BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 8: e136104
doi: 10.3897/biss.8.136104

OPEN ACCESS

Conference Abstract

BIOFAIR Data Network's Listening Sessions for Engagement and Data Integration

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Received: 02 Sep 2024 | Published: 02 Sep 2024

Citation: Ellwood ER, Bentley A, Thiers B, Moser WE, Watkins-Colwell GJ, Zimkus BM, Monfils AK, Franz NM, Bates JM, Poo S, Contreras DL, Webster MS, Nelson G, Abeyrathna N, Kunkel D, Long-Fox BL, Portmann J, Pittman C, Sheik M, Lomas MW, Pandey JL (2024) BIOFAIR Data Network's Listening Sessions for Engagement and Data Integration. Biodiversity Information Science and Standards 8: e136104. https://doi.org/10.3897/biss.8.136104

Abstract

During the last two decades, a wealth of data on biodiversity and associated environments has been mobilized in digital form. Collectively, these data provide a powerful resource that when curated and integrated with intention, can provide critical information to address emerging complex global biological, environmental, and public health challenges. Tapping into the vast potential of specimen, observation, and environmental data requires us to integrate diverse and multifaceted datasets, connect domain-specific communities, and bridge discipline-specific social norms and data infrastructures. Linking data and their respective communities is a critical next step to creating the accessible and enriched data source needed to empower broad integrative biological research and education.

To initiate cross-domain collaborations, the Building an Integrated, Open, Findable, Accessible, Interoperable, and Reusable (*[1]) Data Network project, led by the Biodiversity Collections Network (BCoN) and funded by the United States National Science Foundation, convened stakeholders through six listening sessions over the summer of 2024. The sessions were aimed at building connections between disparate data communities—highlighting an iterative process of building a larger, interdisciplinary community from within. These listening sessions brought together representatives from federal agencies, the genetic data community, the ecology data community, the climate and environmental data community, the One Health community, and the biodiversity informatics community to initiate a collaborative and accessible partnership toward an integrative and expanded data network. Discussions focused on advancing data culture and infrastructure that meets emerging needs in research, education, conservation, biosecurity, and the bioeconomy. Participants discussed building on and bridging the Extended Specimen Network (ESN) vision with other existing conceptual frameworks for data integration and application (Lendemer et al. 2019, Thiers et al. 2019). Stakeholder groups will be brought together at an interdisciplinary workshop in early 2025, to develop a roadmap to augment existing initiatives with the aim of producing a FAIR (Findable, Accessible, Interoperable, and Reusable), open, integrated data network.

Keywords

data infrastructure, Extended Specimen Network

Presenting author

Elizabeth R. Ellwood

Presented at

SPNHC-TDWG 2024

Funding program

This material is based on work supported by the U.S. National Science Foundation award number DBI-2303588. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

Hosting institution

American Institute of Biological Sciences

Conflicts of interest

The authors have declared that no competing interests exist.

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Endnotes

*1 BIOFAIR Data Network, https://bcon.aibs.org/biofair/