Digital collections for all: Creating inclusive educational resources with digital natural history collections

Presented by the iDigBio Team
Natural history collections have historically and currently benefit from colonialism. Specimens shipped on board slave ships, to glorify empires, and to promote exploitation, stolen objects, and so much more. The time for acknowledgement is long overdue. We must acknowledge that through our science, we have and continue to impact Indigenous peoples.

We are all based in different locations today. We are joining from Gainesville, Florida, the traditional territory of the Gabrielino-Tongva, Yat’siminioli (Seminole), and Utina (Timucua) tribal lands.

Learn more here: https://native-land.ca/
Digitizing Natural History Collections
GBIF—the Global Biodiversity Information Facility—is an international network and data infrastructure funded by the world's governments and aimed at providing anyone, anywhere, open access to data about all types of life on Earth.

Coordinated through its Secretariat in Copenhagen, the GBIF network of participating countries and partners includes data providers, research institutions, and many others that contribute to biodiversity science and conservation.
Usage matters: not interchangeable

diverse audiences

diverse student pop

diverse populations

diverse representation

diverse communities

underrepresented in scien
diverse new populations
diverse backgrounds
historically underr
Some Definitions

- **Oppression**: a systemic inequality that is present throughout society, that benefits people with more privilege and harms those with fewer privileges.

- **Marginalized person**: a member of a group that is the primary target of a system of oppression.

- **Underrepresented**: describes a subset of a population that holds a smaller percentage within a significant subgroup than the subset holds in the general population.

- **Minority**: Refers to a category of people who are fewer in numbers & experience relative disadvantage as compared to members of a dominant social group.

Adapted from Gainesville Ally Skills Network workshop.
More Definitions

- **Inclusion**: An intentional, ongoing effort to ensure everyone can participate fully in all aspects of organizational work, including decision-making processes.

- **Diversity**: The ways in which people are different and the same at the individual and group levels.

- **Equity**: Fair and just treatment of all members of a community.

- **Accessibility**: Giving equitable access to everyone along the continuum of human ability and experience.

Adapted from the SPNHC IDEA Committee and American Alliance of Museums (AAM), ELA.
What is Intersectionality
Intersectionality

Race

Class

Education

Sexuality

Ability

Race

Culture

Gender

Age

Ethnicity

Language
Colonialism, & natural history collections

Nature Read in Black and White: decolonial approaches to interpreting natural history collections

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Race & natural history collections


Digital Natural History Collections and Accessibility

Online accessibility applies to all disabilities that affect access to the web, including:

- Auditory
- Cognitive
- Neurological
- Physical
- Speech
- Visual

So how do we make our collections more inclusive, diverse, equitable and accessible?

Collections-level actions

- Collect demographic data on users of physical and virtual collections (Are their biases in who is using and interacting with your collection? If so, what are you going to do about it?)
- Create partnerships communities/countries from which specimens derived.
- Stop allowing people to deposit specimens without permits
- Stop allowing people to deposit specimens without proper acknowledgment of people that contributed to collecting the specimens
Institutional-level actions

- Hire BIPOC faculty and staff
- Paid research and curation experiences for students, especially low-income, first-generation, and BIPOC
- Support training of scientists and students in countries from which specimens were obtained (do you highlight specimens from a particular country? If so, focus on those countries!)
- For university-based museums, engage undergraduate and graduate students directly in conversations about the history of collections as part of courses in biology, anthropology, etc.
Digital Accessibility

- Translate documents related to accessing the collections into multiple languages
- Use alt-text for images and captions for audio
- Add keyboard navigation and use descriptive urls
- Collaborate with communities to identify and create relevant resources that support use of collection for education, research, and more
Further Considerations for Digital Natural History Collections

- Highlight hidden figures (and nameless figures) that collected specimens or served the museum in other ways
- Tell stories with digital natural history collections outside of the ahistorical “hard sciences” lens.
- Talk about race and include historical context about the scientific history of race and racism in online resources & center Black, Indigenous, and other People of Color’s stories and contributions to science.
- When you do talk about well-known, white scientific figures like Darwin and Linnaeus include information about their roles in race and racism or how they benefited from the institutional racism of their times.
Resources

A Diversity, Equity, and Inclusion Reading List, with Special Emphasis on Natural Sciences and Natural History Museums

Mon, 2021-02-01 10:34 -- maphillips

As the hub for digitization of U.S. natural history collections, iDigBio aims to engage our community in promoting a more diverse, equitable, inclusive, and actively anti-racist community. To that end, the iDigBio team focused on issues of Education, Outreach, Diversity, and Inclusion in compiling this reading list to help persons to think more inclusively in the classroom, in professional settings, and beyond.

TK Labels

The TK and BC Labels are an initiative for indigenous communities and local organizations. Developed through sustained partnership and testing within Indigenous communities across multiple countries, the Labels allow communities to express local and specific conditions for sharing and

Resources
A community for the exchange of ideas and resources supporting biological and environmental data science education, grounded in practices of universal design for learning and inclusive pedagogy.

A Call to Action

The Environmental Data Science Inclusion Network (EDSIN) is dedicated to facilitating and supporting diversity, equity, and inclusion within the environmental and data science fields. We do this through activities that support progress in nine priority areas.
Ongoing Initiatives

iDigTRIO
Biological Career Conference & Fair
There's No Formula For Being A Scientist!

Achieving True Diversity in STEM
Ongoing Initiatives
For a Racially Just, Inclusive, and Open STEM Education

The RIOS Institute exists to kickstart the implementation of Open Education (OE) and social-justice, equity, diversity, and inclusion (S-JEDI) practices in STEM higher education. We provide support and resources for STEM organization leaders to bring S-JEDI-centered Open science pedagogy, materials, and resources to the members of their academic organizations and by extension to the institutions where their members teach and do research. Read more about Our Mission here.

As we work towards equity and justice in STEM Education, the RIOS Institute promotes collaboration among the network of leaders we serve. We offer two primary opportunities, open to our network, Working Groups and Professional Learning Communities.

We are currently accepting proposals for new Working Groups! These groups receive a $2000 budget to develop a tangible product aligned with the RIOS mission. Proposals are accepted on a rolling basis until Feb 15th, 2022. For more details, and to apply, see the full call here.
Organize

Work with a society or build a working group on a topic you are passionate about with other collections professionals!
iDigBio can help!

- Host/facilitate working groups
- Promote your IDEA work
- Support workshops, webinar and other events
- Event planning resources
- Partner on new initiatives/grants (or help you find a partner)
In Summary

- Museums are amazing places!
- Past and current systems exclude and harm people.
- We have to change the systems first to truly "broaden representation"
- Listen, learn, and find partners for action!