



## Digitizing Dried Insects Digitization Workshop

**Tentative Agenda  
April 23–26, 2013  
The Field Museum  
Chicago**

This workshop is the third in a series of preparation-specific workshops focusing on organizing, launching, maintaining, and enhancing a biological collections digitization program. The primary goal is to prepare participants with the necessary skills and knowledge to launch or maintain a digitization program individually, through collaboration with an existing Thematic Collections Network (TCN) or Partner with an Existing Network (PEN), or through collaboration with iDigBio. The target audience includes entomology collections managers, curators, and directors.

Workshop content includes: 1) an overview of iDigBio, ADBC, and nationwide digitization activities, 2) how to organize and launch a digitization program, 3) a detailed overview of digitization tasks, 4) hands on use and configuration of camera systems and lighting, 5) an introduction to and overview of several database management systems and related tools, 6) hands-on use/demonstration of several imaging software packages, 7) a consideration of barcodes and file-naming strategies, 8) how to develop effective workflows and protocols, 9) strategies for evaluating hardware and software, 10) a detailed overview of procedures for image and data capture, including a detailed overview of image types, image manipulation, and image conversion, 11) strategies and considerations for georeferencing, including use of online collaborative tools, and 12) methods for moving digitized data to the internet via data aggregators, harvesters, and portals.

Workshop planning team members include: Margaret Thayer (Field Museum), Petra Sierwald (Field Museum), Joanna McCaffrey (iDigBio, University of Florida), Gil Nelson (iDigBio, Florida State University).

Resources and handouts for the workshop are available through a wiki that can be access via iDigBio's digitization resources wiki:

[https://www.idigbio.org/wiki/index.php/Digitization\\_Training\\_Workshops](https://www.idigbio.org/wiki/index.php/Digitization_Training_Workshops)

Or, directly at [https://www.idigbio.org/wiki/index.php/Dried\\_Insect\\_Digitization\\_Workshop](https://www.idigbio.org/wiki/index.php/Dried_Insect_Digitization_Workshop).

The workshop's collaborative workshop notes pages, which can be edited by all workshop participants, can also be found on the workshop's Wiki page.

## Agenda

### Day 1 – April 23, 2013 (Tuesday)

Time	Activity/Venue	Responsible
Various	Participants arrive from airport Optional collection visit/ tour (please pre-arrange)	
6:30–7:30 p.m.	Reception Best Western Hotel (Mei's Kitchen) Facilitator introductions Participant introductions Participant mixer	Gil Nelson (iDigBio) Margaret Thayer (Field Museum) Debby Moskovits (Field Museum)
7:30–9:00 p.m.	Group Dinner Mei's Kitchen (Best Western)	

### Day 2 – April 24, 2013 (Wednesday)

Time	Activity/Venue	Responsible
6:00–7:45 a.m.	Breakfast (on your own)	
7:50 a.m.	Walk to Field Museum Sign in at West Door	
8:30–9:00 a.m.	<b>Digitization Overview: Tasks and Components</b> <ul style="list-style-type: none"> <li>• Workshop logistics</li> <li>• Introduction to iDigBio</li> <li>• Global decisions</li> <li>• Digitization task clusters</li> </ul>	Gil Nelson (iDigBio) Debby Moskovits (Field Museum)

<p><b>9:00–10:00 a.m.</b></p>	<p><b>Getting Started:</b></p> <ul style="list-style-type: none"> <li>• Reason for beginning,</li> <li>• integration with existing digitization initiatives,</li> <li>• Startup costs and funding,</li> <li>• Institutional and administrative support,</li> <li>• IT support,</li> <li>• Brief overview of equipment and software used,</li> <li>• Anticipated and unanticipated benefits,</li> <li>• Anticipated and unanticipated obstacles,</li> <li>• Personnel recruitment,</li> <li>• Extent of additions to professional workload,</li> <li>• Leveraging the library and other institutional resources</li> </ul>	<p><b>Petra Sierwald (Field Museum)</b>  <b>Margaret Thayer (Field Museum)</b>  <b>Andy Deans (Penn State)</b>  <b>Larry Schmidt (U. Wyoming)</b></p>
<p><b>10:00–10:15 a.m.</b></p>	<p><b>Coffee Break</b></p>	
<p><b>10:15–11:00 a.m.</b></p>	<p><b>Imaging Strategies, Tools &amp; Software</b></p> <ul style="list-style-type: none"> <li>• What are the images for?</li> <li>• Specimens or labels?</li> <li>• Small imaging stations--less expensive options</li> <li>• Considerations when imaging pinned insects</li> <li>• whole-drawer vs. specimen</li> <li>• Software tools</li> <li>• Image storage formats</li> <li>• Camera setup and use</li> <li>• Imaging pin labels</li> <li>• iDigBio's imaging guidelines</li> <li>• Image naming strategies</li> <li>• Image capture standards and common practices</li> <li>• Image processing dos and don'ts</li> <li>• Ethics of image enhancement</li> </ul>	<p><b>Roy Larimer (Visionary Digital)</b></p>
<p><b>11:00–11:25</b></p>	<p><b>InvertNet's Robotic Imaging system</b></p>	<p><b>Chris Dietrich</b>  <b>David Raila (Illinois Natural History Survey)</b></p>
<p><b>11:25–11:40</b></p>	<p><b>GigaPan</b></p>	<p><b>Brian Wiegmann (North Carolina State University)</b></p>
<p><b>11:40–12:10</b></p>	<p><b>SatScan</b></p>	<p><b>Vlad Blagoderov (Natural History Museum, London)</b></p>
<p><b>12:10–12:25</b></p>	<p><b>Label Image Automation</b></p>	<p><b>Nicola Ferrier</b></p>

		(Argonne Labs)
12:25 - 12:45p.m.	Hirox	Julie McIntosh Shapiro (Harvard)
12:45–1:45 p.m.	<p><b>Lunch: Catered</b></p> <p>On your own tours of Field Museum Exhibits. Staff member will pick up workshop participants who want to see the museum at 1:40 p.m. at the elephants in Stanley Field Hall for on-time return to the workshop. Another option: collection tour of pinned or wet collection. Pickup from and dropoff at meeting room.</p>	
1:45–3:45 p.m.	<p>Imaging station hands-on demonstrations/tours in</p> <p>A) Collaborative Invertebrate Laboratory (CIL): FMNH microptics, Olympus (2), InvertNet robot;</p> <p>B) Botany Classroom: Hirox, Passport, Gigapan</p> <p>C) Underground Adventure Theater: Ortery</p> <p>~35 minutes/station</p>	<p>Navigational help from</p> <ol style="list-style-type: none"> <li>1) Jim Boone: ACB</li> <li>2) Beka Baquiran: BAC</li> <li>3) Jim Louderman: CBA</li> </ol>
	Coffee available	Deliver at 3:30
3:45–5:30 p.m.	<p><b>Workflows and Protocols</b></p> <p>Importance of written protocols How to develop, write, and manage protocols and workflows Strategies for getting feedback on improvements from technicians</p>	<p>Gil Nelson (iDigBio) Larry Gall (Yale Peabody Museum) Brian Fisher (California Academy of Sciences)</p>

	<p>Sample and suggested workflows</p> <p>Workflow and data entry efficiencies</p> <p>Barcodes: what &amp; where,</p>	<b>Paul Flemons (Australian Museum)</b>
<b>5:30</b>	<b>Optional collection tours</b>	
<b>6:00–8:00 p.m.</b>	<b>Dinner (on your own)</b>	

**Day 3 – April 25, 2013 (Thursday)**

<b>Time</b>	<b>Activity/Venue</b>	<b>Responsible</b>
<b>6:00–7:45 a.m.</b>	<b>Breakfast (on your own)</b>	
<b>7:50 a.m.</b>	<b>Walk to Field Museum</b>	
<b>8:30–8:50 a.m.</b>	<b>Selecting and managing digitization personnel</b>	<b>Larry Gall (Yale Peabody Museum)</b>
<b>8:50–9:20 a.m.</b>	<b>Considerations When Choosing Collections Management Software (include DAMS)</b>	<b>Joanna McCaffrey (iDigBio)</b>
<b>9:20–9:40</b>	<b>Database Overviews: Specify &amp; why not Excel</b>	<b>Andy Bentley (University of Kansas)</b>
<b>9:40–10:10</b>	<b>Database Overviews: Symbiota (includes FilteredPush, status of OCR)</b>	<b>Ed Gilbert (Arizona State University)</b>
<b>10:10–10:30 a.m.</b>	<b>Coffee</b>	
<b>10:30–10:50</b>	<b>Database Overviews: EMu</b>	<b>Beka Baquiran (Field Museum)</b>
<b>10:50–11:10</b>	<b>Database Overviews: Arthropod Easy Capture (AEC)</b>	<b>Signe Valentinsson (American Museum of Natural History)</b>
<b>11:10–11:30</b>	<b>Arctos</b>	<b>Derek Sikes (University of Alaska Museum)</b>
<b>11:30–12:00 noon</b>	<b>Q&amp;A</b>	

<b>12:00–1:00 p.m.</b>	<p><b>Lunch: Catered</b></p> <p><b>On your own tours of Field Museum Exhibits. Staff member will pick up workshop participants who want to see the museum at 12:55 p.m. at the elephants in Stanley Field Hall for on-time return to the workshop. Another option: collection tour of pinned or wet collection. Pickup from and dropoff at meeting room.</b></p>	
<b>1:00–1:30 p.m.</b>	<b>Pre-digitization Curation Practices</b>	<b>Jennifer Thomas (University of Kansas)</b>
<b>1:30–1:45 p.m.</b>	<p><b>Uniquely identifying records and objects</b></p> <p>iDigBio strategies GUID UUID LSID</p>	<b>Deb Paul (iDigBio)</b>
<b>1:45–2:00 p.m.</b>	<p><b>Moving digitized objects to the web via aggregators and harvesters</b></p> <p>iDigBio Morphbank GBIF TCNs</p>	<b>Deb Paul (iDigBio)</b>
<b>2:00–2:15 p.m.</b>	<b>Coffee Break</b>	
<b>2:15–2:30 p.m.</b>	<b>Data cleaning</b>	<b>Joanna McCaffrey (iDigBio)</b>
<b>2:30–2:45 p.m.</b>	<b>Open Refine</b>	<b>Deb Paul (iDigBio)</b>
<b>2:45–3:15 p.m.</b>	<p><b>Georeferencing</b></p> <p>Geolocate Biogeomancer ArcGis ArcExplorer MapWin</p>	<b>Gil Nelson (iDigBio)</b>



The Field  
Museum

	Quantum GIS Georeferencing workshops Google Maps	
<b>3:15–4:00 p.m.</b>	<b>Discussion Groups Topic Focused</b>	
<b>4:00–5:00 p.m.</b>	<b>Wrap up (including group reports)</b>	
<b>5:00</b>	<b>Optional collection tour</b>	
	<b>Dinner (on your own)</b>	

**Friday, April 26**

**Optional collection visit/ tour (please pre-arrange)**