Announcements

• Twitter #SPNHC2015 #specimens
  – @denasmithnufio @vblago @idbdeb
• Remote access
• iDigBio Wiki: http://tinyurl.com/spnhc2015sfc
• Recordings
• Discussion and Questions

Specimens Full Circle: Collection to Digitization to Data Use
Specimens Full Circle: Collection to Digitization to Data Use and Re-use

Dena M. Smith, CU Museum of Natural History
Deborah Paul, Florida State University, iDigBio
Vladimir Blagoderov, Natural History Museum (NHM)
@SPNHC2015 Gainesville, Florida. May 2015

iDigBio is funded by a grant from the National Science Foundation’s Advancing Digitization of Biodiversity Collections Program (Cooperative Agreement EF-1115210). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.
Specimens Full Circle

• Current trends and issues
  – Collecting
  – Digitization including Imaging
  – Managing Digitization Projects and Data
  – Using the Data in Research
• We need clones at SPNHC 2015 (a good thing)!
• Welcome students
Specimens Full Circle: 4 tracks

<table>
<thead>
<tr>
<th>Occurrence Data</th>
<th>Determination History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collector Info</td>
<td></td>
</tr>
<tr>
<td>Catalog Number</td>
<td>Other Numbers</td>
</tr>
<tr>
<td>MSC-B-0000001</td>
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</tr>
<tr>
<td>Associated Collectors</td>
<td></td>
</tr>
<tr>
<td>J.E. Cantlon, A.L. Rebuck</td>
<td></td>
</tr>
<tr>
<td>Latest Identification</td>
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<tr>
<td>Scientific Name</td>
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<td>Abietinella abietina</td>
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<tr>
<td>ID Qualifier</td>
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<td>Identified By</td>
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<td>Locality</td>
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<tr>
<td>Country</td>
<td>State/Province</td>
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<tr>
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<td>Locality Security</td>
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<tr>
<td>Latitude</td>
<td>Longitude</td>
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</table>

Field Number: US15-

Country: UNITED STATES State: FL

Elev.: __________ m  GPS Error: +/- __________

Specific Locality: Gainesville, University

General Site Description/Overview:

Collection sub-code A: Collectors: __

Host Plant: __________

Taxa Collected/Notes: __________
With gratitude and apologies to Dorothy Allard!
Integrative biodiversity research:

It’s about the science questions

Facilitate use of biodiversity data to address environmental and economic challenges

- Researchers
- Educators
- General public, citizen scientists
- Policy-makers

Climate Change
Invasive Species
Human health
Food Security
build an accessible, aggregated, integrated, scalable, specimen database (US collections focus)

- facilitate and increase participation in digitization
- enable researchers’ access to and use of the data
- build partnerships to expand and enhance
Thematic Collection Networks (TCN)
With gratitude and apologies to Dorothy Allard!
# What’s in a name?

<table>
<thead>
<tr>
<th>Role</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Information Manager</td>
<td>Technology Liaison to Science</td>
</tr>
<tr>
<td>Biodiversity Informatics Manager</td>
<td>Biodiversity Informatics &amp; GIS Lab Manager</td>
</tr>
<tr>
<td>Collections Database Architect</td>
<td>Information Manager</td>
</tr>
<tr>
<td>Data Curator</td>
<td>Bioinformatics manager</td>
</tr>
<tr>
<td>Manager of Biodiversity Informatics</td>
<td>Research Specialist</td>
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<tr>
<td>Research Project Manager</td>
<td>Biodiversity Informatics Manager</td>
</tr>
<tr>
<td>Biodiversity Informatics Manager</td>
<td>Data Manager</td>
</tr>
<tr>
<td>Information Manager</td>
<td>Biodiversity Information</td>
</tr>
<tr>
<td>Assistant Botanist / Assistant Curator</td>
<td>Head of Nomenclature and Taxonomy (Biodiversity Informatics)</td>
</tr>
<tr>
<td>Head, Computer Systems Office</td>
<td>Sr. Database Manager</td>
</tr>
<tr>
<td>Collection Manager</td>
<td>Database Admin/Programmer</td>
</tr>
<tr>
<td>Assistant Curator and Virtual Herbarium Coordinator</td>
<td>Biological Informatician</td>
</tr>
</tbody>
</table>
Skills and tools resulting in Data migration rate change

- iDigBio ‘Train the trainers’ georeferencing workshop 10/8/2012
- In-house transfer of training knowledge 11/2011
- Current Specify records 50589 [c. 161903 specimens]

Thanks for the slide, Ann Molineux
Figure 4 Digitisation maturity model

- **0 Disorganised**: No-one has any idea what’s happening across the organisation.
- **1 Making do**: Some of us are doing a good job.
- **2 Coming along nicely**: We are getting our act together and starting to share the same idea.
- **3 Organised**: We all know what to do and how it all fits together, and all share the same idea.
- **4 Under control**: We all know how well we are doing.
- **5 On the look out**: Continuous innovation by everyone.

**Digitisation left to individuals who have their standard processes**

**Digitisation left to each part of the organisation**

**Digitisation left to individuals**

**Management takes responsibility for digitisation**

**Digitisation left to individuals who have their standard processes**

**Digitisation left to each part of the organisation**

**Digitisation left to individuals**

**Continuous innovation by everyone**

http://tinyurl.com/digitizationala
Is the data fit-for-research-use?

(Standard) Data and Metadata.
It’s about discovery and data re/use.
It’s about feedback and accountability.
It’s about credit and attribution.
Make sure your data are not under a rock.
Let’s follow the **Specimens and Data Full Circle**!

Find us on Twitter@denasmithnufio @vblago @idbdeb

Special thanks to Reed Beeman, Katja Seltmann, the SPNHC 2015 organizers, Libby Ellwood, and Derek Woller