Conference Abstract

Biodiversity: Local Implementation - Keynote

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Abstract

A prevalent challenge to the uniform curation of biodiversity data is the extent to which individual initiatives can manage the production, organization, description, maintenance, and administration of digital assets in the long term. Funding agents have historically supported cutting-edge, niche projects that lacked long-term data management plans. To ensure that new initiatives are resilient and long-lasting, funding agents have increasingly emphasized the importance of building sustainable digital projects at the local level with clear administrative structures that ensure both longevity and wide-scale integration into the larger data environment. It is no longer enough to have a great idea - that great idea must be situated within a larger framework of maintenance and repair.

If our data are to withstand the changing and uncertain information and infrastructure landscape, we must articulate a comprehensive set of best practices and workflows that facilitate the integration of local knowledge into global spaces. These best practices must address some thorny issues: How do we create and support systems that are resilient to economic, technological, and standards-level change? How do we bring context to new solutions and initiatives within the broader picture of the data lifecycle? How do we ensure that institutions have a ready pool of trained and diverse information professionals from which to hire and support this evolving landscape?

This session will discuss a bird's-eye view of the biodiversity informatics workflow emphasizing the local considerations of biodiversity work, including the lifecycle of biodiversity data within institutions and the challenges introduced at each stage of the data

management process. Resiliency requires that each of the following elements must be addressed in any biodiversity informatics plan:

- • Metadata, schema, and other descriptive standards
- • Scholarly credit and intellectual property
- • Publishing models
- • User services and interface design
- • Workflows and administration of data
- • Training of core workforce to support work in the long term

This keynote will examine the challenges and opportunities at the local level of biodiversity work, and what must be done to support scientific research, policy, and public engagement at the global level. We will demonstrate how the Informatics program at the National Museum of Natural History has integrated these ideas and strategies with the mission of the Smithsonian Institution to create, preserve, and disseminate knowledge. By making our data comprehensive, accessible, and well managed, we contribute to the creation of a digital-first Smithsonian reaching a global audience of researchers and educators now and long into the future.

Keywords

Biodiversity Informatics, data lifecycle, best practices, informatics workflows

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Presented at

Plenary at Joint Meeting of SPNHC/TDWG 2018: Biodiversity: Global Outlook - Local Implementation