

Biological Databases of South Australia – Overview

Introduction

The Biological Databases of South Australia (BDBSA) is comprised of an integrated collection of corporate databases which meet departmental standards for data quality, integrity and maintenance.

BDBSA was initially established to hold the data collected by the Biological Survey of South Australia but has evolved into a central access point for all biological data within South Australia.

Obtaining data

BDBSA is run primarily on ORACLE software from within the departmental network. Summary outputs from BDBSA are available internally (through the spatial library (SDE) and EnvMaps) and publicly through [NatureMaps](#) and the [Atlas of Living Australia](#). A comparison of data accessed through these public websites is available in the Atlas of Living Australia information sheet.

Users requiring data from BDBSA outside the scope of these reporting tools should submit a Data Request via DEWBioDataRequests@sa.gov.au. Please refer to BDBSA [data request procedure](#).

Contributing data

For details on how to contribute data to BDBSA refer to the relevant information sheets on the [BDBSA Information sharing](#) web page.

Although BDBSA acts as the repository for data from many projects it also includes copies of data sets from several other partner organisations. This external data is included under agreement with the partner organisations for ease of distribution, but they remain owners of the data and should be contacted directly for further information.

Partner datasets include:

Birdlife Australia: <http://www.birdlife.org.au/>

- Atlas records for SA -1996 to 2006 (a process for regular updates is being developed)
- Australasian Wader Studies Group (supplied 2005)
<http://www.birdlife.org.au/locations/australasian-wader-studies-group>

SA Museum: <http://www.samuseum.sa.gov.au/>

- Herpetology data until Aug 2004
- Bird data until end 2003
- Mammal data until May 2012

A process for regular updates is being developed.

BDBSA components

Survey (SU and OP)

This database contains site data collected by a range of methodologies. Spatial locations of sites and all associated data, including the floristic and structural composition of the site, physical attributes, survey effort and vertebrate fauna can be stored. Until 2009



more simple datasets were captured in the Opportune (OP) system and more complex datasets in the Survey (SU) system. The two systems have now been merged and the SU categorisation is now mainly used for data following the [Biological Survey of SA methodology](#).

Reserves (RE) - Status update

The Reserves database was mainly used to store historic SA government species lists for Reserves and other public lands. Valid species records from this database were transferred to Survey (described above) in 2019 and are now stored as OP records under BDBSA RESERVES DATABASE (Project 803) or related projects. The original Reserves database has been archived. Limitations on the spatial accuracy of the records as described below still apply in Survey.

Records do not have an accurate spatial location but may still be useful. Care should be taken when using this information for mapping species distributions as each record's spatial coordinate will be fixed to a designated location (centroid) for the Reserve.

Depending on the method used to derive this centroid the coordinate may even occur outside of the reserve boundary.

Roadside Vegetation (Flora only) (RV)

This database is used to store vegetation data for roadsides throughout South Australia. Species records are linked to the road network through mapping different vegetation communities on either side of a road. Care should be taken when using this information for mapping species distributions as each record's spatial coordinate has been fixed as a centroid of a road segment and is set to 10 m on either side of the road network. For more information refer to the [roadside vegetation survey methodology \(Drive-by method\)](#).

Plant Population (Flora only) (PP)

This database is primarily used to store threatened plant population related data. A wide range of environmental and physical characteristics for each plant population is stored along with species distribution and abundance information. Many records also include detailed information on plant communities.

State Herbarium – ADHERB (Flora only) (AD)

This database is used to store text based data relating to the physical plant **specimens** held by the State Herbarium of SA. Data is from a wide range of sources collected over a long time frame and contains various levels of detail which could range from simple name and location information to detailed habit, habitat and specimen characteristics (e.g. phenology and morphology). The accuracy of location and other information, especially for the historical records may be poor.

Supertable

In order to deliver data from these separate components in a manageable and standard format, a Minimum Dataset from all flora and fauna records is extracted weekly into a Supertable. Due to size limitations this is delivered as a FAUNA Supertable and a FLORA Supertable. For more information refer to the [Supertable Overview – Information Sheet](#).

Notes to users

Data Quality: Although much of the data has been through a variety of validation processes the lists may contain errors and should be used with caution. An indication of the data integrity can be obtained in the metadata for each data set, which includes details of data collection, identification and validation methods.



If any errors are found or suspected please provide feedback at DEWBioDataSupport@sa.gov.au

Risks associated with re-use of data: Re-use or recycling of data is permitted but discouraged. There are inherent risks associated with re-use of **stale biological data**.

These include:

- Uncertainties about whether the data is “as supplied” departmental data or whether the data has been edited or supplemented with additional local data.
- The record data ceases to benefit from:
 - Taxonomic updates (species name changes or splits)
 - Spatial and other edits undertaken as part of departmental quality assurance processes
 - Validation checks which may reject questionable records (and exclude them from distribution)
 - National, State and regional species threat rating updates.
- The recordset ceases to benefit from:
 - Additional data loads
 - Certainty of ongoing conformity with licensing arrangements negotiated with third party data providers. Licensing may have expired or altered since the original data was supplied.
- The recordset may include records which have been subsequently rated as “sensitive” and should have restricted distribution applied to them. It is accepted that such records may continue to be re-used once supplied but users are expected, where possible, to conform with the intent of the sensitive record process.

The nature and extent of these issues, and the risks posed to data uses, will depend on the size, age,

phylogenetic content and spatial extent of the dataset.

Duplicates: As the BDBSA holds datasets from third party organizations there is potential for a record to be present more than once. In particular the Biological Survey of SA program has made a major contribution to the specimen collections of the State Herbarium of SA and the SA Museum. As such, many records from the Biological Survey of SA will also be represented in datasets from these institutions. If users need to identify **duplicates** the Museum/Herbarium registration number is recommended or in its absence, Field Voucher Numbers.

Presence data: BDBSA data is supplied to assist in determining species **presence** and distribution only. A complete understanding of the methods and constraints or assumptions used during collection is required prior to any detailed analysis of the data.

Absence data: In 2017 the ability was added to BDBSA to enable ‘none detected’ to be entered for number observed in a dataset where appropriate presence/absence methodology has been used. Refer to the factsheet ‘BDBSA Presence and Absence observations’ for more detail.

To request associated **metadata** or to consult further with the data custodians contact the department at DEWBioDataSupport@sa.gov.au.



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