

The Australian National Species List steps up for biodiversity conservation

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Abstract

The Australian National Species List ([AuNSL](#)) will bring together authoritative national taxonomies and supporting nomenclatural data for flora, fauna, fungi and algae. These data enable biodiversity infrastructures, such as the [Atlas of Living Australia](#), to store information about taxa against a standard, permanently resolvable taxonomy, and to create linkages between them.

The Biodiversity Data Repository ([BDR](#)) is a new Australian government infrastructure supporting environmental assessments under Australia's Environment Protection and Biodiversity Conservation Act. The BDR will bring together biodiversity data assets from a range of sources and enable decision making to be based on a more holistic view of taxa in Australia. To achieve its objectives, the BDR requires the ability to align disparate taxonomies to a national standard. To support the BDR we have restructured and consolidated the constituent datasets of the AuNSL and added a GraphQL interface from which we can provide machine access to the full suite of taxonomic and nomenclatural entities in the data and the linkages between them. Currently we provide a simple name check service for aligning supplied names with the standard AuNSL taxonomy and a full taxonomic backbone extract as a [SKOS](#) concept scheme expressed in [JSON-LD](#). We are working towards an expanded set of taxonomic and nomenclatural services and a more generalised and complete graph of the AuNSL taxonomy, which can serve an increasing number of initiatives including the Australian Traits database ([AusTraits](#)), the [Australian National DNA Library](#), and sensitive species data exchange mechanisms.

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SKOS label, API, name check

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Conflicts of interest