Empowering the Collections Community: Working Groups, Workflows, and Workshops

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One of the most important things iDigBio did right at the outset was invest in community building.

The investment was not limited to members of TCNs, PENs, or those funded by the U.S. National Science Foundation, but everyone, large, medium, small; funded or not funded; resource rich or resource poor.

December 2011-June 2012

28 Collections
10 Museums
Spanning biological and paleontological collections
Insects and other invertebrates, plants, birds, mammals
Wet, dry

Five task clusters that enable efficient and effective digitization of biological collections

Gil Nelson, Deborah Paul, Gregory Riccardi, Austin R. Mast

A peer-reviewed open-access journal
ZooKeys
Launched to accelerate biodiversity research

iDigBio
Integrated Digitized Biocollections

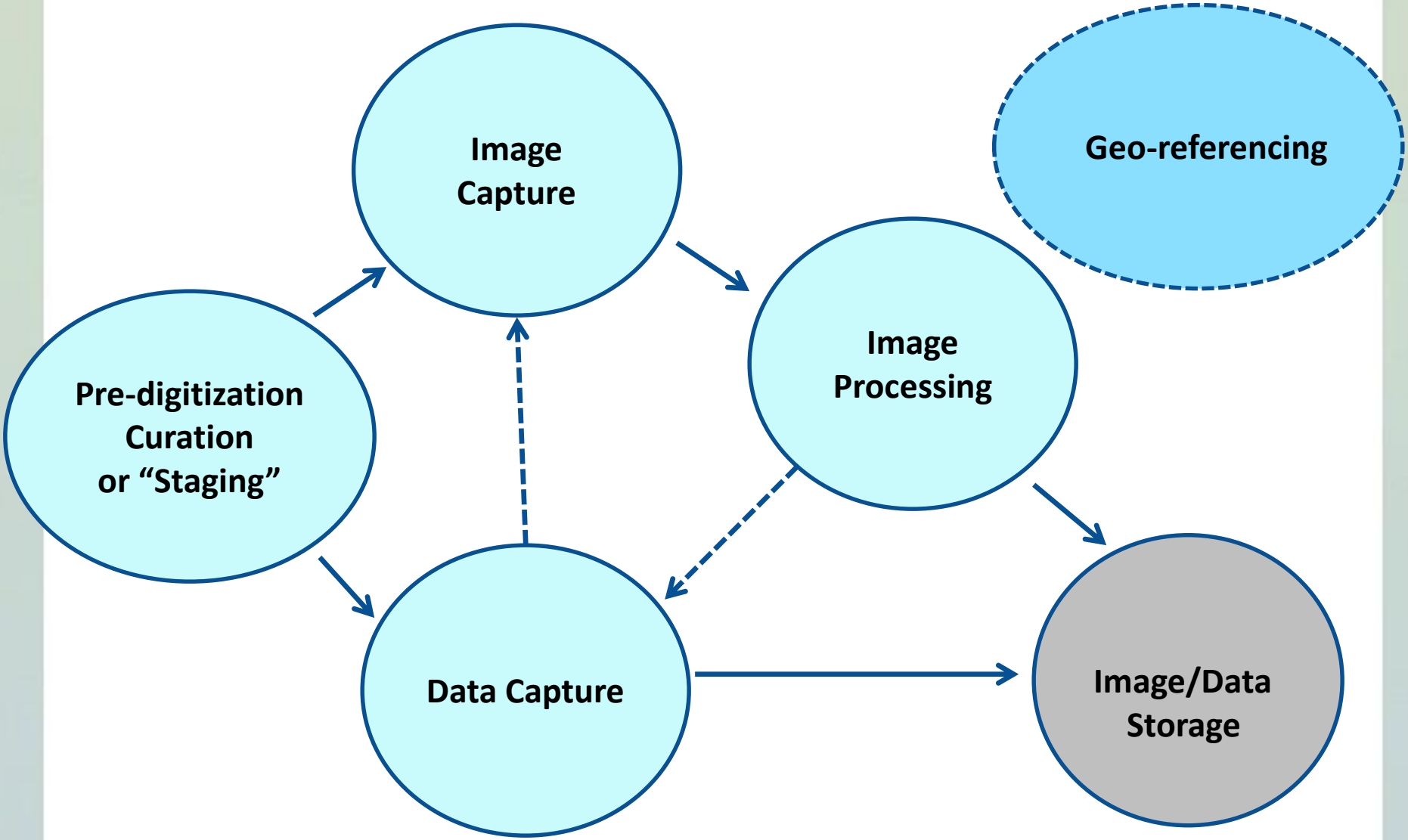


Image Capture
Geo-referencing
Pre-digitization Curation or "Staging"
Image Processing
Data Capture
Image/Data Storage

DROID

Developing Robust Object-to-Image-to-Data Workflows

(May 2012)

Unrealistic goal of developing a consensus workflow applicable to all domains.

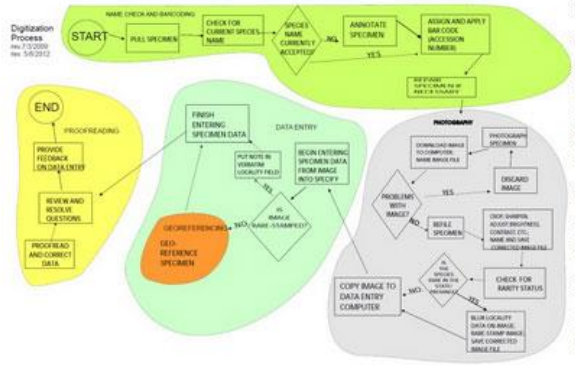
Digitization Workflows

Researchers
Browse our specimen portal

Collections Staff
Learn how your collection can benefit from our work

Teachers & Students
Learning resources & opportunities to engage

Presenter: Dorothy Allard



Digitization Workflows

Efficient and effective workflows are at the heart of successful biological and paleontological collections digitization. Much work has been done with developing workflows and protocols at the museum and collections level, but few of these workflows have been documented or made available to the larger collections community. iDigBio, through its Documentation pages, is establishing an online repository for sharing existing customized workflows from as many collection types and institutions as possible, an idea that stems largely from the Developing Robust Object-to-Image-to-Data (DROID) workshop held May 30-31, 2012. We have assembled an initial set of workflows, including selected examples from the DROID workshop, as well as those developed by iDigBio staff. Here we offer the beginnings of the repository and encourage those in the community to both discuss the workflows via the forum links, and to contribute to this resource by adding new workflows and updating existing workflows. If you would like to submit a workflow for inclusion on this page, please contact iDigBio for instructions. We are also assembling detailed modules of tasks to be performed at each stage of the workflow, accessible on our Workflow Modules and Tasks page.

Outcomes

DROID workflow working groups (generic workflows for several disciplines/prep types):

- **Flat sheets and packets**
- **Pinned Things in Trays and Drawers**
- **Things in Spirits in Jars**
- **3D Objects in Drawers and Boxes**

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https://www.idigbio.org/content/workflow-modules-and-task-lists

iDigBio
Integrated Digitized Biocollections

Flat Sheets and Packets Working Group - Vascular and Non-vascular Plants

- Module 1 Pre-digitization Curation Tasks
- Module 2 Imaging Station Setup Camera
- Module 3 Imaging Station Setup Scanner
- Module 4 Imaging Tasks
- Module 5 Image Processing Tasks (Rev 2012-11-07)
- Module 6 Data Capture Tasks

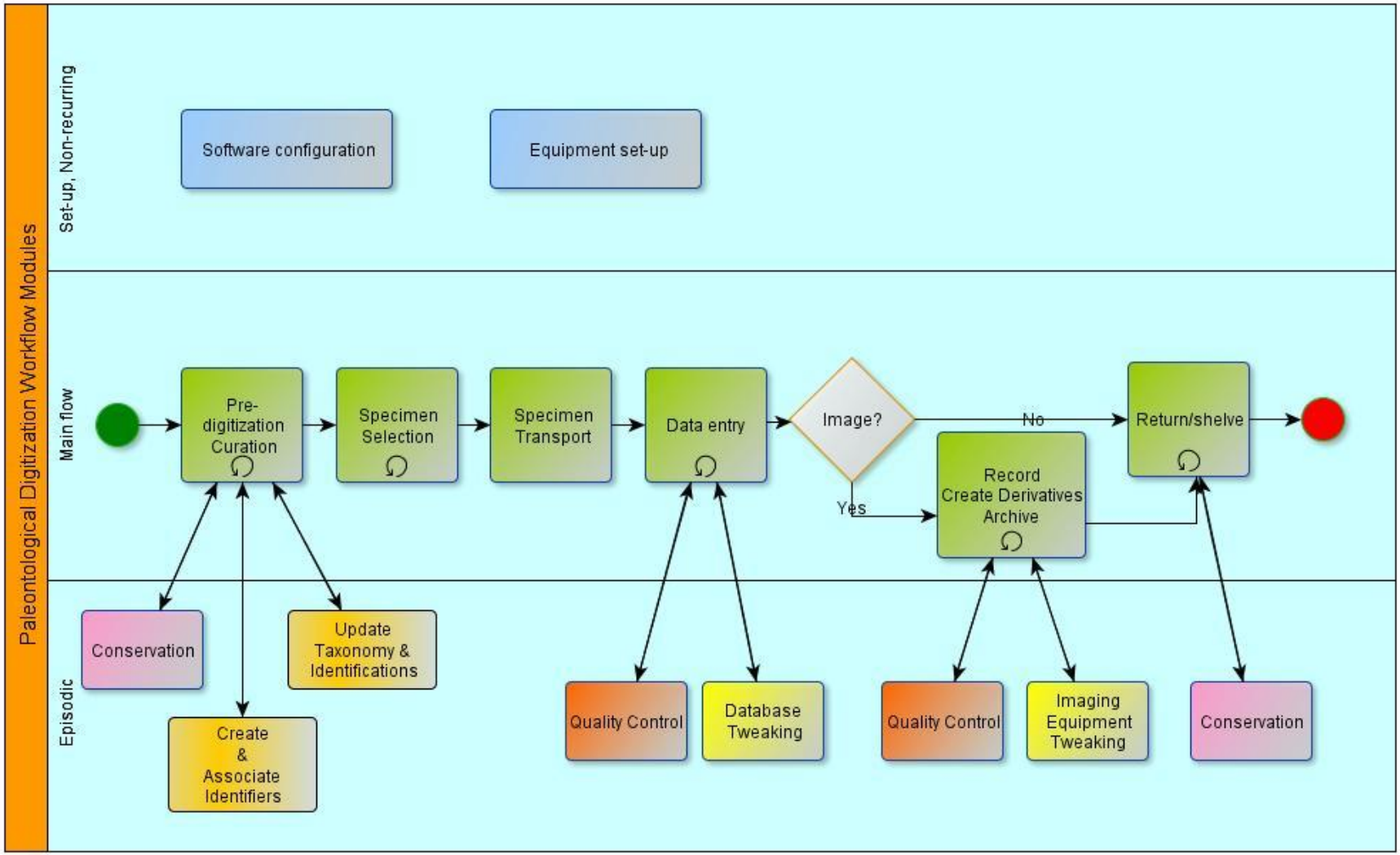
Pinned Things in Trays and Drawers Working Group - Dried Insects

- Module 0 Generic Tasks Applicable to Two or More Modules
- Module 1 Pre-digitization Curation Tasks
- Module 2A Specimen Imaging Tasks
- Module 2B Whole-drawer Imaging Tasks
- Module 2C Label Imaging Tasks
- Module 3 Image Processing Tasks
- Module 4A Data Capture From Image Tasks
- Module 4B Data Capture From Specimen Tasks
- Module 4C Event Data Capture Tasks
- Module 5 Quality Assurance Tasks

Things in Spirits in Jars

- Module 0 Pre-digitization Curation Tasks
- Module 1A Imaging Ledgers, Cards, Field Notes
- Module 1B Imaging Specimen Labels
- Module 1C Specimen Imaging
- Module 1D Image Processing
- Module 1E Phototank Immersion Imaging Seteup
- Module 1F Phototank Immersion Specimen Prep
- Module 1G Phototank Immersion Image Capture
- Module 1F Phototank Immersion Image Processing

Business Process Modeling Approach



Next steps…

- Review, revisit, revise existing workflows in light of what has been learned over the span of ADBC.
- Incorporate georeferencing, OCR, and public participation workflows into the iDigBio workflow repository.
- Develop workflows for imaging and transcription blitzes.
- Publish workflow papers and protocols.

Information Dissemination

In March 2012, the iDigBio Steering Committee established a series of preparation-specific digitization training workshops focused on helping collections managers get started with and/or enhance local digitization programs, all to be held at host institutions.

- DROID (Developing Robust Object->Image->Data, May 2012)
- Herbarium digitization (Valdosta State, September 2012)
- Fluid-preserved collections digitization (U. Kansas, March 2013)
- Dried insect collections digitization (Field Museum, April 2013)
- Collections Digitization (West Virginia, ASB, April 2013)
- Imaging fluid-preserved invertebrates (U. Michigan, September 2013)
- Georeferencing Train-the-Trainers (iDigBio, Gainesville, August 2103)
- Paleontology digitization (Yale Peabody Museum, September 2013)
- Small Herbarium Digitization (Florida State University, December 2013)
- Digitization in the South Pacific (Honolulu, March 2014)
- Paleoimaging (Austin, TX, April 2014)
- Small Herbarium Digitization (Boise, Botany 2014, July 2014)
- Leveraging Digitization Knowledge Across Multiple Domains (Santa Barbara, October 2014)

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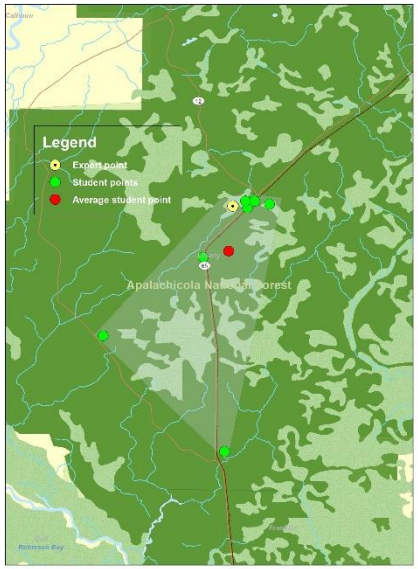

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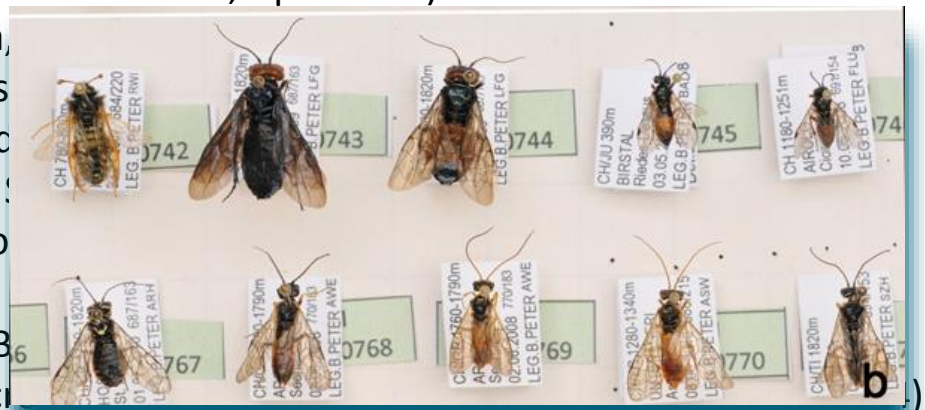

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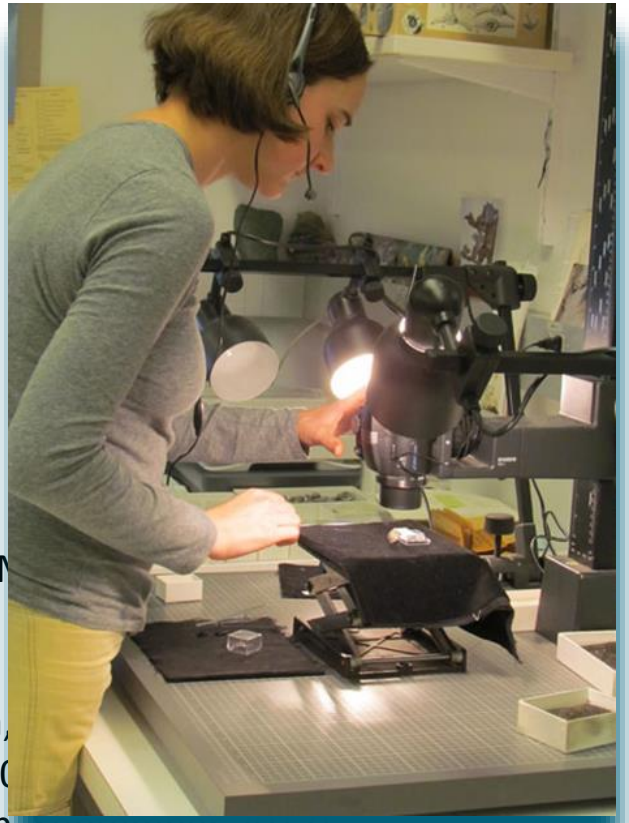

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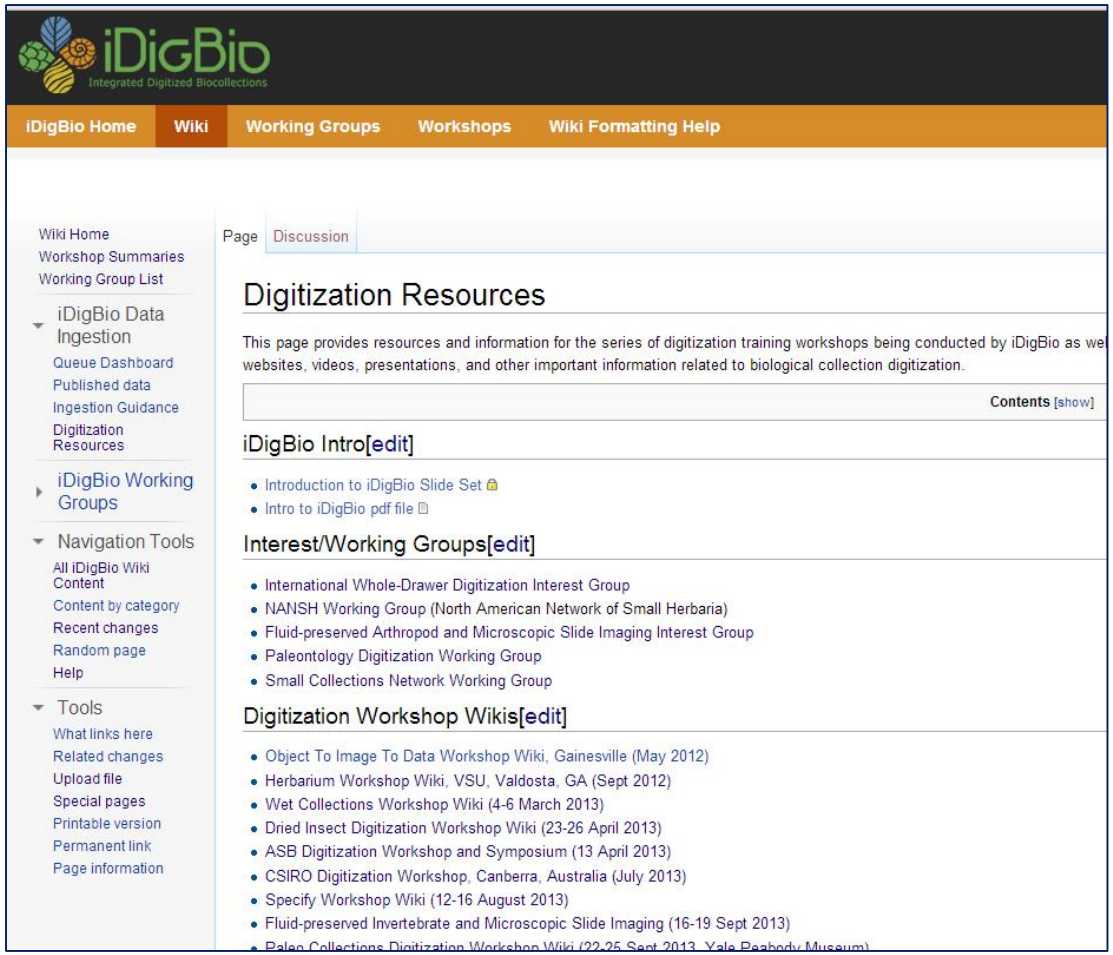
Collaborating on Best Practices

- Augmenting OCR Hackathon (Ft. Worth, February 2103)
- Original Source Materials Digitization (Yale Peabody Museum, March 2014)
- Recruiting and Retaining Small Collections in Digitization (Mt. Pleasant, MI, April 2014)
- CitScribe Hackathon (iDigBio, Gainesville, December 2013)
- Education and Outreach (iDigBio, Gainesville, January 2014)
- Herbarium workflows workshop (Valdosta State University, January 2015)



Wikis
Working groups
Listservs
Webinars

Public festivals—Earth Day 2014

iDigBio E&O General objectives

- Develop diverse activities to broaden the impact of iDigBio to downstream users.
- Coordinate and encourage activities among TCNs and other stakeholders.
- These objectives are accomplished by:
  - Working groups
  - Workshops
  - Related activities (e.g., public engagement)
  - iDigBio and “spin-off” projects

Overarching strategic goal:

Build constituency: Downstream users and the general public better understand the value of collections and digitization.

Target Audiences

- In-reach (digitization community)
  - Workshops (discussed elsewhere)
  - Webinars
  - TCN activities
- Outreach (downstream users)--Target audiences
  - Formal education
    - University
    - K12
  - Informal education
    - Museums, science centers, etc.
    - Citizen science, volunteerism
  - Broadening representation and underserved
  - Others (e.g., policy makers)

Value of networking, sharing, and collaboration

Networking scientists and collections is how science makes profound advances. (David Grimaldi, AMNH)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