Conference Abstract

The state of the data in citizen science

Anne Bowser[‡], Caren Cooper[§]

‡ Woodrow Wilson International Center for Scholars, Washington, United States of America
§ North Carolina Museum of Natural Sciences, Raleigh, United States of America

Corresponding author: Anne Bowser (anne.bowser@wilsoncenter.org)

Abstract

Citizen science has contributed to biodiversity research and monitoring for hundreds of years. Still, the recent increase in scale, scope, diversity and number of citizen science projects highlights the challenge of designing and implementing good practices around data collection and data curation. The Committee on Data for Science and Technology of the International Council for Science (ICSU-CODATA) and the World Data System (WDS) recently founded a joint Task Group to understand and support good practices for citizen science data validation, data cleaning and curation, and, short- and long- term data management.

Research projects conducted by the ICSU-CODATA-WDS Task Group include the development of an initial typology of citizen science data generating tasks, and an exploratory landscape analysis of the state of the data in citizen science. The landscape analysis found that citizen science projects use a wide range of strategies for data validation at numerous stages of the scientific research process. In comparison, practices for data documentation, curation, and long-term management are less advanced. This may limit data discovery and re-use.

This work compliments the planned and ongoing efforts of the TDWG Citizen Science Interest Group to advance biodiversity informatics for citizen science. Presenting research on the state of the data in citizen science can promote cross-pollination between the ICSU-CODATA-WDS Task Group and the biodiversity community, and encourage researchers

and practitioners to work together to advance citizen science data quality, standards, and interoperability.

Keywords

Citizen science, crowdsourcing, data quality, data validation, data curation, data management, converging communities

Presenting author

Anne Bowser