## Atlas of Living Australia ala.org.au

# Increasing accessibility of biological collections data through DigiVol

#### What is DigiVol?

DigiVol is an online tool that enables volunteers to capture data and digitise collections held by institutions such as museums, libraries, archives and herbaria.

DIGIVO

DigiVol is a collaborative partnership between the **Atlas of Living Australia** (ALA) and the **Australian Museum** that represents a pioneering effort of citizen science and digital innovation. This initiative harnesses the collective power of volunteers and technology to digitise and make accessible, vast amounts of biodiversity data.

The program originally started in 2011 with the aim of transcribing specimen labels from 5,000 pinned Cicada specimens from the Australian Museum's collections.

Since this time, DigiVol has grown exponentially with more than **17 million** digitising tasks completed by DigiVol volunteers.

"The DigiVol program couldn't exist without our dedicated volunteers. We started with 30 volunteers working through an average of 23 transcription tasks a day - now we have more than 13,700 volunteers registered with the program, completing on average 7000 tasks per day. This work provides tremendous value in making Australian biodiversity information accessible"

- Paul Flemons DigiVol Program Lead.



CSIRO's Australian National Insect Collection holds pinned specimens with hand-written labels that have been transcribed by DigiVol volunteers.

#### **Biological collections**

Biological collections are an essential resource for science, education, and conservation. They are a valuable record of natural history and are an essential resource for scientific research, conservation and education.

Australia's biological collections are home to hundreds of millions of physical specimens, historically biological collections have only been accessible to those who can visit the collections' location. With the emergence of digitisation techniques, this is now changing so that anybody from around the world can access such information more widely.

#### Camera traps and other data sources

By creating digital records using camera traps, traditional photography, audio, transcribing labels, field notes and other documentation, and entering this information into a searchable database, DigiVol increases the accessibility of biological collections globally. Through the DigiVol program, researchers, data analysts, policymakers and citizen scientists around the world now have deeper access to rich biodiversity information. Butterfly specimen with a handwritten label on DigiVol.

### **Digital data**

Making data accessible via digital channels helps give researchers, governments and industry access to high-quality information so they can better understand, monitor and protect biodiversity. Better data leads to better environmental outcomes and enables data users to tackle ecological problems such as:

- Understanding the relationships between species (important in determining potential agricultural pests or potential medical applications);
- Better-predicting variables that impact the distribution of species (such as assessing how climate change impacts may disrupt an individual species or ecosystem);
- Identifying species from morphological or genetic characters, for example, being able to identify birds involved in aircraft incidents.

#### The two-step DigiVol process

DigiVol is open to any institution or individual who has a project that would be well suited to DigiVol volunteers. Projects are called 'expeditions' which are listed on the DigiVol website.

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The first stage of the DigiVol process involves image capture of the subject matter. For the **Australian Museum** this involves specimens in the collection being carefully photographed by a team of on-site volunteers and added to the digital library.

The second stage of the process involves online volunteers from across the world working to transcribe specimen labels and other text-based information captured in images. After volunteers complete a task, the information is made available on the ALA and the Global Biodiversity Information Facility (GBIF). Bird specimen from CSIRO's Australian National Wildlife Collection.

Getting involved

To become a DigiVol volunteer, check out the current open expeditions **digivol.org** 

For more information visit **ala.org.au** or contact **support@ala.org.au**.







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