

Cloud-based Software Platforms for Citizen Science: Implications and opportunities for biodiversity standards

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Abstract

Whether community created and driven, or developed and run by researchers, most citizen science projects operate on minimalistic budgets, their capacity to invest in fully featured bespoke software and databases is usually very limited. Further, the increasing number of applications and citizen science options available for public participation creates a confusing situation to navigate.

Cloud-based platforms such as [BioCollect](#), [iNaturalist](#), [eBird](#), [CitSci.org](#), and [Zooniverse](#), provide an opportunity for citizen science projects to leverage highly featured functional software capabilities at a fraction of the cost of developing their own, as well as a common channel through which the public can find and access projects. These platforms are also excellent vehicles to facilitate the implementation of data and metadata standards, which streamline interoperability and data sharing. Such services can also embed measures in their design, which uplift the descriptions and quality of data outputs, significantly amplifying their usability and value.

In this presentation I outline the experiences of the Atlas of Living Australia on these issues and demonstrate how we are tackling them with the BioCollect and iNaturalist platforms. We also consider the differences and similarities of these two platforms with respect to standards and data structures in relation to suitability for different use cases. You are invited to join a discussion on approaches being adopted and offer insights for improved outcomes.

Keywords

infrastructure, data sharing, ALA, BioCollect, Atlas of Living Australia

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Conflicts of interest