iDigBio GWG first Train the Trainers Workshop: Expanding the Biodiversity Natural History Collections Georeferencing Community

October 8 - 12, 2012 Gainesville, Florida
iDigBio Offices, 105 Classroom Building

The Georeferencing Working Group at iDigBio is pleased to announce our first "Train-the-Trainers" Georeferencing Workshop for Thematic Collections Networks (TCNs) and others in engaged in the digitization of biological collections in the United States. The workshop will cover tools and techniques used to correctly interpret textual location data into spatial descriptions that can be used in mapping and analyses. Participants will learn the fundamentals of georeferencing best practices through a combination of lectures and hands-on exercises, including paper maps, the MaNIS Georeferencing Calculator, GEOLocate, BioGeomancer and online exercises. Special attention will be paid to the specific and unique georeferencing needs of the TCNs and their digitization activities.

The Train the Trainers Workshop is organized by the iDigBio Georeferencing Working Group and hosted by the Integrated Digitized Biocollections (iDigBio) HUB, a National Resource Center at the University of Florida and Florida State University. The workshop is supported by the U.S. National Science Foundation's Advancing Digitization of Biodiversity Collections (ADBC) Programs.

See: https://www.idigbio.org/wiki/index.php/GWG_Train_the_Trainers_Workshop for online detailed Agenda, Logistics, Remote Participation and Reading Materials for the workshop.

Logistics: https://www.idigbio.org/wiki/index.php/GWG_Trainer%27s_Workshop_Summary_and_Logistics

Remote Participation: http://idigbio.adobeconnect.com/geotrain/
Want to attend Train the Trainer's Workshop Remotely? Please log in 15 - 20 minutes early to learn how the Adobe Connect software works.

Reading Materials and Resources: See above workshop wiki web site for links.
- Georeferencing Quick Reference Guide – Wieczorek, J., et al. 2012
- Guide to Best Practices for Georeferencing - Chapman, A.D. and J. Wieczorek (eds). 2006
- iDigBio Georeferencing Wiki
- Pre Workshop Survey Questions iDigBio Asked
- Group Notes - Take Workshop Notes Together Here http://tinyurl.com/GroupNotesGWGworkshop
- [Post - Workshop Survey Questions]
- Got a Georeferencing Question? Post it at the iDigBio Georeferencing Forum

Bring your Datasets.
Bring your Laptops.
Wired connections provided.
Wireless sign up possible. https://www.idigbio.org/wiki/index.php/Wireless_System

Overview:

Biological specimens vouchered in natural history collections document the historical and modern occurrence of plant and animal species--and most of what we know about the diversity and distribution of life on earth. This workshop addresses a need in the natural history collections community to expand the number of

individuals available and able to train natural history collections students, volunteers and staff how to turn text-based locality data into the best georeference possible.

Teaching those with georeferencing experience to teach others begins with the recognition of differences in locality data that exist between specimen preparation types due to their physical properties and discipline-specific handling, collecting and preservation methods, curatorial and conservation practice, storage environments, data conceptualizations, and data label techniques. Georeferencing locality data recorded on tags tied to vertebrate skins, on labels encircling snakes submerged in solutions of alcohol, on the lilliputian labels of pinned insects, and on the large, verbose labels glued on flat sheets of plant specimens, presents specific constraints and opportunities in each case for efficient georeferencing.

Goals of the Workshop:

1. To teach the best effective practices for georeferencing biological specimens for the purpose of creating georeferenced digital database records for publication and for new research applications of the biological, geospatial, and temporal information associated with specimens.
2. To discuss and dissect the dimensions of specific georeferencing needs based on the discipline involved and how to teach others the georeferencing nuances for a given collection type.
3. To engage the community in further dissemination of georeferencing skills and best practices.

Workshop Objectives:

1. To train a group of professionals from the biological sciences to become georeferencing trainers, via:
   a. Exploration of and experience with the key concepts and best practices of georeferencing using paper maps, online resources, semi-automated, and collaborative tools.
   b. Training in workflows, processes, and techniques needed to prepare data sets for georeferencing and improving data quality and fitness for use.
   c. Discussion and insight into how to plan and prepare for the presentation of a georeferencing workshop for others in the biodiversity and digitization communities.
2. To provide georeferencing support to Thematic Collections Networks involved in the digitization of data for the Advancing Digitization of Biological Collections program of the National Science Foundation through:
   a. Identification and examination of potential roadblocks and impediments to the the georeferencing process.
   b. Provision of solutions and recommended workflows, processes, and tools to meet the goals of the TCNs.
   c. Discussion of the inputs and costs necessary to create successful and efficient georeferencing projects at scale.
3. To establish an updating resource for the TCNs and the broad community within the biodiversity sciences, via:
   a.Creation of a roster of georeferencing "experts" able and willing to provide to support to individuals and groups within their geographic region and professional discipline.
   b. A resource for said "experts" to share their experiences (successes, failures, and recommendations) for the benefit of the broad community.

Desired Outcomes:

1. Participants' georeferencing skills are enhanced after the workshop. (leave knowing more than when they arrived).
2. Each participant presents a georeferenced data set at the end of the workshop to the group.
3. Participants provide feedback - for the further development of this course.
4. Participants plan / outline a georeferencing workshop - share the plan with the group.

5. Participants share their future plans for when and where they will conduct their first training. (post to iDigBio)
6. Participants fill out a post-workshop survey to assist in evaluating the workshop and contribute suggestions for the next workshop.
7. iDigBio Georeferencing Working Group utilizes outcomes / survey results to help shape future efforts and the next Train the Trainers Georeferencing Workshop.
8. Report back to NSF about survey results and workshop outcomes for future planning.

Informal Dinner on Sunday October 7th at The Swamp for any participants who've arrived. Time: 630 - 730 PM. Map to the Swamp

Schedule of Events:

Breakfast every day is on our own. It's available at the hotel and there's a place near the hotel called "Bagels and Noodles" that also has breakfast. You'll be reimbursed at the standard per diem rates.

Day 1, Monday October 8th		
Time	**Activity**	**Presenter**
9:00	Welcome & iDigBio Overview	iDigBio PI Debbie Paul & Gil Nelson
9:10	Meet iDigBio - PI's and Project Managers PI: Pam Soltis, David Jennings, Joanna McCaffrey (5 minutes each)	Debbie Paul
9:25	Trainer Introductions	David Bloom
	Participants Introductions - InvertNet	
	Participants Introductions - SCAN	
	Participants Introductions - Paleoniches	
	Participants Introductions - Macrofungi	
	Participants Introductions - LBCC	
	Participants Introductions - TTD	
	Participants Introductions - MNEV	
	Participants Introductions - Other Projects	
10:00	Workshop Overview, Introduction to Georeferencing, and Thinking like a Trainer	David Bloom/ John Wieczorek
10:20	Train-the-Trainers Georeferencing Pre-workshop Survey Report	Shari Ellis
10:35	Break (Pascals)	
11:00	Collaboration and Automation	John Wieczorek
11:30	Geographical Concepts	Nelson Rios
11:50	Point-Radius Method and Best Practices	David Bloom
12:10	Darwin Core Standard, Key Terminology	John Wieczorek
12:30	Lunch catered - "Tempo Bistro To Go"	
13:30	Georeferencing for Dummies, Locality Types, and Georeferencing Template	Carol Spencer

Time	Activity	Presenter
14:40	Georeferencing Calculator	John Wieczorek
15:30	Break (Pascals)	
16:00	Georeferencing Calculator Example and Exercises	John Wieczorek
17:00	Day in Review and Considerations for Trainers-to-be (Trivia Question - Paul)	David Bloom
17:30	End	

Dinner on our own - See list of local restaurants. You'll be reimbursed at the standard per diem rates.

Optional Evening Activity is:
Oct. 8 | 6:30 p.m. Work out where the Gators play. 60 minutes of interval training inside Ben Hill Griffin Stadium. Hosted by the world famous Florida Track Club: floridatrackclub.org

Day 2, Tuesday October 9th		
Time	**Activity**	**Presenter**
9:00	Review and Questions	All
9:20	Meet iDigBio PI Larry Page	Debbie Paul
9:30	Internet Resources - Where to Begin?	Carol Spencer
10:00	Exercises: Internet Resources	All
10:30	Break (Pascals)	
11:00	Exercises: Internet Resources (continued)	All
12:15	More Online Resources (resources used by/requested by participants)	David Bloom
12:30	Lunch catered by Panera	
13:30	GPS Exercise Introduction	John Wieczorek
13:45	GPS Exercises (outside)	All
15:15	Group Photo (outside)	All
15:30	Break (Pascals)	
16:00	Georeferencing Using Paper Maps, Paper Maps Handout	David Bloom
17:00	Day in Review and Considerations for Trainers-to-be (Trivia Question - Paul)	David Bloom
17:30	END	

Dinner on our own - See list of local restaurants. You'll be reimbursed at the standard per diem rates.

Optional Evening Activities are:
Oct. 9 | 7-8:30 p.m. Water Sustainability: Public Challenges, Private Choices, with Pierce Jones, Ph.D., Professor and Director, UF Program for Resource Efficient Communities; Joe Delfino, Ph.D., Professor, UF Environmental Engineering Sciences; and Wendy Graham, Ph.D., Carl S. Swisher Chair in Water Resources and Director, UF Water Institute. The Water: Discovering and Sharing Solutions exhibit is open 6-7 p.m. Location: Florida Museum of Natural History, 3215 Hull Road - Desserts and cash bar available.

To help plan for this free program, please RSVP at least one week in advance of the café date with your name and the number attending by emailing aerickson@flmnh.ufl.edu or calling Amanda Harvey, 352-273-2062.

Oct 9 | 7-10p.m. Team Trivia: The Laboratory : http://thelaboratorycafe.tk/

Oct 9 | 6:15 p.m. Campus 4 Miler. A group from the Florida Track Club meets at the north end of Ben Hill Griffin Stadium to run a scenic 4 mile route through the UF campus. The pace usually ranges from 8-10 min/miles, although runners of all abilities are encouraged to participate!

Day 3, Wednesday October 10th		
Time	**Activity**	**Presenter**
9:00	Review and Questions	All
9:20	Meet iDigBio PI Greg Riccardi	Debbie Paul
9:30	Exercises: Using Paper Maps	All
10:30	Break (Pascals)	
11:00	Exercises: Using Paper Maps (continued)	All
12:30	Lunch on our own. See local restaurant map	
13:30	Exercises: Using Paper Maps (continued)	All
14:40	Examples and Discussion: Process, Workflows, and Collaborations	
15:30	Break (Pascals)	
16:00	Process, Workflows, and Collaborations (continued)	John Wieczorek
17:00	Day in Review and Considerations for Trainers-to-be, Volunteers for Training Demos (Trivia Question - Paul)	David Bloom
17:30	Specify and Georeferencing: Tools and Workflows	Video
18:00	End	

Dinner on our own - See list of local restaurants. You'll be reimbursed at the standard per diem rates.

Optional Evening Activity is:
Downtown Gainesville, Union Street Farmers Market, 4 - 7 PM. Food and live music.
http://unionstreetfarmersmkt.com/index.php/vendors

Day 4, Thursday October 11th		
Time	**Activity**	**Presenter**
9:00	Meet iDigBio PI Bruce MacFadden	Debbie Paul
9:10	Results: Paper Maps	Carol Spencer
10:00	Paper Maps Review	John Wieczorek
10:30	Break (Pascals)	
11:00	Good and Bad Localities, Field Locality Handout	David Bloom
11:15	Introduction to GEOLocate Project	Nelson Rios
12:00	Lunch on our own. See local restaurant map	
13:00	Using GEOLocate: Basics (Web Application)	Nelson Rios

13:30	Using GEOLocate: Batch Processing (Web App and Excel)	Nelson Rios
14:10	Using GEOLocate: Collaborative Georeferencing Administrative Portal	Nelson Rios
15:10	Using GEOLocate: Web Client	Nelson Rios
15:30	Break (Pascals)	
16:00	Prioritizing Data: Getting the most bang for your buck, Picking low hanging fruit	Nelson Rios
16:15	Advanced GEOLocate: Taxon validation, Web services & integration, Building end to end georeferencing workflows	Nelson Rios
17:00	Day in Review and Considerations for Trainers-to-be (Trivia Question - Debbie Paul)	Bloom
17:30	Symbiota and Georeferencing: Tools and Workflows	Video
18:00	End	

Evening Activity is: Group Dinner, Leonardo's 706, 7PM - 9PM

Day 5, Friday October 12th		
Time	**Activity**	**Presenter**
9:00	Meet iDigBio PI Jose Fortes (5 minutes)	
9:07	BioGeomancer Georeferencing Workbench	John Wieczorek
9:45	BioGeomancer Workbench, Batch Processing	John Wieczorek
10:30	Break (Pascals)	
11:00	Data Set Preparation/BioGeomancer Project Exercises	John Wieczorek
12:00	Open Work Session - Participant/TCN Georeferencing Projects (use those data sets)	All
12:30	Lunch on our own. See local restaurant map	
13:30	Open Work Session (continued)	All
14:30	Volunteer Training Demos	Trainees
15:30	Break (Pascals)	
16:00	Workshop Evaluations	All
16:30	Day in Review and Considerations for Trainers-you-now-be	David Bloom
17:00	Workshop Summary	John Wieczorek
17:30	End	

Dinner on our own - See list of local restaurants. You'll be reimbursed at the standard per diem rates. Leaving tomorrow? Want to get together for dinner or hang out at the hotel pool?

Optional Friday night activities:
free concerts downtown (same location as the wed night farmers mkt) -
http://www.gvlculturalaffairs.org/website/programs_events/plaza_series/plaza.html

Retrieved from "https://www.idigbio.org/wiki/index.php/GWG_Train_the_Trainers_Workshop"