



GAIIA RESOURCES CITIZEN SCIENCE HUB



The Biological Data Recording System (BDRS)

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Data is the key outcome for a successful citizen science project - it must be both of high quality when captured and easily accessible subsequently to both contributors and scientists. For community members, completing the feedback loop allows them to see their efforts in a broader context. For scientists, the data must be available in a form fit for further analysis. And for the future this data should be stored using recognised data standards which allow for both reliable integration with other data sets and aggregation into larger data sets for potential re-use at broader scales.

Gaia Resources originally constructed the Biological Data Recording System (BDRS) for the Atlas of Living Australia in 2009 to provide the backend repository for reliably managing millions of point-based data records contributed by Australian research institutions. Since that time it has been further enhanced to support data contributions coming directly from mobile devices using citizen science apps. By using the same backend architecture not only can individual projects store, aggregate and access their data, but the data can easily be contributed to larger integrative data repositories.

For example, data contributed to the Coastal Walkabout project, where citizen scientists contribute observations of fauna common along the Australian coastline, can be harvested by the Atlas of Living Australia using web services. In this way observations from local citizen science projects can be aggregated at regional, national or global scale to enhance and extend existing data and contribute to larger-scale research questions.

