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# iDigBio, ADBC, Paleo TCNs, Important Acronyms

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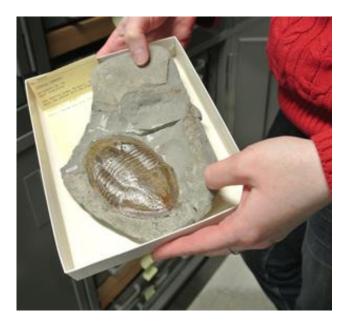
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Estimates suggest that there are between 500 million and one billion biological and paleobiological specimens in United States' collections, perhaps 3+ billion worldwide. No one really knows for sure!

















In an effort to make these collections universally accessible to taxonomists, ecologists, researchers, and the general public, in 2011 the U.S. National Science Foundation launched a \$100 million, 10-year Advancing Digitization of Biodiversity Collections program and named the University of Florida and Florida State University jointly as the coordinating center and national resource for digitization.

The scope of our work is limited to public, non-federal, U.S. collections, though NSF has encouraged us to develop international collaborations.

The goal is to digitize and make available via the Web digital records for all biological and paleontological collection objects in N. America over the 10-year life of the project and to facilitate the discovery and use of these data for important biodiversity research.



# Currently in its 6<sup>th</sup> year of funding.

Renewed for a second 5 years in September 2016.





#### **Definition of Digitization**

Converting analog specimen data to digital format, to include transcription of text data (labels, catalogs, field notes, etc.), recording specimen images (2D, 3D, CT), converting audio to digital, etc.



#### The Alphabet – A Few Acronyms

Acronym	Meaning
iDigBio	Integrated Digitized Biocollections
NSF	National Science Foundation
ADBC	Advancing Digitization of Biodiversity Collections
TCN	Thematic Collections Network
PEN	Partner to Existing Network
CSBR	Collections in Support of Biological Research
IMLS	Institute for Museum and Library Services
GBIF	Global Biodiversity Information Facility
BCoN	Biodiversity Collections Network
GRBio	Global Registry of Biodiversity Repositories
DwC	Darwin Core
IPT	Integrated Publishing Toolkit
API	Application Programming Interface
VertNet	Vertebrate data portal, Data mobilization and cleaning services
EOL	Encyclopedia of Life

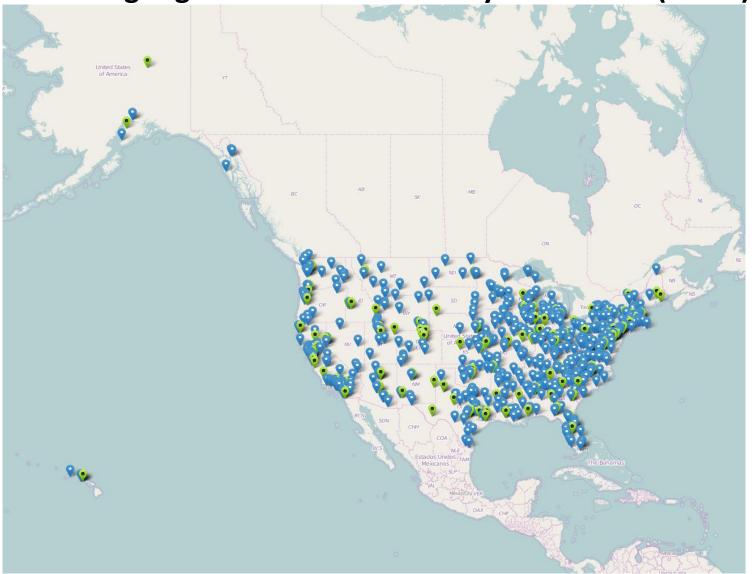


#### Bio Eighteen Thematic Collections Networks (TCNs), 17 PENs

- InvertNet: An Integrative Platform for Research on Environmental Change, Species Discovery and Identification (*Illinois Natural History Survey, University of Illinois*) <a href="http://invertnet.org">http://invertnet.org</a>
- Plants, Herbivores, and Parasitoids: A Model System for the Study of Tri-Trophic Associations (American Museum of Natural History) <a href="https://tcn.amnh.org">http://tcn.amnh.org</a>
- North American Lichens and Bryophytes: Sensitive Indicators of Environmental Quality and Change (University of Wisconsin Madison)
   http://symbiota.org/nalichens/index.php
   http://symbiota.org/bryophytes/index.php
   (plus 2 PENs)
- 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 Anthropods Network (SCAN): A Model for Collections Digitization to Promote Taxonomic and Ecological Research (Northern Arizona University) <a href="http://hasbrouck.asu.edu/symbiota/portal/index.php">http://hasbrouck.asu.edu/symbiota/portal/index.php</a>
- iDigPaleo: Fossil Insect Collaborative: A Deep-Time Approach to Studying Diversification and Response to Environmental Change (U. Colorado, Boulder)
- Developing a Centralized Digital Archive of Vouchered Animal Communication Signals (Cornell University, Laboratory of Orthithology)
- The Macroalgal Herbarium Consortium: Accessing 150 Years of Specimen Data to Understand Changes in the Marine/Aquatic Environment
- Collaborative: Documenting the Occurrence through Space & Time of Aquatic Non-indigenous Fish, Mollusks, Algae, & Plants Threatening North America's Great Lakes
- Collaborative Research: The Key to the Cabinets: Building and Sustaining a Research Database for a Global Biodiversity Hotspot
- · InvertEBase: reaching back to see the future: species-rich invertebrate faunas document causes and consequences of biodiversity shifts
- The Microfungi Collections Consortium: A Networked Approach to Digitizing Small Fungi with Large Impacts on the Function and Health of Ecosystems (MiCC)
- Documenting Fossil Marine Invertebrate Communities of the Eastern Pacific Faunal Responses to Environmental Change over the last 66 million years (PCMIF) (EPICC) (U. California, Berkeley)
- The Cretaceous World: Digitizing Fossils to Reconstruct Evolving Ecosystems in the Western Interior Seaway (KU)
- Lepidoptera of North America Network: Documenting Diversity in the Largest Clade of Herbivores (NAU)
- The Mid-Atlantic Megalopolis: Achieving a greater scientific understanding of our urban world (Morris Arboretum, U. Pennsylvania



## **Advancing Digitization of Biodiversity Collections (ADBC)**



To date: 18 TCNs, ~300 unique institutions, 50 states



### **Advancing Digitization of Biodiversity Collections (ADBC)**







