

Technical Information

Are activities being undertaken to conserve our threatened plants and animals?

This document describes the sources of information, advice, methods, indicators and data processing procedures used to develop the reports. Reliability of data, as well as metadata attributes, are also described.

State NRM Plan Guiding Target:

Improve the conservation status of species and ecological communities.

State NRM Plan Representative Measure:

Proportion of all EPBC Act 1999 listed species and ecological communities with conservation actions and monitoring occurring.

Data collection period:

2013–16.

Expected frequency of reporting:

Annual.

Data sources:

1. [BDBSA](#) (Biological Databases of SA, which is managed by DEWNR). Data for species recorded in South Australia was extracted 8 October 2012. This database stores records of flora and fauna compiled from 730 datasets. Data extracted provided the number of terrestrial plant and animal species recorded in South Australia.
2. [EPBC listed threatened species](#) are listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Australian Government – Department of the Environment and Energy).
3. A questionnaire was sent to NRM threatened species experts to obtain data relating to the conservation actions and monitoring being undertaken for EPBC-listed threatened species occurring in each NRM region. The main questions that feed into this report card from the surveys are: Have conservation actions been identified for this species in your region? - Are any actions being implemented? – Do you monitor for the purpose of reviewing the distribution of this species? – Do you monitor for the purpose of reviewing the abundance of this species? The questionnaire has additional clarifying questions that help define the categories and results.

Indicators used:

1. Number (expressed as a percentage of the total) of EPBC-listed threatened plant and animal species for which conservation actions are occurring in South Australia.
2. Number (expressed as a percentage of the total) of EPBC-listed threatened plant and animal species for which monitoring of population distribution is occurring in South Australia.
3. Number (expressed as a percentage of the total) of EPBC-listed threatened plant and animal species for which monitoring of population abundance is occurring in South Australia.

Methods of data collection and processing:

The species lists sent to NRM threatened species experts were derived from a BDBSA query obtained 8 October 2012. The following steps were undertaken to refine data obtained through the query:

1. Data query run from BDBSA for all known records of terrestrial plants and animals (vertebrates only).
2. The data fields queried were as follows: OBJECTID, FREQUENCY, NSXCODE, ISINDIGENO, SPECIES, COMNAME, CATEGORY, ESACTSTATC, NPWACTSTAT, NRMREGION, NUMOBSERVE.
3. All non-indigenous/feral species were not included in final analyses.



4. Only records identified to Genus and species, or Genus species subspecies were retained.
5. All species returning '0' (number observed) were not included in final analyses.
6. Hybrid species were not included in final analyses.
7. "Unverified" species were not included in final analyses
8. All non-vascular plants (lichens, mosses, fungi etc.) were not included in final analyses.
9. Only marine algae were included in final analyses. All algal species returned from search were checked for marine affinity.
10. The distribution and nomenclature of EPBC-listed threatened species was cross checked against available literature/information. Species information was edited where inconsistencies were found.
11. Marine fishes were not included in this report. Species recorded in South Australia and listed under the EPBC Act include the great white shark (*Carcharodon carcharias*) (Vulnerable), southern dogfish (*Centrophorus zeehaani*) (Conservation Dependent), school shark (*Galeorhinus galeus*), orange roughy (*Hoplostethus atlanticus*), and southern bluefin tuna (*Thunnus maccoyii*).
12. Albatrosses/petrels/marine turtles, Antarctic fur seal, elephant seal, fin whale and humpback whale were removed from threatened species lists and reporting for this report. These species are considered rare and/or vagrants within waters of all NRM regions and therefore conservation actions were not considered warranted at a NRM regional level.

The questionnaire sent to NRM threatened species experts was developed in consultation with threatened species officers from Natural Resources Adelaide Mount Lofty Ranges. Following review of the questionnaire, the questionnaire was sent to NRM threatened species experts in each NRM region.

Questionnaire responses were then collated for all regions. Species were omitted from final analyses if:

- a) conservation actions were not identified for the species within the NRM region where the species has been recorded as present.
- b) they were considered locally extinct/or occasional vagrants by regional NRM staff. These species would not be expected to be a priority for regional conservation actions or monitoring.

Analyses were then undertaken to determine the percentage of SAs EPBC-listed threatened species that have conservation actions or monitoring activities occurring in **all** NRM regions where they have been recorded.

Note: The State target reflected in reports has been reworded after consultation with the conservation and land management branch within DEWNR. The State target according to the State NRM Plan is to "Improve the conservation status of species and ecological communities" this was altered in the reports to "Improve the management of species and ecological communities"

Future reporting measures:

Methods may be developed to allow of fine-scale (region/subregion) reporting for this measure in the future.

The following government agencies contributed to this report:

DEWNR.

The following non-government agencies contributed to this report:

None.

Key stakeholders:

Natural Resources Management Council, Natural Resources Management Boards, DEWNR and NRM communities.

Information reliability scoring:

Information is scored for reliability based on average scores given for information currency and applicability, and its level of spatial representation (Tables 1–3).

Table 1. Information currency

Reliability	Criteria
5	Information up to 3 years old
4	Information up to 5 years old
3	Information up to 7 years old
2	Information up to 10 years old
1	Information >10 years old

Table 2. Applicability of the information

Reliability	Criteria
5	All data based on direct indicators of the measure
4	Most data based on direct indicators of the measure
3	Most data based on indirect indicators of the measure
2	All data based on indirect indicators of the measure
1	Data are based on expert opinion of the measure

Table 3. Spatial representation of information (sampling design)

Reliability	Criteria
5	Information is collected from across the whole region/state (or whole distribution of asset within the region/state) using a stratified sampling design
4	Information is collected from across the whole region/state (or whole distribution of asset within the region/state) using a sampling design that is not stratified
3	Information is collected from an area that represents less than half the spatial distribution of the asset within the region/state
2	Information is collected from an area that represents less than 25% the spatial distribution of the asset within the region/state
1	Information is collected from an area that represents less than 5% the spatial distribution of the asset within the region/state or spatial representation unknown

Based on Tables 1, 2 and 3 above, respectively, the reliability of information relating to the number of nationally listed species in South Australia that have conservation actions and monitoring being undertaken is $(5+5+5)/3 = 5$ (Excellent).

This report is linked to the following report cards/snapshots:

- [How many of our species are extinct or threatened with extinction?](#)
- [How many of our ecological communities are extinct or threatened with extinction?](#)
- [Are conservation activities being undertaken to conserve our threatened ecological communities?](#)
- [Is the condition of our native vegetation improving?](#)
- [Are the extent and connectivity of our native vegetation improving?](#)
- [How much of our native vegetation is in protected areas?](#)
- [Are the extent and condition of our seagrass improving?](#)
- [Are the extent and condition of our saltmarshes improving?](#)
- [Is the condition of our subtidal reefs improving?](#)
- [Are the extent and condition of our coastal dunes improving?](#)
- [Are the extent and condition of our mangroves improving?](#)
- [Is the condition of our estuaries improving?](#)
- [Progress towards protecting marine habitats and species through South Australia's Marine Park network](#)

Metadata description:

Project/dataset name:	BDBSA (Biological Databases of South Australia, which is managed by DEWNR): Data extracted 8 October 2012. Additional species listed were obtained via EPBC listings in October 2016.
Abstract/description	Dataset is all species recorded in South Australia from field surveys and entered up to 8 October 2012. Species recorded in multiple NRM regions may be represented multiple times. Duplicate records have been accounted for (excluded) in data analyses. Additional species listed were obtained via EPBC listings in October 2016.
Data types	Fields queried: OBJECTID, FREQUENCY, NSXCODE, ISINDIGENO, SPECIES, COMNAME, CATEGORY, ESACTSTATC, NPWACTSTAT, NRMREGION, NUMOBSERVE.
Organisation/DEWNR business area that sponsors/holds/manages the data	DEWNR
Date range	Last updated: 1 October 2016
Study area	South Australia. Species records provided for each NRM region
Data format	Excel
Data distribution rules	Licensed under Creative Commons Attribution 4.0 International license
Is the dataset source data (raw), value-add data (analysed/summarised) or final indicator/score data?	Value add data

Project/dataset name:	Questionnaire data for the presence/absence of conservation actions and monitoring occurring for South Australia plant and animal species listed under the <i>EPBC Act 1999</i> .
Abstract/description	Dataset is questionnaire results for nationally listed species occurring within each NRM region that have conservation actions and monitoring programs for distribution and abundance occurring
Data types	Nationally listed threatened species lists for each NRM region. Numeric and descriptive data with comments.
Organisation/DEWNR business area that sponsors/holds/manages the data	DEWNR
Date range	2013–16
Study area	South Australia/Australia
Data format	Excel
Data distribution rules	Licensed under Creative Commons Attribution 4.0 International License
Is the dataset source data (raw), value-add data (analysed/summarised) or final indicator/score data?	Value add data

Photo credit details:

AMLR and NY report photo:

Title: "Bandicoot"

Owner: DEWNR

AW photo

Title: Warru

Owner: Bronwyn Dutch

EP photo

Title: "Malleefowl"

Owner: Sharon Gillam

SAMDB photo:

Title: "Regent Parrot_LoxtonIMG_9131ed"

Owner: Helga Kieskamp

KI and State photo

Title: Glossy black cockatoo

Owner: DEWNR

SAAL photo

Title: "Sandhill Dunnart, Yellabinna, Nullarbor"

Owner: DEWNR

SE photo

Title: "Southern bentwing bat"

Owner: DEWNR, credit Steve Bourne

Scientific literature referred to in the report:

This report uses the listing advice for each of the threatened species and can be access through the Department of Environment and Energy. [Species Profile and Threats Database](#), which we accessed in October 2016.