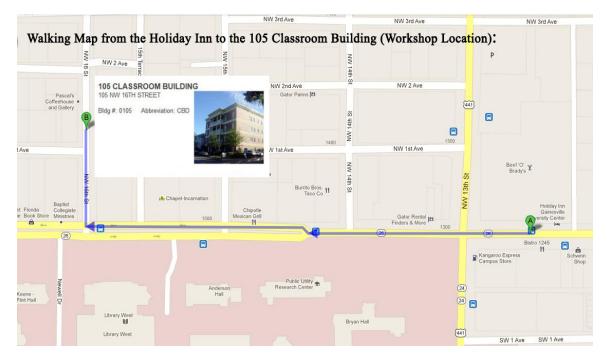


### **Public Participation in Digitization of Biodiversity Specimens Workshop** Gainesville, FL

## Friday, September 28, 2012

7:15–7:55 Breakfast at the workshop location and workshop check-in. The workshop location is a 10-minute walk from the Holiday Inn (3rd floor of Classroom Building 105).



- 7:55–8:00 Introduction to the workshop by Austin Mast (iDigBio; Dept. of Biological Science, Florida State Univ.) and Betty Dunckel (iDigBio; Florida Museum of Natural History, Univ. of Florida).
- 8:00–8:15 Introduction to NSF's Advancing Digitization of Biodiversity Collections Program by Anne Maglia (U.S. National Science Foundation).
- 8:15–8:30 Introduction to iDigBio by Larry Page (iDigBio; Florida Museum of Natural History, Univ. of Florida).

# The thematic collections networks: overview of project goals and digitization methods, with recognition of steps that could involve the public

- 8:30–8:45 Nash, Thomas. Lichens and Bryophytes Thematic Collections Network Project. Univ. of Wisconsin, Madison, Wisconsin. The lichen and bryophyte and climate change (LBCC) TCN: an overview, current progress and relationship to the American Bryological and Lichenological Society.
- 8:50–9:05 Brinda, John. Lichens and Bryophytes Thematic Collections Network Project. Missouri Botanical Garden, St. Louis, Missouri. A few ideas on how public participation can improve the specimen digitization process at the Missouri



Botanical Garden.

- 9:10–9:25 Seltmann, Katja. Tri-Trophic Thematic Collections Network Project. American Museum of Natural History, New York, NY. Opportunities for public involvement and outreach associated with the Plants, Herbivores, and Parasitoids: A Model System for the study of Tri-Trophic Associations Project
- 9:30–9:45 Speelman, Julie A. InvertNet Thematic Collections Network Project. Purdue Univ., West Lafayette, Indiana. Community assisted digital imaging of insect specimens.
- 9:50–10:05 Thiers, Barbara. Macrofungi Thematic Collections Network Project. New York Botanical Garden, New York, New York. The Macrofungi Collection Consortium TCN and North American mycophiles: enhancing a long-standing relationship.
- 10:10–10:40 Break
- 10:40–10:55 Sweeney, Patrick. New England Vascular Plants Thematic Collections Network Project. Yale Univ., New Haven, Connecticut. Mobilizing New England vascular plant data to track environmental change: an overview and preliminary thoughts on engaging the public.
- 11:00–11:15 Basham, Melody. Southwest Collections of Anthropods Network Thematic Collections Network Project. Arizona State Univ., Phoenix, Arizona. SCAN survey results: engaging the public with insect digitization workflows.
- 11:20–11:35 Hendricks, Jonathan. Paleoniches Thematic Collections Network Project. San Jose State Univ., San Jose, California. Digital atlases of fossil collections: new resources for the public to identify and understand ancient biodiversity.
- 11:40–11:55 Martin, Elizabeth. Core Science Analytics and Synthesis Program, U.S. Geological Survey, Gainesville, FL. Biodiversity Information Serving Our Nation (BISON): a national resource for species occurrence data.
- 12:00–12:30 Discussion of similarities and differences in project goals and digitization methods and opportunities to engage the public across the TCNs and BISON.
- 12:30–1:30 Lunch (provided on-site)

## Biodiversity collections software tools: primary purpose and unique contribution of each tool, as well as functionality that could involve members of the public<sup>1</sup>

- 1:30–1:45 Beach, Jim. Biodiversity Institute, Univ. of Kansas, Lawrence, Kansas. Specify & Lifemapper: breaking away from narcissistic science.
- 1:50–2:05 Gilbert, Edward. Symbiota Software Project. Symbiota: using specimen data to promote citizen science and the exploration of backyard biodiversity.

<sup>&</sup>lt;sup>1</sup> We also fit in a talk by Nelson Rios (Tulane Univ.) on GEOLocate's Collaborative Georeferencing project in this section.



- 2:10–2:25 Giddens, Michael. SilverBiology Software Project. HelpingScience.org, an online citizen science solution for converting image labels into occurrence records.
- 2:30–2:45 Denslow, Michael. Appalachian State Univ. Notes from Nature: a scalable citizen science platform for transcribing records from natural history collections.
- 2:50–3:05 Best, Jason. Botanical Research Institute of Texas, Fort Worth, Texas. The Apiary Project—a workflow for herbarium specimen digitization.
- 3:10–3:25 Flemons, Paul. Team Lead, Atlas of Living Australia Biodiversity Volunteer Portal. Australian Museum, Sydney, Australia. Atlas of Living Australia's Volunteer Portal.
- 3:30–4:00 Break

## Engaging the public in science

- 4:00–4:20 Wiggins, Andrea. DataONE, Univ. of New Mexico, and Cornell Lab of Ornithology, Cornell Univ. Citizen science phenotypes: typologies and implications of project design.
- 4:25–4:45 Zelt, Jessica. North American Bird Phenology Program, U.S. Geological Survey, Laurel, Maryland. How to successfully engage the public in science.
- 4:50–5:10 Wilson, Nathan. Director of Biodiversity Informatics, Encyclopedia of Life, Marine Biological Laboratory, Woods Hole, Massachusetts. Mushroom Observer and the Role of Observations.
- 5:45 Pick-up at the Holiday Inn lobby for transportation to the Florida Museum of Natural History.
- 6:00–8:30 Dinner at the Florida Museum of Natural History, including time to see the exhibits and an after-dinner talk by Richard Primack (Dept. of Biology, Boston Univ.) on "The contributions of museum specimens and citizen scientists to climate change research."
- 8:30 Transportation back to the Holiday Inn.

#### Saturday, September 29, 2012

- 7:30–8:00 Breakfast at the workshop location (3rd floor of Classroom Building 105).
- 8:00–8:30 Watson, Bill. Chief of Onsite Learning, Smithsonian Institution, Washington, D.C. The Smithsonian's public engagement projects.

#### Resources available to new projects that engage the public in science



8:35–8:55 Newman, Greg. CitSci.org Project, Natural Resource Ecology Laboratory, Colorado State Univ., Fort Collins, Colorado. The power of many: many people, many programs, and a common goal.

#### Lessons learned while developing successful public engagement projects

- 9:00–9:20 Flemons, Paul. Team Lead, Atlas of Living Australia Biodiversity Volunteer Portal. Australian Museum, Sydney, Australia. EMu's in the cloud—ruminations on interesting interfaces, efficient workflows and building an infrastructure for crowdsourced digitising that is open and integrated.
- 9:25–9:45 Bonter, David. eBird and FeederWatch, Lab of Ornithology, Cornell Univ., Cornell, New York. Engaging the public in ornithological research: Lessons learned from 50 years of citizen science at Cornell.
- 9:50–10:10 Newman, Sarah. Citizen Science Coordinator, NEON, Inc., Boulder, Colorado. Lessons Learned from NEON's Project BudBurst: a national citizen science program.
- 10:15–10:45 Break
- 10:45–11:05 Young, Alison. Citizen Science Educator, California Academy of Sciences, San Francisco, California. Documenting California biodiversity with citizen scientists: lessons learned through a year of planning.
- 11:10–11:30 Hill, Andrew. Vizzuality. Stories in the data: lessons from developing citizen science applications at Vizzuality.
- 11:35–12:05 Discussion of resources available to new citizen science projects (including standards and best practices), lessons learned, and resource gaps.
- 12:05–12:30 Develop a plan for making substantive progress for the field of public participation in digitization of biodiversity specimens as small groups in the afternoon.
- 12:30–1:30 Lunch (provided on-site)
- 1:30–2:30 Meet as small groups on high priority tasks. Priority tasks might include the design of digitization workflows using existing tools (insofar as it is possible) and the identification of gaps where new tools, expertise, and communities are needed.
- 2:30–3:00 Presentation to whole group of each small group's deliverables with feedback from the whole group.
- 3:00–3:30 Break
- 3:30–4:30 Further development of earlier deliverables incorporating feedback from whole group or reconstitution of small groups to take on additional high priority tasks.



- 4:30–5:00 Presentation to whole group of each small group's deliverables with feedback from the whole group.
- 5:00 Adjourn. Participants are on their own for dinner. Suggestions will be provided.