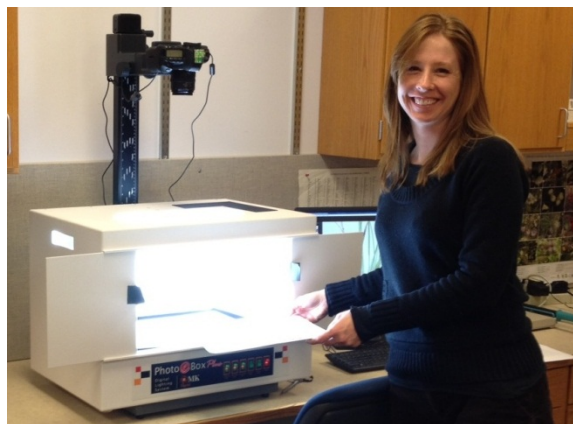
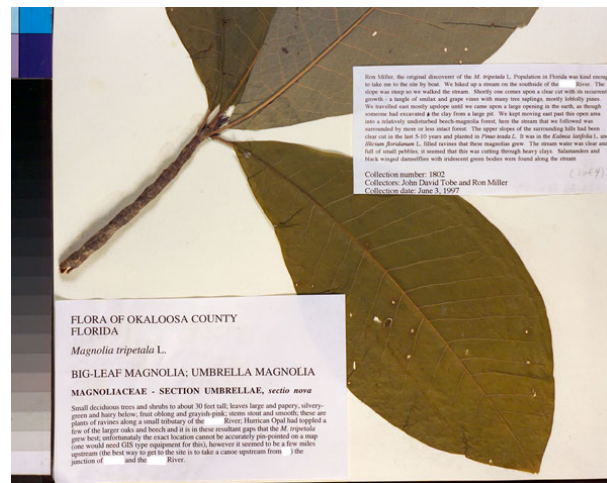




# University of Florida Florida State University



[www.iDigBio.org](http://www.iDigBio.org)



# Advancing Digitization of Biodiversity Collections

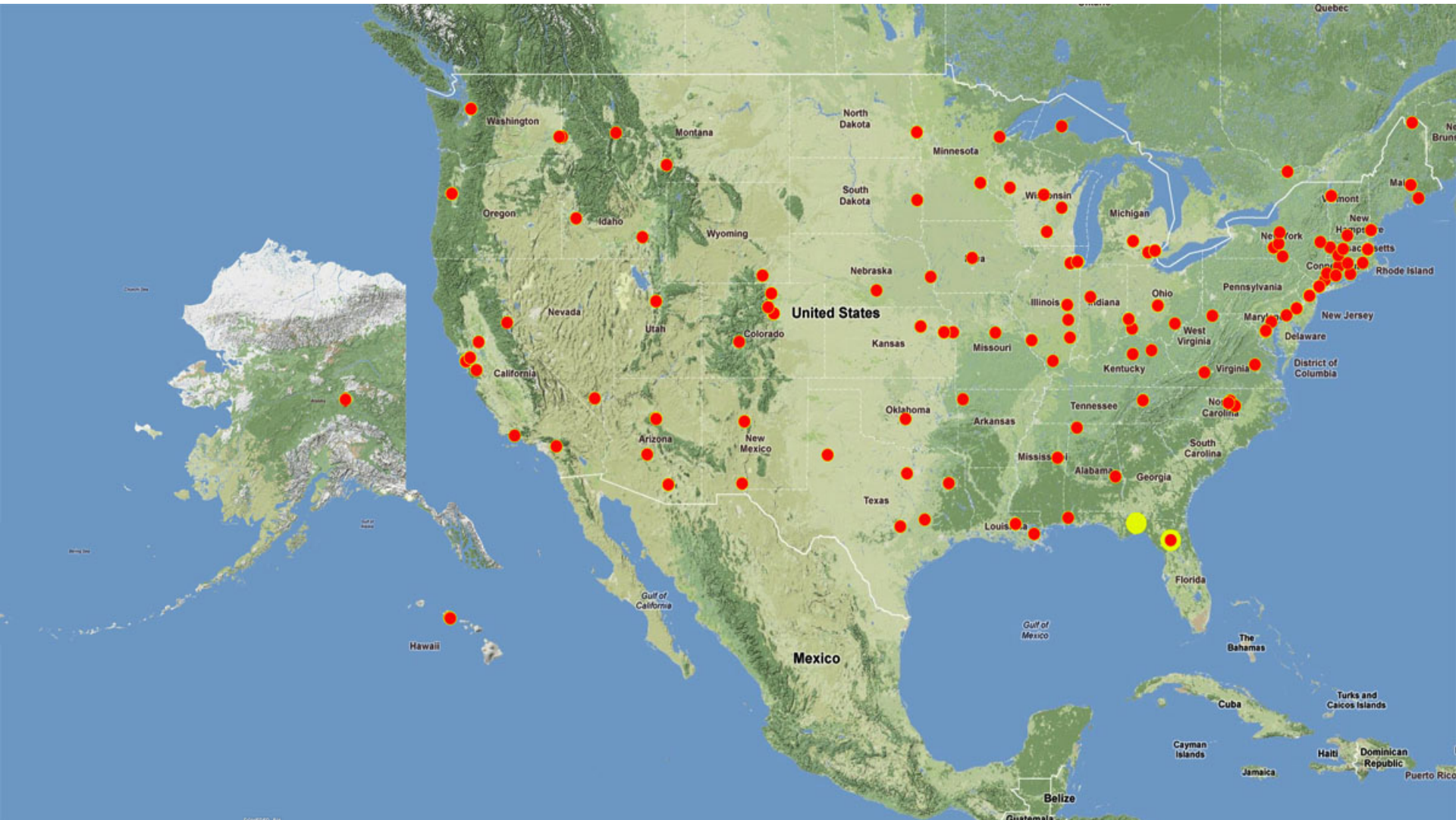
- **Facilitate use of biodiversity data to address environmental and economic challenges**
  - Researchers
  - Educators
  - General public
  - Policy-makers
- **Enable digitization of biodiversity collections data**
  - Develop efficient and effective digitization standards and workflows
  - Respond to cyberinfrastructure needs
- **Provide portal access to biodiversity data in a cloud-computing environment**
- **Plan for long-term sustainability of the national digitization effort**
  - Expand participation: partners and data sources



## Seven Thematic Collections Networks (TCNs)

- InvertNet: An Integrative Platform for Research on Environmental Change, Species Discovery and Identification (*Illinois Natural History Survey, University of Illinois*) <http://invertnet.org>
- Plants, Herbivores, and Parasitoids: A Model System for the Study of Tri-Trophic Associations (*American Museum of Natural History*) <http://tcn.amnh.org>
- 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>
- 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*)  
<http://hasbrouck.asu.edu/symbiota/portal/index.php>

# National Resource (iDigBio), Thematic Collection Networks (TCNs), and Collaborators

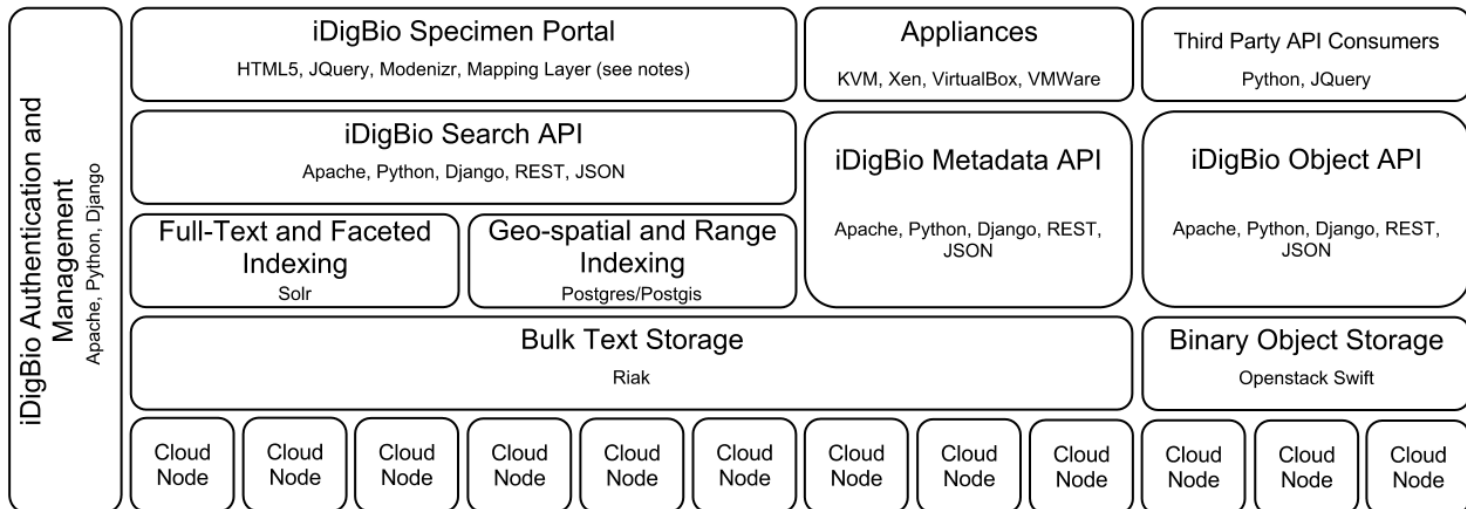


7 TCNs with 130 participating institutions



# Building the iDigBio Cloud

- Cloud-based strategy
  - Providing useful services/APIs (programmatic and web-based Application Programming Interface)
  - Federated scalable object storage and information processing
  - Digitization-oriented virtual appliances
  - Reliance on standards, proven solutions and sustainable software
- Continuous consultation with stakeholders
  - Surveys, working groups, workshops, person-to-person



## What Makes iDigBio Unique?

- Ingest all contributed data with emphasis on GUIDs, not only a restricted set of selected data elements
- Maintain persistent datasets and versioning, allowing new and edited records to be uploaded as needed
- Ingest textual specimen records, associated still images, video, audio, and other media
- Ingest linked documents and associated literature, including field notes, ledgers, monographs, related specimen collections, etc.
- Provide virtual annotation capabilities and track annotations back to the originating collection
- Facilitate sharing and integration of data relevant to biodiversity research
- Provide computational services for biodiversity research

## Recent and Ongoing Activities

- Assessment of common and effective practices (paper in *ZooKeys*)
- Minimum information for scientific collections working group
- Collaborative georeferencing pilot project at Godfrey Herbarium
- Digitization workflows working groups
- Public Participation in Digitization of Biodiversity Specimens workshop
- Georeferencing working group & train-the-trainers workshop
- OCR/natural language processing working group
- Linked data workshop
- Series of digitization training workshops
- Call for appliances
- Call for working groups
- Cyberinfrastructure working group
- Specimen data portal v0 implementation
- Server hosting

