



SUSTAINABILITY
FUTURE GROWTH

VALE EXPLORATION PTY LTD

BRUNCHILLY PROJECT FLORA AND FAUNA DESKTOP STUDY REPORT

**Tenements: EL27191, EL27192, EL27546, EL27547,
EL27612, EL27613 & EL27614**

May 2011

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1. INTRODUCTION

In May 2011, Sustainability Pty Ltd (Sustainability) was engaged by Vale Exploration Pty Ltd (Vale) to perform a flora and fauna desktop study of the Brunchilly Project site (Tenements EL27191, EL27192, EL27546, EL27547, EL27612, EL27613 and EL27614) in the Northern Territory (Figure 1). The purpose of the survey was to identify any species of conservation significance likely to be present in the Project area and so ensure that proposed exploration operations comply with relevant territory and federal environmental legislation and subsequently minimise adverse impacts to the environment.

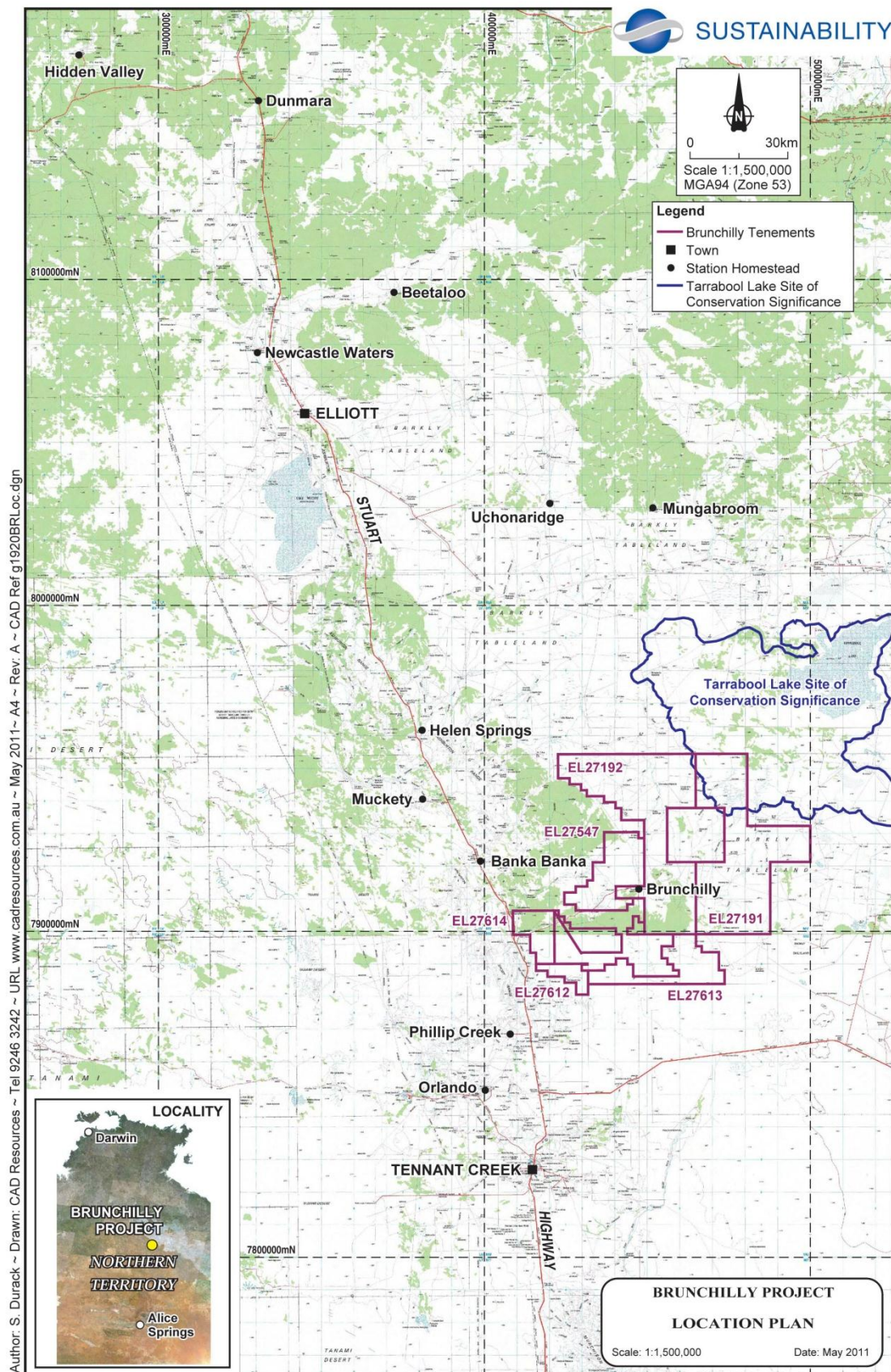


Figure 1: Brunchilly Project Location

2. METHODOLOGY

The desktop flora and fauna assessment was conducted in three stages. The first stage consisted of a search of species listed under the federal government database using the “Protected Matters Search Tool”. This information provides general guidance on matters of national environmental significance and other matters protected by the *Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. The Protected Matters Search Tool is managed by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) and is publically available online (DSEWPC, 2011).

The *EPBC Act* Protected Matters site requires the submission of geographical co-ordinates in the form of a polygon, to define an area of interest, to generate an *EPBC Act* Protected Matters flora and fauna species report. The entire Brunchilly Project area was included in the *EPBC Act* database search, which was an area of 326,729 hectares, plus a one kilometre “buffer” around the border of each of the seven tenements. A buffer between one and 10 kilometres must be selected in the search process. The minimum buffer size was chosen for the *EPBC Act* database search, because Vale will not be operating outside of the Exploration Tenements.

The geographical co-ordinates of each tenement can be found by first registering with, then accessing, the Titles Information System (TIS) (TIS, 2011). By entering in each tenement title, a map of the tenement and surrounding titles is produced, and geographical location points and other information regarding the tenement can also be viewed. By clicking on any point related to the tenement location, geographical co-ordinates can be produced. In this study, the corner point locations of the tenement boundary were required (which formed a co-ordinate polygon) for the *EPBC Act* data search and similarly for the second stage of the methodology – searching the Northern Territory Government (NTG) flora and fauna database.

The NTG flora and fauna database is managed by the Northern Territory’s Department of Natural Resources, Environment, The Arts and Sport (NRETAS). A request for data relating to a specific area in the Northern Territory can be made online with NRETAS (NRETAS, 2011c). The data request requires a form to be downloaded from the website and two geographic locations of the site are to be submitted for each tenement of interest: the top left and bottom right co-ordinates, allowing the mapping tool to create a rectangular or square search area. These co-ordinates can be found using the TIS website. As the tenements are usually irregularly shaped, the rectangular/square area generally encompasses a greater area than just the tenements of interest for the flora and fauna search. The data request usually takes several days to return the digital data files which must then be collated and analysed to determine several factors, such as which tenement each species is located on and the conservation status of species likely to be present.

Geographic Information Systems (GIS) specialists (CAD Resources) were engaged to assist in differentiating the tenement locations of the species within each tenement utilising specialist mapping programs.

The third stage of the flora and fauna desktop study involved researching various online resources to assist with describing the current conditions at the project site. This included, but was not limited to:

- The Bureau of Meteorology for climatic data (BOM, 2011); and
- NRETAS resource documents that accompany the Northern Territory Parks and Conservation Masterplan, primarily the Bioregions Assessment of Key Biodiversity Values and Threats document (Baker *et al.*, 2005).

3. DESKTOP STUDY FINDINGS

3.1 CURRENT BRUNCHILLY PROJECT CONDITIONS

3.1.1 Landscape and Geology

The Brunchilly Project area covers mainly Cambrian rocks of the Georgina Basin, with the westernmost tenements also including strata from the Tomkinson Creek Province (Tennant Region). The project straddles both Davenport Murchison Ranges (DMR) and Mitchell Grass Downs (MGD) bioregions, which are further described below.

DMR: This bioregion comprises low but rugged rocky hills formed from folded volcanics, sandstone, siltstone and conglomerates. Soils are generally shallow lithosols but fine grained alluvial soils occur in the valleys and surrounding plains. Vegetation includes hummock grasslands and low open woodlands dominated by eucalypt and *Acacia* species (Baker *et al.*, 2005).

MGD: This bioregion lies over the Georgina and Dunmurra basins containing sedimentary rocks of Cretaceous, Tertiary and Cambrian ages and soils are predominantly cracking clays. The vegetation is predominantly *Eucalyptus microtheca* low open-woodland with Bluebush (*Chenopodium auricomum*) sparse-shrubland understorey and Mitchell Grass (*Astrebla*) grassland on the Barkly Tableland (Baker *et al.*, 2005).

3.1.2 Surface Water / Hydrology

Drainage within the tenements is dominated by ephemeral creeks, including Attack Creek, Brunchilly Creek, Bullcamp Creek, Chow-chowra Creek, Lirri-lirri Creek and Tooliganbilly Creek, that drain into Tarrabool Lake to the north-east or Lake Sylvester and Lake Corella to the east.

The inner basin of Tarrabool Lake occurs outside the Project area (approximately 20km north east of the north eastern corner of tenement EL27191). However, in exceptionally wet years, the Tarrabool Lake floods and the extent of the flooded area (the outer basin) extends into the Brunchilly Project on the north-eastern corners of tenements EL27191 and EL27192 (see Figure 1). During exceptionally wet years, Lake Tarrabool joins with Eva Downs Swamp to the North (outside the tenement area) and together cover an area of over 275,000 hectares.

The outer basin of Tarrabool Lake (plus a two kilometre buffer) is an NTG listed 'Site of Conservation Significance' and the largest basin-form freshwater wetland and largest wooded swamp in Tropical Australia. NRETAS ranks its significance rating as 'International Significance' (NRETAS, 2011f). The Australian Government list Tarrabool Lake as an 'Indicative Place' and is registered on the National Estate (Australian Government, 2011c).

Unlike the other Barkly Tableland lakes, Tarrabool Lake is dominated by woodland of Coolibah (*Eucalyptus coolabah*) and has a wooded area of at least 120,000 hectares, making it one of Australia's largest wooded swamps. The lake also supports large areas of grassland and open Lignum (*Muehlenbeckia florulenta*) and Bluebush shrubland (NRETAS, 2011f).

3.1.3 Climate and Hydrology

The Brunchilly region is semi-arid with annual rainfall of 414.2 millimetres¹. The climate is characterized by distinct wet and dry seasons with the majority of rain falling between November and March. The predominant wind direction is from the east (BOM, 2011).

Table 1: Climate Statistics – Brunette Downs

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Max Temp °C ²	37.0	36.3	35.2	33.6	29.9	26.8	26.7	29.6	33.5	36.6	38.0	38.5
Highest Temp °C	44.3	45.5	42.5	39.1	38.1	34.7	35.8	37.4	40.3	44.2	44.3	45.5
Mean days ≥ 40 °C	6.9	4.6	1.0	0.0	0.0	0.0	0.0	0.0	0.1	3.5	8.7	10.7
Mean Minimum Temp °C	24.5	24.2	22.3	19.2	15.1	11.4	10.6	12.5	16.7	20.6	23.0	24.4
Lowest Temp °C	16.5	16.1	11.4	8.7	4.0	1.7	1.4	1.7	5.0	7.5	13.2	15.0
Mean Rainfall (mm) ³	106.7	100.1	54.2	14.8	8.1	7.1	4.5	1.4	6.0	15.2	29.0	67.2
Mean number of days of rain >1mm	8.2	8.2	4.8	1.6	0.9	0.7	0.6	0.3	0.8	2.0	3.8	6.0

Key: Red = Maximum value; Blue = Minimum value.

¹ Rainfall measurements from 1891 - 2010 (i.e. 116 years data)

² Temperature measurements from 1957 - 2010

³ Rainfall measurements from 1949 - 2010

3.2 FLORA AND VEGETATION

The flora and vegetation desktop surveys were focused on the areas outlined in Figure 2. The results of the survey are summarised below.

3.2.1 Vegetation of Brunchilly Project Area

On a regional scale, the project straddles both DMR and MGD bioregions, which are described previously in Section 3.1.1.

Vegetation communities within the project area are *Astrebla* sp. low tussock grassland, with smaller pockets of *Chenopodium* sp. open chenopod shrubland and *Eucalyptus* sp. low open woodland. The southern third of EL27191 is dominated by *Corymbia* sp. low open woodland (see Figure 2) (Baker *et al.*, 2005).

Brunchilly tenements have been covered by regional vegetation mapping but there has been limited flora sampling within the Brunchilly Project area. *EPBC Act* Protected Matters searches have showed that no threatened ecological communities (under the *EPBC Act*) occur within the tenements. A NRETAS database search revealed no endangered flora species are likely to occur on the site.

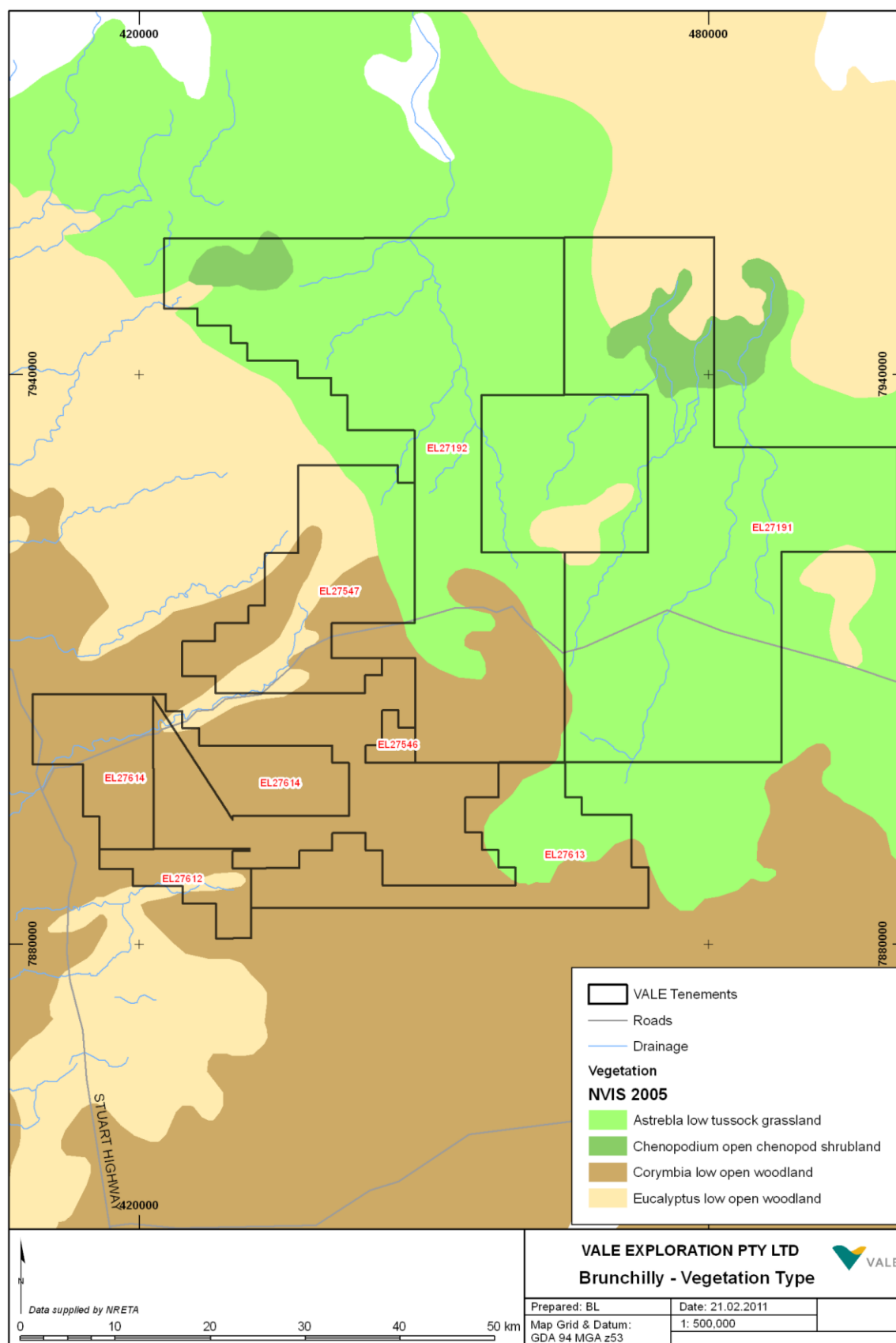


Figure 2: Brunchilly Project Vegetation Type

3.2.2 NRETAS Flora Database Search Results

A search of the NRETAS database found that there were no plant species of significant conservation status, pursuant to the *Territory Parks and Wildlife Conservation Act 2009* as listed by the Northern Territory Government, found within the Brunchilly Project area during the 2011 desktop survey.

A total of 201 vascular taxa from 90 genera and 31 families were listed as occurring in the project area. Two families dominated in terms of taxa numbers; *Poaceae* and *Fabaceae*. Taxa from *Myrtaceae*, *Amarthaceae*, *Asteraceae*, *Malvaceae* and *Cyperaceae* were also dominant but to a lesser extent (NRETAS, 2011c).

Table 2 summarises the categorised flora species found within the Brunchilly Project site and a full listing of the species is included in Appendix B.

Table 2: Summary of Flora Species Categorised in NRETAS Database Search

Status	Taxa Recorded
Data Deficient	174
Least Concern	24
Not Evaluated	3
<i>Total</i>	<i>201</i>

3.2.3 EPBC Act Flora Database Search Results

The *EPBC Act* identifies 20 flora species as invasive species of national significance that pose a threat to biodiversity. The *EPBC Act* database search recorded five of those 20 invasive species as potentially occurring in the Brunchilly Project area, and these are presented in Table 3. The profiles of these five species are outlined in Appendix F. No other matters relevant to the *EPBC Act* were reported.

Table 3: Flora Species of National Significance

Species	Common Name (s)	Status	Tenement
<i>Acacia nilotica</i> subsp. <i>indica</i>	Prickly Acacia	Invasive	EL27547, EL27191, EL27192.
<i>Cenchrus ciliaris</i>	Buffel-grass, Black Buffel-grass	Invasive	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.
<i>Parkinsonia aculeata</i>	Parkinsonia, Jerusalem Thorn, Jelly Bean Tree, Horse Bean	Invasive	EL27547, EL27612, EL27614, EL27191, EL27192.
<i>Parthenium hysterophorus</i>	Parthenium Weed, Bitter Weed, Carrot Grass, False Ragweed	Invasive	EL27547, EL27191, EL27192.
<i>Prosopis</i> ssp.	Mesquite, Algaroba	Invasive	EL27547, EL27191, EL27192.

3.2.4 Flora Data Discussion

The NRETAS flora database search results illustrates that the data is not extensive or recent, as tenement EL27546 does not have any recorded sightings, and three of the tenements (EL27547, EL27612 and EL27613) contribute to the majority (67.3 percent) of the Brunchilly Project records. The most recent flora record was six years ago, in 2005. Prior to that, four records were documented in 2001 (see Appendix B for the full NRETAS flora list of the Brunchilly Project records).

The *EPBC Act* only suggested five flora species of conservation significance, which were all invasive weed species that are outlined in Appendix F. The Vale Exploration Programme already has weed management strategies instigated to limit the further spread of weeds, such as Buffel Grass. Such measures include wash down of vehicles entering and leaving the project area, monitoring for weeds on the access tracks and at active exploration areas at both the start of and at the end of each wet season and spraying any new weed infestations with herbicide.

3.3 FAUNA

A NRETAS search and an *EPBC Act* Protected Matters search was also conducted for potential fauna species at the Brunchilly Project area (Figure 3 summarises the fauna of conservation significance recorded in the search). The search results are discussed at the end of this section.

3.3.1 NRETAS Fauna Database Search Results

The NRETAS database search returned 151 reported fauna sightings within the Brunchilly Project tenements including several species of conservation significance pursuant to the *Territory Parks and Wildlife Conservation Act 2009*, as listed by the NTG (NRETAS, 2011d). It should be noted, however, that there has not been an extensive and recent field study to contribute to this database. For example, some of the tenements were surveyed a relatively long time ago, and so a further field study is recommended. Table 4 summarises the categorised species reported in the NRETAS database search and Table 5 presents the fauna of conservation significance. The definitions of these NRETAS categories are presented in Appendix D and a full listing of the species recorded in the search is presented in Appendix C.

Table 4: Summary of Fauna Species Categorised in NRETAS Database Search

NT Conservation Status	Number of Sightings
Endangered	1
Vulnerable	2
Near Threatened	4
Introduced	7
Least Concern	135
Data Deficient	2
<i>Total</i>	<i>151</i>

Table 5: Significant Fauna Species Recorded in NRETAS Database Search

Common Name	Scientific Name	NT Conservation Status	Tenement sighted on	Number of Sightings	Date of Sighting
Australian Bustard	<i>Ardeotis australis</i>	Vulnerable	EL27614	1	08/03/2001
Western Chestnut Mouse	<i>Pseudomys nanus</i>	Near Threatened	EL27547	3	14/06/1984
Australian Bustard	<i>Ardeotis australis</i>	Vulnerable	EL27612	1	12/02/1984
Western Chestnut Mouse	<i>Pseudomys nanus</i>	Near Threatened	EL27547	1	31/10/1983
Gouldian Finch	<i>Erythrura gouldiae</i>	Endangered	EL27546	1	29/07/1974

The introduced species and data deficient species are not of high conservation significance, but the data may be useful for site management requirements and comparison with future fauna survey reports to assist in determination of population trends, and environmental impact of exploration, if any. The introduced species and data deficient species recorded in the NRETAS database search are presented in Table 6 and Table 7, respectively.

Table 6: Introduced Species Categorised in the NRETAS Database Search

Common Name	Scientific Name	Northern Territory Government Conservation Status	Tenement sighted on	Number of Sightings	Date of Sighting
House Mouse	<i>Mus musculus</i>	Introduced Species	EL27191	1	30/07/1983
Cat	<i>Felis catus</i>	Introduced Species	EL27547	1	10/11/1968
House Mouse	<i>Mus musculus</i>	Introduced Species	EL27191	1	30/08/1966

Common Name	Scientific Name	Northern Territory Government Conservation Status	Tenement sighted on	Number of Sightings	Date of Sighting
House Mouse	<i>Mus musculus</i>	Introduced Species	EL27614	1	29/08/1966
				3	28/06/1966

Table 7: Data Deficient Species Categorised in the NRETAS Database Search

Common Name	Scientific Name	Northern Territory Government Conservation Status	Tenement sighted on	Number of Sightings	Date of Sighting
Spencer's Monitor	<i>Varanus spenceri</i>	Data Deficient	EL27613	1	1902
				1	1904

3.3.2 EPBC Act Fauna Data Search Results

The Protected Matters search tool returned several fauna "species or species habitat that may occur within the area". These species are presented in the following tables and an example of the Protected Matters Reports is included in Appendix A.

Table 8: Birds recorded in EPBC Act Search

Common Name	Scientific Name	Status	Tenements	Type of Presence
Australian Painted Snipe	<i>Rostratula australis</i>	Vulnerable	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Species or species habitat may occur within the area

Table 9: Mammals recorded in *EPBC Act* Search

Common Name	Scientific Name	Status	Tenements	Type of Presence
Crest-tailed Mulgara	<i>Dasyurus cristicauda</i>	Vulnerable	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Species or species habitat likely to occur within the area
Greater Bilby	<i>Macrotis lagotis</i>	Vulnerable	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Species or species habitat likely to occur within the area

Table 10: Introduced Mammal Species recorded in *EPBC Act* Search

Common Name	Scientific Name	Status	Tenements	Type of Presence
Cat, House Cat, Domestic Cat	<i>Felis catus</i>	Invasive	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Species or species habitat likely to occur within the area
Rabbit, European Rabbit	<i>Oryctolagus cuniculus</i>	Invasive	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Species or species habitat likely to occur within the area
Red Fox, Fox	<i>Vulpes vulpes</i>	Invasive	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Species or species habitat likely to occur within the area
Goat	<i>Capra hircus</i>	Invasive	EL27191, EL27192, EL27547, EL27613.	Species or species habitat may occur within the area

There are also several listed Migratory and Marine Species that are potentially in the Brunchilly Project area, according to the *EPBC Act* Protected Matters reports (Appendix A). The Tarrabool Lake 'Site of Conservation Significance' occurs within the north-east corners of tenements EL27191 and EL27192 (see Figure 1).



Table 11: Marine and Migratory Bird Species recorded in *EPBC Act* Search

Terrestrial / Marine / Wetland	Common Name	Species Name	Tenement	Status	Type of Presence
<i>Migratory Terrestrial Species</i>	Rainbow Bee-eater	<i>Merops ornatus</i>	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Listed overfly Marine area; Migratory: JAMBA.	Species or species habitat may occur within the area
<i>Migratory Wetland & Marine Species</i>	Great Egret, White Egret	<i>Ardea alba</i> (CAMBA & JAMBA as <i>Egretta alba</i>)	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Listed overfly Marine area; Migratory: CAMBA, JAMBA.	Species or species habitat may occur within the area
<i>Migratory Wetland & Marine Species</i>	Cattle Egret	<i>Ardea ibis</i> (CAMBA as <i>Ardeola ibis</i> , JAMBA as <i>Bubulcus ibis</i>)	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Listed overfly Marine area, Migratory: CAMBA, JAMBA.	Species or species habitat may occur within the area
<i>Migratory Wetland Species</i>	Oriental Plover, Oriental Dotterel	<i>Charadrius veredus</i>	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Listed overfly Marine area, Migratory: BONN, JAMBA, ROKAMBA.	Species or species habitat may occur within the area
<i>Migratory Wetland Species</i>	Oriental Pratincole	<i>Glareola maldivarum</i>	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Listed overfly Marine area, Migratory: CAMBA, JAMBA, ROKAMBA.	Species or species habitat may occur within the area
<i>Migratory Wetland Species</i>	Painted Snipe	<i>Rostratula australis</i> / <i>Rostratula benghalensis</i> sp. lat.	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Listed overfly Marine area, Migratory: CAMBA.	Species or species habitat may occur within the area

Terrestrial / Marine / Wetland	Common Name	Species Name	Tenement	Status	Type of Presence
<i>Migratory Marine Birds</i>	Fork-tailed Swift	<i>Apus pacificus</i>	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.	Listed overfly Marine area, Migratory: CAMBA, JAMBA, ROKAMBA.	Species or species habitat may occur within the area

3.3.3 Fauna Data Discussion

The NRETAS search returned 151 reported fauna sightings (see Appendix C for the full listing), of which two sightings were of Vulnerable species, four sightings were of Near Threatened species and one sighting was of an Endangered species, as classified under the *Territory Parks and Wildlife Conservation Act 2009*. The *EPBC Act* database search reported three species classified as Vulnerable under the *EPBC Act* (Australian Government, 2011).

The one Endangered species was a single sighting of a Gouldian Finch (*Erythrura gouldiae*) in 1974, on tenement EL27546. Since the 1980s, sightings of these birds are rare in the former range (NRETAS, 2011g). Recent sightings of these birds are of isolated flocks of 100 or so individuals, primarily in the top end of the Northern Territory and in the Kimberley of Western Australia (WWF, no year available). This bird is also federally listed as Endangered and is therefore protected under the *EPBC Act 1999* (Australian Government, 2011a).

The four sightings of Near Threatened species was of the Western Chestnut Mouse (*Pseudomys nanus*) in 1983 and 1984 on Tenement EL27547. According to the Australian Government, the range of the Western Chestnut Mouse does not extend as far south as the Brunchilly Project area, so there is a possibility the data was an incorrect identification (Australian Government, 2011b).

The two Vulnerable species sightings recorded in the NRETAS data were of the Australian Bustard (*Ardeotis australis*) on tenements EL27612 and EL27614. This species is not considered to be Vulnerable, Endangered or Critically Endangered under the *EPBC Act*, but is considered Vulnerable by the NT Government and is thus protected by the *Territory Parks and Wildlife Conservation Act 2009* (Australian Legal Information Institute, 2011). The heaviest of Australian flying birds it is widespread but generally scarce in the Northern Territory. The preferred habitat is open country and often grassy woodlands (NRETAS, 2011b).

The *EPBC Act* identified three Vulnerable species to possibly exist in the Brunchilly Project area. These were the Australian Painted Snipe (*Rostulata australis*), Crest-tail Mulgara (*Dasycerus cristicauda*) and the Greater Bilby (*Macrotis lagotis*).

Greater Bilbies are also classified as Vulnerable under the *Territory Parks and Wildlife Conservation Act 2009*. The Brunchilly Project has areas that are suitable as Greater Bilby preferred habitat, which is characterised by sandy soils and hummock grasslands covered by spinifex (*Triodia*). An over-storey of low, shrub cover dominated by *Acacia* and *Melaleuca* is also often present. This habitat does occur in a small section of the project area (NRETAS, 2011a), so further field studies may indicate if the Greater Bilby still occurs in that area.

The Crest-tailed Mulgara is also classified as Vulnerable under the NRETAS classification. However, it is unlikely that the Crest-tail Mulgara would be in the Brunchilly Project region, as has only been recorded to the southeast of Alice Springs (NRETAS, 2011h).

The only other conservation significant species reported to possibly occur in the Brunchilly Project area, according to the *EPBC Act* database search, is the Australian Painted Snipe (*Rostratula australis*), which is classed as Vulnerable under the *EPBC Act* and by the NRETAS classification. It is likely that the Australian Painted Snipe uses the nearby Lake Sylvester System and Tarrabool lakes as breeding grounds, according to records. However, there are no NRETAS database sightings at the Brunchilly Project tenements (NRETAS, 2011e).

Tarrabool Lake, which in exceptionally wet years enters the tenement area, is recognized as a Site of Conservation Significance by the NT Government as it supports internationally significant numbers of two significant waterbird species; the Australian Pelican (*Pelecanus conspicillatus*) and the Straw-necked Ibis (*Threskiornis spinicollis*) and one shorebird; the Black-winged Stilt (*Himantopus himantopus*). Major waterbird breeding events typically occur after flooding, then receding waters provide habitat for migratory shorebirds. The birds listed as migratory or marine are most likely to be located the vicinity of Lake Tarrabool or within Lake Sylvester and Lake Corella further east (NRETAS, 2011f).

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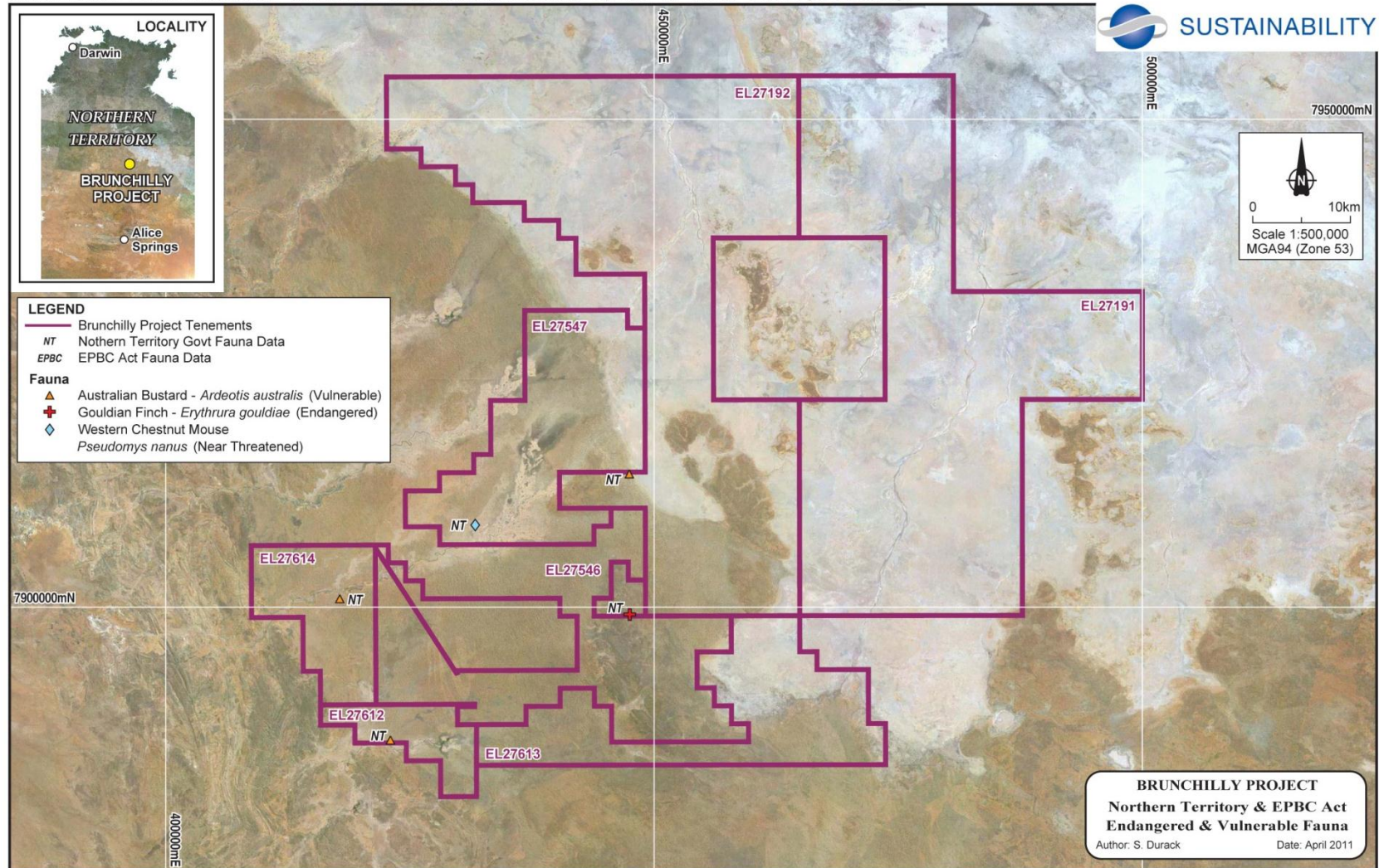


Figure 3: Fauna of Conservation Significance within Brunchilly Project

4. DISCUSSION

This report indicates that the Brunchilly Project site is unlikely to have an impact upon any species of flora and fauna of conservation significance. If exploration activity in the field intensifies, it is suggested that further field surveys at the project site would assist in the verification of the desktop surveys, and update the limited data.

The *EPBC Act* data shows only the *likelihood* of presence of a species; and the NRETAS data is limited in that only two of the seven tenements (EL27614 and EL27191) have fauna data recent data records, from 2010. Prior to that, one other tenement (EL27613) had data recorded 11 years previously (2000) and another tenement (EL27614) had the most recent records from 1994. There was data recorded prior to 1994, but is relatively outdated. These desktop surveys provide a tool for establishing the likelihood of the presence of protected flora or fauna species/communities in a given area.

The NRETAS data is a record that species has been sighted at a particular location, which suggests that there is a possibility for more occurrences of the same species in the area. However, if the survey data is historic, it is also possible that the habitat is no longer suitable and, if so, the species range may have been modified. Similarly, other species not recorded may exist in the area, but surveys may not have recorded them in the past due to reasons such as survey scope, intensity, technique and the cryptic nature of animal or scarcity of individuals. Thus, to reiterate, due to the general lack of information regarding remote locations, such as the Brunchilly Project area, further flora and fauna surveys are recommended, especially if field work intensifies.

Planning for exploration should consider the fact that several weed species of concern have adapted to the area and appropriate weed management should be implemented to limit the further spread of weeds, such as Buffel Grass. A continuation of the Vale Exploration Weed Management Strategy that includes wash down of vehicles entering and leaving the project area, monitoring the access tracks and work areas, at the start of, and at the end of, each wet season and spraying of any new weeds infestations with herbicide, would be beneficial. A weed identification pamphlet produced from the information contained in Appendix F would be useful for onsite operators.

5. REFERENCES

- Australian Government, (2011a)
http://www.environment.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl?wanted=fauna#other_animals_vulnerable
- Australian Government, (2011b)
http://www.environment.gov.au/biodiversity/abrs/online-resources/fauna/afd/taxa/Pseudomys_nanus_nanus
- Australian Government, (2011c)
http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;place_id=103047
- Australian Legal Information Institute, (2011)
http://www.austlii.edu.au/au/legis/nt/consol_act/tpawca451/notes.html
- BOM, (2011)
http://www.bom.gov.au/climate/averages/tables/cw_015085_All.shtml
- Baker, B., Price, O., Woinarski, J., Gold, S., Connors, G., Fisher, A., Hempel, C. (2005)
Northern Territory Bioregions Assessment of Key Biodiversity Values and Threats.
Department of Natural Resources, Environment and the Arts.
- DSEWPC, (2011)
<http://www.environment.gov.au/arcgis-framework/apps/pmst/pmst-coordinate.jsf>
- NRETAS, (2011a)
<http://www.nt.gov.au/nreta/wildlife/animals/threatened/specieslist.html>
http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/mammals/greater_bilby_vu.pdf
- NRETAS, (2011b)
http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/birds/australian_bustard_vu.pdf
- NRETAS, (2011c)
<http://www.nt.gov.au/nreta/wildlife/animals/requests.html>
- NRETAS, (2011d)
<http://www.nt.gov.au/nreta/wildlife/animals/threatened/specieslist.html>
- NRETAS, (2011e)
http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/birds/paintedsnipe_vu.pdf
- NRETAS, (2011f), *Northern Territory Government Sites of Conservation Significance, Lake Sylvester System.* Department of Natural Resources, Environment, the Arts and Sport (NRETAS).
http://www.nt.gov.au/nreta/environment/conservation/pdf/42_lakesylvester.pdf
http://www.nt.gov.au/nreta/environment/conservation/pdf/41_tarrabool.pdf

NRETAS, (2011g)

<http://www.nt.gov.au/nreta/wildlife/animals/threatened/specieslist.html#birds>
<http://www.nt.gov.au/nreta/wildlife/programs/gouldian/index.html>

NRETAS, (2011h)

http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/mammals/cresttail_mulgara_vu.pdf

TIS, (2011)

<http://dmetis.nt.gov.au/tis/OLQ.ASP?WCI=HeaderPage&WCE=Login>

WWF, (no year available)

www.wwf.org.au/publications/gouldian_finch.pdf

6. ABBREVIATIONS

BONN

Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention).

BOM

Bureau of Meteorology

CAMBA

China-Australia Migratory Bird Agreement (CAMBA), 1986. Australian Treaty Series 1988 No 22. Department of Foreign Affairs and Trade, Canberra. Agreement between the Government of Australia and the Government of the People's Republic of China for the Protection of Migratory Birds and their Environment (Canberra, 20 October 1986), Entry into force: 1 September 1988.

DMR

Davenport Murchison Ranges

DSEWPC

Department of Sustainability, Environment, Water, Population and Communities

EPBC Act

Environment Protection and Biodiversity Conservation Act

GIS

Geographic Information System

JAMBA

Japan-Australia Migratory Bird Agreement (JAMBA), 1974. Australia Treaty Series 1981 No. 6. Agreement between the Government of Australia and the government of Japan for the Protection of Migratory Birds in danger of Extinction and their Environment. Tokyo, 6 February 1974. Entry into force: 30 April 1981

MGD

Mitchell Grass Downs

NRETAS

Natural Resources, Environment, The Arts and Sport

NTG

Northern Territory Government

ROKAMBA

Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA), 2006. Agreement Between the government of Australia and the Government of the Republic of Korea on the Protection of Migratory Birds and Exchange of Notes, Canberra, 6 December 2006. Entry into force, 13 July 2007.

TIS

Titles Information System

APPENDIX A:

***EPBC ACT* PROTECTED MATTERS REPORTS FOR TENEMENTS: EL27191, EL27192, EL27546, EL27547, EL27612, EL27613 & EL27614**

***EPBC ACT* PROTECTED MATTERS REPORTS FOR TENEMENTS:
EL27191**



Australian Government

Department of Sustainability, Environment,
Water, Population and Communities

EPBC Act Protected Matters Report: Coordinates

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

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[Summary](#)

[Details](#)

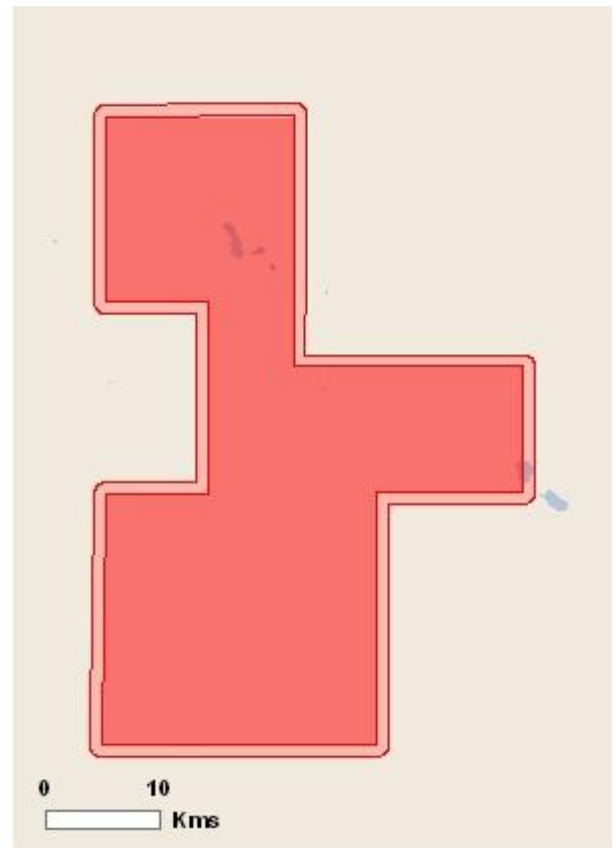
[Matters of NES](#)

[Other matters protected by
the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

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Buffer: 1.0Km

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance - see <http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Significance (Ramsar Wetlands):	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	None
Threatened Species:	3
Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place and the heritage values of a place on the Register of the National Estate. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage/index.html>

Please note that the current dataset on Commonwealth land is not complete. Further information on Commonwealth land would need to be obtained from relevant sources including Commonwealth agencies, local agencies, and land tenure maps.

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species. Information on EPBC Act permit requirements and application forms can be found at <http://www.environment.gov.au/epbc/permits/index.html>.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	7
Whales and Other Cetaceans:	None

Critical Habitats:	None
Commonwealth Reserves:	None

Report Summary for Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	1
State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	9
Nationally Important Wetlands:	None

Details

Matters of National Environmental Significance

Threatened Species		[Resource Information]
Name	Status	Type of Presence
BIRDS		
Rostratula australis Australian Painted Snipe [77037]	Vulnerable	Species or species habitat may occur within area
MAMMALS		
Dasycercus cristicauda Mulgara [328]	Vulnerable	Species or species habitat likely to occur within area
Macrotis lagotis Greater Bilby [282]	Vulnerable	Species or species habitat may occur within area
Migratory Species		[Resource Information]
Name	Status	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Migratory Terrestrial Species		
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Migratory Wetlands Species		
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Charadrius veredus		

Oriental Plover, Oriental Dotterel [882] Glareola maldivarum	Species or species habitat may occur within area
Oriental Pratincole [840] Rostratula benghalensis s. lat.	Species or species habitat may occur within area
Painted Snipe [889]	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
Name	Status	Type of Presence
Birds		
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba		
Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis		
Cattle Egret [59542]		Species or species habitat may occur within area
Charadrius veredus		
Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area
Glareola maldivarum		
Oriental Pratincole [840]		Species or species habitat may occur within area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat may occur within area
Rostratula benghalensis s. lat.		
Painted Snipe [889]		Species or species habitat may occur within area

Extra Information

Places on the RNE	[Resource Information]
Note that not all Indigenous sites may be listed.	

Name	Status
Natural	
Tarabool Lake NT	Indicative Place

Invasive Species	[Resource Information]
Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.	

Name	Status	Type of Presence
Mammals		
Capra hircus		
Goat [2]		Species or species habitat may occur within area
Felis catus		
Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Oryctolagus cuniculus		
Rabbit, European Rabbit [128] Vulpes vulpes		Species or species habitat may occur within area

Red Fox, Fox [18]

Species or species habitat may occur within area

Plants

[Acacia nilotica subsp. indica](#)

Prickly Acacia [6196]

Species or species habitat may occur within area

[Cenchrus ciliaris](#)

Buffel-grass, Black Buffel-grass
[20213]

Species or species habitat may occur within area

[Parkinsonia aculeata](#)

Parkinsonia, Jerusalem Thorn,
Jelly Bean Tree, Horse Bean
[12301]

Species or species habitat likely to occur within area

[Parthenium hysterophorus](#)

Parthenium Weed, Bitter Weed,
Carrot Grass, False Ragweed
[19566]

Species or species habitat may occur within area

[Prosopis spp.](#)

Mesquite, Algaroba [68407]

Species or species habitat may occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites;
- seals which have only been mapped for breeding sites near the Australian continent.

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-19.00028 134.665,-18.80083 134.66861,-18.80083 134.74972,-18.64917 134.74972,-18.64917 134.66861,-18.50139 134.66861,-18.5 134.81889,-18.7 134.81778,-18.7 135.00028,-18.79972 135.00028,-18.79972 134.88389,-19.00028 134.88389,-19.00028 134.665

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Department of Environment, Climate Change and Water, New South Wales](#)
- [-Department of Sustainability and Environment, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment and Natural Resources, South Australia](#)
- [-Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts](#)
- [-Environmental and Resource Management, Queensland](#)
- [-Department of Environment and Conservation, Western Australia](#)
- [-Department of the Environment, Climate Change, Energy and Water](#)
- [-Birds Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
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- [-Australian Museum](#)
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- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Atherton and Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [-State Forests of NSW](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

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***EPBC ACT* PROTECTED MATTERS REPORTS FOR TENEMENTS:
EL27192**



Australian Government

Department of Sustainability, Environment,
Water, Population and Communities

EPBC Act Protected Matters Report: Coordinates

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[Details](#)

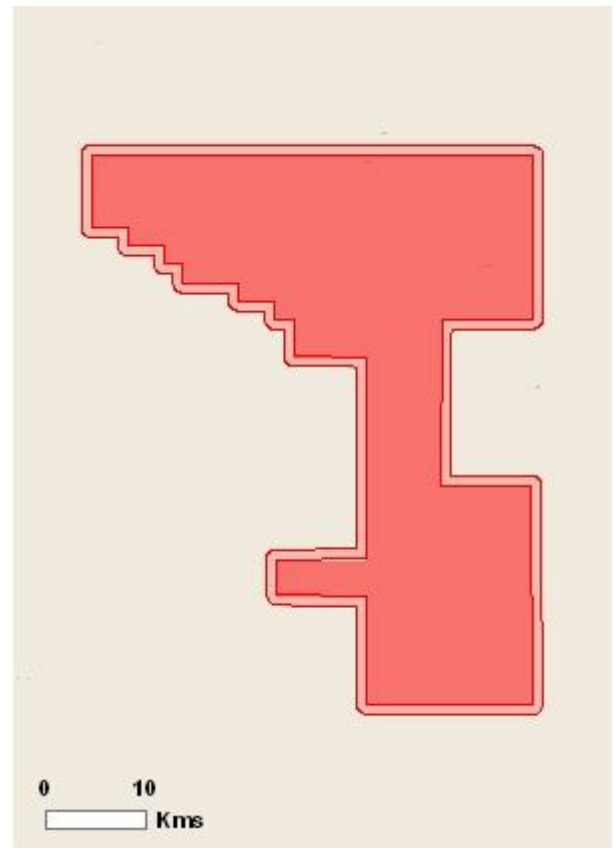
[Matters of NES](#)

[Other matters protected by
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[Extra Information](#)

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Australia), ©PSMA 2010

[Coordinates](#)

Buffer: 1.0Km

Summary

Matters of National Environmental Significance

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World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Significance (Ramsar Wetlands):	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	None
Threatened Species:	3
Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

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Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	7
Whales and Other Cetaceans:	None

Critical Habitats:	None
Commonwealth Reserves:	None

Report Summary for Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	1
State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	9
Nationally Important Wetlands:	None

Details

Matters of National Environmental Significance

Threatened Species		[Resource Information]
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BIRDS		
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MAMMALS		
Dasycercus cristicauda Mulgara [328]	Vulnerable	Species or species habitat likely to occur within area
Macrotis lagotis Greater Bilby [282]	Vulnerable	Species or species habitat likely to occur within area
Migratory Species		[Resource Information]
Name	Status	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Migratory Terrestrial Species		
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Migratory Wetlands Species		
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[Charadrius veredus](#)

Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

[Glareola maldivarum](#)

Oriental Pratincole [840]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species

[Resource Information]

Name	Status	Type of Presence
------	--------	------------------

Birds

[Apus pacificus](#)

Fork-tailed Swift [678]

Species or species habitat may occur within area

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Species or species habitat may occur within area

Extra Information

Places on the RNE

[Resource Information]

Note that not all Indigenous sites may be listed.

Name	Status
------	--------

Natural

[Tarabool Lake NT](#)

Indicative Place

Invasive Species

[Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
------	--------	------------------

Mammals

[Capra hircus](#)

Goat [2]

Species or species habitat may occur within area

[Felis catus](#)

Cat, House Cat, Domestic Cat
[19]

Species or species habitat likely to occur within area

[Oryctolagus cuniculus](#)

Rabbit, European Rabbit [128]

Species or species habitat may occur within area

[Vulpes vulpes](#)

Red Fox, Fox [18]

Species or species habitat may occur within area

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Prickly Acacia [6196]

Species or species habitat may occur within area

[Cenchrus ciliaris](#)

Buffel-grass, Black Buffel-grass
[20213]

Species or species habitat may occur within area

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Parkinsonia, Jerusalem Thorn,
Jelly Bean Tree, Horse Bean
[12301]

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[Parthenium hysterophorus](#)

Parthenium Weed, Bitter Weed,
Carrot Grass, False Ragweed
[19566]

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[Prosopis spp.](#)

Mesquite, Algaroba [68407]

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- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area

- migratory species that are very widespread, vagrant, or only occur in small numbers.

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- non-threatened seabirds which have only been mapped for recorded breeding sites;
- seals which have only been mapped for breeding sites near the Australian continent.

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-18.99889 134.51694,-18.90111 134.51694,-18.9 134.43556,-18.86778 134.43444,-18.86694
 134.51694,-18.68389 134.51694,-18.68333 134.45056,-18.65 134.45056,-18.65 134.43361,-18.63389
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 134.33306,-18.58306 134.33306,-18.58306 134.30028,-18.56639 134.29972,-18.56639
 134.26694,-18.50028 134.26722,-18.50194 134.66833,-18.64944 134.6675,-18.64944 134.585,-18.80056
 134.58389,-18.80056 134.66639,-19.0 134.66694,-18.99889 134.51694

Acknowledgements

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- [-Department of Environment, Climate Change and Water, New South Wales](#)
- [-Department of Sustainability and Environment, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment and Natural Resources, South Australia](#)
- [-Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts](#)
- [-Environmental and Resource Management, Queensland](#)
- [-Department of Environment and Conservation, Western Australia](#)
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- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [-State Forests of NSW](#)
- Other groups and individuals

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advice and information on numerous draft distributions.

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***EPBC ACT* PROTECTED MATTERS REPORTS FOR TENEMENTS:
EL27546**



Australian Government

Department of Sustainability, Environment,
Water, Population and Communities

EPBC Act Protected Matters Report: Coordinates

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information about the EPBC Act including significance guidelines, forms and application process details can be found at <http://www.environment.gov.au/epbc/assessmentsapprovals/index.html>

Report created: 18/05/11 17:23:17

[Summary](#)

[Details](#)

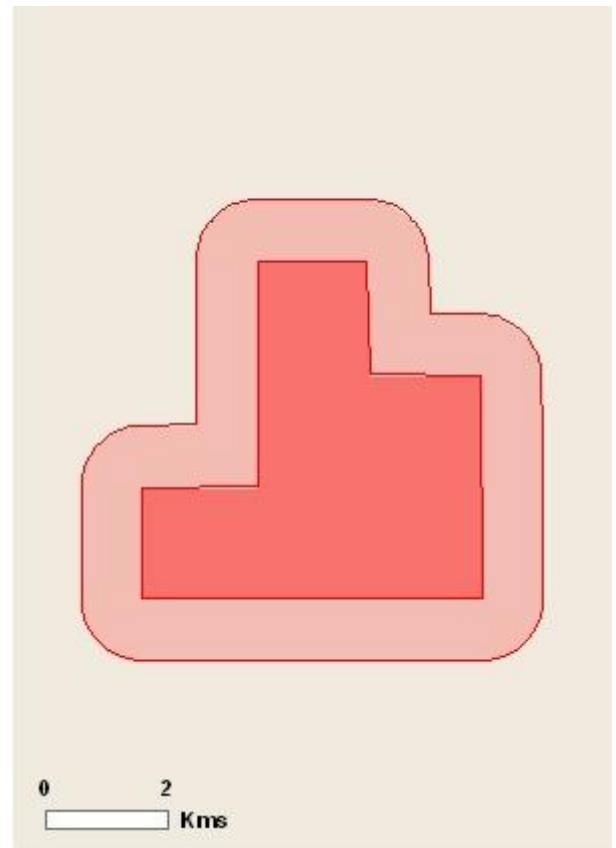
[Matters of NES](#)

[Other matters protected by
the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

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Buffer: 1.0Km

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance - see <http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Significance (Ramsar Wetlands):	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	None
Threatened Species:	3
Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place and the heritage values of a place on the Register of the National Estate. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage/index.html>

Please note that the current dataset on Commonwealth land is not complete. Further information on Commonwealth land would need to be obtained from relevant sources including Commonwealth agencies, local agencies, and land tenure maps.

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species. Information on EPBC Act permit requirements and application forms can be found at <http://www.environment.gov.au/epbc/permits/index.html>.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	7
Whales and Other Cetaceans:	None

Critical Habitats:	None
Commonwealth Reserves:	None

Report Summary for Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	None
State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	4
Nationally Important Wetlands:	None

Details

Matters of National Environmental Significance

Threatened Species [\[Resource Information \]](#)

Name	Status	Type of Presence
------	--------	------------------

BIRDS

[Rostratula australis](#)

Australian Painted Snipe [77037]	Vulnerable	Species or species habitat may occur within area
----------------------------------	------------	--

MAMMALS

[Dasycercus cristicauda](#)

Mulgara [328]	Vulnerable	Species or species habitat likely to occur within area
---------------	------------	--

[Macrotis lagotis](#)

Greater Bilby [282]	Vulnerable	Species or species habitat likely to occur within area
---------------------	------------	--

Migratory Species [\[Resource Information \]](#)

Name	Status	Type of Presence
------	--------	------------------

Migratory Marine Birds

[Apus pacificus](#)

Fork-tailed Swift [678]		Species or species habitat may occur within area
-------------------------	--	--

[Ardea alba](#)

Great Egret, White Egret [59541]		Species or species habitat may occur within area
----------------------------------	--	--

[Ardea ibis](#)

Cattle Egret [59542]		Species or species habitat may occur within area
----------------------	--	--

Migratory Terrestrial Species

[Merops ornatus](#)

Rainbow Bee-eater [670]		Species or species habitat may occur within area
-------------------------	--	--

Migratory Wetlands Species

[Ardea alba](#)

Great Egret, White Egret [59541]		Species or species habitat may occur within area
----------------------------------	--	--

[Ardea ibis](#)

Cattle Egret [59542]		Species or species habitat may occur within area
----------------------	--	--

[Charadrius veredus](#)

Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

[Glareola maldivarum](#)

Oriental Pratincole [840]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [\[Resource Information \]](#)

Name	Status	Type of Presence
------	--------	------------------

Birds

[Apus pacificus](#)

Fork-tailed Swift [678]

Species or species habitat may occur within area

[Ardea alba](#)

Great Egret, White Egret
[59541]

Species or species habitat may occur within area

[Ardea ibis](#)

Cattle Egret [59542]

Species or species habitat may occur within area

[Charadrius veredus](#)

Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

[Glareola maldivarum](#)

Oriental Pratincole [840]

Species or species habitat may occur within area

[Merops ornatus](#)

Rainbow Bee-eater [670]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

Extra Information

Invasive Species [\[Resource Information \]](#)

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
------	--------	------------------

Mammals

[Felis catus](#)

Cat, House Cat, Domestic Cat
[19]

Species or species habitat likely to occur within area

[Oryctolagus cuniculus](#)

Rabbit, European Rabbit [128]

Species or species habitat may occur within area

[Vulpes vulpes](#)

Red Fox, Fox [18]

Species or species habitat may occur within area

Plants

[Cenchrus ciliaris](#)

Buffel-grass, Black Buffel-grass
[20213]

Species or species habitat may occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites;
- seals which have only been mapped for breeding sites near the Australian continent.

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-18.99972 134.46667,-18.98333 134.46667,-18.98306 134.48361,-18.95 134.48361,-18.95
134.49972,-18.96667 134.50028,-18.96694 134.51639,-18.99972 134.51667,-18.99972 134.46667

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- [-Northern Territory Herbarium](#)
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***EPBC ACT* PROTECTED MATTERS REPORTS FOR TENEMENTS:
EL27547**



Australian Government

Department of Sustainability, Environment,
Water, Population and Communities

EPBC Act Protected Matters Report: Coordinates

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

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Report created: 18/05/11 18:38:03

[Summary](#)

[Details](#)

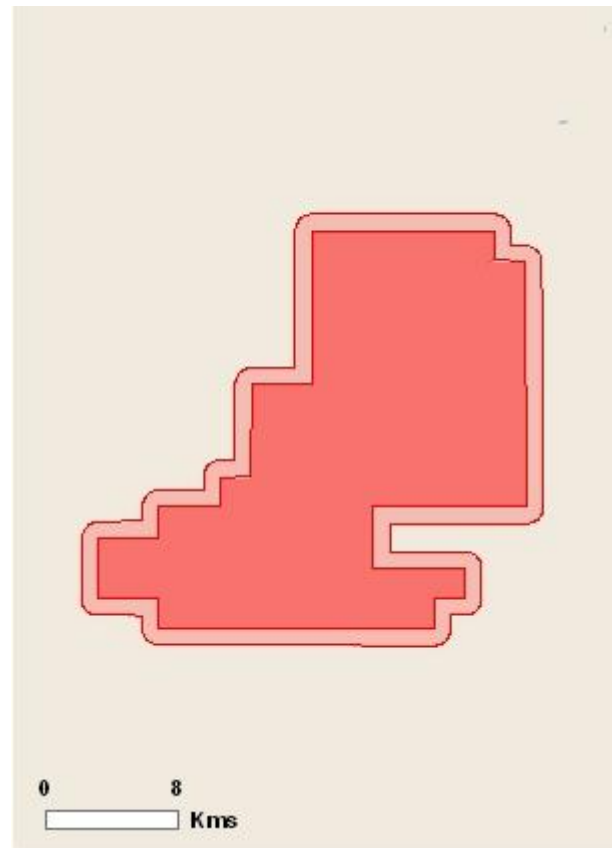
[Matters of NES](#)

[Other matters protected by
the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

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[Coordinates](#)

Buffer: 1.0Km

Summary

Matters of National Environmental Significance

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World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Significance (Ramsar Wetlands):	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	None
Threatened Species:	3
Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

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Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	7
Whales and Other Cetaceans:	None

Critical Habitats:	None
Commonwealth Reserves:	None

Report Summary for Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	None
State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	9
Nationally Important Wetlands:	None

Details

Matters of National Environmental Significance

Threatened Species [\[Resource Information \]](#)

Name	Status	Type of Presence
------	--------	------------------

BIRDS

[Rostratula australis](#)

Australian Painted Snipe [77037]	Vulnerable	Species or species habitat may occur within area
----------------------------------	------------	--

MAMMALS

[Dasycercus cristicauda](#)

Mulgara [328]	Vulnerable	Species or species habitat likely to occur within area
---------------	------------	--

[Macrotis lagotis](#)

Greater Bilby [282]	Vulnerable	Species or species habitat likely to occur within area
---------------------	------------	--

Migratory Species [\[Resource Information \]](#)

Name	Status	Type of Presence
------	--------	------------------

Migratory Marine Birds

[Apus pacificus](#)

Fork-tailed Swift [678]		Species or species habitat may occur within area
-------------------------	--	--

[Ardea alba](#)

Great Egret, White Egret [59541]		Species or species habitat may occur within area
----------------------------------	--	--

[Ardea ibis](#)

Cattle Egret [59542]		Species or species habitat may occur within area
----------------------	--	--

Migratory Terrestrial Species

[Merops ornatus](#)

Rainbow Bee-eater [670]		Species or species habitat may occur within area
-------------------------	--	--

Migratory Wetlands Species

[Ardea alba](#)

Great Egret, White Egret [59541]		Species or species habitat may occur within area
----------------------------------	--	--

[Ardea ibis](#)

Cattle Egret [59542]		Species or species habitat may occur within area
----------------------	--	--

[Charadrius veredus](#)

Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

[Glareola maldivarum](#)

Oriental Pratincole [840]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [[Resource Information](#)]

Name	Status	Type of Presence
------	--------	------------------

Birds

[Apus pacificus](#)

Fork-tailed Swift [678]

Species or species habitat may occur within area

[Ardea alba](#)

Great Egret, White Egret
[59541]

Species or species habitat may occur within area

[Ardea ibis](#)

Cattle Egret [59542]

Species or species habitat may occur within area

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Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

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Extra Information

Invasive Species [[Resource Information](#)]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
------	--------	------------------

Mammals

[Capra hircus](#)

Goat [2]

Species or species habitat may occur within area

[Felis catus](#)

Cat, House Cat, Domestic Cat
[19]

Species or species habitat likely to occur within area

[Oryctolagus cuniculus](#)

Rabbit, European Rabbit [128]

Species or species habitat may occur within area

[Vulpes vulpes](#)

Red Fox, Fox [18]

Species or species habitat may occur within area

Plants

[Acacia nilotica subsp. indica](#)

Prickly Acacia [6196]

Species or species habitat may occur within area

[Cenchrus ciliaris](#)

Buffel-grass, Black Buffel-grass
[20213]

[Parkinsonia aculeata](#)

Parkinsonia, Jerusalem Thorn,
Jelly Bean Tree, Horse Bean
[12301]

[Parthenium hysterophorus](#)

Parthenium Weed, Bitter Weed,
Carrot Grass, False Ragweed
[19566]

[Prosopis spp.](#)

Mesquite, Algaroba [68407]

Species or species habitat may occur within area

Species or species habitat likely to occur within area

Species or species habitat may occur within area

Species or species habitat may occur within area

Caveat

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-18.93278 134.31667,-18.91694 134.31667,-18.91667 134.28361,-18.88389 134.28417,-18.88333 134.31667,-18.86667 134.31694,-18.86667 134.35028,-18.85056 134.35028,-18.84944 134.36667,-18.8 134.3675,-18.8 134.40028,-18.71639 134.40028,-18.71639 134.49972,-18.7325 134.50028,-18.73361 134.51639,-18.86667 134.5175,-18.86667 134.43361,-18.9 134.43361,-18.90028 134.48361,-18.91667 134.48361,-18.91694 134.46694,-18.93333 134.46694,-18.93278 134.31667

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- [-Environmental and Resource Management, Queensland](#)
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***EPBC ACT* PROTECTED MATTERS REPORTS FOR TENEMENTS:
EL27612**



Australian Government

Department of Sustainability, Environment,
Water, Population and Communities

EPBC Act Protected Matters Report: Coordinates

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Report created: 18/05/11 19:09:20

[Summary](#)

[Details](#)

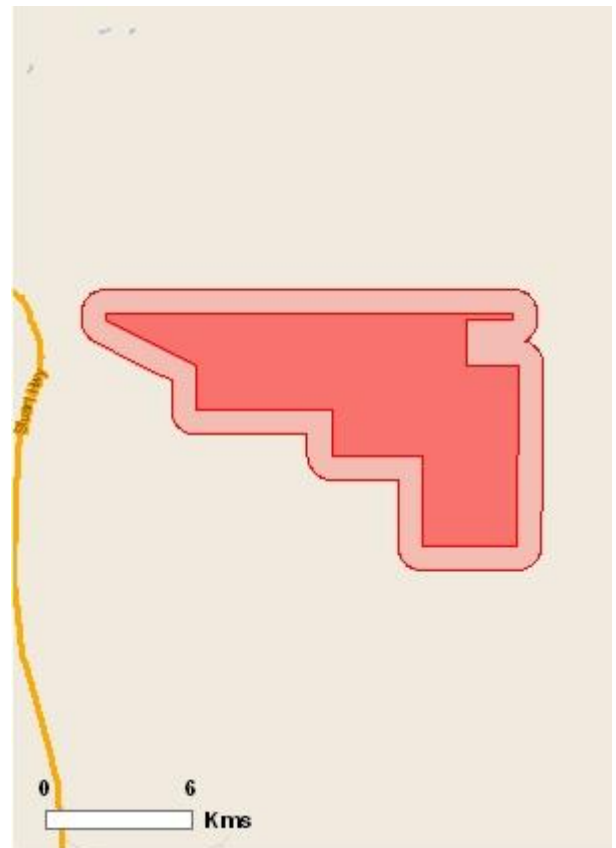
[Matters of NES](#)

[Other matters protected by
the EPBC Act](#)

[Extra Information](#)

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Buffer: 1.0Km

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance - see <http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Significance (Ramsar Wetlands):	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	None
Threatened Species:	3
Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

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Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	7
Whales and Other Cetaceans:	None

Critical Habitats:	None
Commonwealth Reserves:	None

Report Summary for Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	None
State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	5
Nationally Important Wetlands:	None

Details

Matters of National Environmental Significance

Threatened Species		[Resource Information]
Name	Status	Type of Presence
BIRDS		
Rostratula australis Australian Painted Snipe [77037]	Vulnerable	Species or species habitat may occur within area
MAMMALS		
Dasycercus cristicauda Mulgara [328]	Vulnerable	Species or species habitat likely to occur within area
Macrotis lagotis Greater Bilby [282]	Vulnerable	Species or species habitat likely to occur within area
Migratory Species		[Resource Information]
Name	Status	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Migratory Terrestrial Species		
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Migratory Wetlands Species		
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area

[Charadrius veredus](#)

Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

[Glareola maldivarum](#)

Oriental Pratincole [840]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [[Resource Information](#)]

Name	Status	Type of Presence
------	--------	------------------

Birds

[Apus pacificus](#)

Fork-tailed Swift [678]

Species or species habitat may occur within area

[Ardea alba](#)

Great Egret, White Egret
[59541]

Species or species habitat may occur within area

[Ardea ibis](#)

Cattle Egret [59542]

Species or species habitat may occur within area

[Charadrius veredus](#)

Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

[Glareola maldivarum](#)

Oriental Pratincole [840]

Species or species habitat may occur within area

[Merops ornatus](#)

Rainbow Bee-eater [670]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

Extra Information

Invasive Species [[Resource Information](#)]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
------	--------	------------------

Mammals

[Felis catus](#)

Cat, House Cat, Domestic Cat
[19]

Species or species habitat likely to occur within area

[Oryctolagus cuniculus](#)

Rabbit, European Rabbit [128]

Species or species habitat may occur within area

[Vulpes vulpes](#)

Red Fox, Fox [18]

Species or species habitat may occur within area

Plants

[Cenchrus ciliaris](#)

Buffel-grass, Black Buffel-grass
[20213]

Species or species habitat may occur within area

[Parkinsonia aculeata](#)

Parkinsonia, Jerusalem Thorn,

Species or species habitat may occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites;
- seals which have only been mapped for breeding sites near the Australian continent.

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

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Acknowledgements

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- [-Department of Environment, Climate Change and Water, New South Wales](#)
- [-Department of Sustainability and Environment, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment and Natural Resources, South Australia](#)
- [-Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts](#)
- [-Environmental and Resource Management, Queensland](#)
- [-Department of Environment and Conservation, Western Australia](#)
- [-Department of the Environment, Climate Change, Energy and Water](#)
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- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Atherton and Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [-State Forests of NSW](#)
- [-Other groups and individuals](#)

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***EPBC ACT* PROTECTED MATTERS REPORTS FOR TENEMENTS:
EL27613**



Australian Government

Department of Sustainability, Environment,
Water, Population and Communities

EPBC Act Protected Matters Report: Coordinates

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information about the EPBC Act including significance guidelines, forms and application process details can be found at <http://www.environment.gov.au/epbc/assessmentsapprovals/index.html>

Report created: 18/05/11 19:22:35

[Summary](#)

[Details](#)

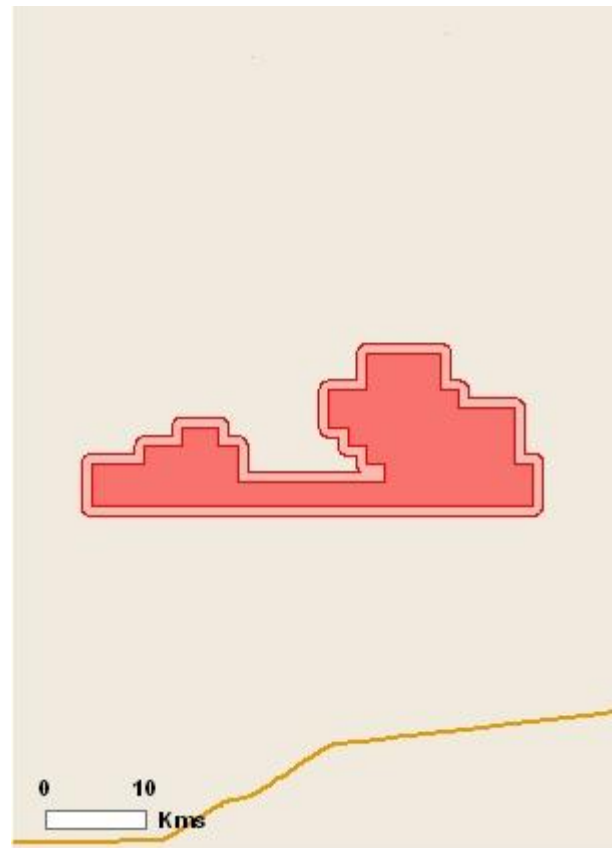
[Matters of NES](#)

[Other matters protected by
the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



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[Coordinates](#)

Buffer: 1.0Km

Summary

Matters of National Environmental Significance

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World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Significance (Ramsar Wetlands):	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	None
Threatened Species:	3
Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

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Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	7
Whales and Other Cetaceans:	None

Critical Habitats:	None
Commonwealth Reserves:	None

Report Summary for Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	None
State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	9
Nationally Important Wetlands:	None

Details

Matters of National Environmental Significance

Threatened Species		[Resource Information]
Name	Status	Type of Presence
BIRDS		
Rostratula australis Australian Painted Snipe [77037]	Vulnerable	Species or species habitat may occur within area
MAMMALS		
Dasycercus cristicauda Mulgara [328]	Vulnerable	Species or species habitat likely to occur within area
Macrotis lagotis Greater Bilby [282]	Vulnerable	Species or species habitat likely to occur within area
Migratory Species		[Resource Information]
Name	Status	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Migratory Terrestrial Species		
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Migratory Wetlands Species		
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area

[Charadrius veredus](#)

Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

[Glareola maldivarum](#)

Oriental Pratincole [840]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [[Resource Information](#)]

Name	Status	Type of Presence
------	--------	------------------

Birds

[Apus pacificus](#)

Fork-tailed Swift [678]

Species or species habitat may occur within area

[Ardea alba](#)

Great Egret, White Egret
[59541]

Species or species habitat may occur within area

[Ardea ibis](#)

Cattle Egret [59542]

Species or species habitat may occur within area

[Charadrius veredus](#)

Oriental Plover, Oriental
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Name	Status	Type of Presence
------	--------	------------------

Mammals

[Capra hircus](#)

Goat [2]

Species or species habitat may occur within area

[Felis catus](#)

Cat, House Cat, Domestic Cat
[19]

Species or species habitat likely to occur within area

[Oryctolagus cuniculus](#)

Rabbit, European Rabbit [128]

Species or species habitat may occur within area

[Vulpes vulpes](#)

Red Fox, Fox [18]

Species or species habitat may occur within area

Plants

[Acacia nilotica subsp. indica](#)

Prickly Acacia [6196]

Species or species habitat may occur within area

[Cenchrus ciliaris](#)

Buffel-grass, Black Buffel-grass
[20213]

[Parkinsonia aculeata](#)

Parkinsonia, Jerusalem Thorn,
Jelly Bean Tree, Horse Bean
[12301]

[Parthenium hysterophorus](#)

Parthenium Weed, Bitter Weed,
Carrot Grass, False Ragweed
[19566]

[Prosopis spp.](#)

Mesquite, Algaroba [68407]

Species or species habitat may occur within area

Species or species habitat likely to occur within area

Species or species habitat may occur within area

Species or species habitat may occur within area

Caveat

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- seals which have only been mapped for breeding sites near the Australian continent.

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Coordinates

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- [-Environmental and Resource Management, Queensland](#)
- [-Department of Environment and Conservation, Western Australia](#)
- [-Department of the Environment, Climate Change, Energy and Water](#)
- [-Birds Australia](#)
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***EPBC ACT* PROTECTED MATTERS REPORTS FOR TENEMENTS:
EL27614**



Australian Government

Department of Sustainability, Environment,
Water, Population and Communities

EPBC Act Protected Matters Report: Coordinates

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

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Report created: 18/05/11 19:30:07

[Summary](#)

[Details](#)

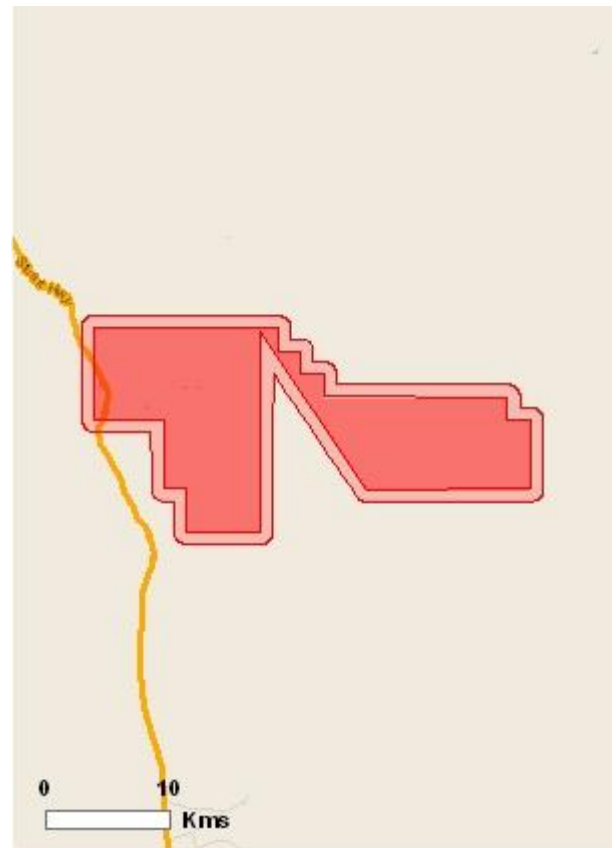
[Matters of NES](#)

[Other matters protected by
the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

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[Coordinates](#)

Buffer: 1.0Km

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance - see <http://www.environment.gov.au/epbc/assessmentsapprovals/guidelines/index.html>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Significance (Ramsar Wetlands):	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Threatened Ecological Communities:	None
Threatened Species:	3
Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

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Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	7
Whales and Other Cetaceans:	None

Critical Habitats:	None
Commonwealth Reserves:	None

Report Summary for Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	None
State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	5
Nationally Important Wetlands:	None

Details

Matters of National Environmental Significance

Threatened Species		[Resource Information]
Name	Status	Type of Presence
BIRDS		
Rostratula australis Australian Painted Snipe [77037]	Vulnerable	Species or species habitat may occur within area
MAMMALS		
Dasycercus cristicauda Mulgara [328]	Vulnerable	Species or species habitat likely to occur within area
Macrotis lagotis Greater Bilby [282]	Vulnerable	Species or species habitat likely to occur within area
Migratory Species		[Resource Information]
Name	Status	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat may occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Migratory Terrestrial Species		
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Migratory Wetlands Species		
Ardea alba Great Egret, White Egret [59541]		Species or species habitat may occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area

[Charadrius veredus](#)

Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

[Glareola maldivarum](#)

Oriental Pratincole [840]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [[Resource Information](#)]

Name	Status	Type of Presence
------	--------	------------------

Birds

[Apus pacificus](#)

Fork-tailed Swift [678]

Species or species habitat may occur within area

[Ardea alba](#)

Great Egret, White Egret
[59541]

Species or species habitat may occur within area

[Ardea ibis](#)

Cattle Egret [59542]

Species or species habitat may occur within area

[Charadrius veredus](#)

Oriental Plover, Oriental
Dotterel [882]

Species or species habitat may occur within area

[Glareola maldivarum](#)

Oriental Pratincole [840]

Species or species habitat may occur within area

[Merops ornatus](#)

Rainbow Bee-eater [670]

Species or species habitat may occur within area

[Rostratula benghalensis s. lat.](#)

Painted Snipe [889]

Species or species habitat may occur within area

Extra Information

Invasive Species [[Resource Information](#)]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
------	--------	------------------

Mammals

[Felis catus](#)

Cat, House Cat, Domestic Cat
[19]

Species or species habitat likely to occur within area

[Oryctolagus cuniculus](#)

Rabbit, European Rabbit [128]

Species or species habitat may occur within area

[Vulpes vulpes](#)

Red Fox, Fox [18]

Species or species habitat may occur within area

Plants

[Cenchrus ciliaris](#)

Buffel-grass, Black Buffel-grass
[20213]

Species or species habitat may occur within area

[Parkinsonia aculeata](#)

Parkinsonia, Jerusalem Thorn,

Species or species habitat may occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites;
- seals which have only been mapped for breeding sites near the Australian continent.

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-19.08111 134.20028,-19.05 134.20028,-19.05 134.18389,-19.00028 134.18333,-19.0
134.13361,-18.93333 134.13278,-18.93361 134.26694,-18.95 134.26694,-18.95028 134.28306,-18.96667
134.28306,-18.96694 134.3,-18.98306 134.30028,-18.98333 134.43333,-18.99944 134.43333,-18.99972
134.44972,-19.05 134.45028,-19.05028 134.33111,-18.93667 134.25417,-19.08111 134.25389,-19.08111
134.20028

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Department of Environment, Climate Change and Water, New South Wales](#)
- [-Department of Sustainability and Environment, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment and Natural Resources, South Australia](#)
- [-Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts](#)
- [-Environmental and Resource Management, Queensland](#)
- [-Department of Environment and Conservation, Western Australia](#)
- [-Department of the Environment, Climate Change, Energy and Water](#)
- [-Birds Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-SA Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Atherton and Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [-State Forests of NSW](#)
- [-Other groups and individuals](#)

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

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APPENDIX B:

NRETAS FLORA LIST

Appendix B: NRETAS Flora List 2011

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
dd	EL27191	ASTERACEAE	<i>Ictaspisma</i>	<i>sessilifolium</i>	<i>Ictaspisma sessilifolium</i>	12/06/1984	-18.615	134.718
dd	EL27191	COMMELINACEAE	<i>Commelina</i>	<i>tricarinata</i>	<i>Commelina tricarinata</i>	12/06/1984	-18.632	134.751
dd	EL27191	FABACEAE	<i>Indigofera</i>	<i>polygaloides</i>	<i>Indigofera polygaloides</i>	17/06/1960	-18.832	134.735
dd	EL27547	GOODENIACEAE	<i>Goodenia</i>	<i>nigrescens</i>	<i>Goodenia nigrescens</i>	17/06/1960	-18.832	134.501
dd	EL27614	CYPERACEAE	<i>Fuirena</i>	<i>nudiflora</i>	<i>Fuirena nudiflora</i>	1/07/1974	-18.999	134.251
dd	EL27191	AMARANTHACEAE	<i>Ptilotus</i>	<i>spicatus</i>	<i>Ptilotus spicatus</i>	18/06/1960	-18.899	134.834
dd	EL27191	EUPHORBIACEAE	<i>Euphorbia</i>	<i>drummondii</i>	<i>Euphorbia drummondii</i>	12/06/1984	-18.615	134.718

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
dd	EL27191	POACEAE	<i>Panicum</i>	<i>decompositum</i>	<i>Panicum decompositum</i> var. <i>indeterminate</i>	12/06/1984	-18.615	134.718
dd	EL27191	AMARANTHACEAE	<i>Ptilotus</i>	<i>spicatus</i>	<i>Ptilotus spicatus</i>	12/06/1984	-18.549	134.701
dd	EL27191	AMARANTHACEAE	<i>Enchylaena</i>	<i>tomentosa</i>	<i>Enchylaena tomentosa</i> var. <i>indeterminate</i>	12/06/1984	-18.865	134.768
dd	EL27191	MALVACEAE	<i>Malvastrum</i>	<i>americanum</i>	<i>Malvastrum americanum</i>	12/06/1984	-18.865	134.768
dd	EL27191	MALVACEAE	<i>Hibiscus</i>	<i>panduriformis</i>	<i>Hibiscus panduriformis</i>	12/06/1984	-18.865	134.768
dd	EL27192	AMARANTHACEAE	<i>Ptilotus</i>	<i>polystachyus</i>	<i>Ptilotus polystachyus</i>	16/06/1970	-18.532	134.318
dd	EL27192	AMARANTHACEAE	<i>Ptilotus</i>	<i>polystachyus</i>	<i>Ptilotus polystachyus</i>	17/06/1960	-18.899	134.501
dd	EL27192	AMARANTHACEAE	<i>Ptilotus</i>	<i>polystachyus</i>	<i>Ptilotus polystachyus</i>	17/06/1960	-18.899	134.501

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
dd	EL27192	POACEAE	<i>Eriachne</i>	<i>obtusa</i>	<i>Eriachne obtusa</i> var. <i>indeterminate</i>	17/06/1960	-18.882	134.535
dd	EL27192	AMARANTHACEAE	<i>Ptilotus</i>	<i>spicatus</i>	<i>Ptilotus spicatus</i>	17/06/1960	-18.849	134.618
dd	EL27192	BORAGINACEAE	<i>Trichodesma</i>	<i>zeylanicum</i>	<i>Trichodesma</i> <i>zeylanicum</i> var. <i>indeterminate</i>	16/02/1966	-18.899	134.468
dd	EL27192	POACEAE	<i>Echinochloa</i>	<i>colonum</i>	<i>Echinochloa</i> <i>colonum</i>	29/07/1983	-18.549	134.318
dd	EL27192	AMARANTHACEAE	<i>Ptilotus</i>	<i>calostachyus</i>	<i>Ptilotus</i> <i>calostachyus</i>	13/06/1984	-18.865	134.618
dd	EL27192	POACEAE	<i>Cynodon</i>	<i>dactylon</i>	<i>Cynodon dactylon</i> var. <i>dactylon</i>	13/06/1984	-18.915	134.651
dd	EL27192	SCROPHULARIACEAE	<i>Eremophila</i>	<i>latrobei</i>	<i>Eremophila</i> <i>latrobei</i> subsp. <i>glabra</i>	13/06/1984	-18.865	134.618
dd	EL27547	BORAGINACEAE	<i>Halgania</i>	<i>solanacea</i>	<i>Halgania</i> <i>solanacea</i> var. <i>indeterminate</i>	14/08/1955	-18.915	134.468

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
dd	EL27547	AMARANTHACEAE	<i>Ptilotus</i>	<i>fusiformis</i>	<i>Ptilotus fusiformis</i>	8/03/1959	-18.932	134.351
dd	EL27547	LAMIACEAE	<i>Clerodendrum</i>	<i>floribundum</i>	<i>Clerodendrum floribundum</i> var. <i>indeterminate</i>	13/06/1984	-18.865	134.485
dd	EL27613	POACEAE	<i>Eriachne</i>	<i>obtusa</i>	<i>Eriachne obtusa</i> var. <i>indeterminate</i>	13/06/1984	-19.082	134.584
dd	EL27614	POACEAE	<i>Aristida</i>	<i>holathera</i>	<i>Aristida holathera</i> var. <i>indeterminate</i>		-18.995	134.182
dd	EL27614	POACEAE	<i>Eragrostis</i>	<i>eriopoda</i>	<i>Eragrostis eriopoda</i> subsp. <i>indeterminate</i>		-18.995	134.182
dd	EL27614	MYRTACEAE	<i>Eucalyptus</i>	<i>pruinosa</i>	<i>Eucalyptus pruinosa</i> subsp. <i>indeterminate</i>		-18.995	134.182
dd	EL27614	AMARANTHACEAE	<i>Ptilotus</i>	<i>spicatus</i>	<i>Ptilotus spicatus</i>	18/02/1966	-18.999	134.168
dd	EL27614	CUCURBITACEAE	<i>Citrullus</i>	<i>lanatus</i>	<i>Citrullus lanatus</i>	16/02/1966	-18.982	134.201

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
dd	EL27614	CARYOPHYLLACEAE	<i>Polycarpaea</i>	<i>corymbosa</i>	<i>Polycarpaea corymbosa</i>	10/04/1976	-18.999	134.168
dd	EL27614	AMARANTHACEAE	<i>Ptilotus</i>	<i>incanus</i>	<i>Ptilotus incanus</i>	28/07/1983	-18.999	134.168
dd	EL27614	CONVOLVULACEAE	<i>Jacquemontia</i>	<i>browniana</i>	<i>Jacquemontia browniana</i>	28/07/1983	-18.999	134.168
dd	EL27614	FABACEAE	<i>Acacia</i>	<i>victoriae</i>	<i>Acacia victoriae</i> subsp. <i>indeterminate</i>	27/07/1983	-18.999	134.168
dd	EL27614	POACEAE	<i>Cenchrus</i>	<i>pennisetiformis</i>	<i>Cenchrus pennisetiformis</i>	18/02/2005	-19.000	134.250
lc	EL27191	FABACEAE	<i>Acacia</i>	<i>hilliana</i>	<i>Acacia hilliana</i>	14/08/1955	-18.899	134.834
lc	EL27191	FABACEAE	<i>Acacia</i>	<i>stipuligera</i>	<i>Acacia stipuligera</i>	14/08/1955	-18.899	134.834
lc	EL27191	FABACEAE	<i>Indigofera</i>	<i>ewartiana</i>	<i>Indigofera ewartiana</i>	17/06/1960	-18.832	134.751
lc	EL27191	FABACEAE	<i>Crotalaria</i>	<i>dissitiflora</i>	<i>Crotalaria dissitiflora</i> subsp. <i>rugosa</i>	17/06/1960	-18.832	134.751

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27191	FABACEAE	<i>Indigastrum</i>	<i>parviflorum</i>	<i>Indigastrum parviflorum</i>	17/06/1960	-18.832	134.751
lc	EL27191	FABACEAE	<i>Acacia</i>	<i>stenophylla</i>	<i>Acacia stenophylla</i>	17/06/1960	-18.865	134.768
lc	EL27191	MARSILEACEAE	<i>Marsilea</i>	<i>crenata</i>	<i>Marsilea crenata</i>	17/06/1960	-18.832	134.668
lc	EL27191	POLYGONACEAE	<i>Muehlenbeckia</i>	<i>florulenta</i>	<i>Muehlenbeckia florulenta</i>	17/06/1960	-18.865	134.801
lc	EL27191	CONVOLVULACEAE	<i>Polymeria</i>	<i>longifolia</i>	<i>Polymeria longifolia</i>	17/06/1960	-18.865	134.801
lc	EL27191	MALVACEAE	<i>Sida</i>	<i>trichopoda</i>	<i>Sida trichopoda</i>	17/06/1960	-18.865	134.751
lc	EL27191	ASTERACEAE	<i>Flaveria</i>	<i>australasica</i>	<i>Flaveria australasica</i>	17/06/1960	-18.865	134.834
lc	EL27191	POACEAE	<i>Astrebla</i>	<i>elymoides</i>	<i>Astrebla elymoides</i>	18/06/1960	-18.899	134.834
lc	EL27191	POACEAE	<i>Astrebla</i>	<i>pectinata</i>	<i>Astrebla pectinata</i>	18/06/1960	-18.882	134.834

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27191	MALVACEAE	<i>Sida</i>	<i>laevis</i>	<i>Sida laevis</i>	18/06/1960	-18.999	134.834
lc	EL27191	GOODENIACEAE	<i>Goodenia</i>	<i>fascicularis</i>	<i>Goodenia fascicularis</i>	18/06/1960	-18.915	134.834
lc	EL27191	PORTULACACEAE	<i>Portulaca</i>	<i>sp. Clay soil (S.T.Blake 17854))</i>	<i>Portulaca sp. Clay soil (S.T.Blake 17854)</i>	18/06/1960	-18.948	134.801
lc	EL27191	MALVACEAE	<i>Sida</i>	<i>spinosa</i>	<i>Sida spinosa</i>	18/06/1960	-18.999	134.834
lc	EL27191	FABACEAE	<i>Desmodium</i>	<i>campylocaulon</i>	<i>Desmodium campylocaulon</i>	18/06/1960	-18.899	134.834
lc	EL27191	MALVACEAE	<i>Hibiscus</i>	<i>trionum</i>	<i>Hibiscus trionum var. vesicarius</i>	18/06/1960	-18.999	134.768
lc	EL27191	CONVOLVULACEAE	<i>Ipomoea</i>	<i>lonchophylla</i>	<i>Ipomoea lonchophylla</i>	18/06/1960	-18.999	134.768
lc	EL27191	FABACEAE	<i>Neptunia</i>	<i>monosperma</i>	<i>Neptunia monosperma</i>	18/06/1960	-18.899	134.834
lc	EL27191	ASTERACEAE	<i>Wedelia</i>	<i>asperrima</i>	<i>Wedelia asperrima</i>	18/06/1960	-18.899	134.834

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27191	POACEAE	<i>Iseilema</i>	<i>vaginiflorum</i>	<i>Iseilema vaginiflorum</i>	18/06/1960	-18.899	134.834
lc	EL27191	ASTERACEAE	<i>Streptoglossa</i>	<i>bubakii</i>	<i>Streptoglossa bubakii</i>	18/06/1960	-18.899	134.834
lc	EL27191	POACEAE	<i>Panicum</i>	<i>laevinode</i>	<i>Panicum laevinode</i>	2/07/1948	-18.865	134.751
lc	EL27191	POACEAE	<i>Spathia</i>	<i>neurosa</i>	<i>Spathia neurosa</i>	2/07/1948	-18.899	134.834
lc	EL27191	GOODENIACEAE	<i>Goodenia</i>	<i>fascicularis</i>	<i>Goodenia fascicularis</i>	13/03/1979	-18.865	134.701
lc	EL27191	MYRTACEAE	<i>Eucalyptus</i>	<i>odontocarpa</i>	<i>Eucalyptus odontocarpa</i>	29/07/1983	-18.732	134.818
lc	EL27191	FABACEAE	<i>Mirbelia</i>	<i>viminalis</i>	<i>Mirbelia viminalis</i>	29/07/1983	-18.732	134.818
lc	EL27191	FABACEAE	<i>Crotalaria</i>	<i>novae-hollandiae</i>	<i>Crotalaria novae-hollandiae</i> subsp. <i>lasiophylla</i>	29/07/1983	-18.732	134.818

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27191	APOCYNACEAE	Marsdenia	viridiflora	Marsdenia viridiflora subsp. tropica	29/07/1983	-18.732	134.818
lc	EL27191	SAPINDACEAE	Dodonaea	coriacea	Dodonaea coriacea	29/07/1983	-18.732	134.818
lc	EL27191	MYRTACEAE	Eucalyptus	chlorophylla	Eucalyptus chlorophylla subsp. chlorophylla	29/07/1983	-18.732	134.818
lc	EL27191	POACEAE	Sporobolus	mitchellii	Sporobolus mitchellii	12/06/1984	-18.865	134.768
lc	EL27191	POACEAE	Chloris	pectinata	Chloris pectinata	12/06/1984	-18.865	134.768
lc	EL27191	FABACEAE	Crotalaria	dissitiflora	Crotalaria dissitiflora subsp. rugosa	12/06/1984	-18.665	134.751
lc	EL27191	PHRYMACEAE	Mimulus	gracilis	Mimulus gracilis	12/06/1984	-18.632	134.751
lc	EL27191	FABACEAE	Cullen	cinereum	Cullen cinereum	12/06/1984	-18.865	134.768

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27191	FABACEAE	<i>Cullen</i>	<i>cinereum</i>	<i>Cullen cinereum</i>	12/06/1984	-18.615	134.718
lc	EL27191	POACEAE	<i>Iseilema</i>	<i>fragile</i>	<i>Iseilema fragile</i>	12/06/1984	-18.615	134.718
lc	EL27191	POACEAE	<i>Iseilema</i>	<i>macratherum</i>	<i>Iseilema macratherum</i>	12/06/1984	-18.865	134.768
lc	EL27191	POACEAE	<i>Iseilema</i>	<i>membranaceum</i>	<i>Iseilema membranaceum</i>	12/06/1984	-18.865	134.768
lc	EL27191	POACEAE	<i>Panicum</i>	<i>laevinode</i>	<i>Panicum laevinode</i>	12/06/1984	-18.632	134.751
lc	EL27191	POACEAE	<i>Iseilema</i>	<i>windersii</i>	<i>Iseilema windsersii</i>	12/06/1984	-18.665	134.751
lc	EL27191	POACEAE	<i>Eriachne</i>	<i>benthamii</i>	<i>Eriachne benthamii</i>	12/06/1984	-18.865	134.768
lc	EL27191	POACEAE	<i>Eragrostis</i>	<i>tenellula</i>	<i>Eragrostis tenellula</i>	12/06/1984	-18.865	134.768
lc	EL27191	POACEAE	<i>Eragrostis</i>	<i>setifolia</i>	<i>Eragrostis setifolia</i>	12/06/1984	-18.865	134.768

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27191	CONVOLVULACEAE	<i>Operculina</i>	<i>aequisepala</i>	<i>Operculina aequisepala</i>	12/06/1984	-18.865	134.768
lc	EL27191	FABACEAE	<i>Sesbania</i>	<i>brachycarpa</i>	<i>Sesbania brachycarpa</i>	12/06/1984	-18.865	134.768
lc	EL27191	FABACEAE	<i>Acacia</i>	<i>stenophylla</i>	<i>Acacia stenophylla</i>	12/06/1984	-18.865	134.768
lc	EL27191	AIZOACEAE	<i>Zaleya</i>	<i>galericulata</i>	<i>Zaleya galericulata subsp. galericulata</i>	12/06/1984	-18.865	134.768
lc	EL27191	NYCTAGINACEAE	<i>Boerhavia</i>	<i>paludosa</i>	<i>Boerhavia paludosa</i>	12/06/1984	-18.865	134.768
lc	EL27191	MALVACEAE	<i>Hibiscus</i>	<i>trionum</i>	<i>Hibiscus trionum var. vesicarius</i>	12/06/1984	-18.865	134.768
lc	EL27191	AMARANTHACEAE	<i>Alternanthera</i>	<i>nodiflora</i>	<i>Alternanthera nodiflora</i>	12/06/1984	-18.865	134.768
lc	EL27191	POACEAE	<i>Elytrophorus</i>	<i>spicatus</i>	<i>Elytrophorus spicatus</i>	12/06/1984	-18.865	134.768

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27191	ASTERACEAE	<i>Sphaeranthus</i>	<i>indicus</i>	<i>Sphaeranthus indicus</i>	12/06/1984	-18.865	134.768
lc	EL27191	ASTERACEAE	<i>Flaveria</i>	<i>australasica</i>	<i>Flaveria australasica</i>	12/06/1984	-18.865	134.768
lc	EL27191	POLYGONACEAE	<i>Muehlenbeckia</i>	<i>florulenta</i>	<i>Muehlenbeckia florulenta</i>	12/06/1984	-18.865	134.768
lc	EL27191	AMARANTHACEAE	<i>Salsola</i>	<i>tragus</i>	<i>Salsola tragus</i> <i>subsp. tragus</i>	12/06/1984	-18.865	134.768
lc	EL27191	POACEAE	<i>Eulalia</i>	<i>aurea</i>	<i>Eulalia aurea</i>	12/06/1984	-18.865	134.768
lc	EL27191	POACEAE	<i>Dichanthium</i>	<i>sericeum</i>	<i>Dichanthium sericeum</i> <i>subsp. polystachyum</i>	12/06/1984	-18.865	134.868
lc	EL27191	MALVACEAE	<i>Abelmoschus</i>	<i>ficulneus</i>	<i>Abelmoschus ficulneus</i>	12/06/1984	-18.865	134.768
lc	EL27191	LAMIACEAE	<i>Basilicum</i>	<i>polystachyon</i>	<i>Basilicum polystachyon</i>	12/06/1984	-18.615	134.718
lc	EL27191	AMARANTHACEAE	<i>Achyranthes</i>	<i>aspera</i>	<i>Achyranthes aspera</i>	12/06/1984	-18.615	134.718

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27191	CARYOPHYLLACEAE	<i>Polycarpaea</i>	<i>spirostylis</i>	<i>Polycarpaea spirostylis</i>	12/06/1984	-18.549	134.701
lc	EL27191	ASTERACEAE	<i>Wedelia</i>	<i>asperrima</i>	<i>Wedelia asperrima</i>	12/06/1984	-18.549	134.701
lc	EL27191	SCROPHULARIACEAE	<i>Eremophila</i>	<i>goodwinii</i>	<i>Eremophila goodwinii</i> subsp. <i>ecapitata</i>	12/06/1984	-18.565	134.668
lc	EL27191	ASTERACEAE	<i>Streptoglossa</i>	<i>bubakii</i>	<i>Streptoglossa bubakii</i>	12/06/1984	-18.682	134.751
lc	EL27191	PORTULACACEAE	<i>Portulaca</i>	<i>digyna</i>	<i>Portulaca digyna</i>	12/06/1984	-18.549	134.701
lc	EL27191	PORTULACACEAE	<i>Portulaca</i>	<i>oleracea</i>	<i>Portulaca oleracea</i> var. <i>Yuendumu</i> (T.S.Henshall 2868)	12/06/1984	-18.865	134.768
lc	EL27192	AMARANTHACEAE	<i>Ptilotus</i>	<i>macrocephalus</i>	<i>Ptilotus macrocephalus</i>	4/08/1959	-18.899	134.468
lc	EL27192	SOLANACEAE	<i>Solanum</i>	<i>quadriloculatum</i>	<i>Solanum quadriloculatum</i>	16/06/1960	-18.532	134.318

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27192	AMARANTHACEAE	<i>Sclerolaena</i>	<i>cornishiana</i>	<i>Sclerolaena cornishiana</i>	16/06/1960	-18.565	134.318
lc	EL27192	POACEAE	<i>Iseilema</i>	<i>vaginiflorum</i>	<i>Iseilema vaginiflorum</i>	16/06/1960	-18.532	134.318
lc	EL27192	ASTERACEAE	<i>Wedelia</i>	<i>asperrima</i>	<i>Wedelia asperrima</i>	16/06/1960	-18.632	134.618
lc	EL27192	RUBIACEAE	<i>Spermacoce</i>	<i>pogostoma</i>	<i>Spermacoce pogostoma</i>	16/06/1960	-18.599	134.551
lc	EL27192	GOODENIACEAE	<i>Goodenia</i>	<i>lunata</i>	<i>Goodenia lunata</i>	16/06/1960	-18.599	134.551
lc	EL27192	POACEAE	<i>Astrebla</i>	<i>pectinata</i>	<i>Astrebla pectinata</i>	16/06/1960	-18.599	134.618
lc	EL27192	POACEAE	<i>Astrebla</i>	<i>squarrosa</i>	<i>Astrebla squarrosa</i>	17/06/1960	-18.532	134.318
lc	EL27192	POACEAE	<i>Iseilema</i>	<i>membranaceum</i>	<i>Iseilema membranaceum</i>	17/06/1960	-18.532	134.318
lc	EL27192	CONVOLVULACEAE	<i>Ipomoea</i>	<i>lonchophylla</i>	<i>Ipomoea lonchophylla</i>	17/06/1960	-18.682	134.501

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27192	ASTERACEAE	<i>Flaveria</i>	<i>australasica</i>	<i>Flaveria australasica</i>	17/06/1960	-18.632	134.501
lc	EL27192	FABACEAE	<i>Indigofera</i>	<i>ewartiana</i>	<i>Indigofera ewartiana</i>	17/06/1960	-18.665	134.501
lc	EL27192	AMARANTHACEAE	<i>Ptilotus</i>	<i>macrocephalus</i>	<i>Ptilotus macrocephalus</i>	17/06/1960	-18.882	134.535
lc	EL27192	POACEAE	<i>Enneapogon</i>	<i>polyphyllus</i>	<i>Enneapogon polyphyllus</i>	17/06/1960	-18.882	134.535
lc	EL27192	FABACEAE	<i>Crotalaria</i>	<i>medicaginea</i>	<i>Crotalaria medicaginea</i> var. <i>neglecta</i>	17/06/1960	-18.865	134.568
lc	EL27192	CONVOLVULACEAE	<i>Evolvulus</i>	<i>alsinoides</i>	<i>Evolvulus alsinoides</i> var. <i>villosicalyx</i>	17/06/1960	-18.899	134.501
lc	EL27192	FABACEAE	<i>Indigofera</i>	<i>linnaei</i>	<i>Indigofera linnaei</i>	17/06/1960	-18.865	134.551
lc	EL27192	AMARANTHACEAE	<i>Salsola</i>	<i>tragus</i>	<i>Salsola tragus</i> subsp. <i>grandiflora</i>	17/06/1960	-18.899	134.468

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27192	FABACEAE	Acacia	ancistrocarpa	Acacia ancistrocarpa	17/06/1960	-18.882	134.535
lc	EL27192	AMARANTHACEAE	Rhagodia	eremaea	Rhagodia eremaea	17/06/1960	-18.899	134.501
lc	EL27192	CAPPARACEAE	Capparis	lasiantha	Capparis lasiantha	17/06/1960	-18.882	134.535
lc	EL27192	FABACEAE	Acacia	lysiphloia	Acacia lysiphloia	17/06/1960	-18.882	134.535
lc	EL27192	APOCYNACEAE	Carissa	lanceolata	Carissa lanceolata	17/06/1960	-18.882	134.535
lc	EL27192	POACEAE	Sarga	timorense	Sarga timorense	17/06/1960	-18.849	134.618
lc	EL27192	CYPERACEAE	Cyperus	bifax	Cyperus bifax	17/06/1960	-18.899	134.618
lc	EL27192	MOLLUGINACEAE	Glinus	lotoides	Glinus lotoides	17/06/1960	-18.899	134.468
lc	EL27192	SANTALACEAE	Santalum	lanceolatum	Santalum lanceolatum	1/09/1965	-18.899	134.468

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27192	FABACEAE	Acacia	sericophylla	Acacia sericophylla	16/02/1966	-18.899	134.468
lc	EL27192	FABACEAE	Dichrostachys	spicata	Dichrostachys spicata	1/03/1966	-18.899	134.468
lc	EL27192	CYPERACEAE	Cyperus	bifax	Cyperus bifax	29/07/1983	-18.549	134.318
lc	EL27192	AMARANTHACEAE	Alternanthera	nodiflora	Alternanthera nodiflora	29/07/1983	-18.549	134.318
lc	EL27192	MALVACEAE	Sida	laevis	Sida laevis	29/07/1983	-18.549	134.318
lc	EL27192	ASTERACEAE	Flaveria	australasica	Flaveria australasica	29/07/1983	-18.549	134.318
lc	EL27192	FABACEAE	Dichrostachys	spicata	Dichrostachys spicata	28/07/1983	-18.532	134.284
lc	EL27192	GOODENIACEAE	Goodenia	lunata	Goodenia lunata	29/07/1983	-18.549	134.318
lc	EL27192	GOODENIACEAE	Goodenia	vilmorinae	Goodenia vilmorinae	13/06/1984	-18.865	134.618

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27192	GOODENIACEAE	<i>Goodenia</i>	<i>vilmorinae</i>	<i>Goodenia vilmorinae</i>	13/06/1984	-18.865	134.618
lc	EL27192	AMARANTHACEAE	<i>Maireana</i>	<i>villosa</i>	<i>Maireana villosa</i>	13/06/1984	-18.999	134.618
lc	EL27192	AMARANTHACEAE	<i>Chenopodium</i>	<i>auricomum</i>	<i>Chenopodium auricomum</i>	12/06/1984	-18.715	134.568
lc	EL27192	AMARANTHACEAE	<i>Sclerolaena</i>	<i>bicornis</i>	<i>Sclerolaena bicornis</i> var. <i>bicornis</i>	12/06/1984	-18.632	134.651
lc	EL27192	ASTERACEAE	<i>Streptoglossa</i>	<i>adscendens</i>	<i>Streptoglossa adscendens</i>	12/06/1984	-18.632	134.601
lc	EL27192	GOODENIACEAE	<i>Goodenia</i>	<i>heterochila</i>	<i>Goodenia heterochila</i>	13/06/1984	-18.999	134.618
lc	EL27192	SOLANACEAE	<i>Solanum</i>	<i>quadriloculatum</i>	<i>Solanum quadriloculatum</i>	13/06/1984	-18.865	134.618
lc	EL27192	ASTERACEAE	<i>Acmella</i>	<i>grandiflora</i>	<i>Acmella grandiflora</i> var. <i>brachyglossa</i>	12/06/1984	-18.715	134.568

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27192	AMARANTHACEAE	<i>Salsola</i>	<i>tragus</i>	<i>Salsola tragus</i> subsp. <i>grandiflora</i>	13/06/1984	-18.849	134.584
lc	EL27192	MYRTACEAE	<i>Eucalyptus</i>	<i>odontocarpa</i>	<i>Eucalyptus</i> <i>odontocarpa</i>	13/06/1984	-18.865	134.618
lc	EL27192	POACEAE	<i>Paraneurachne</i>	<i>muelleri</i>	<i>Paraneurachne</i> <i>muelleri</i>	13/06/1984	-18.915	134.601
lc	EL27192	PROTEACEAE	<i>Grevillea</i>	<i>wickhamii</i>	<i>Grevillea</i> <i>wickhamii</i> subsp. <i>aprica</i>	13/06/1984	-18.865	134.618
lc	EL27192	POACEAE	<i>Cymbopogon</i>	<i>bombycinus</i>	<i>Cymbopogon</i> <i>bombycinus</i>	13/06/1984	-18.865	134.618
lc	EL27192	EUPHORBIACEAE	<i>Euphorbia</i>	<i>stevenii</i>	<i>Euphorbia</i> <i>stevenii</i>	12/06/1984	-18.715	134.568
lc	EL27192	MALVACEAE	<i>Keraudrenia</i>	<i>nephrosperma</i>	<i>Keraudrenia</i> <i>nephrosperma</i>	13/06/1984	-18.865	134.618
lc	EL27192	MYRTACEAE	<i>Eucalyptus</i>	<i>victrix</i>	<i>Eucalyptus victrix</i>	6/04/1985	-18.899	134.468

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27192	FABACEAE	Acacia	victoriae	Acacia victoriae subsp. victoriae	6/04/1985	-18.867	134.483
lc	EL27192	FABACEAE	Desmodium	campylocaulon	Desmodium campylocaulon	20/04/1996	-18.657	134.476
lc	EL27192	NYCTAGINACEAE	Boerhavia	dominii	Boerhavia dominii	20/04/1996	-18.653	134.456
lc	EL27192	AMARANTHACEAE	Amaranthus	mitchellii	Amaranthus mitchellii	20/04/1996	-18.653	134.456
lc	EL27192	FABACEAE	Glycine	falcata	Glycine falcata	20/04/1996	-18.649	134.468
lc	EL27192	LAMIACEAE	Premna	acuminata	Premna acuminata	20/04/1996	-18.657	134.476
lc	EL27192	FABACEAE	Crotalaria	dissitiflora	Crotalaria dissitiflora subsp. rugosa	20/04/1996	-18.657	134.476
lc	EL27192	RUBIACEAE	Spermacoce	argillacea	Spermacoce argillacea	20/04/1996	-18.657	134.476
lc	EL27192	CUCURBITACEAE	Cucumis	melo	Cucumis melo subsp. agrestis	20/04/1996	-18.657	134.476

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27192	POACEAE	<i>Uranthoecium</i>	<i>truncatum</i>	<i>Uranthoecium truncatum</i>	20/04/1996	-18.657	134.476
lc	EL27192	ASTERACEAE	<i>Wedelia</i>	<i>asperrima</i>	<i>Wedelia asperrima</i>	20/04/1996	-18.649	134.468
lc	EL27192	MALVACEAE	<i>Corchorus</i>	<i>tridens</i>	<i>Corchorus tridens</i>	20/04/1996	-18.657	134.476
lc	EL27192	FABACEAE	<i>Acacia</i>	<i>aneura</i>	<i>Acacia aneura</i> <i>var. tenuis</i>	20/04/1996	-18.882	134.468
lc	EL27192	PHRYMACEAE	<i>Mimulus</i>	<i>prostratus</i>	<i>Mimulus prostratus</i>	4/07/2001	-18.586	134.455
lc	EL27192	FABACEAE	<i>Tephrosia</i>	<i>sp. OT Station</i> <i>(S.T.Blake 17659)</i>	<i>Tephrosia sp. OT</i> <i>Station (S.T.Blake</i> <i>17659)</i>	11/01/2001	-18.817	134.583
lc	EL27547	BORAGINACEAE	<i>Heliotropium</i>	<i>tenuifolium</i>	<i>Heliotropium tenuifolium</i>	17/06/1960	-18.765	134.501
lc	EL27547	FABACEAE	<i>Alysicarpus</i>	<i>muelleri</i>	<i>Alysicarpus muelleri</i>	17/06/1960	-18.832	134.501
lc	EL27547	ASTERACEAE	<i>Wedelia</i>	<i>asperrima</i>	<i>Wedelia asperrima</i>	17/06/1960	-18.815	134.485

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27547	FABACEAE	<i>Crotalaria</i>	<i>dissitiflora</i>	<i>Crotalaria dissitiflora</i> subsp. <i>rugosa</i>	17/06/1960	-18.749	134.501
lc	EL27547	FABACEAE	<i>Sesbania</i>	<i>brachycarpa</i>	<i>Sesbania brachycarpa</i>	17/06/1960	-18.799	134.485
lc	EL27547	FABACEAE	<i>Desmodium</i>	<i>campylocaulon</i>	<i>Desmodium campylocaulon</i>	17/06/1960	-18.799	134.485
lc	EL27547	CONVOLVULACEAE	<i>Ipomoea</i>	<i>lonchophylla</i>	<i>Ipomoea lonchophylla</i>	17/06/1960	-18.799	134.485
lc	EL27547	POACEAE	<i>Astrebla</i>	<i>squarrosa</i>	<i>Astrebla squarrosa</i>	17/06/1960	-18.799	134.485
lc	EL27547	POACEAE	<i>Aristida</i>	<i>contorta</i>	<i>Aristida contorta</i>	17/06/1960	-18.865	134.501
lc	EL27547	AMARANTHACEAE	<i>Maireana</i>	<i>villosa</i>	<i>Maireana villosa</i>	17/06/1960	-18.915	134.468
lc	EL27547	POACEAE	<i>Iseilema</i>	<i>vaginiflorum</i>	<i>Iseilema vaginiflorum</i>	17/06/1960	-18.849	134.451

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27547	PHYLLANTHACEAE	<i>Phyllanthus</i>	<i>maderaspatensis</i>	<i>Phyllanthus maderaspatensis</i> <i>var. angustifolius</i>	17/06/1960	-18.832	134.501
lc	EL27547	FABACEAE	<i>Acacia</i>	<i>colei</i>	<i>Acacia colei</i> var. <i>colei</i>	16/02/1966	-18.865	134.501
lc	EL27547	CYPERACEAE	<i>Fimbristylis</i>	<i>nuda</i>	<i>Fimbristylis nuda</i>	1/07/1974	-18.849	134.385
lc	EL27547	FABACEAE	<i>Cullen</i>	<i>leucanthum</i>	<i>Cullen leucanthum</i>	26/08/1976	-18.932	134.401
lc	EL27547	FABACEAE	<i>Crotalaria</i>	<i>novae-hollandiae</i>	<i>Crotalaria novae-hollandiae</i> subsp. <i>lasiophylla</i>	13/06/1984	-18.899	134.351
lc	EL27547	POACEAE	<i>Eragrostis</i>	<i>eriopoda</i>	<i>Eragrostis eriopoda</i> subsp. <i>Red earth</i> (D.J.Nelson 1651)	14/06/1984	-18.915	134.351
lc	EL27547	AMARANTHACEAE	<i>Gomphrena</i>	<i>canescens</i>	<i>Gomphrena canescens</i> subsp. <i>canescens</i>	14/06/1984	-18.882	134.351

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27547	FABACEAE	<i>Senna</i>	<i>artemisioides</i>	<i>Senna artemisioides</i> <i>subsp. oligophylla</i>	13/06/1984	-18.849	134.501
lc	EL27547	CLEOMACEAE	<i>Cleome</i>	<i>viscosa</i>	<i>Cleome viscosa</i>	1/02/1966	-18.832	134.501
lc	EL27547	CUCURBITACEAE	<i>Austrobryonia</i>	<i>centralis</i>	<i>Austrobryonia centralis</i>	20/04/1996	-18.854	134.505
lc	EL27547	FABACEAE	<i>Tephrosia</i>	<i>sp. Willowra</i> (G.M.Chippendale 4809)	<i>Tephrosia sp.</i> <i>Willowra</i> (G.M.Chippendale 4809)	31/01/2001	-18.917	134.350
lc	EL27547	MYRTACEAE	<i>Melaleuca</i>	<i>viridiflora</i>	<i>Melaleuca viridiflora</i>	18/06/1946	-18.865	134.501
lc	EL27612	MYRTACEAE	<i>Eucalyptus</i>	<i>odontocarpa</i>	<i>Eucalyptus odontocarpa</i>	19/07/1968	-19.165	134.334
lc	EL27612	GOODENIACEAE	<i>Goodenia</i>	<i>ramelii</i>	<i>Goodenia ramelii</i>	3/08/1973	-19.115	134.251
lc	EL27613	MYRTACEAE	<i>Corymbia</i>	<i>flavescens</i>	<i>Corymbia flavescens</i>	29/03/1963	-19.132	134.735

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27613	FABACEAE	Acacia	adsurgens	Acacia adsurgens	13/06/1984	-19.082	134.584
lc	EL27613	POACEAE	Aristida	holathera	Aristida holathera var. holathera	12/06/1984	-19.082	134.584
lc	EL27613	POACEAE	Aristida	inaequiglumis	Aristida inaequiglumis	13/06/1984	-19.082	134.584
lc	EL27613	POACEAE	Eragrostis	xerophila	Eragrostis xerophila	13/06/1984	-19.082	134.584
lc	EL27613	POACEAE	Eragrostis	cumingii	Eragrostis cumingii	13/06/1984	-19.082	134.584
lc	EL27613	CONVOLVULACEAE	Ipomoea	diamantinensis	Ipomoea diamantinensis	13/06/1984	-19.015	134.651
lc	EL27613	SOLANACEAE	Solanum	quadriloculatum	Solanum quadriloculatum	13/06/1984	-19.049	134.568
lc	EL27613	SCROPHULARIACEAE	Eremophila	maculata	Eremophila maculata subsp. maculata	13/06/1984	-19.065	134.584
lc	EL27613	SANTALACEAE	Santalum	lanceolatum	Santalum lanceolatum	13/06/1984	-19.082	134.584

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27613	SCROPHULARIACEAE	<i>Eremophila</i>	<i>bignoniiflora</i>	<i>Eremophila bignoniiflora</i>	13/06/1984	-19.082	134.584
lc	EL27613	FABACEAE	<i>Acacia</i>	<i>cuthbertsonii</i>	<i>Acacia cuthbertsonii</i> subsp. <i>cuthbertsonii</i>	13/06/1984	-19.082	134.584
lc	EL27613	FABACEAE	<i>Indigofera</i>	<i>colutea</i>	<i>Indigofera colutea</i>	13/06/1984	-19.082	134.584
lc	EL27613	POACEAE	<i>Enteropogon</i>	<i>acicularis</i>	<i>Enteropogon acicularis</i>	13/06/1984	-19.082	134.584
lc	EL27613	LORANTHACEAE	<i>Lysiana</i>	<i>spathulata</i>	<i>Lysiana spathulata</i> subsp. <i>spathulata</i>	13/06/1984	-19.082	134.584
lc	EL27613	APOCYNACEAE	<i>Marsdenia</i>	<i>australis</i>	<i>Marsdenia australis</i>	13/06/1984	-19.082	134.584
lc	EL27614	POACEAE	<i>Aristida</i>	<i>inaequiglumis</i>	<i>Aristida inaequiglumis</i>		-18.995	134.182
lc	EL27614	POACEAE	<i>Triodia</i>	<i>pungens</i>	<i>Triodia pungens</i>		-18.995	134.182

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27614	CYPERACEAE	<i>Fimbristylis</i>	<i>dichotoma</i>	<i>Fimbristylis dichotoma</i>		-18.995	134.182
lc	EL27614	FABACEAE	<i>Acacia</i>	<i>stipuligera</i>	<i>Acacia stipuligera</i>		-18.995	134.182
lc	EL27614	FABACEAE	<i>Acacia</i>	<i>sericophylla</i>	<i>Acacia sericophylla</i>		-18.995	134.182
lc	EL27614	POACEAE	<i>Chrysopogon</i>	<i>fallax</i>	<i>Chrysopogon fallax</i>		-18.995	134.182
lc	EL27614	FABACEAE	<i>Acacia</i>	<i>lysiphloia</i>	<i>Acacia lysiphloia</i>		-18.995	134.182
lc	EL27614	POACEAE	<i>Eulalia</i>	<i>aurea</i>	<i>Eulalia aurea</i>		-18.995	134.182
lc	EL27614	APOCYNACEAE	<i>Carissa</i>	<i>lanceolata</i>	<i>Carissa lanceolata</i>		-18.995	134.182
lc	EL27614	MYRTACEAE	<i>Corymbia</i>	<i>terminalis</i>	<i>Corymbia terminalis</i>		-18.995	134.182
lc	EL27614	GOODENIACEAE	<i>Goodenia</i>	<i>ramelii</i>	<i>Goodenia ramelii</i>	8/03/1955	-18.999	134.168

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27614	FABACEAE	<i>Tephrosia</i>	<i>brachyodon</i>	<i>Tephrosia brachyodon</i> var. <i>longifolia</i>	8/03/1957	-18.982	134.201
lc	EL27614	APOCYNACEAE	<i>Carissa</i>	<i>lanceolata</i>	<i>Carissa lanceolata</i>	11/09/1965	-18.999	134.168
lc	EL27614	FABACEAE	<i>Glycine</i>	<i>falcata</i>	<i>Glycine falcata</i>	1/02/1966	-18.982	134.201
lc	EL27614	FABACEAE	<i>Crotalaria</i>	<i>dissitiflora</i>	<i>Crotalaria dissitiflora</i> subsp. <i>rugosa</i>	1/02/1966	-18.999	134.251
lc	EL27614	MYRTACEAE	<i>Melaleuca</i>	<i>viridiflora</i>	<i>Melaleuca viridiflora</i>	1/03/1966	-18.999	134.251
lc	EL27614	MYRTACEAE	<i>Melaleuca</i>	<i>viridiflora</i>	<i>Melaleuca viridiflora</i>	26/04/1948	-18.965	134.168
lc	EL27614	NYCTAGINACEAE	<i>Boerhavia</i>	<i>repleta</i>	<i>Boerhavia repleta</i>	26/04/1948	-18.949	134.184
lc	EL27614	MALVACEAE	<i>Gossypium</i>	<i>australe</i>	<i>Gossypium australe</i>	19/07/1968	-18.999	134.184

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27614	FABACEAE	<i>Indigastrum</i>	<i>parviflorum</i>	<i>Indigastrum parviflorum</i>	27/02/1966	-18.982	134.201
lc	EL27614	AMARANTHACEAE	<i>Ptilotus</i>	<i>macrocephalus</i>	<i>Ptilotus macrocephalus</i>	27/02/1966	-18.982	134.201
lc	EL27614	ASTERACEAE	<i>Wedelia</i>	<i>asperrima</i>	<i>Wedelia asperrima</i>	27/02/1966	-18.982	134.201
lc	EL27614	CAPPARACEAE	<i>Capparis</i>	<i>loranthifolia</i>	<i>Capparis loranthifolia</i> var. <i>loranthifolia</i>	25/11/1970	-18.999	134.184
lc	EL27614	MYRTACEAE	<i>Corymbia</i>	<i>flavescens</i>	<i>Corymbia flavescens</i>	16/02/1966	-18.999	134.251
lc	EL27614	ERIOCAULACEAE	<i>Eriocaulon</i>	<i>pygmaeum</i>	<i>Eriocaulon pygmaeum</i>	1/07/1974	-18.999	134.251
lc	EL27614	CENTROLEPIDACEAE	<i>Centrolepis</i>	<i>exserta</i>	<i>Centrolepis exserta</i>	1/07/1974	-18.999	134.251
lc	EL27614	CYPERACEAE	<i>Fuirena</i>	<i>incrassata</i>	<i>Fuirena incrassata</i>	1/07/1974	-18.999	134.251
lc	EL27614	CYPERACEAE	<i>Fimbristylis</i>	<i>signata</i>	<i>Fimbristylis signata</i>	1/07/1974	-18.999	134.251

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27614	CYPERACEAE	<i>Fimbristylis</i>	<i>oxystachya</i>	<i>Fimbristylis oxystachya</i>	1/07/1974	-18.999	134.251
lc	EL27614	CYPERACEAE	<i>Cyperus</i>	<i>castaneus</i>	<i>Cyperus castaneus</i>	1/07/1974	-18.999	134.251
lc	EL27614	CYPERACEAE	<i>Cyperus</i>	<i>dactylotes</i>	<i>Cyperus dactylotes</i>	1/07/1974	-18.999	134.251
lc	EL27614	MALVACEAE	<i>Waltheria</i>	<i>indica</i>	<i>Waltheria indica</i>	27/07/1983	-18.999	134.168
lc	EL27614	PROTEACEAE	<i>Grevillea</i>	<i>refracta</i>	<i>Grevillea refracta</i> <i>subsp. refracta</i>	28/07/1983	-18.999	134.168
lc	EL27614	FABACEAE	<i>Acacia</i>	<i>melleodora</i>	<i>Acacia melleodora</i>	27/07/1983	-18.999	134.168
lc	EL27614	MYRTACEAE	<i>Eucalyptus</i>	<i>pruinosa</i>	<i>Eucalyptus pruinosa</i> <i>subsp. pruinosa</i>	27/07/1983	-18.999	134.168
lc	EL27614	LORANTHACEAE	<i>Lysiana</i>	<i>subfalcata</i>	<i>Lysiana subfalcata</i>	27/07/1983	-18.999	134.168
lc	EL27614	FABACEAE	<i>Acacia</i>	<i>lysiphloia</i>	<i>Acacia lysiphloia</i>	27/07/1983	-18.999	134.168

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27614	POACEAE	<i>Triodia</i>	<i>pungens</i>	<i>Triodia pungens</i>	27/07/1983	-18.999	134.168
lc	EL27614	FABACEAE	<i>Senna</i>	<i>artemisioides</i>	<i>Senna artemisioides subsp. oligophylla</i>	27/07/1983	-18.999	134.168
lc	EL27614	ASTERACEAE	<i>Pluchea</i>	<i>dentex</i>	<i>Pluchea dentex</i>	29/07/1983	-18.999	134.168
lc	EL27614	FABACEAE	<i>Templetonia</i>	<i>hookeri</i>	<i>Templetonia hookeri</i>	28/07/1983	-18.999	134.168
lc	EL27614	FABACEAE	<i>Acacia</i>	<i>acradenia</i>	<i>Acacia acradenia</i>	28/07/1983	-18.999	134.168
lc	EL27614	FABACEAE	<i>Cajanus</i>	<i>cinereus</i>	<i>Cajanus cinereus</i>	28/07/1983	-18.999	134.168
lc	EL27614	PROTEACEAE	<i>Grevillea</i>	<i>wickhamii</i>	<i>Grevillea wickhamii subsp. aprica</i>	28/07/1983	-18.999	134.168
lc	EL27614	MALVACEAE	<i>Hibiscus</i>	<i>meraukensis</i>	<i>Hibiscus meraukensis</i>	28/07/1983	-18.999	134.168
lc	EL27614	LAMIACEAE	<i>Anisomeles</i>	<i>malabarica</i>	<i>Anisomeles malabarica</i>	28/07/1983	-18.999	134.168

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27614	FABACEAE	Acacia	spondylophylla	Acacia spondylophylla	28/07/1983	-18.999	134.168
lc	EL27614	APOCYNACEAE	Sarcostemma	viminale	Sarcostemma viminale subsp. australe	28/07/1983	-18.999	134.168
lc	EL27614	SAPINDACEAE	Dodonaea	lanceolata	Dodonaea lanceolata var. lanceolata	28/07/1983	-18.999	134.168
lc	EL27614	MYRTACEAE	Eucalyptus	camaldulensis	Eucalyptus camaldulensis subsp. obtusa	28/07/1983	-18.999	134.168
lc	EL27614	FABACEAE	Acacia	tenuissima	Acacia tenuissima	27/07/1983	-18.999	134.168
lc	EL27614	FABACEAE	Acacia	retivenea	Acacia retivenea subsp. retivenea	28/07/1983	-18.999	134.168
lc	EL27614	POACEAE	Aristida	exserta	Aristida exserta	28/07/1983	-18.999	134.168
lc	EL27614	FABACEAE	Crotalaria	medicaginea	Crotalaria medicaginea var. neglecta	28/07/1983	-18.999	134.168

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27614	CYPERACEAE	<i>Fimbristylis</i>	<i>microcarya</i>	<i>Fimbristylis microcarya</i>	1/07/1974	-18.982	134.201
lc	EL27614	MYRTACEAE	<i>Eucalyptus</i>	<i>camaldulensis</i>	<i>Eucalyptus camaldulensis subsp. obtusa</i>	23/11/1977	-19.049	134.184
lc	EL27614	MYRTACEAE	<i>Eucalyptus</i>	<i>leucophloia</i>	<i>Eucalyptus leucophloia subsp. euroa</i>	23/11/1977	-19.049	134.184
lc	EL27614	MYRTACEAE	<i>Corymbia</i>	<i>deserticola</i>	<i>Corymbia deserticola subsp. mesogeotica</i>	30/11/1996	-18.949	134.135
lc	EL27614	SAPINDACEAE	<i>Dodonaea</i>	<i>coriacea</i>	<i>Dodonaea coriacea</i>	22/09/1973	-18.999	134.251
lc	EL27614	FABACEAE	<i>Acacia</i>	<i>perryi</i>	<i>Acacia perryi</i>	20/11/1993	-18.963	134.134
lc	EL27614	FABACEAE	<i>Acacia</i>	<i>orthocarpa</i>	<i>Acacia orthocarpa</i>	20/11/1993	-18.967	134.136
lc	EL27614	LORANTHACEAE	<i>Diplatia</i>	<i>grandibractea</i>	<i>Diplatia grandibractea</i>	1/07/1974	-18.999	134.168

NT STATUS	TENEMENT	FAMILY	GENUS	SPECIES	NAMEINFRA	DATE	LATITUDE	LONGITUDE
lc	EL27614	FABACEAE	Acacia	torulosa	Acacia torulosa	24/05/2001	-18.975	134.250
ne	EL27192	CUCURBITACEAE	Cucumis	melo	Cucumis melo subsp. melo	20/04/1996	-18.641	134.554
ne	EL27547	HERNANDIACEAE	Gyrocarpus	americanus	Gyrocarpus americanus subsp. indeterminate	25/06/1984	-18.882	134.351
ne	EL27614	HERNANDIACEAE	Gyrocarpus	americanus	Gyrocarpus americanus subsp. indeterminate		-18.995	134.182
ne	EL27614	HERNANDIACEAE	Gyrocarpus	americanus	Gyrocarpus americanus subsp. indeterminate	20/04/1996	-18.982	134.235

APPENDIX C:

NRETAS FAUNA LIST

Appendix C: NRETAS Flora List 2011

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
EN	EL27546	<i>Erythrura gouldiae</i>	Gouldian Finch	19740729	-18.999	134.501
VU	EL27612	<i>Ardeotis australis</i>	Australian Bustard	19840212	-19.115	134.268
VU	EL27614	<i>Ardeotis australis</i>	Australian Bustard	20010308	-18.984	134.219
NT	EL27547	<i>Pseudomys nanus</i>	Western Chestnut Mouse	19840614	-18.915	134.351
NT	EL27547	<i>Pseudomys nanus</i>	Western Chestnut Mouse	19831031	-18.915	134.351
NT	EL27547	<i>Pseudomys nanus</i>	Western Chestnut Mouse	19840614	-18.915	134.351
NT	EL27547	<i>Pseudomys nanus</i>	Western Chestnut Mouse	19840614	-18.915	134.351
(Int)	EL27191	<i>Mus musculus</i>	House Mouse	19830730	-18.765	134.835
(Int)	EL27547	<i>Felis catus</i>	Cat	19681110	-18.865	134.501
(Int)	EL27614	<i>Mus musculus</i>	House Mouse	19660628	-18.982	134.201
(Int)	EL27614	<i>Mus musculus</i>	House Mouse	19660628	-18.982	134.201
(Int)	EL27614	<i>Mus musculus</i>	House Mouse	19660628	-18.982	134.201

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
(Int)	EL27614	<i>Mus musculus</i>	House Mouse	19660829	-18.982	134.201
(Int)	EL27614	<i>Mus musculus</i>	House Mouse	19660830	-18.982	134.201
DD	EL27613	<i>Varanus spenceri</i>	Spencer's Monitor	19020000	-19.129	134.731
DD	EL27613	<i>Varanus spenceri</i>	Spencer's Monitor	19040000	-19.129	134.731
LC	EL27191	<i>Hamirostra melanosternon</i>	Black-breasted Buzzard	20010713	-18.973	134.786
LC	EL27191	<i>Anas gracilis</i>	Grey Teal	19830415	-18.782	134.901
LC	EL27191	<i>Anas superciliosa</i>	Pacific Black Duck	19830415	-18.782	134.901
LC	EL27191	<i>Aythya australis</i>	Hardhead	19830415	-18.782	134.901
LC	EL27191	<i>Dendrocygna eytoni</i>	Plumed Whistling-Duck	19830415	-18.782	134.901
LC	EL27191	<i>Egretta novaehollandiae</i>	White-faced Heron	19830415	-18.782	134.901
LC	EL27191	<i>Elseya melanops</i>	Black-fronted Dotterel	19830415	-18.782	134.901
LC	EL27191	<i>Erythronyx cinctus</i>	Red-kneed Dotterel	19830415	-18.782	134.901
LC	EL27191	<i>Haliastur sphenurus</i>	Whistling Kite	19830415	-18.782	134.901
LC	EL27191	<i>Malacorhynchus membranaceus</i>	Pink-eared Duck	19830415	-18.782	134.901
LC	EL27191	<i>Milvus migrans</i>	Black Kite	19830415	-18.782	134.901

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
LC	EL27191	<i>Mirafrja javanica</i>	Horsfield's Bushlark	19830415	-18.782	134.901
LC	EL27191	<i>Poliocephalus poliocephalus</i>	Hoary-headed Grebe	19830415	-18.782	134.901
LC	EL27191	<i>Pseudomys hermannsburgensis</i>	Sandy Inland Mouse	19830730	-18.732	134.818
LC	EL27191	<i>Stiltia isabella</i>	Australian Pratincole	19830415	-18.782	134.901
LC	EL27191	<i>Tympanocryptis lineata</i>	Lined Earless Dragon	19840612	-18.865	134.768
LC	EL27191	<i>Tympanocryptis lineata</i>	Lined Earless Dragon	19851030	-18.865	134.768
LC	EL27191	<i>Tympanocryptis lineata</i>	Lined Earless Dragon	19840612	-18.865	134.768
LC	EL27191	<i>Pseudomys delicatulus</i>	Delicate Mouse	19830730	-18.765	134.835
LC	EL27191	<i>Pseudomys hermannsburgensis</i>	Sandy Inland Mouse	19830730	-18.765	134.835
LC	EL27547	<i>Pelecanus conspicillatus</i>	Australian Pelican	19900601	-18.865	134.501
LC	EL27547	<i>Pseudomys desertor</i>	Desert Mouse	19840614	-18.915	134.351
LC	EL27547	<i>Falco peregrinus</i>	Peregrine Falcon	19670000	-18.865	134.485
LC	EL27547	<i>Myiagra inquieta</i>	Restless Flycatcher	19770000	-18.865	134.485
LC	EL27547	<i>Poliocephalus poliocephalus</i>	Hoary-headed Grebe	19670000	-18.865	134.485
LC	EL27547	<i>Pseudomys desertor</i>	Desert Mouse	19831031	-18.915	134.351

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
LC	EL27547	<i>Artamus cinereus</i>	Black-faced Woodswallow	19810904	-18.919	134.421
LC	EL27547	<i>Chalcites basalis</i>	Horsfield's Bronze-Cuckoo	19810904	-18.919	134.421
LC	EL27547	<i>Falco berigora</i>	Brown Falcon	19810904	-18.919	134.421
LC	EL27547	<i>Falco cenchroides</i>	Nankeen Kestrel	19810904	-18.919	134.421
LC	EL27547	<i>Geopelia cuneata</i>	Diamond Dove	19810904	-18.919	134.421
LC	EL27547	<i>Geopelia striata</i>	Peaceful Dove	19810904	-18.919	134.421
LC	EL27547	<i>Grallina cyanoleuca</i>	Magpie-lark	19810904	-18.919	134.421
LC	EL27547	<i>Cracticus tibicen</i>	Australian Magpie	19810904	-18.919	134.421
LC	EL27547	<i>Lalage sueurii</i>	White-winged Triller	19810904	-18.919	134.421
LC	EL27547	<i>Lichenostomus virescens</i>	Singing Honeyeater	19810904	-18.919	134.421
LC	EL27547	<i>Malurus lamberti</i>	Variegated Fairy-wren	19810904	-18.919	134.421
LC	EL27547	<i>Pardalotus rubricatus</i>	Red-browed Pardalote	19810904	-18.919	134.421
LC	EL27547	<i>Pomatostomus temporalis</i>	Grey-crowned Babbler	19810904	-18.919	134.421
LC	EL27547	<i>Smicrornis brevirostris</i>	Weebill	19810904	-18.919	134.421

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
LC	EL27547	<i>Taeniopygia guttata</i>	Zebra Finch	19810904	-18.919	134.421
LC	EL27547	<i>Vanellus miles</i>	Masked Lapwing	19810904	-18.919	134.421
LC	EL27547	<i>Canis lupus</i>	Dingo	19681105	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681106	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681106	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681107	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681107	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681101	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681102	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681102	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681102	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681103	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681103	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681105	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681106	-18.865	134.501

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
LC	EL27547	<i>Canis lupus</i>	Dingo	19681107	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681109	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681111	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681111	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19681106	-18.865	134.501
LC	EL27547	<i>Canis lupus</i>	Dingo	19730629	-18.865	134.501
LC	EL27612	<i>Accipiter fasciatus</i>	Brown Goshawk	19840212	-19.115	134.268
LC	EL27612	<i>Cacatua sanguinea</i>	Little Corella	19840212	-19.115	134.268
LC	EL27612	<i>Grallina cyanoleuca</i>	Magpie-lark	19840212	-19.115	134.268
LC	EL27612	<i>Haliastur sphenurus</i>	Whistling Kite	19840212	-19.115	134.268
LC	EL27612	<i>Ocyphaps lophotes</i>	Crested Pigeon	19840212	-19.115	134.268
LC	EL27613	<i>Cacomantis pallidus</i>	Pallid Cuckoo	20000630	-19.038	134.585
LC	EL27613	<i>Grallina cyanoleuca</i>	Magpie-lark	20000630	-19.038	134.585
LC	EL27613	<i>Milvus migrans</i>	Black Kite	20000630	-19.038	134.585
LC	EL27613	<i>Rhipidura leucophrys</i>	Willie Wagtail	20000630	-19.038	134.585

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
LC	EL27613	<i>Taeniopygia guttata</i>	Zebra Finch	20000630	-19.038	134.585
LC	EL27614	<i>Accipiter cirrocephalus</i>	Collared Sparrowhawk	20010308	-18.984	134.219
LC	EL27614	<i>Artamus cinereus</i>	Black-faced Woodswallow	20010308	-18.984	134.219
LC	EL27614	<i>Barnardius zonarius</i>	Australian Ringneck	20010308	-18.984	134.219
LC	EL27614	<i>Cacatua sanguinea</i>	Little Corella	20010308	-18.984	134.219
LC	EL27614	<i>Chalcites osculans</i>	Black-eared Cuckoo	20010308	-18.984	134.219
LC	EL27614	<i>Cincloramphus mathewsi</i>	Rufous Songlark	20010308	-18.984	134.219
LC	EL27614	<i>Circus assimilis</i>	Spotted Harrier	20010308	-18.984	134.219
LC	EL27614	<i>Colluricincla harmonica</i>	Grey Shrike-thrush	20010308	-18.984	134.219
LC	EL27614	<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike	20010308	-18.984	134.219
LC	EL27614	<i>Cracticus nigrogularis</i>	Pied Butcherbird	20010308	-18.984	134.219
LC	EL27614	<i>Cacomantis pallidus</i>	Pallid Cuckoo	20010308	-18.984	134.219
LC	EL27614	<i>Elanus axillaris</i>	Black-shouldered Kite	20010308	-18.984	134.219
LC	EL27614	<i>Falco berigora</i>	Brown Falcon	20010308	-18.984	134.219

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
LC	EL27614	<i>Geopelia cuneata</i>	Diamond Dove	20010308	-18.984	134.219
LC	EL27614	<i>Grallina cyanoleuca</i>	Magpie-lark	20010308	-18.984	134.219
LC	EL27614	<i>Hamirostra melanosternon</i>	Black-breasted Buzzard	19990909	-18.989	134.140
LC	EL27614	<i>Hamirostra melanosternon</i>	Black-breasted Buzzard	20010308	-18.984	134.219
LC	EL27614	<i>Petrochelidon ariel</i>	Fairy Martin	20010308	-18.984	134.219
LC	EL27614	<i>Lalage sueurii</i>	White-winged Triller	20010308	-18.984	134.219
LC	EL27614	<i>Lichenostomus keartlandi</i>	Grey-headed Honeyeater	20010308	-18.984	134.219
LC	EL27614	<i>Lichenostomus virescens</i>	Singing Honeyeater	20010308	-18.984	134.219
LC	EL27614	<i>Malurus lamberti</i>	Variegated Fairy-wren	20010308	-18.984	134.219
LC	EL27614	<i>Manorina flavigula</i>	Yellow-throated Miner	20010308	-18.984	134.219
LC	EL27614	<i>Milvus migrans</i>	Black Kite	20010308	-18.984	134.219
LC	EL27614	<i>Ocyphaps lophotes</i>	Crested Pigeon	20010308	-18.984	134.219
LC	EL27614	<i>Oreoica gutturalis</i>	Crested Bellbird	20010308	-18.984	134.219
LC	EL27614	<i>Pardalotus rubricatus</i>	Red-browed Pardalote	20010308	-18.984	134.219
LC	EL27614	<i>Rhipidura leucophrys</i>	Willie Wagtail	20010308	-18.984	134.219

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
LC	EL27614	<i>Taeniopygia guttata</i>	Zebra Finch	20010308	-18.984	134.219
LC	EL27614	<i>Aprosmictus erythropterus</i>	Red-winged Parrot	19940603	-18.999	134.135
LC	EL27614	<i>Eulophus roseicapilla</i>	Galah	19940603	-18.999	134.135
LC	EL27614	<i>Cacatua sanguinea</i>	Little Corella	19940603	-18.999	134.135
LC	EL27614	<i>Cracticus nigrogularis</i>	Pied Butcherbird	19940603	-18.999	134.135
LC	EL27614	<i>Ctenophorus nuchalis</i>	Central Netted Dragon	19891023	-18.999	134.135
LC	EL27614	<i>Egretta novaehollandiae</i>	White-faced Heron	19940603	-18.999	134.135
LC	EL27614	<i>Gehyra minuta</i>	Dwarf Dtella	19860527	-18.999	134.135
LC	EL27614	<i>Grallina cyanoleuca</i>	Magpie-lark	19940603	-18.999	134.135
LC	EL27614	<i>Cracticus tibicen</i>	Australian Magpie	19940603	-18.999	134.135
LC	EL27614	<i>Haliastur sphenurus</i>	Whistling Kite	19940603	-18.999	134.135
LC	EL27614	<i>Lichenostomus virescens</i>	Singing Honeyeater	19940603	-18.999	134.135
LC	EL27614	<i>Lichmera indistincta</i>	Brown Honeyeater	19940603	-18.999	134.135
LC	EL27614	<i>Ocyphaps lophotes</i>	Crested Pigeon	19940603	-18.999	134.135
LC	EL27614	<i>Rhipidura albiscapa</i>	Grey Fantail	19940603	-18.999	134.135

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
LC	EL27614	<i>Rhipidura leucophrys</i>	Willie Wagtail	19940603	-18.999	134.135
LC	EL27614	<i>Petrochelidon ariel</i>	Fairy Martin	19771213	-19.079	134.251
LC	EL27614	<i>Gehyra minuta</i>	Dwarf Dtella	19860527	-18.999	134.135
LC	EL27614	<i>Gehyra minuta</i>	Dwarf Dtella	19860527	-18.999	134.135
LC	EL27614	<i>Gehyra minuta</i>	Dwarf Dtella	19860527	-18.999	134.135
LC	EL27614	<i>Gehyra minuta</i>	Dwarf Dtella	19860527	-18.999	134.135
LC	EL27614	<i>Heteronotia binoei</i>	Bynoe's Gecko	19620725	-19.065	134.201
LC	EL27614	<i>Strophurus taeniatus</i>	White-striped Gecko	19740804	-19.065	134.201
LC	EL27614	<i>Strophurus ciliaris</i>	Spiny-tailed Gecko	19800224	-18.999	134.135
LC	EL27614	<i>Lialis burtonis</i>	Burton's Legless Lizard	19650200	-19.065	134.201
LC	EL27614	<i>Litoria maculosa</i>	Daly Waters Frog	19660130	-19.065	134.201
LC	EL27614	<i>Varanus acanthurus</i>	Ridge-tailed Monitor	19640801	-19.065	134.201
LC	EL27614	<i>Varanus acanthurus</i>	Ridge-tailed Monitor	19640801	-19.065	134.201
LC	EL27614	<i>Pseudonaja nuchalis</i>	Western Brown Snake	19650130	-19.065	134.201
LC	EL27614	<i>Pseudomys hermannsburgensis</i>	Sandy Inland Mouse	19660627	-18.982	134.201

NT STATUS	TENEMENTS	FULL NAME	COMMON NAME	DATE	LATITUDE	LONGITUDE
LC	EL27614	<i>Pseudomys desertor</i>	Desert Mouse	19660627	-18.982	134.201
LC	EL27614	<i>Pseudomys hermannsburgensis</i>	Sandy Inland Mouse	19660628	-18.982	134.201
LC	EL27614	<i>Pseudomys hermannsburgensis</i>	Sandy Inland Mouse	19660627	-18.982	134.201
LC	EL27614	<i>Pseudomys desertor</i>	Desert Mouse	19660829	-18.982	134.201
LC	EL27614	<i>Pseudomys hermannsburgensis</i>	Sandy Inland Mouse	19660830	-18.982	134.201
LC	EL27614	<i>Pseudomys hermannsburgensis</i>	Sandy Inland Mouse	19660830	-18.982	134.201

APPENDIX D:

NRETAS CATEGORY DEFINITIONS LIST

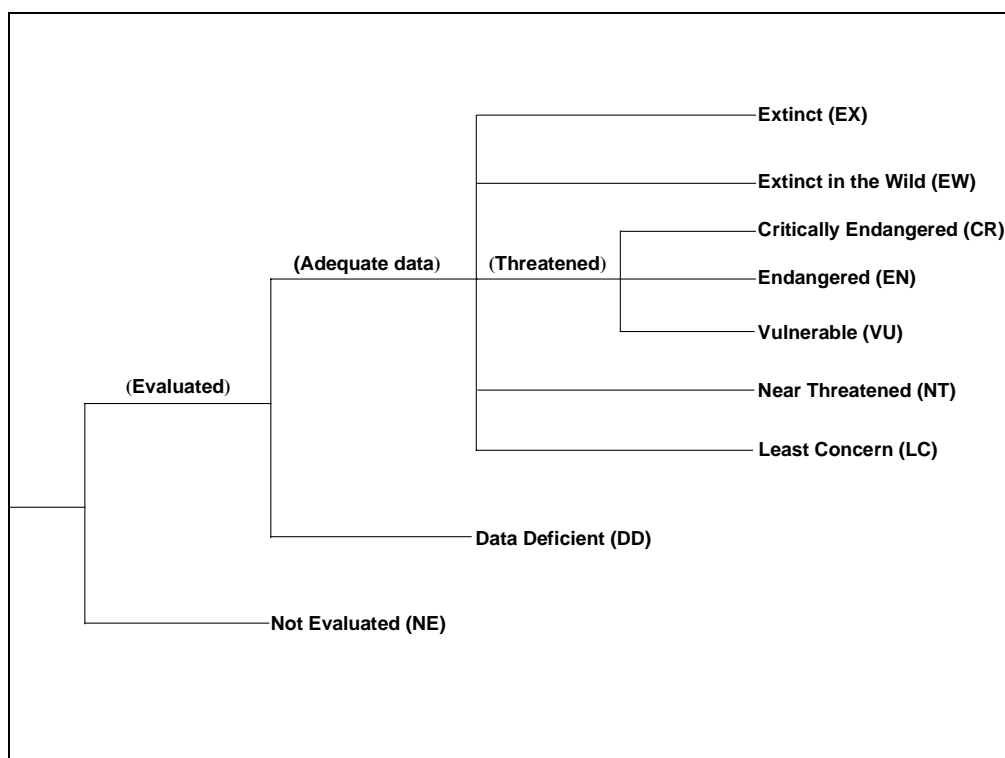


Figure 1. Structure of the categories.

3. Role of the different criteria

For listing as Critically Endangered, Endangered or Vulnerable there is a range of quantitative criteria; meeting any one of these criteria qualifies a taxon for listing at that level of threat. Each taxon should be evaluated against all the criteria. Even though some criteria will be inappropriate for certain taxa (some taxa will never qualify under these however close to extinction they come), there should be criteria appropriate for assessing threat levels for any taxon. The relevant factor is whether *any one* criterion is met, not whether all are appropriate or all are met. Because it will never be clear in advance which criteria are appropriate for a particular taxon, each taxon should be evaluated against all the criteria, and *all* criteria met at the highest threat category must be listed.

4. Derivation of quantitative criteria

The different criteria (A-E) are derived from a wide review aimed at detecting risk factors across the broad range of organisms and the diverse life histories they exhibit. The quantitative values presented in the various criteria associated with threatened categories were developed through wide consultation, and they are set at what are generally judged to be appropriate levels, even if no formal justification for these values exists. The levels for different criteria within categories were set independently but against a common standard. Broad consistency between them was sought.

5. Conservation actions in the listing process

The criteria for the threatened categories are to be applied to a taxon whatever the level of conservation action affecting it. It is important to emphasise here that a taxon may require conservation action even if it is not listed as threatened. Conservation actions which may benefit the taxon are included as part of the documentation requirements (see Annex 3).

6. Data quality and the importance of inference and projection

The criteria are clearly quantitative in nature. However, the absence of high-quality data should not deter attempts at applying the criteria, as methods involving estimation, inference and projection are emphasised as being acceptable throughout. Inference and projection may be based on extrapolation

IV. THE CATEGORIES ¹

A representation of the relationships between the categories is shown in Figure 1.

EXTINCT (EX)

A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

EXTINCT IN THE WILD (EW)

A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.

CRITICALLY ENDANGERED (CR)

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered (see Section V), and it is therefore considered to be facing an extremely high risk of extinction in the wild.

ENDANGERED (EN)

A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered (see Section V), and it is therefore considered to be facing a very high risk of extinction in the wild.

VULNERABLE (VU)

A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable (see Section V), and it is therefore considered to be facing a high risk of extinction in the wild.

NEAR THREATENED (NT)

A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

LEAST CONCERN (LC)

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

DATA DEFICIENT (DD)

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well

¹ Note: As in previous IUCN categories, the abbreviation of each category (in parenthesis) follows the English denominations when translated into other languages (see Annex 2).

be justified.

NOT EVALUATED (NE)

A taxon is Not Evaluated when it has not yet been evaluated against the criteria.

APPENDIX E:

PROFILES OF THE THREATENED FAUNA SPECIES THAT ARE POSSIBLY PRESENT AT THE BRUNCHILLY PROJECT AREA

Appendix E: Profiles of the Threatened Fauna Species that are Possibly Present at the Brunchilly Project Area

This appendix provides the profiles of Threatened Fauna species of the Barkly Project area determined, by a desktop search in April 2011, to have the potential to occur on the Barkly Project. Two different database searches were conducted to produce these results:

This appendix provides the profiles of fauna species of conservation significance at the Brunchilly Project area determined, by a desktop search in April 2011, to have the potential to occur on the Brunchilly Project. Two different database searches were conducted to produce these results, being:

- A search of species listed under the Federal Government database using the "Protected Matters Search Tool". This information provides general guidance on matters of national environmental significance and other matters protected by the *Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. The Protected Matters Search Tool is managed by the Department of Sustainability, Environment, Water, Population and Communities and is publically available online (DSEWPA, 2011); and
- A search of the Northern Territory's Department of Natural Resources, Environment, The Arts and Sport (NRETAS) database, pursuant to the Northern Territory Government's *Territory Parks and Wildlife Conservation Act 2009*.

The cause of decline is not always known in these animals, however, it is likely that the processes of environmental degradation and habitat homogenization that have occurred throughout arid Australia following European settlement have negatively affected its populations. Changes in fire regimes, grazing by introduced herbivores including cattle and rabbits, and predation by introduced predators are all likely threatening processes.

Australian Bustard (*Ardeotis australis*)

Conservation Status: **Australia:** Least Concern; **Northern Territory:** Vulnerable.



(NRETAS, 2011b)

Description

Australia's heaviest flying bird, the Australian Bustard is a large, stately bird that exhibits significant sexual size dimorphism between males and females, with males (five to ten kg) up to three times heavier than females (two to three kg). The crown is brown-black, neck and breast grey-white with a distinct black breast band. The bend of wing is patterned black and white. The back, wings and tail are brown with fine buff markings. Females have a narrower brown crown, less distinct or absent breast band and greyer neck and breast.

Distribution

The Australian Bustard is widespread though generally scarce in the Northern Territory. It is more common in the north, and tends to occur in loose aggregations, particularly during the breeding season. Its strongholds in the Northern Territory include the Barkly Tableland, Daly River region, the Victoria River District and the Tanami Desert.

Habitat

The Australian Bustard typically occurs in open country preferring grasslands, low shrublands, grassy woodlands and other structurally similar but artificial habitats such as croplands and airfields. However, they respond readily to fire and are often found on recently burnt country, even in more wooded areas.

Diet

Bustards have a broad, omnivorous diet largely comprising seeds, fruit, vegetation, invertebrates and small vertebrates. They apparently move readily, tracking rainfall, fires and food.

Breeding

The species' reproductive biology is unique in that it exhibits an "exploded" lek mating system. In lek systems males aggregate in display arenas that are visited by females for the purpose of mating. The lek system of the Bustard is referred to as "exploded" as the display arenas of the males are well spaced apart and aggregation may not be detectable until they are mapped over a larger area. Following mating, males play no further role in the breeding process and females care for young until independence.

Behaviour

Australian Bustards are believed to be nomadic or irruptive in the arid and semi-arid regions and migratory with more regular north-south movements in relation to wet/dry seasons in the north. Some populations in the Top End may also be sedentary (NRETAS, 2011b).

Australian Painted Snipe (*Rostratula australis*)

Conservation Status: **Australia:** Vulnerable; **Northern Territory:** Vulnerable.



(NRETAS, 2011e)

Description

The Australian Painted Snipe is a wader of around 220-250 mm in length. The head, neck and upper breast is chestnut-bronze. The back and wings are dark olive-green, finely barred black and are ornamented with bright chestnut spots and black bars. The back has a conspicuous buff coloured V. A broad white band separates the neck and wings. There is a broad white horizontal band through the eye. The male is a smaller, less colourful bird, lacking the rufous on the hindneck. This species is generally inconspicuous, and occurs solitarily or in only small parties.

Distribution

Until recently, the Australian Painted Snipe was generally considered part of a more widespread species that extended throughout Indonesia, Asia and Africa and on many Pacific Islands. As redefined, the species is now considered restricted to Australia. Australian Painted Snipe are most frequently recorded in south eastern Australia. In the Northern Territory it was recorded breeding at Tarrabool Lake on Eva Downs on the Barkly Tablelands in 1993, with non-breeding records from Lake Woods in 1993 and an un-named swamp on Sturt Plateau in 2001. It is likely that the species could occur on any shallow ephemeral wetlands in central or southern Northern Territory. It is also possible that the species could occur in northern areas of the NT.

Habitat

Australian Painted Snipe occur in shallow, vegetated, freshwater swamps, claypans or inundated grassland (including temporary wetlands).

Diet

Australian Painted Snipe feed at the water's edge and on mudflats, taking seeds and probing for invertebrates.

Behaviour

It is unknown whether the Australian Painted Snipe is resident. They may well be nomadic. Its occurrence appears to be unpredictable. It is unobtrusive during the day, feeding primarily at night (NRETAS, 2011e).

Crest-tailed Mulgara (*Dasycercus cristicauda*)

Conservation Status: **Australia:** Vulnerable; **Northern Territory:** Vulnerable.



(NRETAS, 2011a).

Description

The Crest-tailed Mulgara is a robust, carnivorous marsupial with body mass up to about 190g, and head body length to about 18cm. The tail is short, slightly enlarged at the base and tapering to a point. There has been considerable taxonomic confusion and re-sorting of the Mulgaras. For most of the last 30 years only one species, *Dasycercus cristicauda*, was recognized. More recently, based on some genetic and morphological attributes, two species were recognized, *Dasycercus cristicauda* and the *Dasycercus blythi* commonly known as the Crest-tailed Mulgara and the Brush-tailed Mulgara, respectively. Both of which occur in the Northern Territory.

The two species are distinguished by the following characteristics:

- (i) appearance of black hairs on the distal half of the tail (a brush in *D. blythi* versus a dorsal crest in *D. cristicauda*);
- (ii) the number of upper pre-molar teeth (two in *D. blythi* versus three in *D. cristicauda*); and
- (iii) in females, the number of teats (six in *D. blythi* versus eight in *D. cristicauda*).

Distribution

Because most previous records did not distinguish among the two species of Mulgara now recognized, there is ambiguity about the distribution of both species.

Ecology

Mulgaras shelter in burrows, are primarily nocturnal, and feed on invertebrates, reptiles and small mammals (NRETAS, 2011a).

Gouldian Finch (*Erythrura gouldiae*)

Conservation Status: **Australia:** Endangered; **Northern Territory:** Endangered.



(NRETAS, 2011f)

Description

The Gouldian Finch is an easily recognised small bird: mature adults have a purple chest, yellow breast and green back, with an intensely vivid pale blue upper collar. Females are duller than males, and juveniles are completely dull green. Three colour morphs exist in the wild: black face, red face and yellow face.

Distribution

Formerly the Gouldian Finch was distributed throughout the tropical savannas of northern Australia. It is now restricted to isolated areas mostly within the Northern Territory and the Kimberley. Although the decline has occurred throughout the range, this has been most pronounced in the easternmost populations. The largest known population is in the Yinberrie Hills (about 40km north of Katherine).

Ecology

Gouldian Finches occupy two different regions of the landscape on an annual cycle. In the dry season and part of the late wet season, between February and October, they live within wooded hills that contain a group of Eucalyptus species commonly referred to as snappy or salmon gums. Hollows in these trees provide nesting sites. During this period, they forage on the ground, feeding on shed seeds of native sorghum, and find water at small rocky waterholes that remain within the hills until the next wet. In the wet season Gouldian Finches move from the hills into lowland drainages to feed upon seeds of perennial grasses, typically available from mid-December. These grasses include soft spinifex, Cockatoo Grass and Golden Beard Grass (NRETAS, 2011f).

Greater Bilby (*Macrotis lagotis*)

Conservation Status: **Australia:** Vulnerable; **Northern Territory:** Vulnerable.



(NRETAS, 2011d)

Description

The greater bilby is a large bandicoot (body mass males, 800-2500g; females, 600-1100g) with soft silky fur. The fur is ash grey over most of the body, whereas on the belly it is pure white to cream. The basal 20 percent of the tail is the same colour as the upper-body, the central 40 percent is black and the distal 40 percent, pure white. The forelimbs are robust and equipped with three stoutly clawed toes (and two unclawed toes) giving the animal a formidable burrowing capacity. The slender hind limbs are long and resemble those of macropods. The snout is long and delicate and the ears are large and rabbit-like.

Distribution

Within the Northern Territory, it occurs in the central and western parts of the Tanami bioregion, the southern Sturt Plateau bioregion and the northern Great Sandy Desert bioregion. The distribution is highly fragmented within this area. Historically, the greater bilby occupied a vast area of arid and semi-arid Australia. Its distribution declined dramatically in the years following European settlement and it now occupies about 20 percent of its former range. The species occurs in two separate geographic areas; one extending from the western deserts region of the Northern Territory and Western Australia north to the Pilbara and Kimberley regions, the second in the Channel Country of south-west Queensland.

Habitat

Habitat of the Greater Bilby in the Northern Territory is characterised by sandy soils dominated by hummock grasslands covered predominantly by three species of spinifex, *Triodia basedowii*, *T. pungens* and *T. schinzii*. An overstory of low shrub cover dominated by Acacia and Melaleuca species grows over much of this country. This predominantly sandy landscape also includes rocky outcrops, laterite rises and low lying drainage systems.

Diet

The Greater Bilby is omnivorous and major foods vary across seasons. Important plant foods include seed from various grasses and sedges including Button Grass (*Dactyloctenium radulans*), Desert Flinders Grass (*Yakirra australiensis*) and Parakeelya (*Calandrinia* spp.) and bulbs from Bush Onion or Yalka (*Cyperus bulbosus*) and *Wurmbea deserticola*, many of which are most abundant soon after fires. At a site in central Australia, fruiting bodies of underground fungi were the major dietary component. Major invertebrate prey includes termites, ants, beetles, insect larvae and siders. Most of the food of the Greater Bilby is excavated from the soil and holes may attain 25cm in depth.

Breeding

Litters, comprising one to three young, can be produced at any time of year. Young remain in the pouch for approximately 75 days, before being cached and suckled in maternal burrows for a further two weeks prior to independence. Under ideal conditions, there is the potential to produce four litters every year. Captive animals live up to 10 years.

Behaviour

Bilbies dig burrows up to two metres deep and an individual may have over a dozen regularly used burrows within its home-range. Bilbies forage at night. Movements of five km during one night have been recorded for male bilbies. Males, females and juveniles may occupy overlapping home ranges. Densities of 12–16 individuals/km² are reached in optimal habitat. However; a density of one to two km² is more typical (NRETAS, 2011d).

Western Chestnut Mouse (*Pseudomys nanus*)

Conservation Status: **Australia:** Least Concern; **Northern Territory:** Near Threatened.



(Wildlife Images, 2010)

Habitat

The Western Chestnut Mouse is known to occur in a range of habitats that are associated with low eucalypt woodlands with a dense cover of tussock grasses. The western chestnut mouse uses an extensive network of burrows up to 1m in depth which should enable it to survive fires (Reilly *et al.*, 2006).

Diet

Its diet is currently unknown (Partridge, 2008).

Breeding

Breeding occurs at a very rapid rate and appears to be responsive to favourable conditions, such as rapid vegetation growth after fires, flooding and rains (Reilly *et al.*, 2006). They breed in the latter part of the monsoon season and can extend their breeding activity into spring. They may reproduce virtually year-round, presumably when environmental conditions are favourable. The predominance of young non-breeding adults and juveniles in the spring signals a new infusion of animals into the population and a large population turnover at the expense of older members. The young survivors of the seasonal transition from extremely dry to intensely wet conditions then become the primary contributors to the next major breeding episode (CSIRO, 2004).

References

CSIRO, (2004)

<http://www.publish.csiro.au/paper/ZO03011.htm>

NRETAS (2011a)

http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/mammals/cresttail_mulgara_vu.pdf

NRETAS, (2011b)

http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/birds/australian_bustard_vu.pdf

NRETAS, (2011d)

<http://www.nt.gov.au/nreta/wildlife/animals/threatened/specieslist.html>

http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/mammals/greater_bilby_vu.pdf

NRETAS, (2011e)

http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/birds/paintedsnipe_vu.pdf

NRETAS, (2011f)

http://www.nt.gov.au/nreta/wildlife/animals/threatened/pdf/birds/gouldian_finch_en.pdf

Partridge, T., (2008). *Fire and Fauna in the Purnululu (Bungle Bungle) National Park, Kimberley, Western Australia*

<http://science.dec.wa.gov.au/conslib.php?id=069223&type=all&page=1>

Reilly, T., Low, B., Matthews, D., (2006). *Survey 2: Landscape, Flora and Fauna Survey of the Proposed Frances Creek Iron-ore Prospects, May 2006. Low Ecological Services*

http://www.nt.gov.au/nreta/environment/assessment/register/francescreek/pdf/app7B_flora_fauna.pdf

Wildlife Images, 2010

http://www.pbase.com/wildlifeimages/western_chestnut_mouse

APPENDIX F:

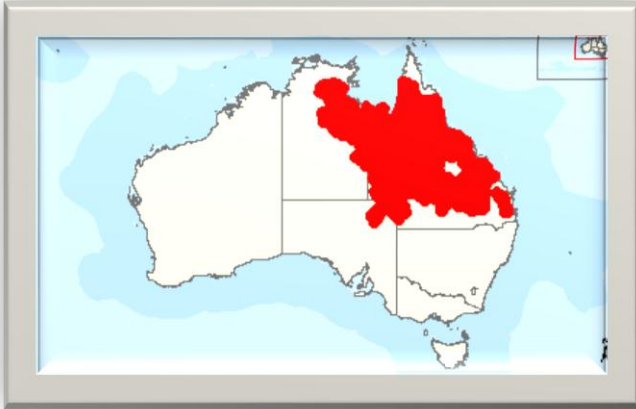
INVASIVE FLORA SPECIES PROFILES OF NATIONAL SIGNIFICANCE THAT ARE POSSIBLY PRESENT AT THE BRUNCHILLY PROJECT AREA

Appendix F: Invasive Flora Species Profiles of National Significance that are Possibly Present at the Brunchilly Project Area

The following table portrays five of the 20 Invasive flora species as reported by the *Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act)* Protected Matters database search, to be of national significance, as they pose a particularly significant threat to biodiversity, including those that may possibly occur in the Brunchilly Project area.

Scientific Name	<i>Acacia nilotica</i> subsp. <i>indica</i>
Common Name	Prickly Acacia
Photograph	 <p> <i>Acacia nilotica</i> subsp. <i>indica</i> Photographer: D. Valke. (Valke, 2011) </p>




Distribution Map	 <p>(Australian Government, 2011a)</p>
Tenements where the species or species habitat may occur	EL27547, EL27191, EL27192.
Key Characteristics	The hairy "string of beads" pod is characteristic. This subspecies, the only one found in Australia, differs from <i>A. farnesiana</i> in its more or less hairy branchlets and pinnules without distinct raised mid- and lateral nerves underneath.
Description	Dense, spreading shrub or tree, to 12 m high, bark smooth becoming rough and longitudinally fissured at base; heads globular. Fl. yellow, Jan/Apr–Nov. Silty, cracking clay or sandy alluvial soils. Plains, floodplains, often near creeks, streams, dams or bores, on cleared land, roadsides.
Distribution	<p><i>Australian:</i> Western Australia, Northern Territory, South Australia, Queensland. Alien to Australia, alien to Western Australia, naturalised or cultivated.</p> <p><i>Native:</i> India, but has spread into western Asia and Africa. Introduced into Queensland in the late 1800s.</p>
Habit	Spreading, dense trees (with deep taproot), up to 12 m high. Spines present; associated with leaves (stipular to 50 mm long).
Where it grows	Grows on bare areas.




Flower colour	Yellow
Flowering period	January, April, May, June, August, September, November.
Fruit	Indehiscent, a loment, non-fleshy (softly hairy), to 250 mm long, to 17 mm wide (to 9 mm at constrictions) (Florabase, 2011a).



Scientific Name	<i>Cenchrus ciliaris</i>
Common Name	Buffel-grass, Black Buffel-grass
Photograph	<div><p><i>Cenchrus ciliaris</i> Photos: G.E. Craig, R. & M. Lowe & L. Wall</p></div> <p><i>Cenchrus ciliaris</i></p> <p>Photographer: Craig <i>et al.</i></p> <p>(Florabase, 2011)</p>




Distribution Map	 <p>(Australian Government, 2011b)</p>
Tenements where the species or species habitat may occur	EL27191, EL27192, EL27546, EL27547, EL27612, EL27613, EL27614.
Key Points	<ul style="list-style-type: none"> • Shade and fire tolerant. • Adapted to frequent defoliation. • Capable of changing fire frequency and intensity. • Can begin producing seeds from approximately 3 months of age. • Rhizomatous cultivars can produce seeds, but produce fewer numbers. • Dormancy varies between climatic regions and can be broken by high temperatures. • Germination rates are highest on the soil surface and can be poor and unpredictable particularly in low rainfall regions. • Has developed resistance to some post-emergent herbicides.
Description	Perennial, caespitose grass.
Habit	Grass
How it spreads	Primarily wind and water, also mammals (on skin and fur), birds, vehicles.
Fire Response	Resprouts; Heat may kill seeds, however buried or protected seed may survive and readily germinate in the post-fire environment.

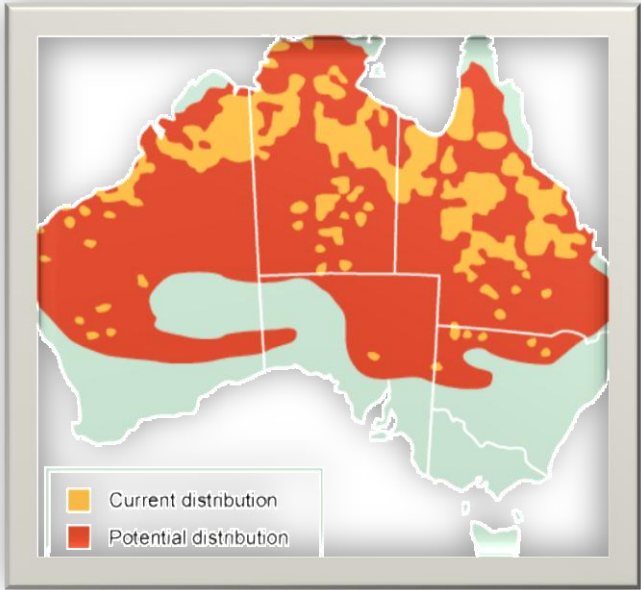


Flower colour	Purple between February and October.
Where it grows	White, red or brown sand, stony red loam, black cracking clay.
Origin	Africa, India and western Asia. Introduced for livestock forage, re-vegetation and erosion control (Florabase, 2011).



Scientific Name	<i>Parkinsonia aculeata</i>
Common Name	Parkinsonia, Jerusalem Thorn, Jelly Bean Tree, Horse Bean
Photograph	<div data-bbox="454 560 1348 1153"></div> <p><i>Parkinsonia aculeata</i> Photographer: Wilson, C.G. Taken at : Rockhampton Downs, NT. (Australian Government, 2011c).</p>



<p>Distribution Map</p>	 <p>(Australian Government, 2011c)</p>
<p>Tenements where the species or species habitat may occur</p>	<p>EL27547, EL27612, EL27614, EL27191, EL27192.</p>
<p>Key Points</p>	<ul style="list-style-type: none"> • Parkinsonia (<i>Parkinsonia aculeata</i>) is a fast grower and can flower as early as the summer of its second year of growth. • It is a threat to rangelands and wetlands • Use of chemicals produces less regrowth than if mechanical means are used • Control measures always need to be followed up as some trees may be missed during initial control and regrowth can occur from seeds and roots.




Description	<p>Parkinsonia (<i>Parkinsonia aculeata</i>) is a spreading, much-branched shrub or tree to 8 or rarely 10 m tall. It has a deep taproot and extensive surface roots. Its stems are slender, drooping and tend to zig-zag, with thorns 5-20 mm long.</p> <p>Parkinsonia leaves consist of a flat, green leaf stalk up to 300 mm long and 2-3 mm wide with numerous small (4-10 mm) green oblong leaflets staggered along both sides. The leaf base is protected by sharp, recurved spines, 5-15 mm long, which persist in older branches.</p> <p>The fragrant flowers are up to 20 mm in diameter, with five petals, and predominantly yellow. The top petal either has orange spots or turns completely orange. Each flower grows on a long, slender, drooping stalk arising from leaf joints in groups of 8 to 12.</p> <p>The fruit is an elongate, almost straight pod about 3-13 cm long and 3.5-8 mm wide and narrows at both ends; it is somewhat flattened and usually has pronounced constrictions between each of the seeds and at maturity is a pale brown or yellow-brown. Seeds, of which there are usually just 2-4 per fruit pod, but sometimes up to 8, are oval or oblong in shape, 9-15 mm long, 3-4 mm wide, and are olive green to brown.</p>
Distribution	<p>In Australia most infestations occur in coastal, central and western Queensland, central and northern parts of the Northern Territory, and the Pilbara and Kimberley regions of Western Australia. Isolated populations have been recorded in South Australia and western New South Wales. It is been estimated that at least 800 000 hectares of land are infested with this species</p>
Habit	<p>Shrub, Tree</p>
How it spreads	<p>Parkinsonia produces abundant seed, a typically mature plant producing about 5 000 seeds per year and large specimens more than 13 000. They fall within the pods which can be widely dispersed in moving water. The pods are relatively unpalatable and so spread by animals feeding on them is probably a minor method of dispersal. Both seeds and pods can be dispersed on unclean machinery, for example, in mud.</p>
Where it grows	<p>Commonly on seasonally flooded sites but also around dams and bores, as well as stream banks and floodplains; on sand to clay soils. It inhabits pastures, roadsides, grasslands, open woodland and rangelands.</p>



Flower colour	Yellow
Impacts	<p>Parkinsonia is a Weed of National Significance. It is regarded as one of the worst weeds in Australia because of its invasiveness, potential for spread, and economic and environmental impacts. Parkinsonia has the potential to invade more than three quarters of mainland Australia.</p> <p>Plants can form dense impenetrable thickets on rangelands and wetlands, making areas of land inaccessible for people and animals. Seed pods float and are easily spread by water. Thickets can be up to several kilometres across. Cattle are difficult to muster in paddocks where Parkinsonia infestations are thick. Access to watering points is impaired by the thickets which also shade out valuable pastures and displaces native vegetation when left untreated. Parkinsonia can dam watercourses, cause erosion, and lower water tables. A very hardy plant that can withstand long dry spells. Seeds remain viable for many years. Parkinsonia infestations provide refuges for feral animals especially pigs</p>
Origin	<p>Parkinsonia is native to tropical regions of the Americas, from the southern regions of the United States to northern South America (e.g. Colombia, Costa Rica, Guatemala, Panama and Peru).</p> <p>It has been introduced to some South American countries (including mainland Ecuador and El Salvador) and many other regions, including tropical Africa, the Middle East, Italy, Cyprus, India, Pakistan, Thailand, Cambodia, Vietnam, Indonesia, many Pacific islands (e.g. Hawaii, Tahiti) and Australia.</p> <p>Parkinsonia is believed to have been introduced into Australia in the 1890s and early 1900s for use as an ornamental in towns and (perhaps subsequently) as a shade tree around homesteads and bores in northern Australia (Australian Government, 2011c).</p>



Scientific Name	<i>Parthenium hysterophorus.</i>
Common Name	Parthenium Weed, Bitter Weed, Carrot Grass, False Ragweed
Photograph	<div></div> <p><i>Parthenium hysterophorus</i></p> <p>Photographer: Wilson, C.G. Taken at : Bangalore, India. (Australian Government, 2011d)</p>



<p>Distribution Map</p>	<div data-bbox="564 295 1203 703" data-label="Figure"> </div> <p>(Australian Government, 2011d).</p>
<p>Tenements where the species or species habitat may occur</p>	<p>EL27547, EL27191, EL27192.</p>
<p>Key Points</p>	<ul style="list-style-type: none"> • Parthenium Weed (<i>Parthenium hysterophorus</i>) is a prolific setter of seed, an average-sized plant producing about 15,000 seed; with a significant portion of buried seed remaining viable for six or more years. • It invades grazing land and summer cropping areas as well as disturbed native vegetation, its aggressiveness partly due to an allelopathic effect on other plants. • It favours cracking clay soils. • The species can cause respiratory problems and severe dermatitis in humans. • It taints meat and milk of livestock.




Description	<p>Parthenium Weed (<i>Parthenium hysterophorus</i>) is an aromatic, annual herb initially forming a basal rosette of leaves but then becoming much-branched and usually about 0.5-1.5 m tall. In favourable situations it can grow to 2 m tall. It has divided, softly hairy leaves arranged alternately along the stem, decreasing in size towards the top of the plant. The flowers heads are white and borne in loose clusters on the tips of branches. The wedge-shaped seeds (known as achenes cypselas) are black at maturity, about 2 mm long, and end in 2 broad, membranous white scales about 0.5 mm long.</p>
Distribution	<p>Within Australia, Parthenium Weed has been recorded from Queensland, New South Wales and the Northern Territory. It is widespread and seemingly entrenched in central Queensland. Around 2000 the core area of infestation in the central highlands of Queensland was estimated to be 8.2 million hectares. Scattered infestations also occur in Queensland from Cook shire in the north to Longreach in the west and south to the border towns of Goondiwindi and Mungindi.</p> <p>From published records the extent to which Parthenium Weed has been noted in the Northern Territory is unclear, but reports are few. It has been reported that the original infestation of 1977 at Elsey Creek, in the Mataranka district, had almost been eradicated. At that time no other infestations were known. Since then, the Elsey population has been eradicated and sporadic outbreaks on rural blocks in the Katherine area have also been successfully treated. Seemingly, two outbreaks in the Northern Territory Gulf country in 1991 - one near Borroloola and the other at Limmen Bight - have also been satisfactorily dealt with.</p>
Habit	<p>Herb</p>
How it spreads	<p>Parthenium Weed is a prolific seeder. Soil seed-bank studies in Australia reveal as many as 400 million seeds per hectare. The seed can be dispersed by both water, with significant spread along waterways noted in central Queensland, and by wind. Similarly, they can be spread by livestock and other animals in the hair or mud attached to their bodies.</p> <p>Long-distance dispersal can take place by the movement of contaminated passenger vehicles, farm machinery, livestock, stock feed and pasture seed. In Queensland there is a legal requirement for suppliers of stock, machinery and other products to sign a declaration whether or not the material is clean of seed. Legislation is also in place which requires agricultural machinery moving from Queensland to New South Wales to be inspected at the border, a process considered to have greatly reduced the risk of further introductions into the latter state.</p>

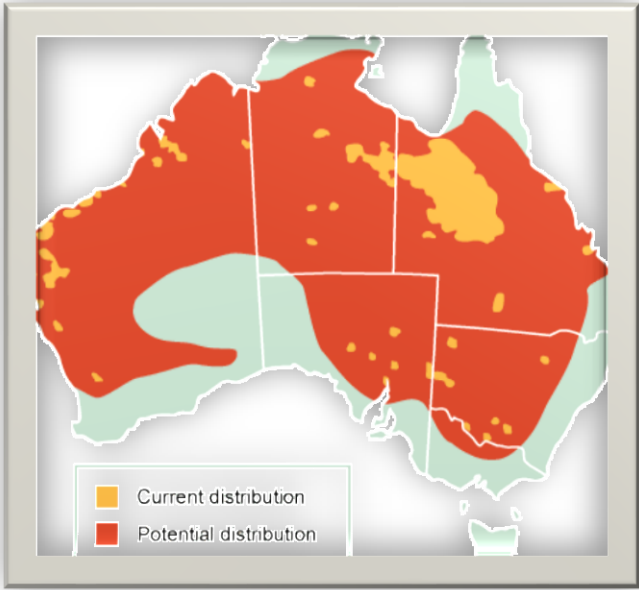


Where it grows	Parthenium Weed can be prolific in disturbed situations, both natural and unnatural, and has a marked preference for highly fertile, black, alkaline, cracking clay soils but does grow on other soils, albeit not usually as vigorously. Climatically it has a preference for areas with an annual summer rainfall greater than 500 mm. Flooded country is also very prone to Parthenium Weed infestations.
Flower colour	White
Impacts	<p>Parthenium Weed is a Weed of National Significance. It is regarded as one of the worst weeds in Australia because of its invasiveness, potential for spread, and economic and environmental impacts.</p> <p>Parthenium Weed is a major problem in rangeland and summer-cropping areas of Queensland, costing farmers and graziers over \$22 million a year in reduced production and increased management costs. It readily colonises disturbed and heavily stocked areas, reduces both pasture establishment and potential, and invades native vegetation. In Queensland it threatens biodiversity in the Einasleigh Uplands bioregion and native grassland in the central highlands. It is somewhat toxic to livestock and taints meat and milk. In people, repeated contact with plants can produce allergic dermatitis, while in others the pollen may cause hay fever and asthma.</p>
Origin	Parthenium Weed was originally described and formally named from material gathered in Jamaica. The species is native to the Caribbean region and according to some reports also other regions of central America, Mexico and parts of South America (Australian Government, 2011d).



Scientific Name	<i>Prosopis ssp.</i>
Common Name	Mesquite, Algaroba
Photograph	<div></div> <p><i>Prosopis limensis</i></p> <p>Photographer: Wilson, C.G. Taken at : Hughenden, QLD. (Australian Government, 2011e).</p>



<p>Distribution Map</p>	 <p>(Australian Government, 2011e).</p>
<p>Tenements where the species or species habitat may occur</p>	<p>EL27547, EL27191, EL27192.</p>
<p>Key Points</p>	<ul style="list-style-type: none"> • Mesquite (<i>Prosopis</i> spp.), which includes four species and several hybrids, is one of four prickly bushes that have infestations scattered throughout semi-arid Australia. • It is a nuisance in rangelands where it forms dense impenetrable stands, particularly around waterways. • Animals eat the seed pods and spread the seeds. Historical control efforts by mechanical and chemical means have been expensive and ultimately ineffective. • Control requires an integrated management approach, including mechanical, chemical and biological techniques and the use of fire and grazing strategies.



Description	<p>The various Mesquite species (<i>Prosopis</i> spp.) come in a range of shapes and sizes. They can be found as multi-stemmed shrubby bushes or single stemmed trees with a spreading canopy often with an irregular outline with some branches protruding out of the canopy, growing from 3 to 15 m tall. The bark is smooth and dark red-green in young stems, and rough and grey in older stems. Branches have a characteristic zig-zag structure, and the overall impression is of a rather untidy plant, with single branches extending outside the main canopy. Mesquite leaves occur at each point where the branch changes direction (the zig-zag) and are compound (twice-divided), with 1-4 pairs of primary leaflets each with 7-21 pairs of small opposite secondary leaflets. There are often one or two thorns at the base of the leaves.</p> <p>The greenish cream-yellow flowers form a cylindrical flowerhead 50-80 mm in length. Pods are 5-20 cm long, compressed, straight to curved, smooth or with slight restrictions between the seeds. Ripe pods are yellow, purple, or yellow with purple streaks and patches. The flat seeds are oval or elliptical 2.5-7 mm long by 2-3 mm wide, each enclosed in a flattened fibrous case, and surrounded by sweet pulp.</p> <p>Identification of Mesquite species is complicated because there is often variation in growth form, even within the same species, and hybrids between the main species are common.</p>
Distribution	<p>There are four naturalised species of Mesquite in Australia, and a range of hybrids. Collectively, they are suited to the climate of much of inland Australia. The worst infestations are on pastoral land in the Pilbara in Western Australia, the Barkly Tablelands in the Northern Territory, and in north-western, central and south-western Queensland.</p> <p>Different species have different distributions, which reflect their initial plantings but also variation in their preferred climate and surroundings. For example, <i>Prosopis pallida</i> is widely distributed across the north of Australia from the east coast of Queensland through the Northern Territory to the west coast of Western Australia. However, it is not found in any of the southern states, whereas <i>Prosopis velutina</i> and the hybrid <i>P. velutina</i> x <i>P. glandulosa</i> var. <i>torreyana</i> can tolerate the cooler climate of southeastern Australia.</p>
Habit	Tree, Shrub



How it spreads	<p>Mesquite mainly reproduces via seeds, producing one main crop annually. Each seed pod generally carries between 5 and 20 seeds, with potentially hundreds of thousands of seeds produced per mature plant. Humans have assisted the spread of Mesquite throughout Australia and the rest of the world. Animals consume the nutritious seed pods and excrete viable seed in their droppings, helping to spread Mesquite over shorter distances. Cattle are mainly responsible, although horses, pigs, goats, sheep, emus and kangaroos are also known to consume the seed pods. As long as the seeds themselves are not damaged by chewing, digestion actually helps germination, particularly as the expelled seeds are deposited in moist, nutrient-rich dung. Apart from deliberate plantings, animals - mainly cattle - are most responsible for spreading Mesquite. Seed pods can also be spread by flooding.</p>
Where it grows	<p>In general, Mesquite species are well adapted to hot climates and a wide range of soil types and annual rainfall (150-1200 mm). They can tolerate droughts and waterlogging, low nutrient soil and highly saline or alkaline soil. In northern Australia, Mesquite prefers semi-arid to arid rangelands that are prone to flooding and soils that have good moisture retention.</p>
Flower colour	<p>Green, Yellow</p>
Impacts	<p>Mesquite is a Weed of National Significance. It is regarded as one of the worst weeds in Australia because of its invasiveness, potential for spread, and economic and environmental impacts. Environmental impacts include land erosion resulting from the loss of grassland habitat that supports native plants and animals; and the provision of safe refuges for feral animals such as pigs and cats. Mesquite can also increase land degradation and loss of soil moisture due to its extensive and deep root system.</p> <p>Mesquite's economic impacts stem from its habit of forming dense, impenetrable thickets which, combined with its large thorns, prevent stock accessing watering holes and make mustering difficult. Mesquite also reduces the productivity of pastoral country by taking over grasslands and using valuable water resources. The sharp thorns damage animal hooves, puncture vehicle tyres, and inflict injury to people. Livestock which consume excessive amounts of seed pods can be poisoned</p>



Origin	<p>Mesquite was originally planted as an ornamental, shade or fodder tree around stations in the Northern Territory and Queensland at the start of the 19th century, and in Western Australia and New South Wales a little later, but appeared to be little threat at first. It was also planted around mining sites around Cloncurry in Queensland and Broken Hill in New South Wales to reduce dust and erosion. It has subsequently escaped in every mainland state after favourable conditions in the mid-1900s provided it with the opportunity to spread. Because Mesquite has some properties that are considered useful to humans, including uses as building timber, fuel and livestock food, it has been introduced and naturalised around the world.</p> <p>Mesquite has been introduced to Hawaii, Jamaica, the Middle East, throughout Asia including the Indian subcontinent, and Africa including Nigeria, Sudan, Senegal and southern Africa. It is also one of the most serious weeds of the southwestern United States where nearly thirty <i>Prosopis</i> species are federally listed noxious weeds (Australian Government, 2011e).</p>
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References

Australian Government, (2011a)

http://www.weeds.gov.au/cgi-bin/weeddetails.pl?taxon_id=6196

Australian Government, (2011b)

http://www.weeds.gov.au/cgi-bin/weeddetails.pl?taxon_id=20213

Australian Government, (2011c)

http://www.weeds.gov.au/cgi-bin/weeddetails.pl?taxon_id=19566

Australian Government, (2011d)

http://www.weeds.gov.au/cgi-bin/weeddetails.pl?taxon_id=19566

Australian Government, (2011e)

http://www.weeds.gov.au/cgi-bin/weeddetails.pl?taxon_id=68407

Florabase, (2011)

<http://florabase.calm.wa.gov.au/browse/profile/258>

Florabase, (2011a)

<http://florabase.calm.wa.gov.au/browse/profile/20757>

Valke, (2011)

http://www.fotopedia.com/wiki/Acacia_nilotica_subsp_indica/photos