern boundary of Glen Rock along Blackfellow Creek are also significant for fauna habitat. Although fragmented and disturbed the riparian vegetation along the Blackfellow Creek valley supports a diverse range of bird species including satin bowerbirds, lorikeets, parrots, rosellas, galahs, cockatoos and water birds.

The maintenance of biodiversity within Glen Rock will require appropriate fire regimes to be implemented. Monitoring sites should be established to assess the impact of fire on key species such as the Brush-tailed Rock-wallaby, Glossy black-cockatoo and Bailey's cypress pine. Predation by feral animals on native fauna and weed impact on the conservation values are key issues for management consideration for the future viability of fauna in the area. The weed species *Lantana camara* has the potential to invade threatened species habitat and threatened ecosystems.

The Glen Rock property provides a significant adjunct to the Mt Mistake section of the Main Range National Park which is classified as world heritage.

The retention of native vegetation on Glen Rock property will significantly assist the movement of wildlife from existing conservation areas to the east. In addition its position in the catchment at the headwaters of Blackfellow and Black Duck Creek is vital to maintaining the quality of water and aquatic species in the wider catchment.

The close connections with the World Heritage listed Main Range National Park place Glen Rock in a strategic position to both protect and enhance the nature conservation needs of the wider area.

REFERENCES

Blakers, M., Davies, S.J.J.F., Reilly, P.N. eds (1984). *The Atlas of Australian Birds,* Royal Australian Ornithologists Union, Melbourne University Press, Melbourne.

Boyes, B. (1999). Gatton Shire Biodiversity Strategy. Prepared for the Lockyer Watershed Management Association, Inc Lockyer Landcare Group.

Calaby, J.(1988). ' Sooty Owl, in Reader's Digest Complete Book of Australian Birds, eds R.Schodde and S.C. Tidemann, Readers Digest Services, Sydney.

Cogger, H. G. (1992). Reptiles and Amphibians of Australia.

Debus, S. J.S. (1994). The Sooty Owl *Tyto tenebricosa* in New South Wales. *Australian Birds* 28 supplement : 4-19.

Forshaw, J.M. and Cooper, W.T. (1989). *Parrots of the World*, Lansdowne Press, Melbourne.

Gilmore, A, and Parnaby, H. (1994). Vertebrate fauna of conservation concern in north-east New South Wale forests. North East Forests Biodiversity Study Report No. 3e, unpublished report, N.S.W. National Parks and Wildlife Service.

Grimshaw, P. (1999). Vegetation map of Glen Rock . QPWS, Environmental Protection Agency, Conservation Resource Unit, Moggill.

Krieger, G. and Capararo, S.(1999). An Assessment of the Brush-tailed rock-wallaby population in the Mount Machar and Cooks Tableland areas of Glen Rock (Gatton Shire), Queensland Parks and Wildlife Service, Environmental Protection Agency, Conservation Resource Unit, Moggill.

Parks, K. and Borsboom, A. (1998). DNR Draft species Management Manual Vol.1. Internal Species Profile Report.

Parnaby, H. (1992). An Interim Guide to Identification of Insectivorous Bats of South-eastern Australia. Technical Reports of the Australian museum Number 8.

QLD CRA/RFA Steering Committee (1997b) Taxa at risk, threats, conservation requirements, and recovery planning. Queensland Government.

Saunders, D. (1988). 'Glossy Black-Cockatoo', in *Reader's Digest Complete Book of Australian Birds*, eds R.Schodde and S.C. Tidemann, Readers Digest Services, Sydney.

Sattler,P.S. and Williams, R.D., (1999). The Conservation Status of Queensland's Bioregional Ecosystems, Environmental Protection Agency, Brisbane.

Short, J. C. (1980). Ecology of the Brush-tailed Rock-wallaby (*Petrogale penicillata*, Griffith, Smith and Pidgeon). M.Sc. thesis, University of Sydney, NSW.

Slater, P. (1992). Field Guide to Australian Birds.

Strahan, R. (1994). The Australian Museum Complete Book of Australian Mammals.

APPENDICES

APPENDIX 1: GLEN ROCK VEGETATION MAP UNIT COMPREHENSIVE LEGEND

P.Grimshaw 22/12/99 *(Draft….legend may be subject to further minor modification)*

Gatton Shire Vegetation Type Code 1:25 000	**Glen Rock Vegetation Type Code 1:25 000**	**P.Young Mt Mistake Vegetation Type Code 1:25 000**	**Helidon Map Sheet Vegetation Type Code 1:100 000**	**Regional Ecosystem & Status** (refers only to status throughout SEQ bioregion)	**Structural Type, Predominant & Associated Species** (**Bolded text** indicates dominant and co-dominant species within upper stratum) (Underlined text indicates species with R&T status) (* indicates naturalised species)	**Geology Unit & Landform**	**Comments**
3a	**3a**	No match	1a	**12.3.7 (No concern at present)**	Very tall open forest/woodland/open woodland of ***Eucalyptus tereticornis, Casuarina cunninghamiana*** ± *Angophora subvelutina/floribunda Corymbia intermedia, Corymbia tessellaris, Callistemon viminalis, Melaleuca bracteata, Lophostemon suaveolens, Acacia spp., *Lantana camara, Lomandra longifolia/hystrix.*	**Qa (Alluvium)** Stream banks, watercourses, stream beds, moist drainage-lines. (this often includes dynamic alluvial areas strewn with boulders or pebbles interspersed with small water-pools).	3a is typical common narrow riparian unit
3c	**3c**	No match	1c	**12.3.3 (Of concern)** possible ecotonal intergrade with **12.9/10.2 (Vulnerable)**	Tall/very tall woodland/open forest of ***Eucalyptus tereticornis*** ± *Corymbia citriodora, Corymbia intermedia, Lophostemon suaveolens, Eucalyptus crebra, Corymbia tessellaris, Angophora subvelutina/floribunda, Corymbia clarksoniana, Callitris baileyi* (in southern parts), *Acacia concurrens, *Lantana camara, Alphitonia excelsa, Pteridium esculentum, Heteropogon contortus, Cymbopogon refractus, Imperata cylindrica.*	**Qa/Qx (Alluvium/Colluvium)** Toe slopes and slightly inclined outwash, minor creek flats, drainage depressions and ephemeral drainage lines.	3c usually flanks unit 3a.
8a	**8a**	4b	2b/2c	**12.8.14 (No concern at present)**	Very tall open forest/woodland of ***Eucalyptus biturbinata, Eucalyptus eugenioides*** ± *Eucalyptus melliodora, Eucalyptus tereticornis, Corymbia intermedia, Eucalyptus moluccana, Eucalyptus quadrangulata, Lophostemon confertus, Allocasuarina torulosa, Angophora floribunda/subvelutina, Acacia maidenii, Acacia irrorata, Xanthorrhoea glauca, Bursaria spinosa var. macrophylla, *Lantana camara, Themeda triandra, Imperata cylindrica, Poa spp., Sorghum leiocladum, Asperula conferta.*	**Tm (Main Range Volcanics)** mostly olivine basalt or strongly under its influence Steep upper slopes of sheltered gullies and sheltered upper slopes of ranges.	8a tends to be at higher elevations on well watered slopes
8b	**8b**	6i	2d/2c	**12.8.14 (No concern at present)**	Very tall open forest/tall/very tall woodland of ***Eucalyptus tereticornis, Eucalyptus melliodora*** ± *Eucalyptus eugenioides, Eucalyptus biturbinata, Angophora floribunda/subvelutina, Eucalyptus crebra, Lophostemon confertus, Allocasuarina torulosa, Eucalyptus melanophloia, Brachychiton populneus, Corymbia intermedia, Acacia maidenii, Xanthorrhoea glauca, Exocarpos cupressiformis, Acacia irrorata, *Lantana camara, Themeda triandra, Imperata cylindrica, Sorghum leiocladum, Poa spp., Bothriochloa decipiens, Asperula conferta, Galium migrans, Lomandra longifolia.*	**Tm/Tv (Main Range Volcanics or basalt flows)** olivine basalt and basalt flows sometimes with scree patches and occasionally near interface with metasediments. Steep upper slope of range and low mountains or residual capping of plateaux.	8b like 8a occurs on higher elevated slopes but soils tend to be shallower and with exposed rock.

Gatton Shire Vegetation Type Code 1:25 000	Glen Rock Vegetation Type Code 1:25 000	P.Young Mt Mistake Vegetation Type Code 1:25 000	Helidon Map Sheet Vegetation Type Code 1:100 000	Regional Ecosystem & Status (refers only to status throughout SEQ bioregion)	Structural Type, Predominant & Associated Species (**Bolded text** indicates dominant and co-dominant species within upper stratum) (Underlined text indicates species with R&T status) (* indicates naturalised species)	Geology Unit & Landform	Comments
8d	**8d**	7j	2e	**12.8.16 (No concern at present)**	Very tall woodland/open woodland of ***Eucalyptus crebra, Eucalyptus melanophloia*** ± *Eucalyptus tereticornis, Corymbia clarksoniana, Corymbia tessellaris, Angophora floribunda/subvelutina, Eucalyptus albens, Allocasuarina torulosa, Callitris glaucophylla, Callitris baileyi, *Lantana camara, Acacia fimbriata, Acacia maidenii, Choretrum candollei, Xanthorrhoea glauca, Dodonaea viscosa, Canthium odoratum, Themeda triandra, Heteropogon contortus, Sorghum leiocladum, Cymbopogon refractus, Bothriochloa decipiens, Dichanthium sericeum.*	**Tm (Main Range Volcanics)** olivine basalt and related capping. Mid to upper slope of low mountain	8d tends to occur on crests and ridges of hills with basalt flows or residual basalt capping. Prone to weed invasion ie. **Lantana camara*
8e	**8e**	4a	2g	**12.8.9 (No concern at present)**	Very tall/tall/open forest or mid-high closed forest (with very tall sclerophyll and rarely araucarian emergents), of ***Lophostemon confertus*** ± *(Eucalyptus tereticornis, Eucalyptus biturbinata, Eucalyptus eugenioides, Eucalyptus melliodora, Araucaria cunninghamii* emergents*), Allocasuarina torulosa,* with rainforest species *Ficus* spp.*, Toona ciliata, Dendrocnide excelsa, Argyrodendron actinophyllum, Olea paniculata, Mallotus philippensis, Drypetes deplanchei, Harpullia pendula, Rapanea variabilis, Alyxia ruscifolia, Cissus antarctica, Tetrastigma nitens* as well as other mixed rainforest/riparian species and fern species.	**Tm/Tv (Main Range Volcanics or basalt flows)** olivine basalt or basalt flows sometimes as boulder scree. Steep hills or sheltered range slopes and range gullies.	8e tends to occur in sheltered parts of Main/Mistake Ranges and Mts Cross and Perseverance.
8h	**8h**	4c,2h	2l	**12.8.10 (Of concern)** **12.8.1** also in part **12.8.14** also in part	Extremely tall/very tall/tall open forest of ***Eucalyptus saligna*** ± *Eucalyptus campanulata, Eucalyptus laevopinea Eucalyptus eugenioides, Allocasuarina torulosa, Angophora floribunda, Lophostemon confertus, Acacia melanoxylon, Acacia irrorata, Poa sieberiana, Themeda triandra, Rubus spp., Hibbertia scandens, Pteridium esculentum, Fern spp.*	**Tm /Tmt (Main Range Volcanics)** olivine basalt and minor trachyte. Narrow high plateau crest	8h is very minor and found only on high elevated parts of Mistake Plateau.
8i	**8i**	6i (in part)	2j	**12.8.14 (No concern at present)**	Very tall open forest/very tall/tall woodland of ***Eucalyptus moluccana*** ± *Eucalyptus crebra, Eucalyptus tereticornis, Eucalyptus biturbinata, Eucalyptus eugenioides, Allocasuarina torulosa, *Lantana camara, Choretrum candollei, Alphitonia excelsa, Acacia fimbriata, Cymbopogon refractus, Themeda triandra, Bothriochloa decipiens.*	**Tm (Main Range Volcanics)** olivine basalt Toe slopes and depressions in valleys in elevated parts of range.	8i is relatively minor, patchy and restricted to elevated parts of Main and Mistake Ranges

Gatton Shire Vegetation Type Code 1:25 000	**Glen Rock Vegetation Type Code 1:25 000**	**P.Young Mt Mistake Vegetation Type Code 1:25 000**	**Helidon Map Sheet Vegetation Type Code 1:100 000**	**Regional Ecosystem & Status** (refers only to status throughout SEQ bioregion)	**Structural Type, Predominant & Associated Species** (**Bolded text** indicates dominant and co-dominant species within upper stratum) (Underlined text indicates species with R&T status) (* indicates naturalised species)	**Geology Unit & Landform**	**Comments**
8j	**8j**	8,13	2k	**12.8.19 (No concern at present)**	Mid-high woodland/open woodland (usually associated with steep exposed rock surfaces) of a heterogeneous mix of trees (stunted), shrubs, forbs and grasses, including *Eucalyptus tereticornis, Eucalyptus melliodora, Angophora floribunda, Eucalyptus biturbinata, Eucalyptus eugenioides, Acacia melanoxylon, Eucalyptus albens, Acacia maidenii, Allocasuarina torulosa, Kunzea ericoides, Jacksonia scoparia, Bursaria spinosa var. macrophylla, Xanthorrhoea glauca, Hovea spp., Acacia decora, Doryanthes palmeri, Cassinia spp., Indigofera australis, Pimelea linifolia, Plectranthus graveolens, Bulbine bulbosa, Hardenbergia violacea, Swainsona galegifolia, Gahnia aspera, Rhodanthe anthemoides, Poa spp., Sorghum leiocladum, Themeda triandra, Asperula conferta.*	**Tm/Tmt (Main Range Volcanics)** olivine basalt and minor trachyte. Crests, precipitous upper slopes and scarps of ranges.	8j is confined to steeper parts of Main and Mistake Ranges. It often intergrades with units 8a, 8b, 8d, 8k and to a lesser extent 8h.
8k	**8k**	7j (in part)	2a	**12.8.16 (No concern at present)**	Very tall open forest/woodland/tall woodland of ***Eucalyptus albens +*** *Eucalyptus crebra, Eucalyptus melliodora, Eucalyptus tereticornis, Eucalyptus eugenioides Exocarpos cupressiformis, Themeda triandra, Dichanthium sericeum, Aristida spp.*	**Tm (Main Range Volcanics)** olivine basalt. Upper slopes and high elevations	8k is confined to drier slopes of Main Range, and it intergrades with unit 8d.
8m	**8m**	No match	8a	**12.8.21 (Of concern)**	Very tall/tall/mid-high closed forest/vine thicket of ***Flindersia australis, Vitex lignumvitae, Flindersia collina, Ficus obliqua/platypoda, Ficus virens +*** *Acacia fasciculifera, Brachychiton discolor, Dendrocnide excelsa, Olea paniculata, Arytera foveolata, Geijera salicifolia, Brachychiton rupestris, Cupaniopsis parvifolia, Pouteria cotinifolia var. cotinifolia, Pentaceras australis, Croton insularis, Elattostachys xylocarpa, Acalypha spp., Cissus spp., Harnieria hygrophylloides, Pyrrosia spp., *Rivina humilis, *Anredera cordifolia. (Araucaria cunninghamii* is largely absent from this unit in the Lockyer Catchment)	**Tm (Main Range Volcanics)** olivine basalt. Upper slopes of ranges	8m is mainly on upper slopes or at higher elevation than unit 9j with which it is closely associated.

Gatton Shire Vegetation Type Code 1:25 000	Glen Rock Vegetation Type Code 1:25 000	P.Young Mt Mistake Vegetation Type Code 1:25 000	Helidon Map Sheet Vegetation Type Code 1:100 000	Regional Ecosystem & Status (refers only to status throughout SEQ bioregion)	Structural Type, Predominant & Associated Species (**Bolded text** indicates dominant and co-dominant species within upper stratum) (Underlined text indicates species with R&T status) (* indicates naturalised species)	Geology Unit & Landform	Comments
8n	**8n**	1A	7a	**12.8.4 (No concern at present)**	Extremely tall/very tall closed forest of ***Argyrodendron actinophyllum, Sloanea woollsii, Elaeocarpus kirtonii*** **+** *Ficus watkinsiana, Orites excelsa, Dysoxylon fraserianum, Pennantia cunninghamii, Araucaria cunninghamii* (emergent), *Diploglottis cunninghamii, Brachychiton acerifolius, Dendrocnide excelsa, Baloghia inophylla Lophostemon confertus, Cinnamomum virens, Archontophoenix cunninghamiana, Tasmannia insipida, Eupomatia laurina, Citriobatus pauciflorus, Lastreopsis spp., Adiantum spp., Lomandra hystrix, Arthropteris tenella.*	**Tm (Main Range Volcanics)** olivine basalt Range crest and high elevated plateaux.	8n is mostly found within Mt Mistake National Park
9h	**9h not mapped at this scale.**		3c	**12.9/10.7 (Of concern)**	Very tall/tall woodland of ***Eucalyptus crebra*** **±** *Angophora leiocarpa, Eucalyptus melanophloia, Corymbia tessellaris, Eucalyptus tereticornis, Corymbia clarksoniana, Corymbia intermedia, Alphitonia excelsa, Allocasuarina torulosa, *Lantana camara, Acacia fimbriata, Acacia maidenii, Acacia concurrens, Choretrum candollei, Canthium odoratum, Acacia leiocalyx, Cymbopogon refractus, Aristida* spp., *Entolasia stricta, Dichanthium sericeum, Panicum maximum.*	**Jw/** (fine sedimentary rock including labile and sublabile sandstone) Lower to upper slopes of foothills low ridges and some low hill crests.	9h has not been delineated with polygon line-work as occurring in Glen Rock. It occurs within regrowth areas and is too small to map at 1:25 000 scale. Its occurrence is near the northern entry.
A	**A**				**Agriculture**:- intensive cropping, ploughed paddocks, planted forage crops	Mostly occurs on fertile **Qa (Alluvium)/Qx (Colluvium)**.	Where some form of intensive farming is currently operating. Original vegetation elements are usually totally absent.
C	**C**				**Clearing**:- none intensive farming, grazing paddocks.		Where original vegetation has been removed or so highly modified that original elements are virtually absent. Exotic weed species are often dominant.

Gatton Shire Vegetation Type Code 1:25 000	Glen Rock Vegetation Type Code 1:25 000	P.Young Mt Mistake Vegetation Type Code 1:25 000	Helidon Map Sheet Vegetation Type Code 1:100 000	Regional Ecosystem & Status (refers only to status throughout SEQ bioregion)	Structural Type, Predominant & Associated Species (**Bolded text** indicates dominant and co-dominant species within upper stratum) (Underlined text indicates species with R&T status) (* indicates naturalised species)	Geology Unit & Landform	Comments
R	***R***				**Regrowth**:- thinning, selective clearing, mature regrowth with exotic weeds. [There is a possibility within 15 to 20 years, with appropriate management regimes (no overgrazing, no high frequency fires and with weed control), that some of the areas classified in the regrowth category may recover sufficiently to be reclassified as remnant vegetation].		Where the original vegetation has been modified but some of the original elements remain. Often weed infested and usually too degraded to detect floristic community type.

GEOLOGY UNIT DESCRIPTIONS FOR GLEN ROCK, HELIDON 1:100 000 SCALE MAP GEOLOGY SHEET

GEOLOGY UNIT	DESCRIPTION	LAND ZONE
Qa	Quaternary alluvium: gravel, sand, silt, clay.	**3**
Qs	Quaternary colluvium: gravel, sand, silt.	**3**
Tm	Tertiary volcanics: olivine basalt and minor trachyte (Main Range Volcanics).	**8**
Jw	Jurassic Beds: sandstone, siltstone, shale and coal seams (Walloon Coal Measures)	**9/10**

Appendix 2: Preliminary Plant Species list for Glen Rock area in Gatton Shire

RECORDER & COMPILER P.Grimshaw --- January 2000

(* asterisk indicates exotic weed species)

No.	SCIENTIFIC NAME	COMMON NAME	FAMILY
1	*Rostellularia adscendens*		ACANTHACEAE
2	*Adiantum aethiopicum*	MAIDENHAIR FERN	ADIANTACEAE
3	*Adiantum formosum*	GIANT MAIDENHAIR	ADIANTACEAE
4	*Adiantum hispidulum* var.*whitei*		ADIANTACEAE
5	*Cheilanthes sieberi*	MULGA FERN	ADIANTACEAE
6	*Pellaea falcata* var. *nana*	DWARF SICKLE FERN	ADIANTACEAE
7	*Cordyline petiolaris*	PALM LILY	AGAVACEAE
8	*Cordyline rubra*	PALM LILY	AGAVACEAE
9	*Euroschinus falcata* var. *falcata*	RIBBONWOOD	ANACARDIACEAE
10	*Rhodosphaera rhodanthema*	DEEP YELLOWOOD	ANACARDIACEAE
11	*Melodorum leichhardtii*	ZIG-ZAG VINE	ANNONACEAE
12	*Hydrocotyle pedicellosa*	PENNYWORT	APIACEAE
13	*Alyxia ruscifolia*	CHAIN FRUIT	APOCYNACEAE
14	*Carissa ovata*	CURRANT BUSH	APOCYNACEAE
15	*Parsonsia straminea*	MONKEY ROPE	APOCYNACEAE
16	*Parsonsia velutina*	HAIRY SILKPOD	APOCYNACEAE
17	*Gymnostachys anceps*	SETTLERS FLAX	ARACEAE
18	*Polyscias elegans*	CELERY WOOD	ARALIACEAE
19	*Araucaria cunninghamii*	HOOP PINE	ARAUCACEAE
20	*Gompocarpus physocarpus**	BALLOON COTTON	ASCLEPIADACEAE
21	*Hoya australis*	HOYA VINE	ASCLEPIADACEAE
22	*Secamone elliptica*	CORKY MILK VINE	ASCLEPIADACEAE
23	*Bulbine bulbosa*	BULBINE LILY	ASPHODELIACEAE
24	*Asplenium attenuatum*	WALKING FERN	ASPLENIACEAE
25	*Asplenium australasicum*	BIRD'S NEST FERN	ASPLENIACEAE
26	*Ageratina adenophorum**	CROFTON WEED	ASTERACEAE
27	*Ageratina riparia**	MIST WEED	ASTERACEAE
28	*Bidens pilosa**	COBBLER'S PEGS	ASTERACEAE
29	*Brachyscome microcarpa*		ASTERACEAE
30	*Bracteantha bracteata*	YELLOW PAPER-DAISY	ASTERACEAE
31	*Calotis dentex*	WHITE BURR-DAISY	ASTERACEAE
32	*Cassinia laevis*	COUGH BUSH	ASTERACEAE
33	*Cassinia quinquefaria*	NATIVE ROSEMARY	ASTERACEAE
34	*Chrysocephalum apiculatum*	YELLOW BUTTONS	ASTERACEAE
35	*Cirsium vulgare**	SPEAR THISTLE	ASTERACEAE
36	*Rhodanthe anthemoides*	MOUNTAIN SUNRAY	ASTERACEAE
37	*Sigesbeckia orientalis*	INDIAN WEED	ASTERACEAE
38	*Tagetes minuta**	STINKING ROGER	ASTERACEAE
39	*Vernonia cinerea*	VERNONIA	ASTERACEAE
40	*Wedelia spilanthoides*		ASTERACEAE
41	*Pandorea jasminoides*	BOWER VINE	BIGNONIACEAE
42	*Pandorea pandorana*	WONGA VINE	BIGNONIACEAE
43	*Blechnum cartilagineum*	GRISTLE FERN	BLECHNACEAE
44	*Doodia aspera*	PRICKLY RASP FERN	BLECHNACEAE
45	*Doodia caudata*	SMALL RASP FERN	BLECHNACEAE
46	*Opuntia tomentosa**	TREE PEAR	CACTACEAE
47	*Senna floribunda*	SMOOTH SENNA, ARSENIC BUSH	CAESALPINIACEAE
48	*Lobelia purpurascens*	WHITE ROOT	CAMPANULACEAE
49	*Capparis arborea*	SCRUB CAPERBERRY	CAPPARACEAE
50	*Capparis mitchellii*	BUMBLE TREE	CAPPARACEAE
51	*Capparis sarmentosa*	SCRAMBLING CAPER	CAPPARACEAE

No.	SCIENTIFIC NAME	COMMON NAME	FAMILY
52	*Allocasuarina torulosa*	FOREST (ROSE) SHE-OAK	CASUARINACEAE
53	*Casuarina cunninghamiana*	RIVER SHE-OAK	CASUARINACEAE
54	*Cassine australis* var. *australis*	RED OLIVE-BERRY	CELASTRACEAE
55	*Celastrus subspicata*	STAFF VINE	CELASTRACEAE
56	*Maytenus bilocularis*	ORANGEBARK	CELASTRACEAE
57	*Maytenus silvestris*	NARROW-LEAVED ORANGE BARK	CELASTRACEAE
58	*Commelina diffusa*	NATIVE WANDERING JEW	COMMELINACEAE
59	*Pollia crispata*	POLLIA	COMMELINACEAE
60	*Dichondra repens*	KIDNEY WEED	CONVOLVULACEAE
61	*Aphanopetalum resinosum*	GUM VINE	CUNONIACEAE
62	*Callitris baileyi*	BAILEY'S CYPRESS	CUPRESSACEAE
63	*Callitris glaucophylla*	WHITE CYPRESS	CUPRESSACEAE
64	*Fimbristylis dichotoma*	COMMON FRINGERUSH	CYPERACEAE
65	*Gahnia aspera*	COMMON SAWSEDGE	CYPERACEAE
66	*Lepidosperma laterale*	VARIABLE SWORDSEDGE	CYPERACEAE
67	*Lepidosperma urophorum*	TAILED SWORDSEDGE	CYPERACEAE
68	*Scleria mackaviensis*		CYPERACEAE
69	*Pteridium esculentum*	BRACKEN FERN	DENNSTAEDTIACEAE
70	*Calochlaena dubia*	SOFT BRACKEN FERN	DICKSONIACEAE
71	Hibbertia scandens	SNAKE VINE	DILLENIACEAE
72	Dioscorea transversa	YAM VINE	DIOSCOREACEAE
73	Doryanthes palmeri	SPEAR LILY	DORYANTHACEAE
74	Diospyros australis	BLACK PLUM	EBENACEAE
75	Diospyros geminata	SCALY EBONY	EBENACEAE
76	Elaeocarpus kirtonii	WHITE QUANDONG	ELAEOCARPACEAE
77	Sloanea woollsii	YELLOW CARABEEN	ELAEOCARPACEAE
78	Leucopogon juniperinus	PRICKLY-LEAVED BEARD-HEATH	EPACRIDACEAE
79	Lissanthe strigosa		EPACRIDACEAE
80	Erythroxylum sp. (Splityard Creek L.Pedley 5360)		ERYTHROXYLACEAE
81	*Alchornea ilicifolia*	NATIVE HOLLY	EUPHORBIACEAE
82	*Breynia oblongifolia*	COFFEE BUSH	EUPHORBIACEAE
83	*Claoxylon australe*	BRITTLEWOOD	EUPHORBIACEAE
84	*Cleistanthus cunninghamii*	CLEISTANTHUS	EUPHORBIACEAE
85	*Mallotus philippensis*	RED KAMALA	EUPHORBIACEAE
86	Tragia novaehollandiae	STINGING VINE	EUPHORBIACEAE
87	*Daviesia genistifolia*		FABACEAE
88	Desmodium brachypodum	LARGE TICK TREFOIL	FABACEAE
89	Desmodium varians	VARIABLE TICK TREFOIL	FABACEAE
90	Erythrina vespertilio	BAT'S WING CORAL TREE	FABACEAE
91	Hardenbergia violacea	FALSE SARSAPARILLA	FABACEAE
92	Hovea sp. (Dalby K.A.Williams 90035)		FABACEAE
93	Indigofera australis	AUSTRAL INDIGO	FABACEAE
94	Jacksonia scoparia	DOGWOOD	FABACEAE
95	*Kennedia rubicunda*	DUSKY CORAL PEA	FABACEAE
96	*Swainsona galegifolia*	DARLING PEA	FABACEAE
97	*Geranium solanderi*	NATIVE GERANIUM	GERANIACEAE
98	*Goodenia rotundifolia*		GOODENIACEAE
99	*Scaevola albida*	FANFLOWER	GOODENIACEAE
100	*Abrophyllum ornans*	NATIVE HYDRANGEA	GROSSULARIACEAE
101	*Ajuga australis*	AUSTRAL BUGLE	LAMIACEAE
102	*Mentha diemenica*	NATIVE MINT	LAMIACEAE
103	*Plectranthus graveolens*		LAMIACEAE
104	*Plectranthus parviflorus*		LAMIACEAE
105	*Teucrium argutum*	NATIVE GERMANDER	LAMIACEAE
106	*Melia azedarach*	WHITE CEDAR	MELIACEAE
107	*Toona ciliata*	RED CEDAR	MELIACEAE

No.	SCIENTIFIC NAME	COMMON NAME	FAMILY
108	*Turraea rubescens*	NATIVE WITCH-HAZEL	MELIACEAE
109	*Legnephora moorei*	ROUND-LEAVED VINE	MENISPERMACEAE
110	*Acacia concurrens*	A BLACK WATTLE	MIMOSACEAE
111	*Acacia decora*	PRETTY WATTLE	MIMOSACEAE
112	*Acacia fimbriata*	BRISBANE WATTLE	MIMOSACEAE
113	*Acacia implexa*	HICKORY WATTLE	MIMOSACEAE
114	*Acacia irrorata*	GREEN WATTLE	MIMOSACEAE
115	*Acacia leiocalyx*	A BLACK WATTLE	MIMOSACEAE
116	*Acacia maidenii*	MAIDEN'S WATTLE	MIMOSACEAE
117	*Acacia neriifolia*	OLEANDER WATTLE	MIMOSACEAE
118	*Acacia obtusifolia*		MIMOSACEAE
119	*Acacia salicina*	SALLY WATTLE	MIMOSACEAE
120	*Ficus coronata*	SANDPAPER FIG	MORACEAE
121	*Ficus macrophylla*	MORETON BAY FIG	MORACEAE
122	*Ficus obliqua* var. *petiolaris*	SMALL-LEAVED MORETON BAY FIG	MORACEAE
123	*Ficus platypoda*	ROCK FIG	MORACEAE
124	*Ficus virens* var. *sublanceolata*	WHITE FIG	MORACEAE
125	*Ficus watkinsiana*	STRANGLER FIG	MORACEAE
126	*Maclura cochinchinensis*	COCKSPUR VINE	MORACEAE
127	*Trophis scandens* subsp.*scandens*	BURNY VINE	MORACEAE
128	*Eremophila debilis*	WINTER APPLE	MYOPORACEAE
129	*Rapanea variabilis*	MUTTONWOOD	MYRSINACEAE
130	*Angophora floribunda*	ROUGH-BARKED APPLE	MYRTACEAE
131	*Angophora subvelutina*	BROAD-LEAVED APPLE	MYRTACEAE
132	*Callistemon viminalis*	WEEPING BOTTLEBRUSH	MYRTACEAE
133	*Corymbia clarksoniana*	CLARKSON'S BLOODWOOD	MYRTACEAE
134	*Corymbia intermedia*	PINK BLOODWOOD	MYRTACEAE
135	*Corymbia tessellaris*	MORETON BAY ASH (CARBEEN)	MYRTACEAE
136	*Eucalyptus albens*	WHITE BOX	MYRTACEAE
137	*Eucalyptus biturbinata*	GREY GUM	MYRTACEAE
138	*Eucalyptus campanulata*	NEW ENGLAND BLACKBUTT	MYRTACEAE
139	*Eucalyptus carnea*	WHITE STRINGYBARK	MYRTACEAE
140	*Eucalyptus crebra*	NARROW-LEAVED IRONBARK	MYRTACEAE
141	*Eucalyptus eugenioides*	THIN-LEAVED STRINGYBARK	MYRTACEAE
142	*Eucalyptus melanophloia*	SILVER-LEAVED IRONBARK	MYRTACEAE
143	*Eucalyptus melliodora*	YELLOW BOX	MYRTACEAE
144	*Eucalyptus moluccana*	GUM-TOPPED BOX	MYRTACEAE
145	*Eucalyptus quadrangulata*	WHITE-TOPPED BOX	MYRTACEAE
146	*Eucalyptus saligna*	SYDNEY BLUE GUM	MYRTACEAE
147	*Eucalyptus tereticornis*	FOREST RED GUM, QUEENSLAND BLUE GUM	MYRTACEAE
148	*Lophostemon confertus*	BRUSH BOX	MYRTACEAE
149	*Lophostemon suaveolens*	SWAMP BOX	MYRTACEAE
150	*Melaleuca bracteata*	BLACK (RIVER) TEA TREE	MYRTACEAE
151	*Nephrolepis cordifolia*	FISHBONE FERN	NEPHROLEPIDACEAE
152	*Jasminum simplicifolium* subsp. *australiense*	STIFF JASMINE	OLEACEAE
153	*Notelaea microcarpa*	SMALL-FRUITED MOCK-OLIVE	OLEACEAE
154	*Olea paniculata*	NATIVE OLIVE	OLEACEAE
155	*Dendrobium kingianum*	PINK ROCK ORCHID	ORCHIDACEAE
156	*Dendrobium speciosum*	KING ORCHID	ORCHIDACEAE
157	*Eustrephus latifolium*	WOMBAT BERRY	PHILESIACEAE
158	*Geitonoplesium cymosum*	SCRAMBLING LILY	PHILESIACEAE
159	*Dianella brevipedunculata*	SHORT-STEMMED FLAX LILY	PHORMIACEAE
160	*Dianella longifolia*	LONG-LEAVED FLAX LILY	PHORMIACEAE
161	*Peperomia blanda* var. *floribunda*	PEPEROMIA	PIPERACEAE
162	*Bursaria spinosa* var. *macrophylla*	BLACKTHORN	PITTOSPORACEAE
163	*Pittosporum rhombifolium*	HOLLYWOOD	PITTOSPORACEAE

No.	SCIENTIFIC NAME	COMMON NAME	FAMILY
164	*Pittosporum undulatum*	SWEET DAPHNE	PITTOSPORACEAE
165	*Aristida gracilipes*	FINE WIRE-GRASS	POACEAE
166	Aristida queenslandica var. queenslandica	QUEENSLAND WIRE-GRASS	POACEAE
167	Bothriochloa decipiens	PITTED BLUEGRASS	POACEAE
168	Chloris gayana*	RHODES GRASS	POACEAE
169	Cymbopogon refractus	BARBWIRE GRASS	POACEAE
170	Heteropogon contortus	BLACK SPEAR GRASS	POACEAE
171	Imperata cylindrica	BLADY GRASS	POACEAE
172	Melinis repens*	RED NATAL GRASS	POACEAE
173	Panicum maximum var. trichoglume	GREEN PANIC	POACEAE
174	Pennisetum alopecuroides*	FOXTAIL GRASS	POACEAE
175	Poa labillardieri var. labillardieri	TUSSOCK GRASS	POACEAE
176	Poa sieberiana var. sieberiana	FINE-LEAVED TUSSOCK GRASS	POACEAE
177	Sorghum leiocladum	NATIVE SORGHUM	POACEAE
178	Themeda triandra	KANGAROO GRASS	POACEAE
179	Platycerium bifurcatum	ELKHORN FERN	POLYPODIACEAE
180	Platycerium superbum	STAGHORN FERN	POLYPODIACEAE
181	Pyrrosia confluens	ROBBER FERN	POLYPODIACEAE
182	Pyrrosia rupestris	ROCK FELT FERN	POLYPODIACEAE
183	Clematis glycinoides	HEADACHE VINE	RANUNCULACEAE
184	Alphitonia excelsa	RED ASH, SOAP TREE	RHAMNACEAE
185	*Asperula conferta*	COMMON WOODRUFF	RUBIACEAE
186	*Canthium buxifolium*	SMALL-LEAVED CANTHIUM	RUBIACEAE
187	*Canthium odoratum*	SHINY-LEAVED CANTHIUM	RUBIACEAE
188	*Galium migrans*	BEDSTRAW	RUBIACEAE
189	*Geijera salicifolia*	SCRUB WILGA	RUTACEAE
190	*Choretrum candollei*	WHITE BROOM	SANTALACEAE
191	*Exocarpos cupressiformis*	CHERRY BALLART	SANTALACEAE
192	*Exocarpos latifolius*	BROAD-LEAVED BALLART	SANTALACEAE
193	*Alectryon connatus*	ALECTRYON	SAPINDACEAE
194	*Arytera foveolata*	PITTED COOGERA	SAPINDACEAE
195	*Cupaniopsis parvifolia*	SMALL-LEAVED TUCKEROO	SAPINDACEAE
196	*Dodonaeae viscosa* subsp. *burmanniana*	STICKY HOP BUSH	SAPINDACEAE
197	*Elattostachys xylocarpa*	WHITE TAMARIND	SAPINDACEAE
198	*Pouteria cotinifolia* var. *cotinifolia*	SMALL-LEAVED COONDOO	SAPOTACEAE
199	*Ailanthus altissima**	TREE-OF-HEAVEN	SIMAROUBACEAE
200	*Ripogonum album*	WHITE SUPPLEJACK	SMILACACEAE
201	*Smilax australis*	AUSTRAL SARSAPARILLA	SMILACACEAE
202	*Argyrodendron actinophyllum*	BLACK (BOOYONG) TULIP OAK	STERCULIACEAE
203	*Brachychiton acerifolius*	FLAME TREE	STERCULIACEAE
204	*Brachychiton discolor*	LACEBARK TREE	STERCULIACEAE
205	*Brachychiton populneus*	KURRAJONG	STERCULIACEAE
206	*Christella dentata*	BINUNG	THELYPTERIDACEAE
207	*Pimelea linifolia*	RICEFLOWER	THYMELACEAE
208	*Dendrocnide excelsa*	GIANT STINGING TREE	URTICACEAE
209	*Dendrocnide photinophylla*	SHINY-LEAVED STINGING TREE	URTICACEAE
210	*Lantana camara**	LANTANA BUSH	VERBENACEAE
211	*Cissus antarctica*	NATIVE GRAPE	VITACEAE
212	*Cissus hypoglauca*	WATER VINE	VITACEAE
213	*Tetrastigma nitens*	THREE-LEAVED WATER VINE	VITACEAE
214	*Lomandra filiformis*	FINE-LEAVED MATRUSH	XANTHORRHOEACEAE
215	*Lomandra hystrix*	SHINY-LEAVED MATRUSH	XANTHORRHOEACEAE
216	*Lomandra longifolia*	LONG-LEAVED MATRUSH	XANTHORRHOEACEAE
217	*Xanthorrhoea glauca*	A GRASS TREE	XANTHORRHOEACEAE

APPENDIX 3: GLEN ROCK FAUNA SURVEY SITE DESCRIPTION AND SURVEY METHODS

Compiled by the Conservation Management Group, QPWS, EPA, Moggill, March 2000

SITE	EAST	NORTH	RE CODE	VEGETATION	TOPOCODE	ALTITUDE	METHODS	SITE TYPE
GLRK1	429441	6913811	12.8.9	8e	GU	400	SET,SBE,SSP,SHD	STD
GLRK2	429253	6913133	12.3.7	3a	GU	350	SET,SBE,SSP,SHD	STD
GLRK3	431599	6909177	12.8.9	8e	GU	480	SET,SBE,SSP,SHD	STD
GLRK4	431377	6909822	12.8.9	8e	GU	500	SET,SBE,SSP,SHD	STD
GLRK5	430564	6908986	12.8.16/12.8.14	8d/8b	MS	480	SET,SBE,SSP,SHD, SPT	STD
GLRK6	431813	6908166	12.8.14	8b	MS	500	SET,SBE,SSP,SHD	STD
GLRK7	425455	6912346	12.8.9	8e/8m	MS	700	SET,SHD,IOF,SSP,SBE,SPBD	STD
GLRK8	426205	6911996	12.8.14	8b	RI	740	SET,SBE,SHD,SSP,CVS,IOF,SPBD, BCP	STD
GLRK9	427318	6909215	12.8.14	8a/8b	RI	850	SET,SBE,SHD,SSP, BCP	STD
GLRK10	427569	6909318	12.8.9/12.8.21	8e/8m	GU	800	SET,SBE,SSP,STH,SPBD	STD
GLRK11	429726	6906825	12.8.14/12.8.16	8b/8d	MS	900	SET,SBE,SHD,SSP,SPBD,BCP	STD
GLRK12	428392	6909220	12.8.14	8a/8b	RI	900	SET,SBE,SHD,SSP	STD
GLRK13	427151	6909220	12.8.14	8a/8b	MS	750	SSS	INC
GLRK14	424115	6917144	12.3.7/12.3.3	3a/3c&C	GU	300	SET,SBE,SBL,SHD,INC,IOF,INC,	STD
GLRK15	424519	6916810	12.3.7/12.3.3	3a/3c&C	MS	300	CVS,ION	STD
GLRK16	425700	6915400	NIL	R	MS	350	SBE,SHN,CVS,ION	OPP
GLRK17	425500	6914840	12.3.7/12.3.3	3a/3c	GU	340	SBE,SHN,IOF,ION	OPP
GLRK18	431048	6913002	12.8.9/12.8.4	8e/8n	GU	475	ION	INC
GLRK19	430049	6913480	12.8.14/12.8.19	8b/8j	RI	600	ION	INC
GLRK20	430293	6913771	12.8.14	8b	RI	770	ION	INC
GLRK21	430526	6914173	12.8.14	8b	RI	900	ION	INC
GLRK22	430702	6914504	12.8.14	8a	RI	940	ION	INC
GLRK23	428700	6914774	12.8.14	8b	RI	850	ION	INC
GLRK24	428138	6914250	12.8.14	8b	RI	500	ION	INC
GLRK25	424994	6913922	12.8.16	8d	MS	450	SET,SBE,SHD,IOF,ION,SSP	STD
GLRK26	425160	6913210	12.8.16/12.8.16	8d/8k/R	MS	590	ION	INC
GLRK27	433300	6907320	12.8.9/12.3.7	8e/3a	MS	500	SET,SBL,SHD,SSP,SPT,BCP	STD
GLRK28	427800	6909830	12.8.14	8a/8b	MS	880	SET	STD

Appendix 3: Glen Rock Fauna Survey Site Description and Survey Methods cont'd

SITE	EAST	NORTH	RE CODE	VEGETATION	TOPOCODE	ALTITUDE	METHODS	SITE TYPE
GLRK29	428500	6909800	12.8.16/12.8.14	8d/8b	MS	820	SET,SPT	STD
GLRK30	425706	6917167	12.8.14	8a	MS	500	SET,SBE,SHD,SSP,BCP	STD
GLRK31	424092	6914968	NIL	R	MS	450	SET,SBE,SHD,SSP	STD
GLRK32	431193	6909041	12.3.7	3a/R	GU	450	SHD	STD
GLRK33	432000	6907870	12.8.9/12.3.7	8e/3a	GU	450	ION,SSP	INC
GLRK34	42519 7	6913480	NIL	R	RI	600	SHN	INC
GLRK35	427087	6908690	12.8.14	8a/8b	MS	830	ION	INC
GLRK36	426942	6911729	12.8.16/12.8.14	8d/8b	MS	700	ION	INC
GLRK37	428270	6910760	12.8.14	8a/8b	MS	800	ION	INC
GLRK38	423904	6914385	12.8.16	8d	MS	750	ION	INC
GLRK39	425091	6912551	12.816	8d/8k	MS	670	ION	INC
GLRK40	426219	6912085	12.8.14	8b	MS	780	ION	INC
GLRK41	429920	6911005	12.3.7	3a	GU	400	IOF,ION	INC
GLRK42	428054	6909549	12.8.14	8a/8b	MS	875	ION	INC
GLRK43	429953	6907494	12.8.16	8d/8k	MS	850	ION	INC
GLRK44	433000	6907300	12.8.9/12.3.7	8e/3a	GU	450	SPBR,SSP,ION,BCP	OPP
GLRK45	435000	6910000	12.3.7/12.8.16/12.8.14	3a,8d/8b	GU	400	ION,IOF	INC
GLRK46	430000	1270000	12.3.7	3a	GU	400	FS	STD
GLRK47	430000	1050000	12.3.7	3a	GU	400	FS	STD

Code	Survey Method
SBE	Early morning bird transect
SBL	Late morning bird transect
SHD	Diurnal Herptofauna transect
SHN	Nocturnal Herptofauna transect
SSP	Hand held spotlighting
CVS	Vehicle spotlighting
SPT	Pitfall trapping
SSS	Scat searches
SPBR	Nocturnal call playback rainforest
STH	Harp trapping

Code	Survey Method
ION	Incidental sightings on-site
IOF	Incidental sightings off-site
SET	Elliott trap
STH	Harp trapping
SPT	Pitfall trapping
FS	Fish survey
SPBD	Nocturnal call playback dry forest
OHD	Opportunistic herps diurnal
BCP	Bristle bird call playback

Code	Site Type
STD	Standard site
INC	Incidental site
OPP	Opportunistic site

Topographic Code

GU	Gully site
MS	Mid Slope site
RI	Ridge Site

APPENDIX 4: FAUNA RECORDED AT EACH OF THE SITES DURING THE SURVEY OF GLEN ROCK

Site 1:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Trichosurus	vulpecula	Common brushtail possum	C
Mus	musculus	House mouse	C
Rattus	fuscipes	Bush rat	C
Crinia	signifera	Clicking froglet	C
Cryptoblepharus	virgatus	Wall skink	C
Trichoglossus	chlorolepidotus	Scaly-breasted lorikeet	C
Platycercus	eximius	Eastern rosella	C
Platycercus	adscitus	Pale-headed rosella	C
Alisterus	scapularis	Australian king-parrot	C
Gymnorhina	tibicen	Australian magpie	C
Acanthorhynchus	tenuirostris	Eastern spinebill	C
Psophodes	olivaceus	Eastern whipbird	C
Eopsaltria	australis	Eastern yellow robin	C
Pachycephala	pectoralis	Golden whistler	C
Meliphaga	lewinii	Lewin's honeyeater	C
Meliphaga	notata	Yellow-spotted honeyeater	C
Philemon	corniculatus	Noisy friarbird	C
Manorina	melanocephala	Noisy miner	C
Malurus	melanocephalus	Red-backed wren	C
Emblema	temporalis	Red-browed firetail	C
Petroica	rosea	Rose robin	C
Myzomela	sanguinolenta	Scarlet honeyeater	C
Climacteris	affinis	White-browed treecreeper	C
Rhipidura	fuliginosa	Grey fantail	C

Site 2:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Antechinus	flavipes	Yellow-footed antechinus	C
Petaurus	norfolcensis	Squirrel glider	C
Mus	musculus	House mouse	C
Rattus	fuscipes	Bush rat	C
Lepus	capensis	Brown hare	C
Bos	taurus	Feral european cattle	C
Crinia	signifera	Clicking froglet	C
Litoria	lesueuri	Stony-creek frog	C
Cryptoblepharus	virgatus	Wall skink	C
Platycercus	adscitus	Pale-headed rosella	C
Platycercus	eximius	Eastern rosella	C
Dacelo	novaeguineae	Laughing kookaburra	C
Gymnorhina	tibicen	Australian magpie	C
Manorina	melanocephala	Noisy miner	C
Strepera	graculina	Pied currawong	C
Malurus	melanocephalus	Red-backed wren	C
Corvus	orru	Torresian crow	C
Rhipidura	fuliginosa	Grey fantail	C

Site 3:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Mus	musculus	House mouse	C
Rattus	fuscipes	Bush rat	C

 ISSN 1037 4701

Bos	taurus	Feral european cattle	C
Bufo	marinus	Cane (marine) toad	C
Crinia	signifera	Clicking froglet	C
Lampropholis	delicata	Eastern grass skink	C
Cryptoblepharus	virgatus	Wall skink	C
Trichoglossus	chlorolepidotus	Scaly-breasted lorikeet	C
Platycercus	adscitus	Pale-headed rosella	C
Platycercus	eximius	Eastern rosella	C
Platycercus	elegans	Blue-cheeked rosella	C
Alisterus	scapularis	Australian king-parrot	C
Dacelo	novaeguineae	Laughing kookaburra	C
Rhipidura	fuliginosa	Grey fantail	C
Eopsaltria	australis	Eastern yellow robin	C
Psophodes	olivaceus	Eastern whipbird	C
Gymnorhina	tibicen	Australian magpie	C

Site 4:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Antechinus	flavipes	Yellow-footed antechinus	C
Trichosurus	vulpecula	Common brushtail possum	C
Melomys	cervinipes	Fawn-footed melomys	C
Rattus	fuscipes	Bush rat	C
Bos	taurus	Feral european cattle	C
Litoria	lesueuri	Stony-creek frog	C
Crinia	signifera	Clicking froglet	C
Egernia	frerei	Major skink	C
Leucosarcia	melanoleuca	Wonga pigeon	C
Platycercus	adscitus	Pale-headed rosella	C
Trichoglossus	chlorolepidotus	Scaly-breasted lorikeet	C
Alisterus	scapularis	Australian king-parrot	C
Phylidonyris	nigra	White-cheeked honeyeater	C
Acanthiza	lineata	Striated thornbill	C
Eopsaltria	australis	Eastern yellow robin	C
Psophodes	olivaceus	Eastern whipbird	C
Rhipidura	fuliginosa	Grey fantail	C
Acanthiza	reguloides	Buff-rumped thornbill	C
Meliphaga	lewinii	Grey fantail	C

Site 5:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Trichosurus	vulpecula	Common brushtail possum	C
Mus	musculus	House mouse	C
Bos	taurus	Feral European cattle	C
Pogona	barbata	Bearded dragon	C
Cryptoblepharus	virgatus	Wall skink	C
Lampropholis	amicula	Friendly skink	C
Coturnix	australis	Brown quail	C
Cormobates	leucophaeus	White-throated treecreepr	C
Manorina	melanocephala	Noisy Miner	C
Pachycephala	pectoralis	Golden whistler	C
Malurus	melanocephalus	Red-backed wren	C
Gymnorhina	tibicen	Australian magpie	C
Strepera	graculina	Pied currawong	C
Corvus	orru	Torresian crow	C

Site 6:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Trichosurus	vulpecula	Common brushtail possum	C
Mus	musculus	House mouse	C
Bos	taurus	Feral european cattle	C
Cryptoblepharus	virgatus	Wall skink	C
Alisterus	scapularis	Australian king-parrot	C
Calyptorhynchus	lathami	Glossy black-cockatoo	V
Calyptorhynchus	magnificus	Red-tailed black-cockatoo	C
Tyto	alba	Barn owl	C
Gymnorhina	tibicen	Australian magpie	C
Acanthorhynchus	tenuirostris	Eastern spinebill	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Acanthiza	lineata	Striated thornbill	C
Emblema	temporalis	Red-browed firetail	C
Manorina	melanophrys	Bell miner	C
Meliphaga	lewinii	Lewin's honeyeater	C
Pardalotus	punctatus	Spotted pardalote	C
Petroica	rosea	Rose robin	C
Psophodes	olivaceus	Eastern whipbird	C
Rhipidura	fuliginosa	Grey fantail	C
Colluricincla	harmonica	Grey shrike-thrush	C

 ISSN 1037 4701

Site 7:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Antechinus	flavipes	Yellow-footed Antechinus	C
Phascolarctos	cinereus	Koala	M
Trichosurus	vulpecula	Common Brushtail Possum	C
Petrogale	penicillata	Brush-tailed Rock-wallaby	V
Mus	musculus	House Mouse	C
Rattus	fuscipes	Bush Rat	C
Bos	taurus	Cattle (feral)	C
Eulamprus	martini	Skink	C
Lampropholis	amicula	Friendly Skink	C
Trichoglossus	chlorolepidotus	Scaly-breasted Lorikeet	C
Alisterus	scapularis	Australian King Parrot	C
Platycercus	adscitus	Pale-headed Rosella	C
Ninox	novaeseelandiae	Southern Boobook	C
Dacelo	novaeguineae	Laughing Kookaburra	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Malurus	melanocephalus	Red-backed Fairy-wren	C
Pardalotus	punctatus	Spotted pardalote	C
Acanthiza	reguloides	Buff-rumped Thornbill	C
Acanthiza	nana	Yellow Thornbill	C
Philemon	corniculatus	Noisy Friarbird	C
Manorina	melanocephala	Noisy Miner	C
Eopsaltria	australis	Eastern Yellow Robin	C
Cinclosoma	punctatum	Spotted Quail-thrush	C
Strepera	graculina	Pied Currawong	C
Neochmia	temporalis	Red-browed Finch	C
Zosterops	lateralis	Silvereye	C

Site 8:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Antechinus	flavipes	Yellow-footed Antechinus	C
Petauroides	volans	Greater Glider	C
Petaurus	breviceps	Sugar Glider	C
Trichosurus	vulpecula	Common Brushtail Possum	C
Macropus	giganteus	Eastern Grey Kangaroo	C
Mus	musculus	House Mouse	C
Rattus	fuscipes	Bush Rat	C
Turnix	varia	Painted Button-quail	C
Calyptorhynchus	lathami	Glossy Black-Cockatoo	V
Cacomantis	flabelliformis	Fan-tailed Cuckoo	C
Scythrops	novaehollandiae	Channel-billed Cuckoo	C
Climacteris	erythrops	Red-browed Treecreeper	R
Malurus	melanocephalus	Red-backed Fairy-wren	C
Pardalotus	punctatus	Spotted pardalote	C
Anthochaera	carunculata	Red Wattlebird	C
Manorina	melanocephala	Noisy Miner	C
Myiagra	rubecula	Leaden Flycatcher	C
Rhipidura	fuliginosa	Grey Fantail	C
Strepera	graculina	Pied Currawong	C

Site 9:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Sminthopsis	murina	Common Dunnart	C
Trichosurus	vulpecula	Common Brushtail Possum	C
Mus	musculus	House Mouse	C
Bos	taurus	Cattle (feral)	C
Egernia	cunninghami	Cunningham's Skink	C
Coturnix	ypsilophora	Brown Quail	C
Trichoglossus	chlorolepidotus	Scaly-breasted Lorikeet	C
Glossopsitta	concinna	Musk Lorikeet	C
Alisterus	scapularis	Australian King Parrot	C
Platycercus	elegans	Crimson Rosella	C
Platycercus	eximius	Eastern Rosella	C
Platycercus	adscitus	Pale-headed Rosella	C
Dacelo	novaeguineae	Laughing Kookaburra	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Malurus	melanocephalus	Red-backed Fairy-wren	C
Pardalotus	punctatus	Spotted pardalote	C
Acanthiza	reguloides	Buff-rumped Thornbill	C
Manorina	melanophrys	Bell Miner	C
Strepera	graculina	Pied Currawong	C
Neochmia	temporalis	Red-browed Finch	C

 ISSN 1037 4701

Site 10:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V
Rhinolophus	megaphyllus	Eastern Horseshoe-bat	C
Miniopterus	australis	Little Bent-wing Bat	C
Mus	musculus	House Mouse	C
Rattus	fuscipes	Bush Rat	C
Glossopsitta	concinna	Musk Lorikeet	C
Platycercus	adscitus	Pale-headed Rosella	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Malurus	lamberti	Variegated Fairy-wren	C
Pardalotus	punctatus	Spotted pardalote	C
Philemon	corniculatus	Noisy Friarbird	C
Manorina	melanophrys	Bell Miner	C
Meliphaga	lewinii	Lewin's Honeyeater	C
Lichenostomus	chrysops	Yellow-faced Honeyeater	C
Lichenostomus	melanops	Yellow-tufted Honeyeater	C
Eopsaltria	australis	Eastern Yellow Robin	C
Psophodes	olivaceus	Eastern Whipbird	C
Pachycephala	pectoralis	Golden Whistler	C
Sphecotheres	viridis	Figbird	C
Strepera	graculina	Pied Currawong	C
Ptilonorhynchus	violaceus	Satin Bowerbird	C
Hirundo	neoxena	Welcome Swallow	C

Site 11:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Phascolarctos	cinereus	Koala	M
Petauroides	volans	Greater Glider	C
Trichosurus	vulpecula	Common Brushtail Possum	C
Bos	taurus	Cattle (feral)	C
Coturnix	ypsilophora	Brown Quail	C
Leucosarcia	melanoleuca	Wonga Pigeon	C
Calyptorhynchus	lathami	Glossy Black-Cockatoo	V
Trichoglossus	chlorolepidotus	Scaly-breasted Lorikeet	C
Glossopsitta	concinna	Musk Lorikeet	C
Alisterus	scapularis	Australian King Parrot	C
Platycercus	eximius	Eastern Rosella	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Climacteris	erythrops	Red-browed Treecreeper	R
Malurus	lamberti	Variegated Fairy-wren	C
Malurus	melanocephalus	Red-backed Fairy-wren	C
Pardalotus	punctatus	Spotted pardalote	C
Philemon	corniculatus	Noisy Friarbird	C
Meliphaga	lewinii	Lewin's Honeyeater	C
Acanthorhynchus	tenuirostris	Eastern Spinebill	C
Petroica	multicolor	Scarlet Robin	C
Petroica	rosea	Rose Robin	C
Eopsaltria	australis	Eastern Yellow Robin	C
Colluricincla	harmonica	Grey Shrike-thrush	C
Cracticus	nigrogularis	Pied Butcherbird	C
Strepera	graculina	Pied Currawong	C
Neochmia	temporalis	Red-browed Finch	C

Site 12:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Mus	musculus	House Mouse	C
Bos	taurus	Cattle (feral)	C
Lampropholis	delicata	Eastern Grass Skink	C
Malurus	lamberti	Variegated Fairy-wren	C
Manorina	melanocephala	Noisy Miner	C
Strepera	graculina	Pied Currawong	C

Site 13:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V

 ISSN 1037 4701

Site 14:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Bufo	marinus	Cane Toad	C
Litoria	fallax	Eastern Sedgefrog	C
Litoria	lesueuri	Stony-creek Frog	C
Litoria	nasuta	Striped Rocketfrog	C
Litoria	rubella	Naked Treefrog	C
Crinia	signifera	Clicking Froglet	C
Limnodynastes	peronii	Striped Marshfrog	C
Cryptoblepharus	virgatus	Wall Skink	C
Ctenotus	taeniolatus	Copper-tailed Skink	C
Lygisaurus	foliorum	Burnett's Skink	C
Ramphotyphlops	wiedii	no common name	C
Morelia	spilota	Carpet Python	C
Dendrocygna	arcuata	Wandering Whistling-Duck	C
Chenonetta	jubata	Australian Wood Duck	C
Anas	superciliosa	Pacific Black Duck	C
Tachybaptus	novaehollandiae	Australasian Grebe	C
Phalacrocorax	varius	Pied Cormorant	C
Phalacrocorax	carbo	Great Cormorant	C
Egretta	novaehollandiae	White-faced Heron	C
Ardea	ibis	Cattle Egret	C
Nycticorax	caledonicus	Nankeen Night Heron	C
Threskiornis	molucca	Australian White Ibis	C
Threskiornis	spinicollis	Straw-necked Ibis	C
Platalea	regia	Royal Spoonbill	C
Platalea	flavipes	Yellow-billed Spoonbill	C
Falco	longipennis	Australian Hobby	C
Falco	cenchroides	Nankeen Kestrel	C
Gallinula	tenebrosa	Dusky Moorhen	C
Vanellus	miles	Masked lapwing	C
Ocyphaps	lophotes	Crested Pigeon	C
Geopelia	striata	Peaceful Dove	C
Geopelia	humeralis	Bar-shouldered Dove	C
Calyptorhynchus	banksii	Red-tailed Black-Cockatoo	C
Trichoglossus	chlorolepidotus	Scaly-breasted Lorikeet	C
Glossopsitta	pusilla	Little Lorikeet	C
Platycercus	adscitus	Pale-headed Rosella	C
Cacomantis	flabelliformis	Fan-tailed Cuckoo	C
Eudynamys	scolopacea	Common Koel	C
Scythrops	novaehollandiae	Channel-billed Cuckoo	C
Dacelo	novaeguineae	Laughing Kookaburra	C
Todiramphus	sanctus	Sacred Kingfisher	C
Merops	ornatus	Rainbow Bee-eater	C
Eurystomus	orientalis	Dollarbird	C
Malurus	cyaneus	Superb Fairy-wren	C
Pardalotus	striatus	Striated Pardalote	C
Gerygone	olivacea	White-throated Gerygone	C
Manorina	melanocephala	Noisy Miner	C

Site 14 cont'd:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS

Grallina	cyanoleuca	Magpie Lark	C
Rhipidura	leucophrys	Willie Wagtail	C
Coracina	novaehollandiae	Black-faced Cuckoo-shrike	C
Oriolus	sagittatus	Olive-backed Oriole	C
Cracticus	nigrogularis	Pied Butcherbird	C
Gymnorhina	tibicen	Australian Magpie	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C
Taeniopygia	bichenovii	Double-barred Finch	C
Hirundo	neoxena	Welcome Swallow	C
Acridotheres	tristis	Common Myna	C

Site 15:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Trichosurus	vulpecula	Common Brushtail Possum	C
Crinia	signifera	Clicking Froglet	C
Elanus	axillaris	Black-shouldered Kite	C
Ninox	novaeseelandiae	Southern Boobook	C
Merops	ornatus	Rainbow Bee-eater	C

 ISSN 1037 4701

Site 16:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petaurus	norfolcensis	Squirrel Glider	C
Nyctinomus	australis	White-striped Freetail Bat	C
Litoria	dentata	Bleating Treefrog	C
Litoria	fallax	Eastern Sedgefrog	C
Limnodynastes	peronii	Striped Marshfrog	C
Gehyra	dubia	no common name	C
Dendrelaphis	punctulata	Common Tree Snake	C
Pseudechis	porphyriacus	Red-bellied Black Snake	C
Coturnix	ypsilophora	Brown Quail	C
Cacatua	roseicapilla	Galah	C
Trichoglossus	haematodus	Rainbow Lorikeet	C
Alisterus	scapularis	Australian King Parrot	C
Platycercus	elegans	Crimson Rosella	C
Platycercus	eximius	Eastern Rosella	C
Platycercus	adscitus	Pale-headed Rosella	C
Eudynamys	scolopacea	Common Koel	C
Scythrops	novaehollandiae	Channel-billed Cuckoo	C
Centropus	phasianinus	Pheasant Coucal	C
Ninox	novaeseelandiae	Southern Boobook	C
Podargus	strigoides	Tawny Frogmouth	C
Dacelo	novaeguineae	Laughing Kookaburra	C
Eurystomus	orientalis	Dollarbird	C
Philemon	corniculatus	Noisy Friarbird	C
Manorina	melanocephala	Noisy Miner	C
Microeca	fascinans	Jacky Winter	C
Pomatostomus	temporalis	Grey-crowned Babbler	C
Psophodes	olivaceus	Eastern Whipbird	C
Myiagra	inquieta	Restless Flycatcher	C
Grallina	cyanoleuca	Magpie Lark	C
Coracina	tenuirostris	Cicadabird	C
Cracticus	torquatus	Grey Butcherbird	C
Gymnorhina	tibicen	Australian Magpie	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C
Hirundo	neoxena	Welcome Swallow	C
Zosterops	lateralis	Silvereye	C
Sturnus	vulgaris	Common Starling	C
Acridotheres	tristis	Common Myna	C

Site 17:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Lepus	capensis	Brown Hare	C
Litoria	peronii	Emerald-spotted Treefrog	C
Litoria	rubella	Naked Treefrog	C
Chenonetta	jubata	Australian Wood Duck	C
Phalacrocorax	melanoleucos	Little Pied Cormorant	C
Falco	cenchroides	Nankeen Kestrel	C
Vanellus	miles	Masked lapwing	C
Ocyphaps	lophotes	Crested Pigeon	C
Geopelia	striata	Peaceful Dove	C
Cacatua	roseicapilla	Galah	C
Trichoglossus	chlorolepidotus	Scaly-breasted Lorikeet	C
Platycercus	elegans	Crimson Rosella	C
Platycercus	eximius	Eastern Rosella	C
Eudynamys	scolopacea	Common Koel	C
Centropus	phasianinus	Pheasant Coucal	C
Tyto	alba	Barn Owl	C
Alcedo	azurea	Azure Kingfisher	C
Dacelo	novaeguineae	Laughing Kookaburra	C
Merops	ornatus	Rainbow Bee-eater	C
Malurus	cyaneus	Superb Fairy-wren	C
Pardalotus	striatus	Striated Pardalote	C
Sericornis	frontalis	White-browed Scrubwren	C
Acanthiza	chrysorrhoa	Yellow-rumped Thornbill	C
Manorina	melanocephala	Noisy Miner	C
Pomatostomus	temporalis	Grey-crowned Babbler	C
Psophodes	olivaceus	Eastern Whipbird	C
Grallina	cyanoleuca	Magpie Lark	C
Rhipidura	leucophrys	Willie Wagtail	C
Coracina	tenuirostris	Cicadabird	C
Sphecotheres	viridis	Figbird	C
Gymnorhina	tibicen	Australian Magpie	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C
Anthus	novaeseelandiae	Richard's Pipit	C
Taeniopygia	bichenovii	Double-barred Finch	C
Neochmia	temporalis	Red-browed Finch	C
Cisticola	exilis	Golden-headed Cisticola	C

 ISSN 1037 4701

Site 18:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Pogona	barbata	Bearded Dragon	C
Egernia	frerei	Major Skink	C
Leucosarcia	melanoleuca	Wonga Pigeon	C
Pitta	versicolor	Noisy Pitta	C
Philemon	corniculatus	Noisy Friarbird	C
Eopsaltria	australis	Eastern Yellow Robin	C
Psophodes	olivaceus	Eastern Whipbird	C
Monarcha	melanopsis	Black-faced Monarch	C
Strepera	graculina	Pied Currawong	C

Site 19:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Platycercus	elegans	Crimson Rosella	C
Pardalotus	punctatus	Spotted pardalote	C
Dicrurus	bracteatus	Spangled Drongo	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C

Site 20:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V
Pardalotus	punctatus	Spotted pardalote	C
Acanthiza	chrysorrhoa	Yellow-rumped Thornbill	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C

Site 21:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Leucosarcia	melanoleuca	Wonga Pigeon	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Pardalotus	punctatus	Spotted pardalote	C
Anthochaera	carunculata	Red Wattlebird	C
Philemon	corniculatus	Noisy Friarbird	C
Meliphaga	lewinii	Lewin's Honeyeater	C
Lichenostomus	chrysops	Yellow-faced Honeyeater	C
Dicrurus	bracteatus	Spangled Drongo	C
Coracina	novaehollandiae	Black-faced Cuckoo-shrike	C
Strepera	graculina	Pied Currawong	C

Site 22:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V
Egernia	frerei	Major Skink	C
Alisterus	scapularis	Australian King Parrot	C
Malurus	melanocephalus	Red-backed Fairy-wren	C
Pardalotus	punctatus	Spotted pardalote	C
Sericornis	frontalis	White-browed Scrubwren	C
Philemon	corniculatus	Noisy Friarbird	C
Strepera	graculina	Pied Currawong	

Site 23:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V

Site 24:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Calyptorhynchus	lathami	Glossy Black-Cockatoo	V

 ISSN 1037 4701

Site 25:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Canis	familiaris	Dingo and Dog (feral)	C
Crinia	signifera	Clicking Froglet	C
Limnodynastes	peronii	Striped Marshfrog	C
Amphibolurus	nobbi	Nobbi Dragon	C
Accipiter	cirrhocephalus	Collared Sparrowhawk	C
Aquila	audax	Wedge-tailed Eagle	C
Ocyphaps	lophotes	Crested Pigeon	C
Platycercus	elegans	Crimson Rosella	C
Cacomantis	flabelliformis	Fan-tailed Cuckoo	C
Eudynamys	scolopacea	Common Koel	C
Centropus	phasianinus	Pheasant Coucal	C
Eurystomus	orientalis	Dollarbird	C
Pardalotus	punctatus	Spotted pardalote	C
Pardalotus	striatus	Striated Pardalote	C
Sericornis	frontalis	White-browed Scrubwren	C
Gerygone	olivacea	White-throated Gerygone	C
Acanthiza	chrysorrhoa	Yellow-rumped Thornbill	C
Philemon	corniculatus	Noisy Friarbird	C
Philemon	citreogularis	Little Friarbird	C
Manorina	melanocephala	Noisy Miner	C
Lichenostomus	chrysops	Yellow-faced Honeyeater	C
Psophodes	olivaceus	Eastern Whipbird	C
Pachycephala	rufiventris	Rufous Whistler	C
Colluricincla	harmonica	Grey Shrike-thrush	C
Coracina	tenuirostris	Cicadabird	C
Oriolus	sagittatus	Olive-backed Oriole	C
Gymnorhina	tibicen	Australian Magpie	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C
Ptilonorhynchus	violaceus	Satin Bowerbird	C
Taeniopygia	bichenovii	Double-barred Finch	C
Dicaeum	hirundinaceum	Mistletoebird	C
Zosterops	lateralis	Silvereye	C

Site 26:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Cacomantis	flabelliformis	Fan-tailed Cuckoo	C
Eudynamys	scolopacea	Common Koel	C
Philemon	corniculatus	Noisy Friarbird	C
Manorina	melanocephala	Noisy Miner	C
Gymnorhina	tibicen	Australian Magpie	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C

Site 27:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Pseudomys	novaehollandiae	New Holland Mouse	C
Crinia	signifera	Clicking Froglet	C
Cryptoblepharus	virgatus	Wall Skink	C
Egernia	cunninghami	Cunningham's Skink	C
Rhinoplocephalus	nigrescens	Eastern Small-eyed Snake	C
Cacatua	galerita	Sulphur-crested Cockatoo	C
Platycercus	elegans	Crimson Rosella	C
Cacomantis	variolosus	Brush Cuckoo	C
Cacomantis	flabelliformis	Fan-tailed Cuckoo	C
Eudynamys	scolopacea	Common Koel	C
Podargus	strigoides	Tawny Frogmouth	C
Dacelo	novaeguineae	Laughing Kookaburra	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Pardalotus	striatus	Striated Pardalote	C
Gerygone	olivacea	White-throated Gerygone	C
Lichenostomus	chrysops	Yellow-faced Honeyeater	C
Eopsaltria	australis	Eastern Yellow Robin	C
Pachycephala	rufiventris	Rufous Whistler	C
Colluricincla	harmonica	Grey Shrike-thrush	C
Dicrurus	bracteatus	Spangled Drongo	C
Oriolus	sagittatus	Olive-backed Oriole	C
Strepera	graculina	Pied Currawong	C
Ptilonorhynchus	violaceus	Satin Bowerbird	C
Zosterops	lateralis	Silvereye	C

Site 28:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Antechinus	flavipes	Yellow-footed Antechinus	C

Site 29:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Mus	musculus	House Mouse	C

 ISSN 1037 4701

Site 30:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Antechinus	flavipes	Yellow-footed Antechinus	C
Carlia	vivax	Lively Skink	C
Cryptoblepharus	virgatus	Wall Skink	C
Ctenotus	robustus	Eastern Striped Skink	C
Lampropholis	amicula	Friendly Skink	C
Lygisaurus	foliorum	Burnett's Skink	C
Aquila	audax	Wedge-tailed Eagle	C
Falco	berigora	Brown Falcon	C
Geopelia	striata	Peaceful Dove	C
Geopelia	humeralis	Bar-shouldered Dove	C
Trichoglossus	haematodus	Rainbow Lorikeet	C
Cacomantis	variolosus	Brush Cuckoo	C
Eudynamys	scolopacea	Common Koel	C
Centropus	phasianinus	Pheasant Coucal	C
Dacelo	novaeguineae	Laughing Kookaburra	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Pardalotus	striatus	Striated Pardalote	C
Gerygone	olivacea	White-throated Gerygone	C
Acanthiza	reguloides	Buff-rumped Thornbill	C
Philemon	corniculatus	Noisy Friarbird	C
Manorina	melanocephala	Noisy Miner	C
Lichenostomus	chrysops	Yellow-faced Honeyeater	C
Eopsaltria	australis	Eastern Yellow Robin	C
Psophodes	olivaceus	Eastern Whipbird	C
Colluricincla	harmonica	Grey Shrike-thrush	C
Myiagra	rubecula	Leaden Flycatcher	C
Coracina	novaehollandiae	Black-faced Cuckoo-shrike	C
Coracina	tenuirostris	Cicadabird	C
Oriolus	sagittatus	Olive-backed Oriole	C
Cracticus	torquatus	Grey Butcherbird	C
Cracticus	nigrogularis	Pied Butcherbird	C
Gymnorhina	tibicen	Australian Magpie	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C
Dicaeum	hirundinaceum	Mistletoebird	C
Hirundo	neoxena	Welcome Swallow	C

Site 31:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Lygisaurus	foliorum	Burnett's Skink	C
Furina	diadema	Red-naped Snake	C
Falco	berigora	Brown Falcon	C
Phaps	chalcoptera	Common Bronzewing	C
Centropus	phasianinus	Pheasant Coucal	C
Merops	ornatus	Rainbow Bee-eater	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Malurus	melanocephalus	Red-backed Fairy-wren	C
Pardalotus	punctatus	Spotted pardalote	C
Pardalotus	striatus	Striated Pardalote	C
Chthonicola	sagittata	Speckled Warbler	C
Smicrornis	brevirostris	Weebill	C
Gerygone	olivacea	White-throated Gerygone	C
Acanthiza	reguloides	Buff-rumped Thornbill	C
Philemon	corniculatus	Noisy Friarbird	C
Manorina	melanocephala	Noisy Miner	C
Lichenostomus	chrysops	Yellow-faced Honeyeater	C
Psophodes	olivaceus	Eastern Whipbird	C
Pachycephala	rufiventris	Rufous Whistler	C
Coracina	novaehollandiae	Black-faced Cuckoo-shrike	C
Coracina	tenuirostris	Cicadabird	C
Oriolus	sagittatus	Olive-backed Oriole	C
Cracticus	torquatus	Grey Butcherbird	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C
Taeniopygia	bichenovii	Double-barred Finch	C
Neochmia	temporalis	Red-browed Finch	C
Dicaeum	hirundinaceum	Mistletoebird	C

Site 32:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Melomys	cervinipes	Fawn-footed Melomys	C
Ctenotus	taeniolatus	Copper-tailed Skink	C
Morethia	taeniopleura	Fire-tailed Skink	C

Site 33:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Pseudocheirus	peregrinus	Common Ringtail Possum	C
Physignathus	lesueurii	Eastern Water Dragon	C
Pogona	barbata	Bearded Dragon	C
Varanus	varius	Lace Monitor	C

 ISSN 1037 4701

Site 34:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Bufo	marinus	Cane Toad	C
Litoria	fallax	Eastern Sedgefrog	C
Litoria	latopalmata	Broad-palmed Rocketfrog	C
Limnodynastes	peronii	Striped Marshfrog	C

Site 35:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V

Site 36:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V

Site 37:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V

Site 38:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V

Site 39:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V

Site 40:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Petrogale	penicillata	Brush-tailed Rock-wallaby	V

Site 41:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Felis	catus	Cat (feral)	C
Vulpes	vulpes	Fox	C
Equus	caballus	Horse (feral)	C
Calyptorhynchus	lathami	Glossy Black-Cockatoo	V

Site 42:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Calyptorhynchus	lathami	Glossy Black-Cockatoo	V

Site 43:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Calyptorhynchus	lathami	Glossy Black-Cockatoo	V

Site 44:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Trichosurus	vulpecula	Common Brushtail Possum	C
Litoria	lesueuri	Stony-creek Frog	C
Physignathus	lesueurii	Eastern Water Dragon	C
Tyto	tenebricosa	Sooty Owl	R

Site 45:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Phalacrocorax	melanoleucos	Little Pied Cormorant	C
Falco	berigora	Brown Falcon	C
Turnix	varia	Painted Button-quail	C
Macropygia	amboinensis	Brown Cuckoo-Dove	C
Phaps	chalcoptera	Common Bronzewing	C
Geopelia	humeralis	Bar-shouldered Dove	C
Psephotus	haematonotus	Red-rumped Parrot	C
Chrysococcyx	minutillus	Little Bronze-Cuckoo	C
Aegotheles	cristatus	Australian Owlet-nightjar	C
Chthonicola	sagittata	Speckled Warbler	C
Smicrornis	brevirostris	Weebill	C
Gerygone	olivacea	White-throated Gerygone	C
Acanthiza	pusilla	Brown Thornbill	C
Acanthiza	lineata	Striated Thornbill	C
Plectorhyncha	lanceolata	Striped Honeyeater	C
Entomyzon	cyanotis	Blue-faced Honeyeater	C
Lichenostomus	leucotis	White-eared Honeyeater	C
Melithreptus	albogularis	White-throated Honeyeater	C
Melithreptus	lunatus	White-naped Honeyeater	C
Lichmera	indistincta	Brown Honeyeater	C
Myzomela	sanguinolenta	Scarlet Honeyeater	C
Daphoenositta	chrysoptera	Varied Sittella	C
Myiagra	rubecula	Leaden Flycatcher	C
Coracina	papuensis	White-bellied Cuckoo-shrike	C
Coracina	tenuirostris	Cicadabird	C
Lalage	leucomela	Varied Triller	C
Artamus	superciliosus	White-browed Woodswallow	C
Anthus	novaeseelandiae	Richard's Pipit	C

 ISSN 1037 4701

Site 46:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Cherax	sp.	Yabby	C
Macrobrachium	sp	Long-armed Prawn	C
Paratya	australiensis	Atyid shrimp	C
Retropinna	semoni	Australian Smelt	C
Tandanus	tandanus	Eel-tailed Catfish	C
Craterocephalus	marjoriae	Marjorie's Hardyhead	C
Mogurnda	adspersa	Southern Purple-spotted Gudgeon	C

Site 47:

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Litoria	lesueuri	Stony-creek Frog	C
Elseya	latisternum	Saw-shelled Turtle	C
Cherax	sp.	Yabby	C
Macrobrachium	sp	Long-armed Prawn	C
Paratya	australiensis	Atyid shrimp	C
Anguilla	reinhardtii	Long-finned Eel	C
Retropinna	semoni	Australian Smelt	C
Tandanus	tandanus	Eel-tailed Catfish	C
Craterocephalus	marjoriae	Marjorie's Hardyhead	C
Melanotaenia	fluviatilis	Crimson-spotted Rainbowfish	C
Mogurnda	adspersa	Southern Purple-spotted Gudgeon	C

APPENDIX 5: COMPLETE LIST OF FAUNA RECORDED AT GLEN ROCK

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Mammals			
Antechinus	flavipes	Yellow-footed Antechinus	C
Sminthopsis	murina	Common Dunnart	C
Phascolarctos	cinereus	Koala	M
Petauroides	volans	Greater Glider	C
Petaurus	breviceps	Sugar Glider	C
Petaurus	norfolcensis	Squirrel Glider	C
Pseudocheirus	peregrinus	Common Ringtail Possum	C
Trichosurus	vulpecula	Common Brushtail Possum	C
Macropus	giganteus	Eastern Grey Kangaroo	C
Petrogale	penicillata	Brush-tailed Rock-wallaby	V
Nyctinomus	australis	White-striped Freetail Bat	C
Rhinolophus	megaphyllus	Eastern Horseshoe-bat	C
Miniopterus	australis	Little Bent-wing Bat	C
Lepus	capensis	Brown Hare	C*
Melomys	cervinipes	Fawn-footed Melomys	C
Mus	musculus	House Mouse	C*
Pseudomys	novaehollandiae	New Holland Mouse	C
Rattus	fuscipes	Bush Rat	C
Canis	familiaris	Dingo and Dog (feral)	C*
Vulpes	vulpes	Fox	C*
Felis	catus	Cat (feral)	C*
Equus	caballus	Horse	C*
Bos	taurus	Cattle	C*
Amphibians			
Bufo	marinus	Cane Toad	C*
Litoria	dentata	Bleating Treefrog	C
Litoria	fallax	Eastern Sedgefrog	C
Litoria	latopalmata	Broad-palmed Rocketfrog	C
Litoria	lesueuri	Stony-creek Frog	C
Litoria	nasuta	Striped Rocketfrog	C
Litoria	peronii	Emerald-spotted Treefrog	C
Litoria	rubella	Naked Treefrog	C
Crinia	signifera	Clicking Froglet	C
Limnodynastes	peronii	Striped Marshfrog	C
Reptiles			
Elseya	latisternum	Saw-shelled Turtle	C
Gehyra	dubia	no common name	C
Amphibolurus	nobbi	Nobbi Dragon	C
Physignathus	lesueurii	Eastern Water Dragon	C
Pogona	barbata	Bearded Dragon	C
Varanus	varius	Lace Monitor	C
Carlia	vivax	Lively Skink	C
Cryptoblepharus	virgatus	Wall Skink	C
Ctenotus	robustus	Eastern Striped Skink	C
Ctenotus	taeniolatus	Copper-tailed Skink	C
Egernia	cunninghami	Cunningham's Skink	C
Egernia	frerei	Major Skink	C
Eulamprus	martini	Skink	C
Lampropholis	amicula	Friendly Skink	C
Lampropholis	delicata	Eastern Grass Skink	C

 ISSN 1037 4701

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Lygisaurus	foliorum	Burnett's Skink	C
Morethia	taeniopleura	Fire-tailed Skink	C
Ramphotyphlops	wiedii	no common name	C
Morelia	spilota	Carpet Python	C
Dendrelaphis	punctulata	Common Tree Snake	C
Furina	diadema	Red-naped Snake	C
Pseudechis	porphyriacus	Red-bellied Black Snake	C
Rhinoplocephalus	nigrescens	Eastern Small-eyed Snake	C
Birds			
Coturnix	ypsilophora	Brown Quail	C
Dendrocygna	arcuata	Wandering Whistling-Duck	C
Chenonetta	jubata	Australian Wood Duck	C
Anas	superciliosa	Pacific Black Duck	C
Tachybaptus	novaehollandiae	Australasian Grebe	C
Phalacrocorax	melanoleucos	Little Pied Cormorant	C
Phalacrocorax	varius	Pied Cormorant	C
Phalacrocorax	carbo	Great Cormorant	C
Egretta	novaehollandiae	White-faced Heron	C
Ardea	ibis	Cattle Egret	C
Nycticorax	caledonicus	Nankeen Night Heron	C
Threskiornis	molucca	Australian White Ibis	C
Threskiornis	spinicollis	Straw-necked Ibis	C
Platalea	regia	Royal Spoonbill	C
Platalea	flavipes	Yellow-billed Spoonbill	C
Elanus	axillaris	Black-shouldered Kite	C
Accipiter	cirrhocephalus	Collared Sparrowhawk	C
Aquila	audax	Wedge-tailed Eagle	C
Falco	berigora	Brown Falcon	C
Falco	longipennis	Australian Hobby	C
Falco	cenchroides	Nankeen Kestrel	C
Gallinula	tenebrosa	Dusky Moorhen	C
Turnix	varia	Painted Button-quail	C
Vanellus	miles	Masked lapwing	C
Macropygia	amboinensis	Brown Cuckoo-Dove	C
Phaps	chalcoptera	Common Bronzewing	C
Ocyphaps	lophotes	Crested Pigeon	C
Geopelia	striata	Peaceful Dove	C
Geopelia	humeralis	Bar-shouldered Dove	C
Leucosarcia	melanoleuca	Wonga Pigeon	C
Calyptorhynchus	banksii	Red-tailed Black-Cockatoo	C
Calyptorhynchus	lathami	Glossy Black-Cockatoo	V
Cacatua	roseicapilla	Galah	C
Cacatua	galerita	Sulphur-crested Cockatoo	C
Trichoglossus	haematodus	Rainbow Lorikeet	C
Trichoglossus	chlorolepidotus	Scaly-breasted Lorikeet	C
Glossopsitta	concinna	Musk Lorikeet	C
Glossopsitta	pusilla	Little Lorikeet	C
Alisterus	scapularis	Australian King Parrot	C
Platycercus	elegans	Crimson Rosella	C
Platycercus	eximius	Eastern Rosella	C
Platycercus	adscitus	Pale-headed Rosella	C
Psephotus	haematonotus	Red-rumped Parrot	C
Cacomantis	variolosus	Brush Cuckoo	C

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Cacomantis	flabelliformis	Fan-tailed Cuckoo	C
Chrysococcyx	minutillus	Little Bronze-Cuckoo	C
Eudynamys	scolopacea	Common Koel	C
Scythrops	novaehollandiae	Channel-billed Cuckoo	C
Centropus	phasianinus	Pheasant Coucal	C
Ninox	novaeseelandiae	Southern Boobook	C
Tyto	tenebricosa	Sooty Owl	R
Tyto	alba	Barn Owl	C
Podargus	strigoides	Tawny Frogmouth	C
Aegotheles	cristatus	Australian Owlet-nightjar	C
Alcedo	azurea	Azure Kingfisher	C
Dacelo	novaeguineae	Laughing Kookaburra	C
Todiramphus	sanctus	Sacred Kingfisher	C
Merops	ornatus	Rainbow Bee-eater	C
Eurystomus	orientalis	Dollarbird	C
Pitta	versicolor	Noisy Pitta	C
Cormobates	leucophaeus	White-throated Treecreeper	C
Climacteris	erythrops	Red-browed Treecreeper	R
Malurus	cyaneus	Superb Fairy-wren	C
Malurus	lamberti	Variegated Fairy-wren	C
Malurus	melanocephalus	Red-backed Fairy-wren	C
Pardalotus	punctatus	Spotted pardalote	C
Pardalotus	striatus	Striated Pardalote	C
Sericornis	frontalis	White-browed Scrubwren	C
Chthonicola	sagittata	Speckled Warbler	C
Smicrornis	brevirostris	Weebill	C
Gerygone	olivacea	White-throated Gerygone	C
Acanthiza	pusilla	Brown Thornbill	C
Acanthiza	reguloides	Buff-rumped Thornbill	C
Acanthiza	chrysorrhoa	Yellow-rumped Thornbill	C
Acanthiza	nana	Yellow Thornbill	C
Acanthiza	lineata	Striated Thornbill	C
Anthochaera	carunculata	Red Wattlebird	C
Plectorhyncha	lanceolata	Striped Honeyeater	C
Philemon	corniculatus	Noisy Friarbird	C
Philemon	citreogularis	Little Friarbird	C
Entomyzon	cyanotis	Blue-faced Honeyeater	C
Manorina	melanophrys	Bell Miner	C
Manorina	melanocephala	Noisy Miner	C
Meliphaga	lewinii	Lewin's Honeyeater	C
Lichenostomus	chrysops	Yellow-faced Honeyeater	C
Lichenostomus	leucotis	White-eared Honeyeater	C
Lichenostomus	melanops	Yellow-tufted Honeyeater	C
Melithreptus	albogularis	White-throated Honeyeater	C
Melithreptus	lunatus	White-naped Honeyeater	C
Lichmera	indistincta	Brown Honeyeater	C
Acanthorhynchus	tenuirostris	Eastern Spinebill	C
Myzomela	sanguinolenta	Scarlet Honeyeater	C
Microeca	fascinans	Jacky Winter	C
Petroica	multicolor	Scarlet Robin	C
Petroica	rosea	Rose Robin	C
Eopsaltria	australis	Eastern Yellow Robin	C
Pomatostomus	temporalis	Grey-crowned Babbler	C
Psophodes	olivaceus	Eastern Whipbird	C
Cinclosoma	punctatum	Spotted Quail-thrush	C

 ISSN 1037 4701

GENUS NAME	SPECIES NAME	COMMON NAME	STATUS
Daphoenositta	chrysoptera	Varied Sittella	C
Pachycephala	pectoralis	Golden Whistler	C
Pachycephala	rufiventris	Rufous Whistler	C
Colluricincla	harmonica	Grey Shrike-thrush	C
Monarcha	melanopsis	Black-faced Monarch	C
Myiagra	rubecula	Leaden Flycatcher	C
Myiagra	inquieta	Restless Flycatcher	C
Grallina	cyanoleuca	Magpie Lark	C
Rhipidura	fuliginosa	Grey Fantail	C
Rhipidura	leucophrys	Willie Wagtail	C
Dicrurus	bracteatus	Spangled Drongo	C
Coracina	novaehollandiae	Black-faced Cuckoo-shrike	C
Coracina	papuensis	White-bellied Cuckoo-shrike	C
Coracina	tenuirostris	Cicadabird	C
Lalage	leucomela	Varied Triller	C
Oriolus	sagittatus	Olive-backed Oriole	C
Sphecotheres	viridis	Figbird	C
Artamus	superciliosus	White-browed Woodswallow	C
Cracticus	torquatus	Grey Butcherbird	C
Cracticus	nigrogularis	Pied Butcherbird	C
Gymnorhina	tibicen	Australian Magpie	C
Strepera	graculina	Pied Currawong	C
Corvus	orru	Torresian Crow	C
Ptilonorhynchus	violaceus	Satin Bowerbird	C
Anthus	novaeseelandiae	Richard's Pipit	C
Taeniopygia	bichenovii	Double-barred Finch	C
Neochmia	temporalis	Red-browed Finch	C
Dicaeum	hirundinaceum	Mistletoebird	C
Hirundo	neoxena	Welcome Swallow	C
Cisticola	exilis	Golden-headed Cisticola	C
Zosterops	lateralis	Silvereye	C
Sturnus	vulgaris	Common Starling	C*
Acridotheres	tristis	Common Myna	C*
Fish			
Anguilla	reinhardtii	Long-finned Eel	C
Retropinna	semoni	Australian Smelt	C
Tandanus	tandanus	Eel-tailed Catfish	C
Craterocephalus	marjoriae	Marjorie's Hardyhead	C
Melanotaenia	fluviatilis	Crimson-spotted Rainbowfish	C
Mogurnda	adspersa	Southern Purple-spotted Gudgeon	C
Crustaceans			
Cherax	sp.	Yabby	C
Macrobrachium	sp	Long-armed Prawn	C
Paratya	australiensis	Atyid shrimp	C

Status Codes

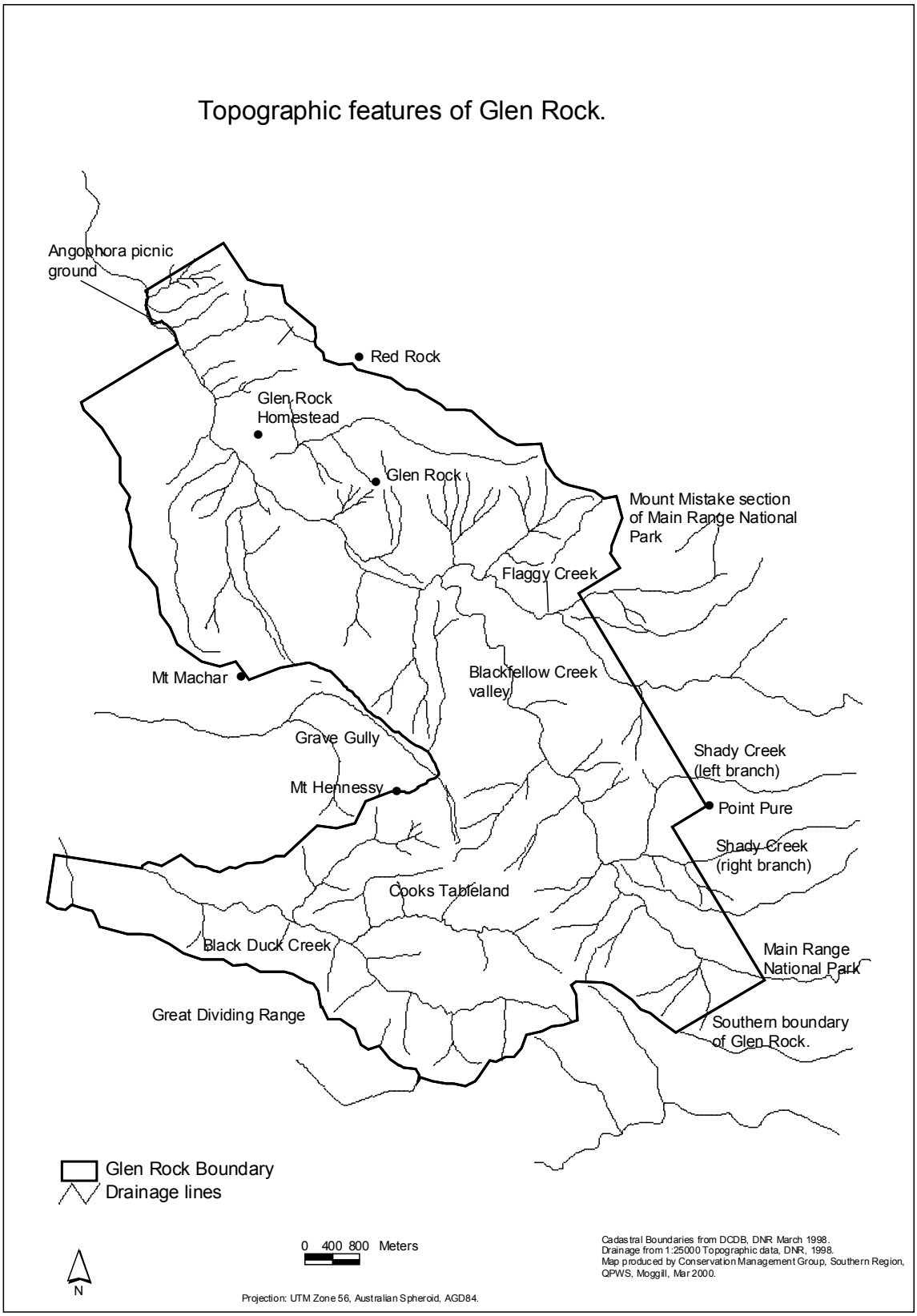
V = Vulnerable
R = Rare
M = Management implications / cultural significance
C = Common fauna
* = Exotic Introduced fauna

 ISSN 1037 4701

MAPS

MAP 1: LOCALITY MAP

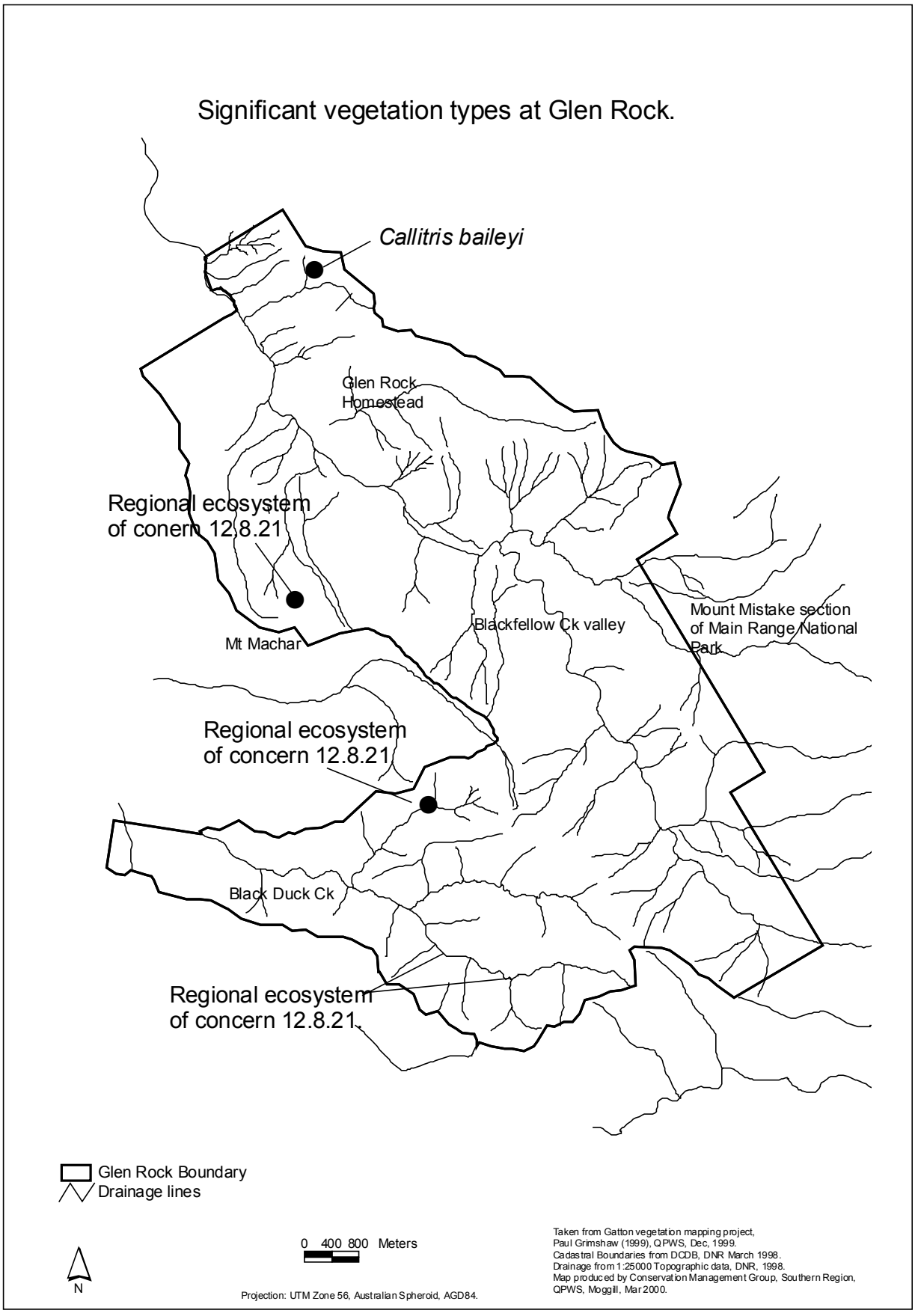
ISSN 1037 4701



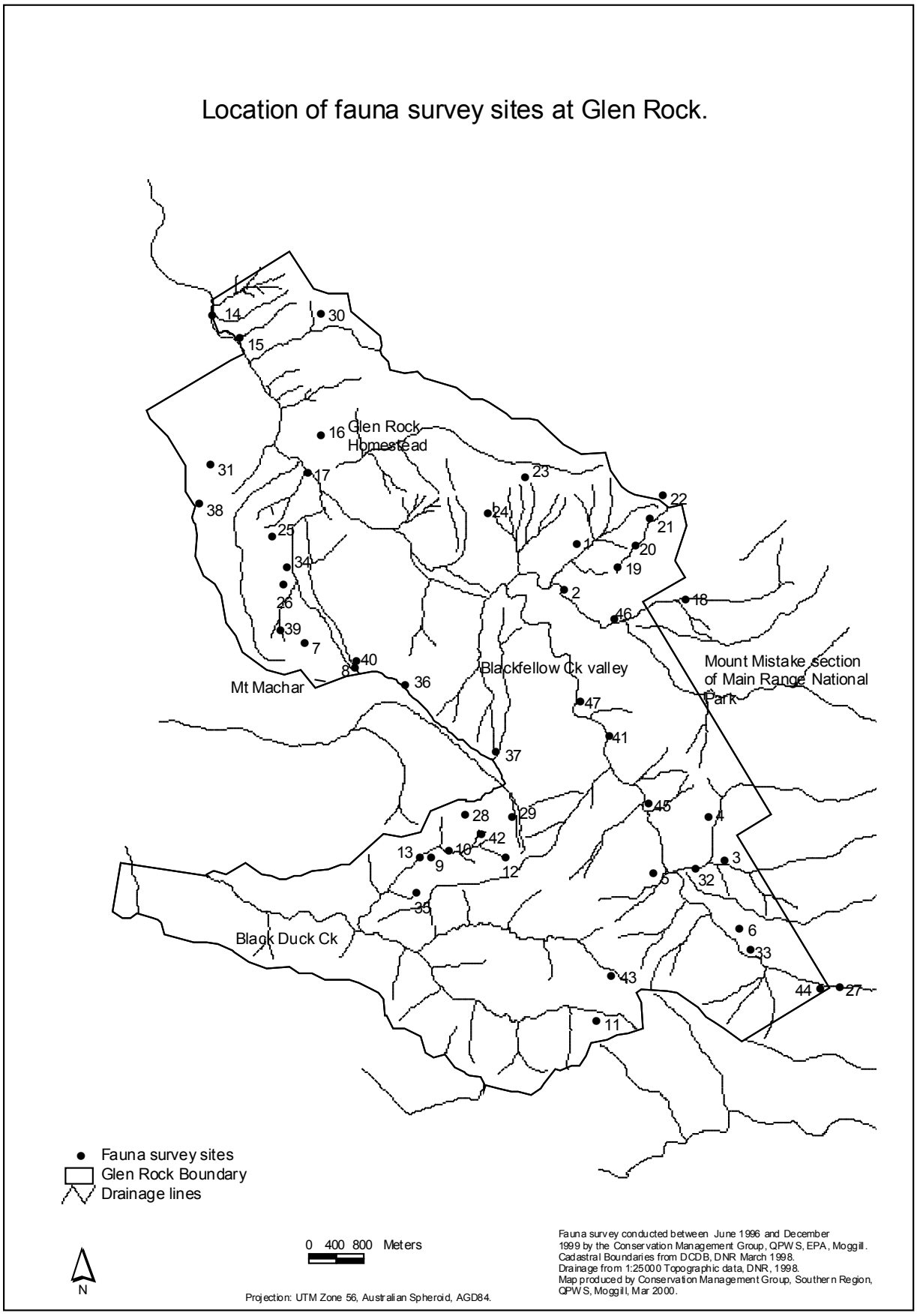
MAP 2: TOPOGRAPHIC FEATURES OF GLEN ROCK

(INSERT MAP 3: VEGETATION MAP OF GLEN ROCK HERE)

 ISSN 1037 4701

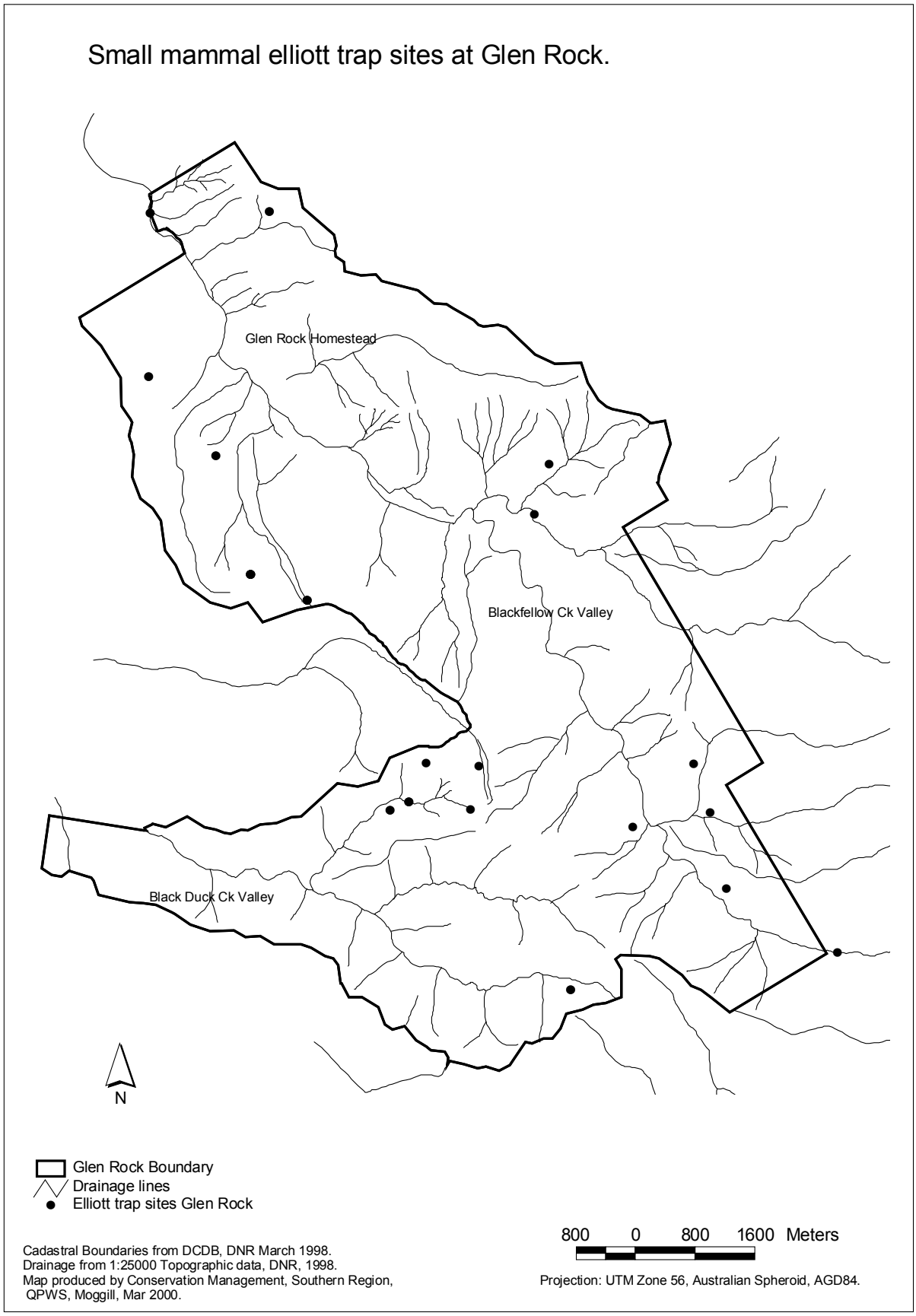


MAP 4: SIGNIFICANT VEGETATION TYPES AT GLEN ROCK

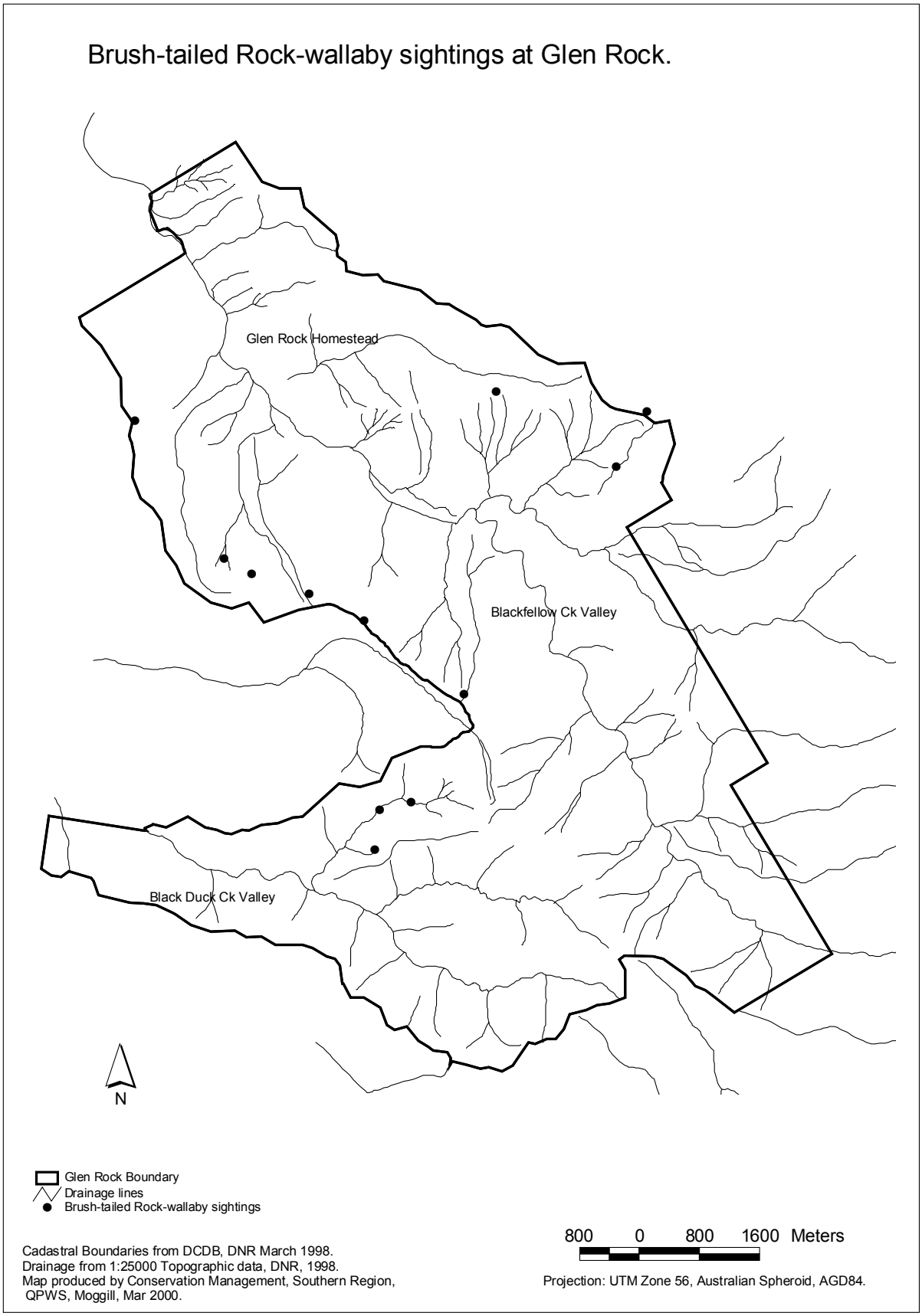


MAP 5: LOCATION OF FAUNA SURVEY SITES AT GLEN ROCK

 ISSN 1037 4701

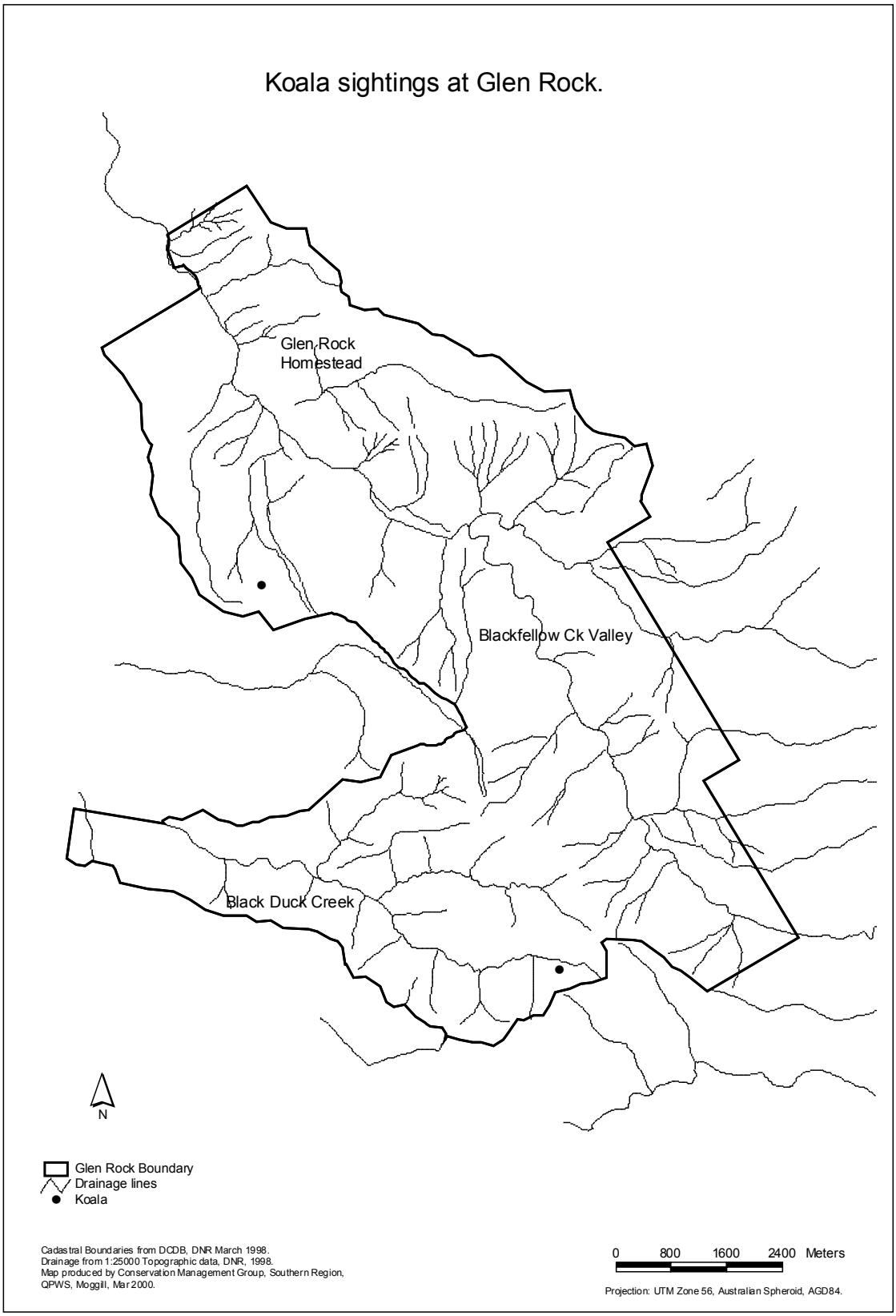


MAP 6: SMALL MAMMAL ELLIOTT TRAP SITES AT GLEN ROCK

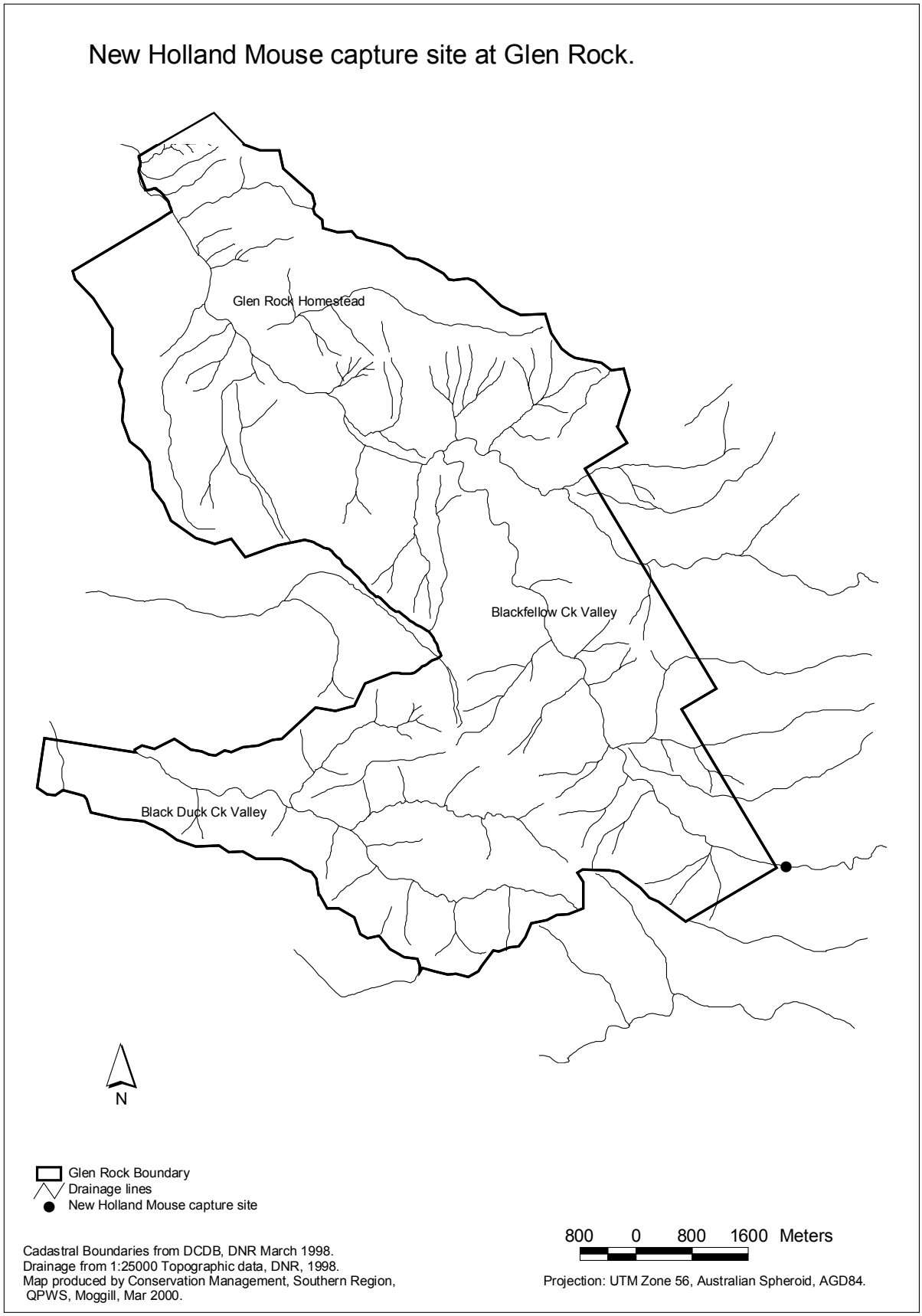


MAP 7: BRUSH-TAILED ROCK-WALLABY SIGHTINGS AT GLEN ROCK

 ISSN 1037 4701

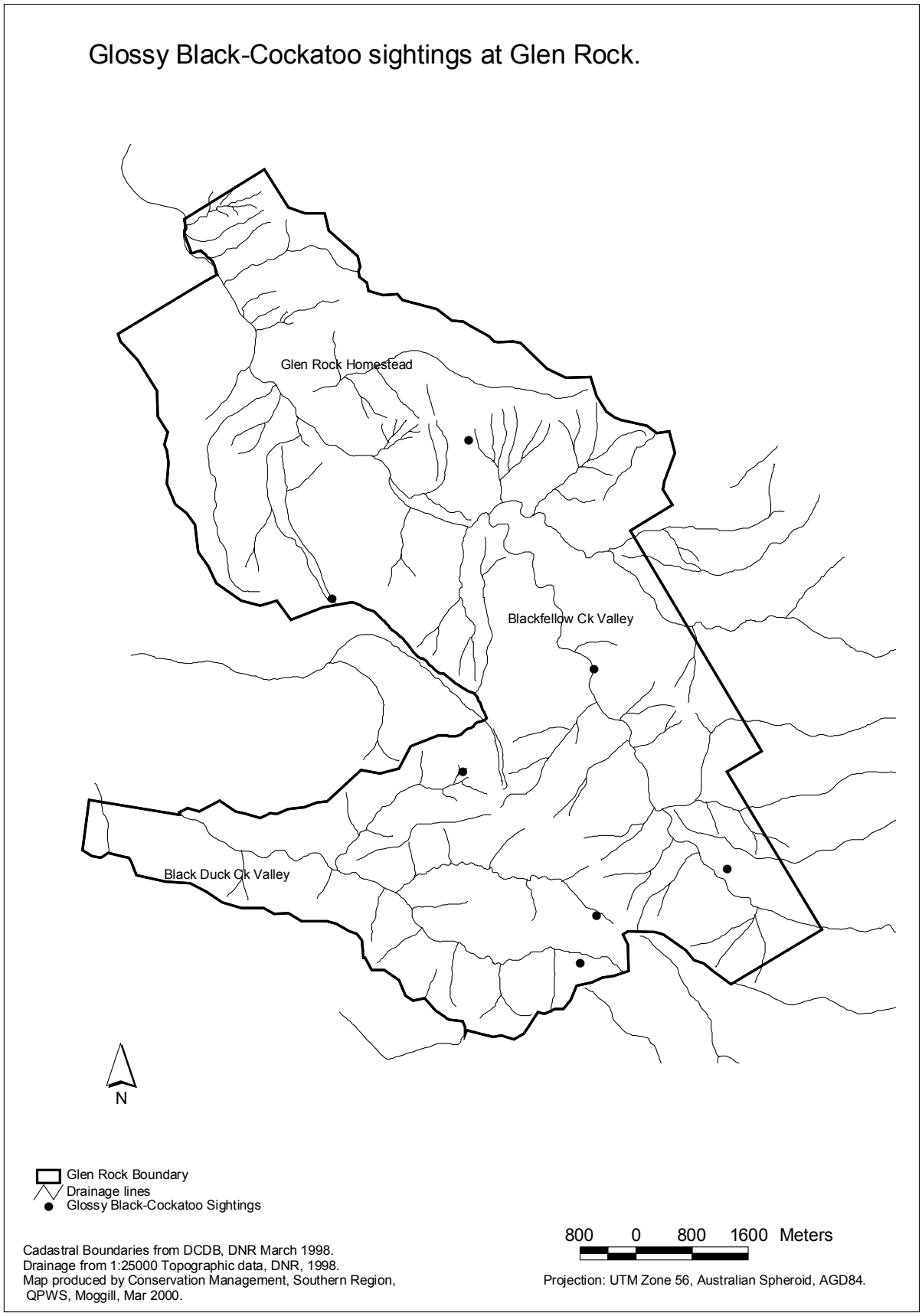


MAP 8: KOALA SIGHTINGS AT GLEN ROCK

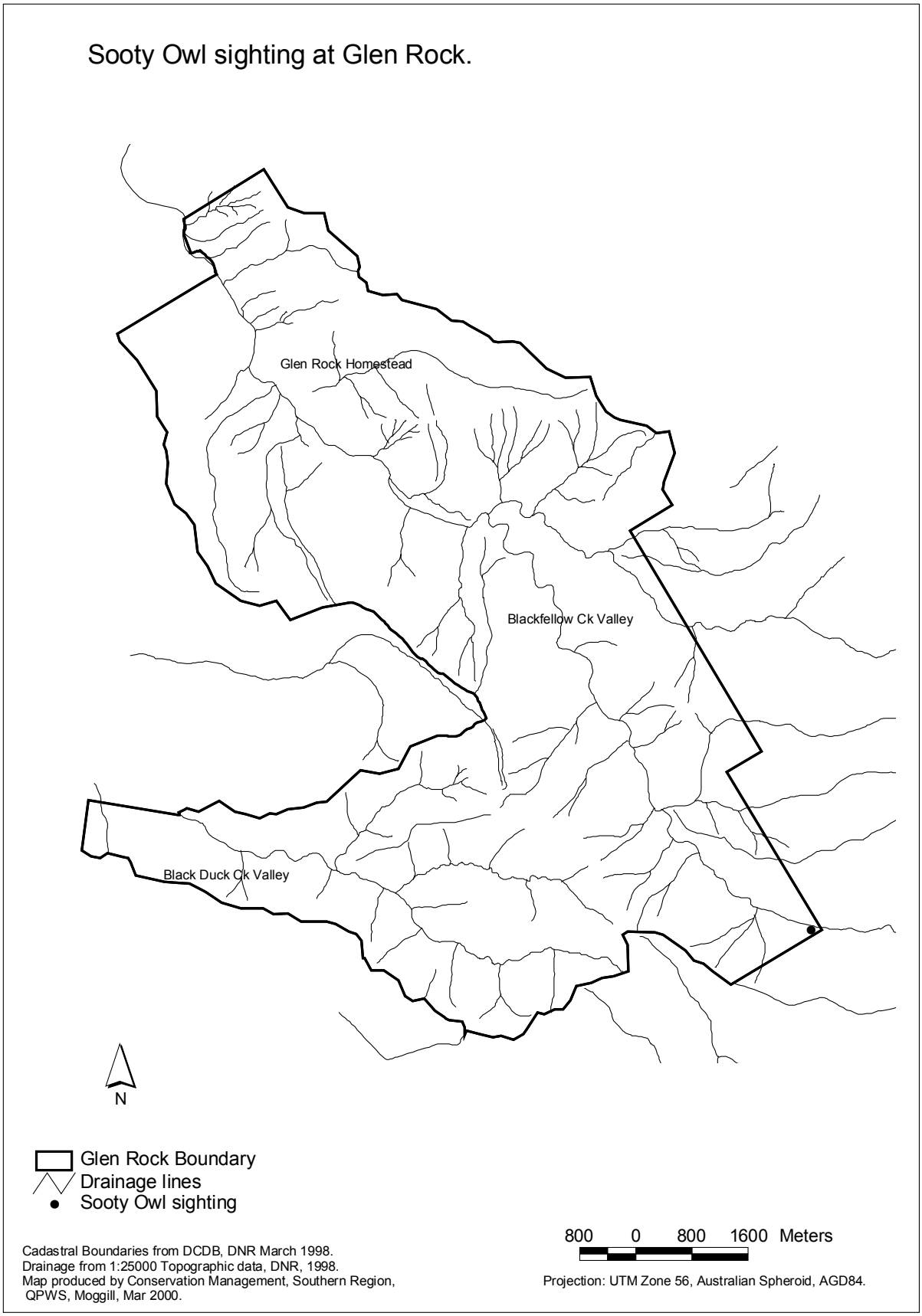


MAP 9: NEW HOLLAND MOUSE CAPTURE SITE AT GLEN ROCK

 ISSN 1037 4701

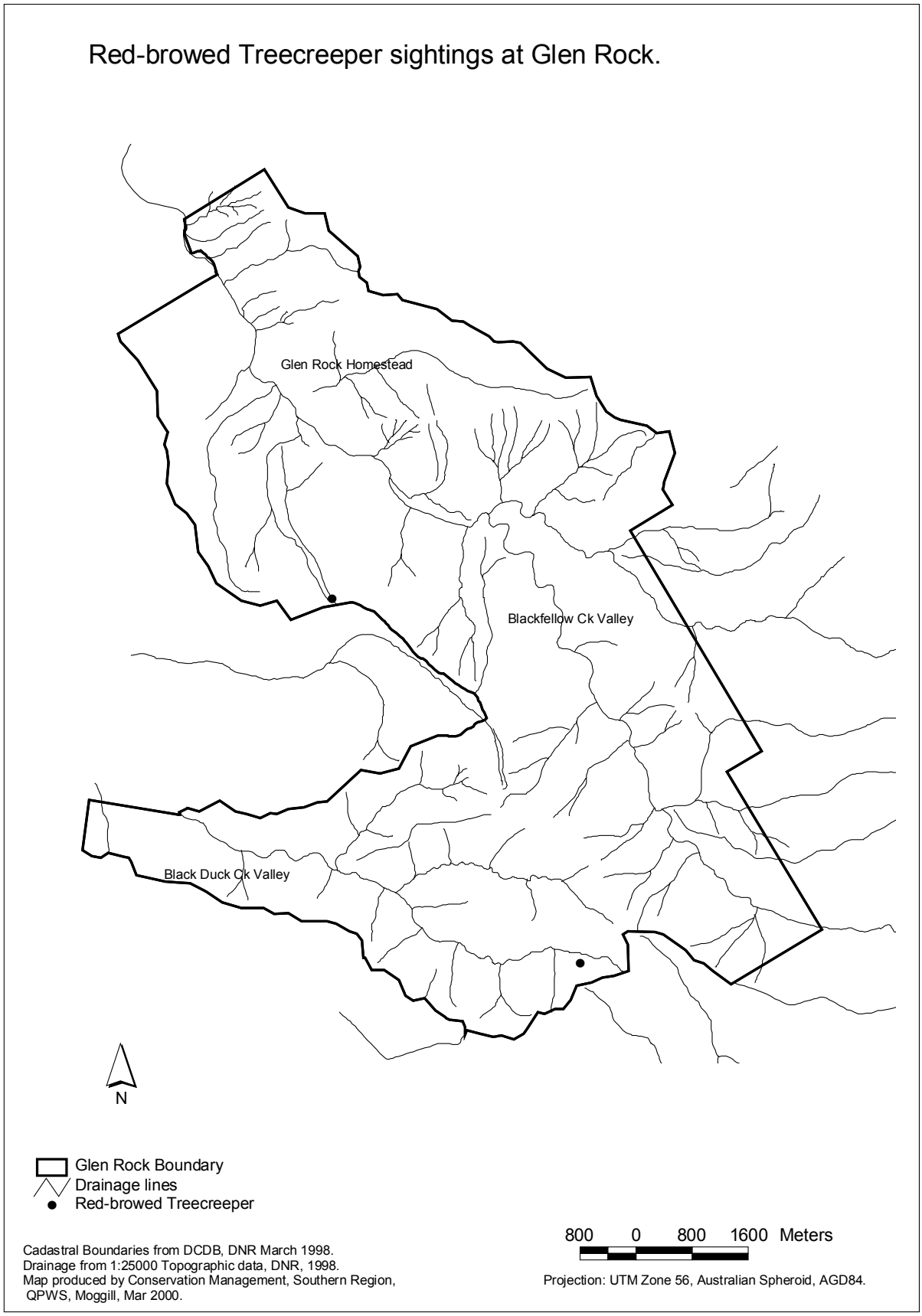


MAP 10: GLOSSY BLACK-COCKATOO SIGHTINGS AT GLEN ROCK



MAP 11: SOOTY OWL SIGHTING AT GLEN ROCK

 ISSN 1037 4701



MAP 12: RED-BROWED TREECREEPER SIGHTINGS AT GLEN ROCK

PHOTOGRAPHS

ISSN 1037 4701

Plate 1: Vegetation Type 3a, very tall open forest/woodland/open woodland extends along Blackfellow, Shady and Flaggy Creek valleys and the dominant species are *Eucalyptus tereticornis* and *Casuarina cunninghamiana.*

Plate 2: Vegetation Type 8a, very tall open forest/woodland occurs on the high elevation areas of Cook's Tableland and the steep slopes adjoining Mount Mistake section of Main Range National Park. Dominant species include *Eucalyptus biturbiinata and Eucalyptus eugenioides.*

Plate 3: Vegetation Type 8b, very tall open forest/tall/very tall woodland of *Eucalyptus tereticornis, E. melliodora* occurs on higher elevated slopes with shallow soils. This community is common throughout the Glen Rock landscape.

Plate 4: Vegetation Type 8d, very tall woodland/open woodland of *Eucalyptus crebra, E. melanophloia.* This community tends to occur on crests and ridges with basalt flows or residual basalt capping. Weed invasion is prevalent, in particular *Lantana camara.*

 ISSN 1037 4701

Plate 5: Vegetation Type 8e, very tall/tall/open forest or mid high closed forest dominated by *Lophostemon confertus.* This community occurs in sheltered parts of Glen Rock including gullies.

Plate 6: Vegetation Type 8m, very tall/tall/mid-high closed forest/vine thicket of *Flindersia australis, Vitex lignumvitae, Flindersia collina and Ficus obliqua/platypodia/virens.* This community occurs on olivine basalt scree slopes.

Plate 7: Vegetation Type 8j, mid-high woodland/open woodland (usually associated with steep exposed rock surfaces) of a heterogeneous mix of trees (stunted shrubs, forbs and grasses). Tree species include *Eucalyptus teteticornis, E. melliodora, E. biturbinata and E. eugenioides.* These areas provide significant habitat for the Brush-tailed rock-wallaby *Petrogale penicillata.*

Plate 8: Vegetation Type 8n, extremely tall /very tall closed forest of *Argyrodendron actinophyllun, Sloanea woollsii and Elaeocarpus kirtonii.* This community only occurs in the Flaggy Creek Valley and is common in the adjoining Mt Mistake section of Main Range National Park.

ISSN 1037 4701

Plate 9: Vegetation Type C (Clearing, non intensive farming, grazing paddocks). Areas of Blackfellow Creek valley have been cleared in the past for grazing purposes. Weed species associated with land clearing have invaded the understorey, including *Lantana camara.*

Plate 10: R (Regrowth with exotic weed understorey. There is a possibility that within 15 to 20 years, with appropriate management regimes (no overgrazing, no high frequency fires and with weed control) that some of the areas classified as regrowth may recover sufficiently to be reclassified as remnant vegetation.

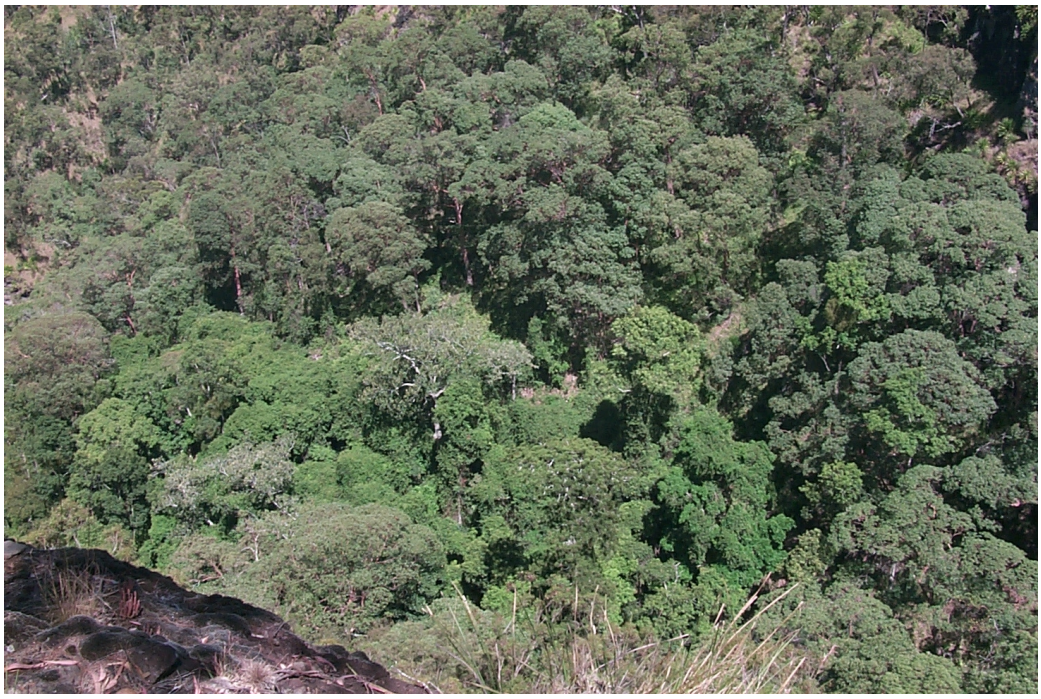


Plate 11: Cook's Tableland Gorge (south of Mt Hennessy) is an important refuge area for wildlife including the Brush-tailed rock-wallaby. Areas such as these are significant in times of fire and drought as they provide a permanent source of water. Vegetation map units represented here include 8e and 8m.

Plate 12: The main waterway through the Glen Rock area consists of Blackfellow Creek and its permanent pools which support a diversity of aquatic and terrestrial fauna. The sandstone cliffs belong to vegetation map unit 9h which were too small to map at 1:25 000 scale.

 ISSN 1037 4701

ISSN 1037 4701

Plate13: The vulnerable plant *Callitris bailleyii was* recorded at site 30 in the north eastern corner of Glen Rock. This community is susceptible to the impact of fire.

Plate14: View of Mt Machar from Blackfellow Creek valley with *Callitris glaucaphylla* shown in the foreground. A significant refuge area for the Brush-tailed Rock-wallaby is located directly below the cliffs of Mt Machar.

Plate 15: The vulnerable Brush-tailed Rock-wallaby *Petrogale penicillata* was recorded along the steep rocky outcrops. Site 7 and 13 were identified as major core refuge areas for this species at Glen Rock. Photo QPWS, Moggill.

Plate 16: The Sugar Gliders *Petaurus breviceps* were observed in the tall open forest in the Blackfellow Creek valley and in the Cooks Tableland areas of Glen Rock. Photo QLD Museum

 ISSN 1037 4701

Plate 17: The New Holland Mouse *Pseudomys novaehollandiae* was recorded on the boundary of Glen Rock and the Main Range National Park in the Blackfellow Creek valley. This capture represents only the third known record for this species in Queensland. Photo QLD Museum.

Plate 18: The Common Dunnart *Sminthopsis murina* was recorded in the tall open forest at site 9 in the Cooks Tableland area. Photo QLD Museum.

Plate 19: The Stony-creek Frog *Litoria lesueuri* was common throughout the Blackfellow, Flaggy and Shady Creek valleys. Photo QPWS, Moggill, H. Hines.

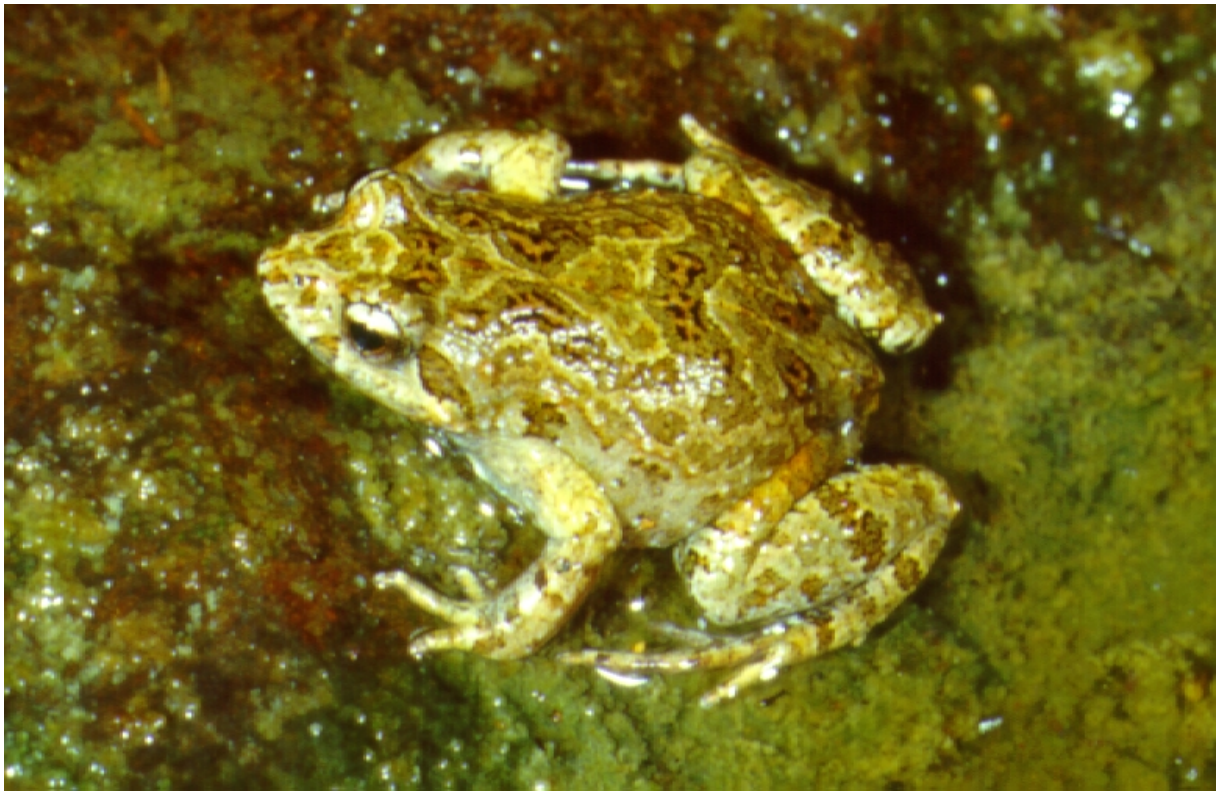


Plate 20: The Clicking Froglet *Crinia signifera* was recorded in the open forest areas of Glen Rock. Photo QPWS, Moggill, H. Hines.

 ISSN 1037 4701

ISSN 1037 4701

Plate 21: The Eastern Water Dragon *Physignathus lesueurii* was observed along Blackfellow Creek towards the southern boundary of Glen Rock. Photo QLD Museum.

Plate 22: Cunningham's Skink *Egernia cunninghami* was recorded in the open forest communities of Glen Rock. Photo QPWS, Moggill.

Plate 23: The Blind Snake *Ramphotyphlops wiedii* was recorded at site 14. Photo QLD Museum.

Plate 24: Red-napped Snake *Furina diadema* was recorded in the open forest at site 31. Photo QLD Museum.

ISSN 1037 4701

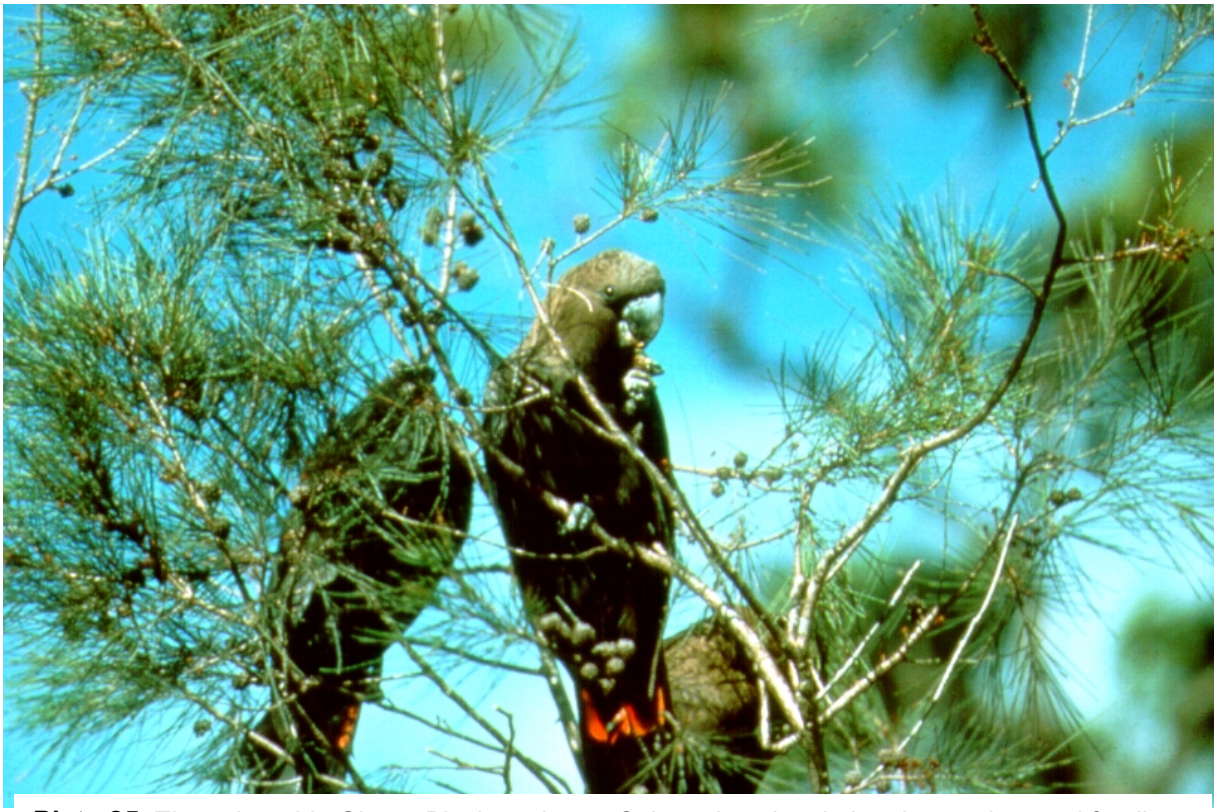


Plate 25: The vulnerable Glossy Black-cockatoo *Calyptorhynchus lathami* was observed feeding on the fruits of the Casuarina trees in the Blackfellow Creek valley and the high elevation areas of Cooks Tableland. Photo QPWS, Moggill.

Plate 26: The Musk Lorikeet *Glossopsitta concinna* was recorded in the Cooks Tableland area of Glen Rock. Photo QLD Museum.

Plate 27 Spotted Pardalote

Plate 28: The Yellow-tufted honeyeater *Lichenostomus melanops* was recorded in the Cooks Tableland area of Glen Rock. Photo Qld Museum.

 ISSN 1037 4701