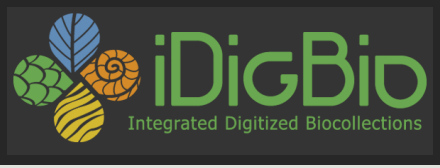

Advancing Digitization of Biodiversity Collections (ADBC)

SUMMIT V

hosted by

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Advancing Digitization of Biodiversity Collections

"To advance scientific knowledge by improving access to digitized information in vouchered scientific collections across the US."

- **Enable use of biodiversity data to address environmental and economic challenges by:**
  - Researchers
  - Educators
  - General public, citizen scientists
  - Policy-makers

iDigBio
Integrated Digitized Biocollections

TCNs: Thematic Collections Networks
PENs: Partners to Existing Networks

15 Thematic Collections Networks (TCNs)

- **InvertNet**: An Integrative Platform for Research on Environmental Change, Species Discovery and Identification (*Illinois Natural History Survey, University of Illinois*)
- **Plants, Herbivores, and Parasitoids**: A Model System for the Study of Tri-Trophic Associations (*American Museum of Natural History*)
- **North American Lichens and Bryophytes**: Sensitive Indicators of Environmental Quality and Change (*University of Wisconsin Madison*)
- **Digitizing Fossils** to Enable New Syntheses in Biogeography-Creating a PALEONICHES-TCN (*University of Kansas*)
- **The Macrofungi Collection Consortium**: Unlocking a Biodiversity Resource for Understanding Biotic Interactions, Nutrient Cycling and Human Affairs (*New York Botanical Garden*)
- **Mobilizing New England Vascular Plant Specimen Data** to Track Environmental Change (*Yale University*)
- **Southwest Collections of Arthropods Network** (SCAN): A Model for Collections Digitization to Promote Taxonomic and Ecological Research (*Northern Arizona University*)
- **The Macroalgal Herbarium Consortium**: Accessing 150 Years of Specimen Data to Understand Changes in the Marine/Aquatic Environment *(University of New Hampshire*)
- Developing a Centralized Digital Archive of **Vouchered Animal Communication Signals** (*Cornell University*)
- **Fossil Insect Collaborative**: A Deep-Time Approach to Studying Diversification and Response to Environmental Change (*University of Colorado at Boulder*)
- **Great Lakes Invasives**: Documenting the Occurrence through Space and Time of Aquatic Non-indigenous Fish, Mollusks, Algae, and Plants Threatening North America's Great Lakes (*University of Wisconsin Madison*)
- **InvertEBase**: Reaching Back to See the Future: Species-rich Invertebrate Faunas Document Causes and Consequences of Biodiversity Shifts (*Field Museum of Natural History*)
- **The Key to the Cabinets**: Building and Sustaining a Research Database for a Global Biodiversity Hotspot (*Appalachian State University*)
- **The Microfungi Collections Consortium**: A Networked Approach to Digitizing Small Fungi with Large Impacts on the Function and Health of Ecosystems (*Illinois Natural History Survey, University of Illinois*)
- **Documenting Fossil Marine Invertebrate Communities of the Eastern Pacific** - Faunal Responses to Environmental Change over the last 66 million years (University of California-Berkeley)

TCNs & others

5th year

- ✓ Digitization priorities for institutional collections have been defined
- ✓ Best practices have been integrated into workflows
- ✓ Cyberinfrastructure resources including a search portal have been provided
- ✓ Collaborations with data providers and data users have been established

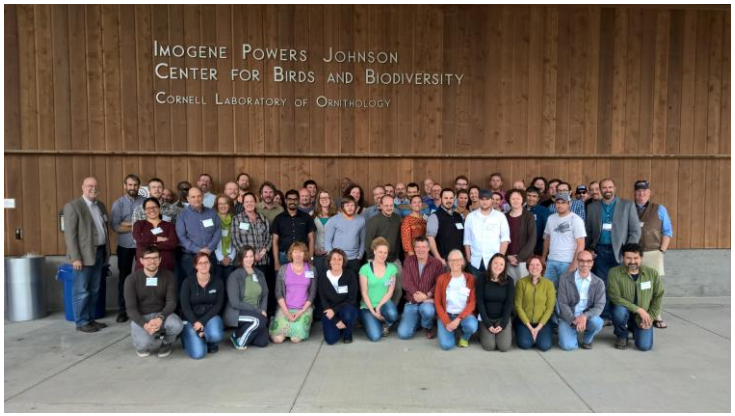
iDigBio
Integrated Digitized Biocollections
National Resource for Advancing Digitization of Biological Collections

NATIONAL HUB, THEMATIC COLLECTION NETWORKS, AND COLLABORATORS

2,201 participants from 511 institutions at 47 workshops

Search portal:
46M records for 150M specimens
13M images

439 collections in 268 institutions in 50 states (15 TCNS & others)



As we move forward …

Continue success by

- **Engaging the collections community**
- **Facilitating digitization and mobilization of data**
- **Developing/enhancing the search portal**

Priorities

1. Work with additional collections

- **where digitization is not taking place,**
- **where digitization is occurring but from which records have not yet been harvested**

~1500 collections in U.S. / we have data from 439

Priorities

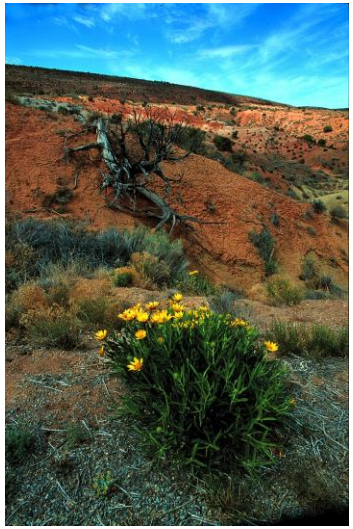
2. Increase use of data in research & outreach

- **Workshops and webinars on what data are available and how data can be used**

- **(GSA) Using Digitized Data in Geological and Paleontological Research**
- **(ECN) Using Digitized Insect Data in Research**
- **(MoBot) Using Specimen-based Data to Study Global Change**
- **(UC-Berkeley) Coding Phenological Data from Herbarium Specimens**
- **(ICE) Biodiversity informatics Skills for Collections and Research**

- ***Etc.***

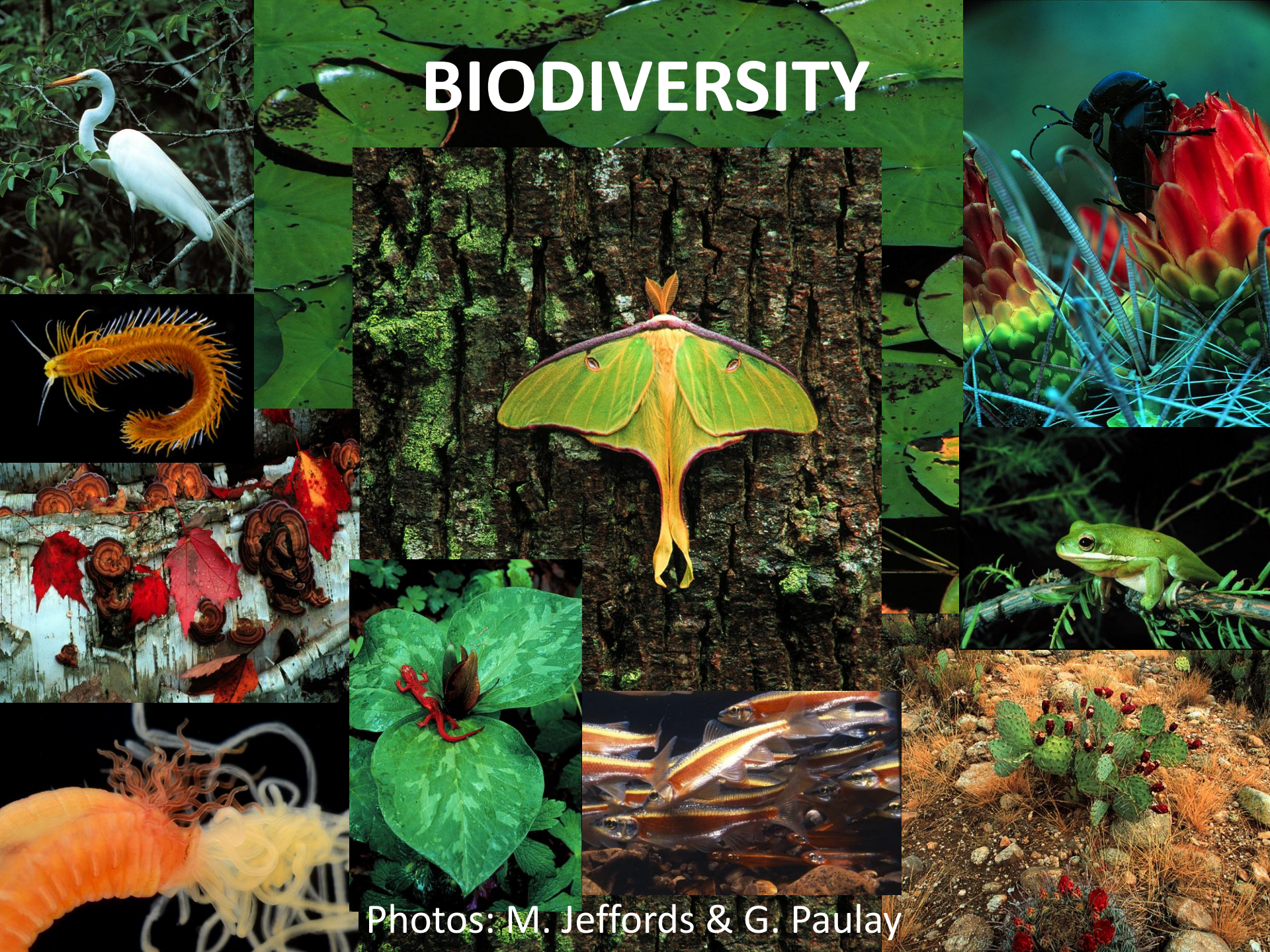
Priorities



3. **Sustainability (BCoN RCN)**

- **Documentation of life on Earth**
- **The single largest source of information on biological diversity**
- **Information in collections is vital to understanding the large changes in the global environment, from landscape modifications to climate change to introductions of thousands of exotic species**

BIODIVERSITY



Photos: M. Jeffords & G. Paulay