Conference Abstract

Engaging K-12 Audiences with Biodiversity Data through Advancing Digitization for Biodiversity Collections

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Abstract

Natural history collections around the world are currently being digitized with the resulting data and associated media now shared online in aggregators such as the Global Biodiversity Information Facility and Integrated Digitized Biocollections (iDigBio). These collections and their resources are accessible and discoverable through online portals to not only researchers and collections professionals, but to educators, students, and other potential downstream users. Primary and secondary education (K-12) in the United States is going through its own revolution with many states adopting Next Generation Science Standards (NGSS https://www.nextgenscience.org/). The new standards emphasize science practices for analyzing and interpreting data and connect to cross-cutting concepts such as cause and effect and patterns.

NGSS and natural history collections data portals seem to complement each other. Nevertheless, many educators and students are unaware of the digital resources available or are overwhelmed with working in aggregated databases created by scientists. To better address this challenge, participants within the National Science Foundation Advancing Digitization for Biodiversity Collections program (ADBC) have been working to increase awareness of, and scaffold learning for, digitized collections with K-12 educators and learners. They are accomplishing this through individual programs at institutions across the country as part of the Thematic Collections Networks and collaboratively through the iDigBio Education and Outreach Working Group. ADBC partners have focused on incorporating digital data and resources into K-12 classrooms through training workshops and webinars for both educators and collections professionals, as well as through creating educational resources, websites, and applications that use digital collections data. This presentation includes lessons learned from engaging K-12 audiences with digital data, summarizes available resources for both educators and collections professionals, shares how to become involved, and provides ways to facilitate transfer of educational resources to the K-12 community.

Keywords

Education, Digitization, K-12, Primary Education, Secondary Education, Data, Outreach, Educational Resources

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