

Appendix I – Likelihood of Occurrence (MNES)

| Common name (Scientific name) | | | Conservation status | Recorded locations | | | Likelihood of occurrence | | Description ¹ | |
|---|-------------|---|--|--------------------|-----|------------|--------------------------|--|--|--|
| | | | | FVA/FVSA | PCA | Regionally | FVA/FVSA | PCA | | |
| Plants | | | | | | | | | | |
| <i>Hibbertia abyssus</i> Bandalup Buttercup | | Critically Endangered, EPBC Act Schedule 1, BC Act | ✓ | X | ✓ | Confirmed | Unlikely | One individual has been recorded (in December 2016) within the FVSA. Despite numerous targeted surveys (Woodman 2019, ELA 2020 and ELA 2021) no additional individuals have been recorded with FVSA or PCA. | | |
| <i>Acacia rhamphophylla</i> Kundip Wattle | | Endangered, EPBC Act Schedule 1, BC Act | X | X | ✓ | Possible | Unlikely | The nearest record is located 12 km west of the RNP within the Ravensthorpe Range, where all known records are restricted to date. Targeted surveys within the FVSA did not record any new individuals of the species (Woodman 2017). | | |
| <i>Anigozanthos bicolor subsp. minor</i> Little Kangaroo Paw | | Endangered, EPBC Act Schedule 3, BC Act | X | X | ✓ | Unlikely | Unlikely | The nearest record is located 25 km south of the RNP near Jerdacuttup Lakes (Woodman 2017). | | |
| <i>Conostylis lepidospermoides</i> Sedge conostylis | | Endangered, EPBC Act Schedule 3, BC Act | ✓ | ✓ | ✓ | Confirmed | Confirmed | The species has been confirmed within the FVSA and PCA. | | |
| <i>Daviesia megacalyx</i> Long-sepalled Daviesia | | Endangered, EPBC Act Schedule 2, BC Act | X | X | ✓ | Possible | Unlikely | The nearest record is location 14 km west of the RNP within the Ravensthorpe Range, where all known records are restricted to date. Targeted surveys within the FVSA did not record any new individuals of the species (Woodman 2017). | | |
| <i>Eremophila verticillate</i> Whorled Eremophila | | Endangered, EPBC Act Schedule 1, BC Act | X | X | ✓ | Unlikely | Unlikely | The nearest record is located 97 km northwest of the RNP near Lake Chidnup. | | |
| <i>Ricinocarpos trichophorus</i> Barrens Wedding Bush | | Endangered, EPBC Act Schedule 3, BC Act | X | X | ✓ | Unlikely | Unlikely | The nearest record is located approximately 15 km to the east of the RNP with remaining records located over 90 km to the east and west (Woodman 2017). | | |
| <i>Roycea pycnophylloides</i> Saltmat | | Endangered, EPBC Act Schedule 3, BC Act | X | X | ✓ | Unlikely | Unlikely | The nearest record is located 80 km northwest of the RNP near Lake King. | | |
| <i>Eremophila denticulata subsp. denticulate</i> Fitzgerald Eremophila | | Vulnerable, EPBC Act Schedule 3, BC Act | X | X | ✓ | Unlikely | Unlikely | The nearest record is located 17 km northeast of the RNP within the Oldfield River Region. | | |
| <i>Kennedia glabrata</i> Northcliffe Kennedia | | Vulnerable, EPBC Act Schedule 3, BC Act | X | X | X | Unlikely | Unlikely | The nearest record is located 300 km southwest of the RNP near Denmark. The species is known to be endemic to the near-coastal area between Albany and Augusta and habitat for the species is unlikely within the FVSA (Woodman 2017). | | |
| <i>Thelymitra psammophila</i> Sandplain Sun-orchid | | Vulnerable, EPBC Act Schedule 3, BC Act | X | X | ✓ | Unlikely | Unlikely | The nearest record is located 92 km west southwest of the RNP within the Jacup area. | | |
| Birds | | | | | | | | | | |
| Carnaby's | Cockatoo | <i>(Calyptorhynchus latirostris)</i> | Endangered, EPBC Act Schedule 2, BC Act | ✓ | X | ✓ | Confirmed | Very likely | The species has been recorded from numerous locations within the Fauna Study Area but has not been recorded within the PCA to date. Foraging habitat is available within the PCA and has mostly been mapped as low quality (score of below 4); however, the Mallee loam or clay habitat is considered to represent valued foraging quality (score of 4 or above), as evidence of Carnaby's Cockatoo foraging (i.e. chewed banksia cones) has been recorded in this habitat type. Tall trees suitable for roosting also occur within the northern section of the PCA; however, there are no potential breeding trees present within the PCA. Given the presence of suitable foraging and roosting habitat, and the occurrence of nearby records, Carnaby's Cockatoo is considered very likely to occur within the PCA. | |
| Night | Parrot | <i>(Pezoporus occidentalis)</i> | Endangered, EPBC Act Schedule 1, BC Act | - | - | - | Unlikely | Unlikely | The Fauna Study Area occurs south of the species' predicted range, does not contain suitable habitat and there are no records nearby. This species is considered unlikely to occur. | |
| Western | Bristlebird | <i>(Dasyornis longirostris)</i> | Endangered, EPBC Act Schedule 3, BC Act | - | - | - | Possible | Possible | The Fauna Study Area and PCA contain suitable habitat for the species; however, they both lie just outside the known range of the species (DoE 2017 [149]). The species is known to occur within the Fitzgerald River National Park, approximately 35 km south west of the PCA (DoE 2017 [149]). Given the occurrence of suitable habitat and the proximity to the known distribution of the species, this species is considered to possibly occur. | |
| Malleefowl | | <i>(Leipoa ocellata)</i> | Vulnerable, EPBC Act Schedule 3, BC Act | ✓ | ✓ | ✓ | Confirmed | Confirmed | Malleefowl have been detected on numerous occasions within the wider Fauna Study Area; however, there is only one record of an individual bird known from the PCA. In addition to individuals, there are a total of 12 Malleefowl mounds that have previously been recorded within the | |

| Common name (Scientific name) | Conservation status | Recorded locations | | | Likelihood of occurrence | | Description ¹ |
|---|---|--------------------|-----|------------|--------------------------|-----------|---|
| | | FVA/FVSA | PCA | Regionally | FVA/FVSA | PCA | |
| | | | | | | | Fauna Study Area. This includes three active mounds, four inactive and five extinct mounds. There are no Malleefowl mounds within the PCA itself. |
| Grey Falcon (<i>Falco hypoleucos</i>) | Vulnerable, EPBC Act Schedule 3, BC Act | - | - | - | Unlikely | Unlikely | This species is mostly confined to the arid and semi-arid zones of Australia. There are two outlier records near Esperance, approximately 250 km from the Fauna Study Area. Given the lack of nearby records and/or suitable habitat, this species is considered unlikely to occur. |
| Mammals | | | | | | | |
| Numbat (<i>Myrmecobius fasciatus</i>) | Endangered, EPBC Act Schedule 2, BC Act | - | - | - | Unlikely | Unlikely | The Fauna Study Area and PCA occur outside the species' known distribution. In addition, neither the Fauna Study Area or the PCA contain suitable habitat for this species and there are no records nearby. This species is considered unlikely to occur. |
| Heath mouse (<i>Pseudomys shortridgei</i>) | Endangered, EPBC Act Schedule 3, BC Act | ✓ | X | ✓ | Confirmed | Likely | The species was recorded from multiple locations within the Fauna Study Area but has not been recorded from the PCA itself. Habitat mapping indicates the species tends to occur within or near Mallee over Loam or Clay and Dense Mallee over Heath, but given the low number of records, this species is likely to be sparsely distributed in the area. In addition, a large-scale fire occurred across the PCA and surrounding area in 2003, making this habitat <30 years unburnt, which does not represent the preferred habitat for this species. However, due to the presence of suitable habitat and occurrence of nearby records (~3.3 km), this species is considered likely to occur within the PCA. |
| Dibbler (<i>Parantechinus apicalis</i>) | Endangered, EPBC Act Schedule 2, BC Act | - | - | - | Unlikely | Unlikely | The species is largely restricted to a population within the Fitzgerald River National Park and translocated populations into national parks, reserves or fenced areas. There are no recent records of the species nearby and as such, it is considered unlikely to occur. |
| Chuditch (<i>Dasyurus geoffroii</i>) | Vulnerable, EPBC Act Schedule 3, BC Act | ✓ | ✓ | ✓ | Confirmed | Confirmed | Chuditch have been recorded on multiple occasions throughout the Fauna Study Area, with four records of individual Chuditch within the PCA. The majority of fauna habitats within the Fauna Study Area have the potential to support Chuditch as most comprise substrates with medium to high burrowing suitability or provide suitable prey for this species. |
| Red-tailed phascogale (<i>Phascogale calura</i>) | Vulnerable, EPBC Act Schedule 6, BC Act | - | - | - | Unlikely | Unlikely | The Fauna Study Area does not contain suitable habitat and the species has not been recorded recently nearby. This species is considered unlikely to occur. |
| Migratory Birds | | | | | | | |
| Fork-tailed Swift (<i>Apus pacificus</i>) | Migratory, EPBC Act Schedule 5, BC Act | - | - | - | Possible | Possible | The Fork-tailed Swift is an aerial forager and unlikely to be dependent on any of the habitats present within the PCA. The species has not been recorded during previous surveys but given its range it is considered to possibly occur. |
| Grey Wagtail (<i>Motacilla cinerea</i>) | Migratory, EPBC Act Schedule 5, BC Act | - | - | - | Unlikely | Unlikely | Neither the Fauna Study Area or the PCA contain suitable habitat for this species and there are no records nearby. The species occurs mainly within northern areas of Australia, and as such is considered unlikely to occur. |
| Three oceanic sea-bird species: • Yellow-nosed Albatross (<i>Thalassarche chlororhynchos</i>); • Osprey (<i>Pandion haliaetus</i>); and • Crested tern (<i>Sterna bergii</i>). | Vu, Mi | - | - | - | Unlikely | Unlikely | These species are associated with coastal habitats that are not present within the Fauna Study Area or PCA and so are considered unlikely to occur. |
| Eleven wetland bird species from the following families: • Ardeidae; • Charadriidae; • Scolopacidae; and • Laridae. | En, Cr, Mi, EPBC Act Schedules 2, 3 and 5 of BC Act | - | - | - | Unlikely | Unlikely | Whilst some suitable habitat is available within the wider Fauna Study Area, there is no suitable habitat for these species within the PCA itself. Overall, the species are likely to occur within coastal areas and/or lakes in the surrounding region and are considered unlikely to occur. |



EPBC Act Protected Matters Report

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 is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 18/03/21 13:44:33

[Summary](#)

[Details](#)

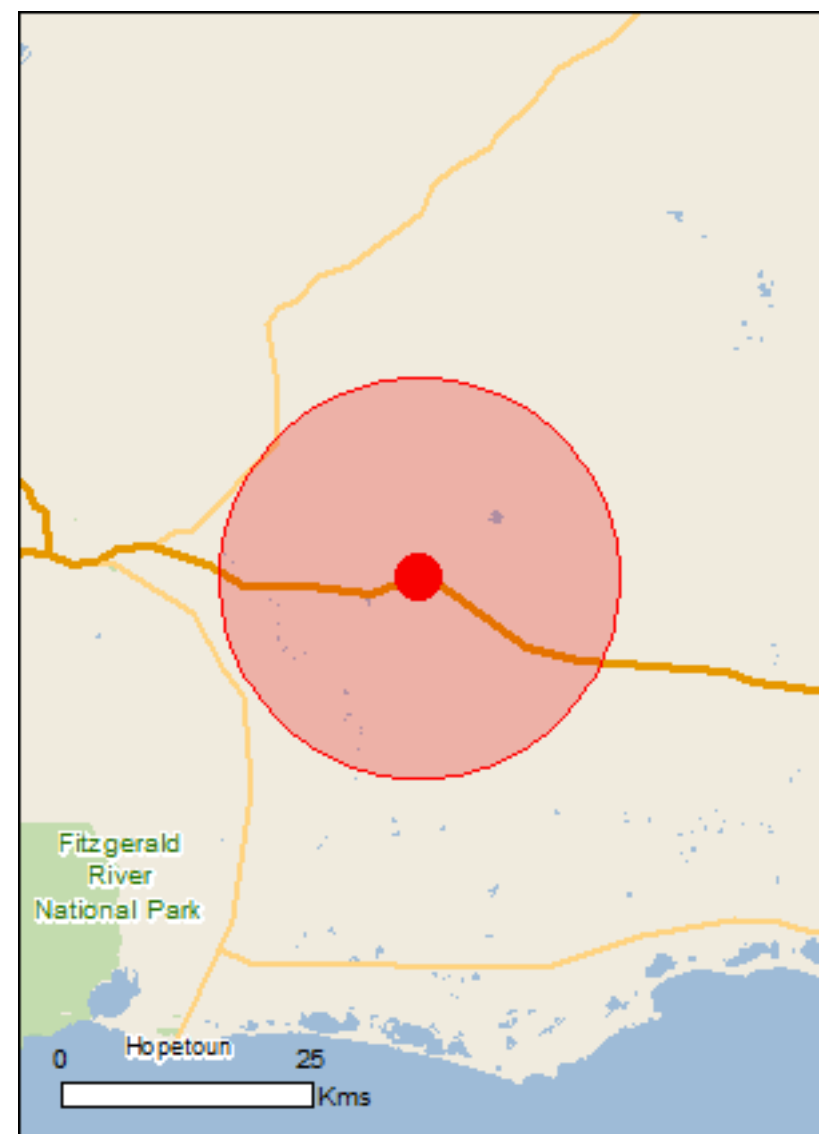
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

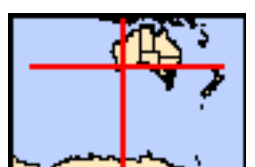
[Acknowledgements](#)



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2015

[Coordinates](#)

Buffer: 20.0Km



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](#).

| | |
|---|------|
| World Heritage Properties: | None |
| National Heritage Places: | None |
| Wetlands of International Importance: | None |
| Great Barrier Reef Marine Park: | None |
| Commonwealth Marine Area: | None |
| Listed Threatened Ecological Communities: | 2 |
| Listed Threatened Species: | 23 |
| Listed 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. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

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.

| | |
|--|------|
| Commonwealth Land: | None |
| Commonwealth Heritage Places: | None |
| Listed Marine Species: | 15 |
| Whales and Other Cetaceans: | None |
| Critical Habitats: | None |
| Commonwealth Reserves Terrestrial: | None |
| Australian Marine Parks: | None |

Extra Information

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

| | |
|--|------|
| State and Territory Reserves: | 5 |
| Regional Forest Agreements: | None |
| Invasive Species: | 13 |
| Nationally Important Wetlands: | None |
| Key Ecological Features (Marine) | None |

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[[Resource Information](#)]

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.

| Name | Status | Type of Presence |
|---|-----------------------|---------------------------------------|
| Eucalypt Woodlands of the Western Australian Wheatbelt | Critically Endangered | Community may occur within area |
| Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia | Endangered | Community likely to occur within area |

Listed Threatened Species

[[Resource Information](#)]

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

Birds

| | | |
|--|-----------------------|--|
| Botaurus poiciloptilus Australasian Bittern [1001] | Endangered | Species or species habitat may occur within area |
| Calidris ferruginea Curlew Sandpiper [856] | Critically Endangered | Species or species habitat likely to occur within area |
| Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523] | Endangered | Species or species habitat known to occur within area |
| Dasyornis longirostris Western Bristlebird [515] | Endangered | Species or species habitat known to occur within area |
| Falco hypoleucos Grey Falcon [929] | Vulnerable | Species or species habitat likely to occur within area |
| Leipoa ocellata Malleefowl [934] | Vulnerable | Species or species habitat known to occur within area |
| Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847] | Critically Endangered | Species or species habitat may occur within area |
| Pezoporus occidentalis Night Parrot [59350] | Endangered | Species or species habitat may occur within area |
| Mammals | | |
| Dasyurus geoffroii Chuditch, Western Quoll [330] | Vulnerable | Species or species habitat known to occur within area |
| Parantechinus apicalis Dibbler [313] | Endangered | Species or species habitat known to occur |

| Name | Status | Type of Presence within area |
|--|-----------------------|--|
| Phascogale calura Red-tailed Phascogale, Red-tailed Wambenger, Kenngoor [316] | Vulnerable | Species or species habitat known to occur within area |
| Pseudomys shortridgei Heath Mouse, Dayang, Heath Rat [77] | Endangered | Species or species habitat known to occur within area |
| Plants | | |
| Acacia rhamnophylla Kundip Wattle [64659] | Endangered | Species or species habitat known to occur within area |
| Anigozanthos bicolor subsp. minor Little Kangaroo Paw, Two-coloured Kangaroo Paw, Small Two-colour Kangaroo Paw [21241] | Endangered | Species or species habitat likely to occur within area |
| Conostylis lepidospermoides Sedge Conostylis [9254] | Endangered | Species or species habitat known to occur within area |
| Daviesia megacalyx Long-sepalled Daviesia [56785] | Endangered | Species or species habitat known to occur within area |
| Eremophila denticulata subsp. denticulata Fitzgerald Eremophila [64569] | Vulnerable | Species or species habitat likely to occur within area |
| Eremophila verticillata Whorled Eremophila [7032] | Endangered | Species or species habitat may occur within area |
| Hibbertia abyssus Bandalup Buttercup [89267] | Critically Endangered | Species or species habitat known to occur within area |
| Kennedia glabrata Northcliffe Kennedia [16452] | Vulnerable | Species or species habitat likely to occur within area |
| Ricinocarpos trichophorus Barrens Wedding Bush [19931] | Endangered | Species or species habitat likely to occur within area |
| Roycea pycnophylloides Saltmat [21161] | Endangered | Species or species habitat may occur within area |
| Thelymitra psammophila Sandplain Sun-orchid [4908] | Vulnerable | Species or species habitat likely to occur within area |
| Listed Migratory Species | | [Resource Information] |
| * Species is listed under a different scientific name on the EPBC Act - Threatened Species list. | | |
| Name | Threatened | Type of Presence |
| Migratory Marine Birds | | |
| Apus pacificus Fork-tailed Swift [678] | | Species or species habitat likely to occur within area |
| Migratory Terrestrial Species | | |
| Motacilla cinerea Grey Wagtail [642] | | Species or species habitat may occur within area |
| Migratory Wetlands Species | | |
| Actitis hypoleucos Common Sandpiper [59309] | | Species or species habitat may occur within |

| Name | Threatened | Type of Presence area |
|---|-----------------------|--|
| Calidris acuminata Sharp-tailed Sandpiper [874] | | Species or species habitat may occur within area |
| Calidris ferruginea Curlew Sandpiper [856] | Critically Endangered | Species or species habitat likely to occur within area |
| Calidris melanotos Pectoral Sandpiper [858] | | Species or species habitat may occur within area |
| Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847] | Critically Endangered | Species or species habitat may occur within area |
| Pandion haliaetus Osprey [952] | | Species or species habitat likely to occur within area |
| Tringa nebularia Common Greenshank, Greenshank [832] | | Species or species habitat likely to occur within area |

Other Matters Protected by the EPBC Act

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

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

| Name | Threatened | Type of Presence |
|---|-----------------------|--|
| Birds | | |
| Actitis hypoleucos Common Sandpiper [59309] | | Species or species habitat may occur within area |
| Apus pacificus Fork-tailed Swift [678] | | Species or species habitat likely to occur within area |
| Ardea alba Great Egret, White Egret [59541] | | Species or species habitat likely to occur within area |
| Ardea ibis Cattle Egret [59542] | | Species or species habitat may occur within area |
| Calidris acuminata Sharp-tailed Sandpiper [874] | | Species or species habitat may occur within area |
| Calidris ferruginea Curlew Sandpiper [856] | Critically Endangered | Species or species habitat likely to occur within area |
| Calidris melanotos Pectoral Sandpiper [858] | | Species or species habitat may occur within area |
| Chrysococcyx osculans Black-eared Cuckoo [705] | | Species or species habitat likely to occur within area |
| Haliaeetus leucogaster White-bellied Sea-Eagle [943] | | Species or species habitat likely to occur within area |

| Name | Threatened | Type of Presence |
|---|-----------------------|--|
| Merops ornatus Rainbow Bee-eater [670] | | Species or species habitat may occur within area |
| Motacilla cinerea Grey Wagtail [642] | | Species or species habitat may occur within area |
| Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847] | Critically Endangered | Species or species habitat may occur within area |
| Pandion haliaetus Osprey [952] | | Species or species habitat likely to occur within area |
| Thinornis rubricollis Hooded Plover [59510] | | Species or species habitat likely to occur within area |
| Tringa nebularia Common Greenshank, Greenshank [832] | | Species or species habitat likely to occur within area |

Extra Information

| State and Territory Reserves | [Resource Information] |
|------------------------------|--|
| Name | State |
| Kundip | WA |
| Ravensthorpe Range | WA |
| Unnamed WA27177 | WA |
| Unnamed WA43060 | WA |
| Unnamed WA49742 | WA |

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 |
|--|--------|--|
| Birds | | |
| Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803] | | Species or species habitat likely to occur within area |
| Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781] | | Species or species habitat likely to occur within area |
| Sturnus vulgaris Common Starling [389] | | Species or species habitat likely to occur within area |
| Mammals | | |
| Canis lupus familiaris Domestic Dog [82654] | | Species or species habitat likely to occur within area |

| Name | Status | Type of Presence |
|--|--------|--|
| Capra hircus Goat [2] | | Species or species habitat likely to occur within area |
| Felis catus Cat, House Cat, Domestic Cat [19] | | Species or species habitat likely to occur within area |
| Mus musculus House Mouse [120] | | Species or species habitat likely to occur within area |
| Oryctolagus cuniculus Rabbit, European Rabbit [128] | | Species or species habitat likely to occur within area |
| Sus scrofa Pig [6] | | Species or species habitat likely to occur within area |
| Vulpes vulpes Red Fox, Fox [18] | | Species or species habitat likely to occur within area |
| Plants | | |
| Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473] | | Species or species habitat likely to occur within area |
| Lycium ferocissimum African Boxthorn, Boxthorn [19235] | | Species or species habitat likely to occur within area |
| Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018] | | Species or species habitat likely to 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 and National Heritage properties, Wetlands of International and National 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.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

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

-33.59356 120.34469

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:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian 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, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- [-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.

Please feel free to provide feedback via the [Contact Us](#) page.

© Commonwealth of Australia

Department of Agriculture Water and the Environment

GPO Box 858

Canberra City ACT 2601 Australia

+61 2 6274 1111