Collections for the 21st Century, a Symposium

NSC ALLIANCE

NATURAL SCIENCE COLLECTIONS ALLIANCE

The Natural Science Collections Alliance
is a Washington, D.C.-based nonprofit association that
supports natural science collections,
their human resources,
the institutions that house them,
and their research activities
for the benefit of science and society.

Robert Gropp, Director Public Policy Office

iDigBio
Integrated Digitized Biocollections

Advancing Digitization of Biodiversity Collections (ADBC)

FLORIDA MUSEUM OF NATURAL HISTORY

iDigBio Integrated Digitized Biocollections

FLORIDA STATE UNIVERSITY 1851 VIRES ARTES MORES

UF UNIVERSITY of FLORIDA

Coordinating center for the national effort to digitize natural history collections

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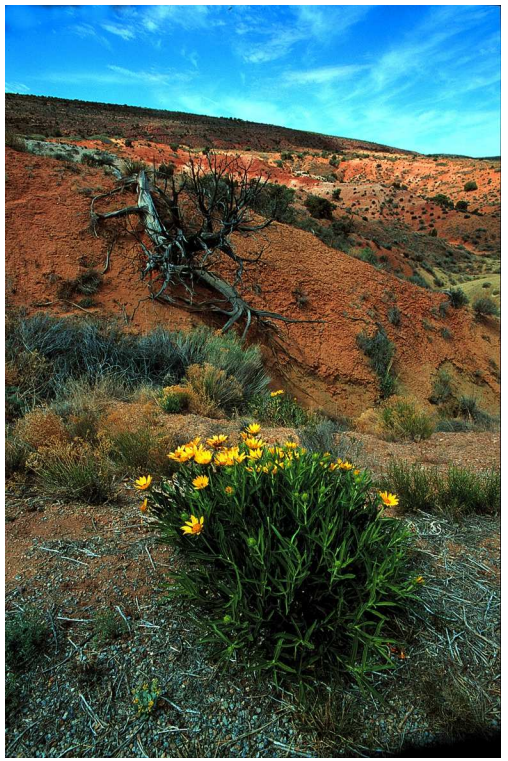
University of Florida

Larry Page: *Project Director*
Pam Soltis: *Research opportunities*
Bruce MacFadden: *Educational activities*
Jose Fortes: *Cyberinfrastructure*

Florida State University

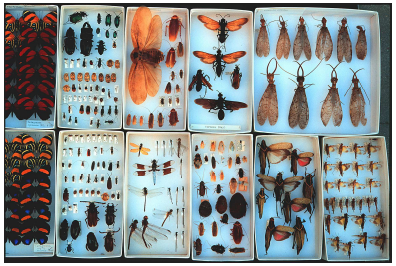
Greg Riccardi: *Digitization activities*

Biodiversity Collections



The single largest source of information on biological diversity.

1,500 natural history collections in U.S.A.



1 billion specimens in USA

3 billion specimens globally

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Advancing Digitization of Biodiversity Collections

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

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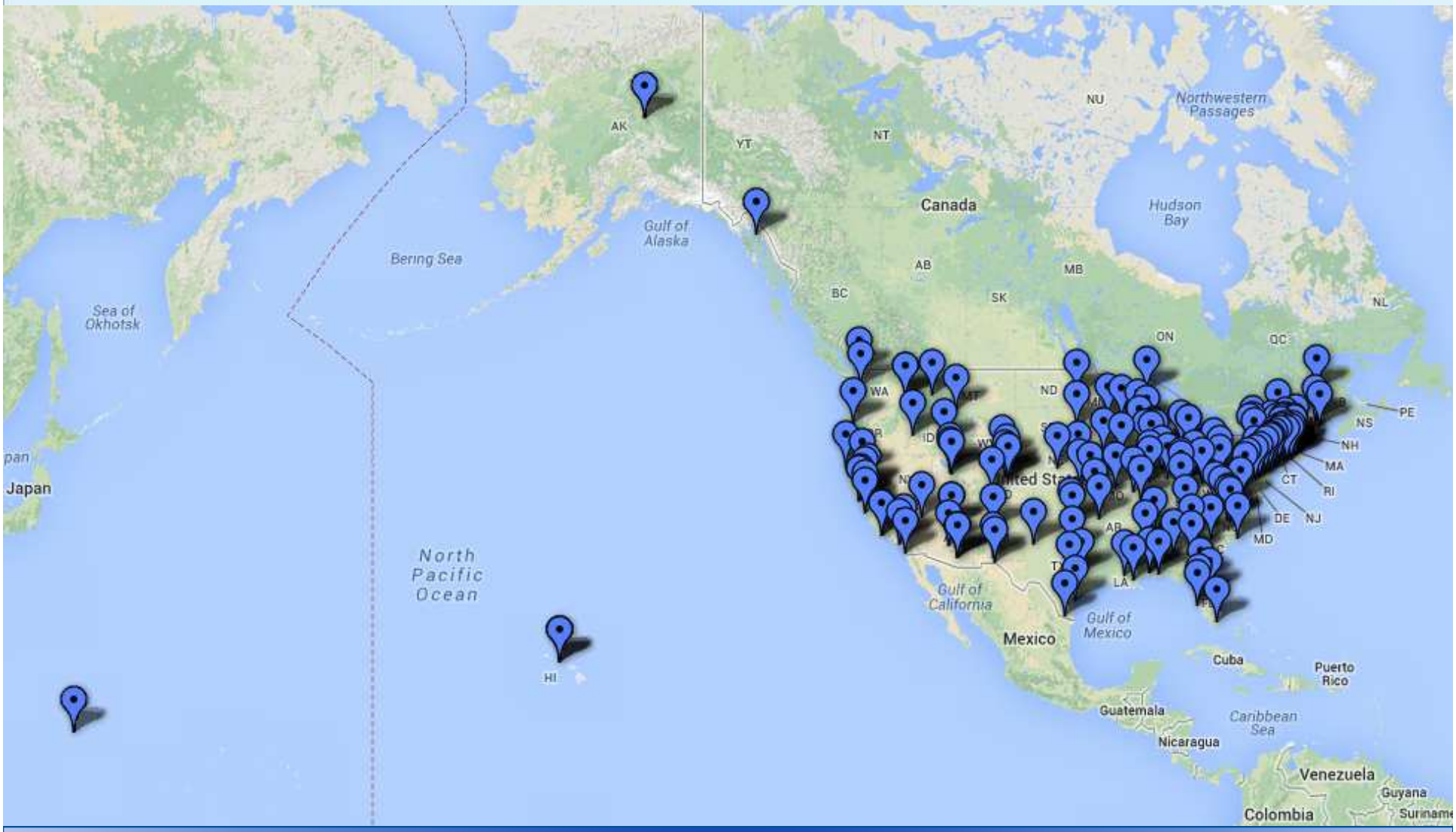
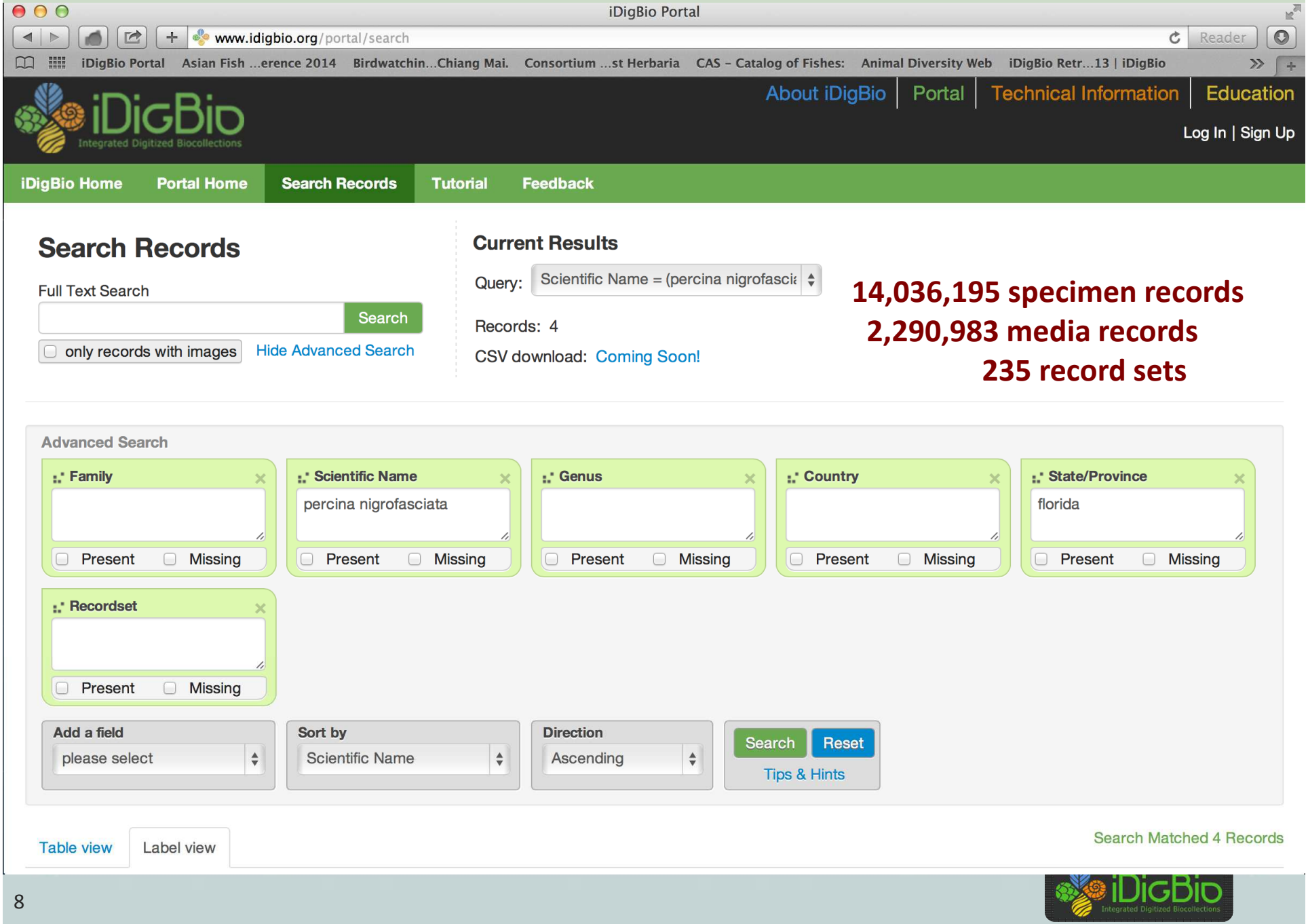
National Resource for Advancing Digitization of Biological Collections

NATIONAL HUB, THEMATIC COLLECTION NETWORKS, AND COLLABORATORS



Ten TCNS and collaborating institutions: 152 institutions in 50 states


iDigBio Portal
www.idigbio.org/portal/search
Reader
iDigBio Portal
Asian Fish ...erence 2014
Birdwatchin...Chiang Mai.
Consortium ...st Herbaria
CAS – Catalog of Fishes:
Animal Diversity Web
iDigBio Retr...13 | iDigBio
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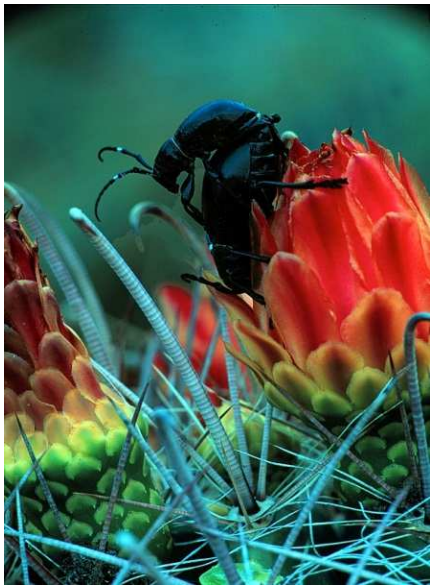
Feedback
Search Records
Full Text Search
Search
only records with images
Hide Advanced Search
Current Results
Query:
Scientific Name = (percina nigrofasci
Records: 4
CSV download: Coming Soon!
14,036,195 specimen records
2,290,983 media records
235 record sets
Advanced Search
Family
Scientific Name
percina nigrofasciata
Genus
Country
State/Province
florida
Present
Missing
Recordset
Add a field
please select
Sort by
Scientific Name
Direction
Ascending
Search
Reset
Tips & Hints
Table view
Label view
Search Matched 4 Records

New Research and Educational Opportunities

- One billion records – huge source of biodiversity data
- Opportunities for <u>previously intractable large-scale **research**</u>
  requiring large amounts of spatial and temporal data



→ Big-science questions related to human health, climate change, agriculture, species discovery, species extinctions, rates of evolutionary change, and ecosystem services

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- What collections data are available or could be made available?
- What research questions can we address?
- Have we demonstrated the power of collections data to answer big-science questions?
- How can the data improve our educational and outreach activities?
- How do we translate our accomplishments into more public and private support for our collections?

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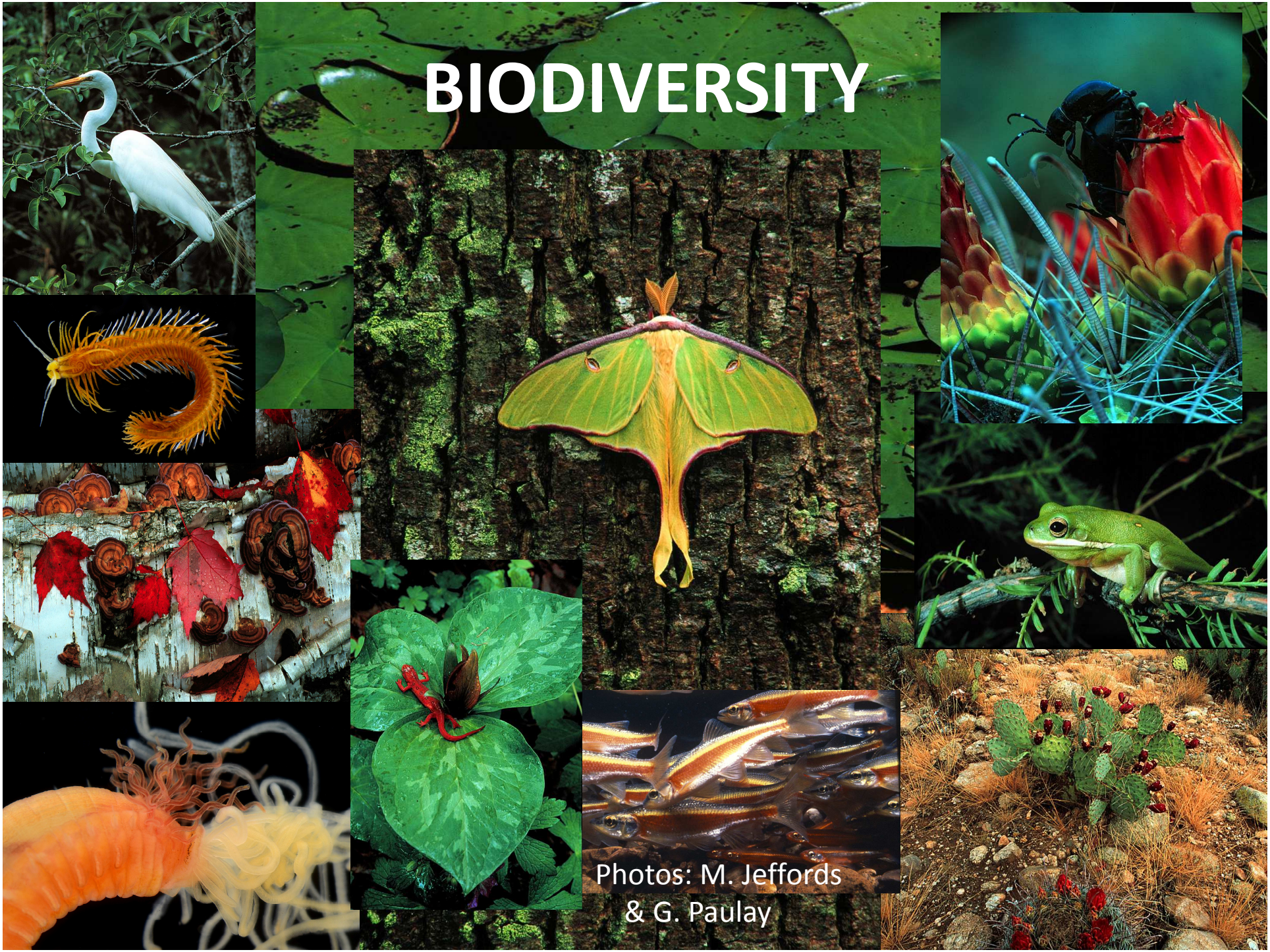
BIODIVERSITY



Photos: M. Jeffords & G. Paulay