

Welcome to the Terrestrial Parasite Tracker (TPT) Best Practices and Standardization of Digital Data Capture Workshop!

Workshop Development Team:

Jen Zaspel, Kathryn Sullivan, Katja Seltmann, Jorrit Poelen, Julie Allen, Alyssa Caywood, Julia Colby, Chris Tyrrell, Stephen Cameron, Petra Sierwald, Rebekah Shuman, Jim Louderman, Erika Tucker, Matt Yoder, Neil Cobb, Maureen Turcatel, Julia Snyder, Theresa Reilly

Supported by: NSF, iDigBio, and the Field Museum of Natural History

Workshop Information and Agenda

- What are we doing here?
- What do we hope to accomplish?
- What are the next steps?

PARASITE TRACKER

DOCUMENTING ARTHROPOD VERTEBRATE PARASITISM

Next Steps: A Review

- Review digitization plans
- Work with Kat/Mark on ordering
- Work with Kat on taxonomy x platform
- Work with Chris/Alyssa on workflow development and reporting
- Hire technicians/students (slide cleaning, organizing, barcoding, taxonomy)
- Learn Inselect (segmentation) and Geolocate (georeferencing)

INSTITUTION	Imaged Pinned Specimens	Scanned Vials	Scanned Slides	Total Transcribed	Legacy Data Import	Data Crowdsourced
ANS	30	21,200	7,289	28,519	20,000	
BPBM	4,500	35,000	10,000	70,000		55,000
BYU			79,200	79,200		
CAS	5,241	6,289		99,840		6,289
CU	200	9,370		14,640		
FMNH	809	6,000	189,000	198,000		
INHS	400	9,906	13,111	73,258	8,214	
MSU	1000	530	2100	36,000		
MPM	200	1500	1000	2,700		
OSU			6,000	6,000		
PSU	200	8,301	5,000	38,301	images	
PU	300	300		27,600		
TAMU	500	13,595	23,452	165,000		13,595
UH	4,600		6,400	11,316		
UM			180,000	180,000		30,000
UMSP	48		56,204	56,252		
UNL			10,000	10,000	20,000	
UNH	4,500	1000	1000	30,000		
UNM		18,500	2,000	43,000	2,500	
UU		8,300	39,700	48,000		
UWM		6,426	13,053	19,985		
UWSP			9,280	9,280		
TOTAL	22,528	146,217	653,789	1,246,891	50,714	104,884



Inselect

An innovative tool for automating digitisation of natural history collections



Workshop Information and Agenda

● What are we doing here?

- Demonstrating/distributing digitization workflows
- Developing/communicating approaches for sharing taxonomy (arthropod/host)
- Demonstrating online data/image delivery to SCAN
- Learning how to set up NfN expeditions
- Demonstrating/distributing georeferencing workflows and best practices
- Practicing transcription and interpretation of interactions data for GloBI
- Learning about FieldGuide, BrainScoop, and BLUE!
- Meeting colleagues from various TPT stakeholder/collaborator groups

Workshop Information and Agenda

- **What do we hope to accomplish?**

- Our primary goal is to provide data providers the tools needed to meet their digitization goals for TPT
- Develop ideas for research projects that will use TPT data
- Develop a schedule of deliverables for BI activities
- Outline 2-3 papers for TPT community publications



Workshop Information and Agenda

- **Where are we headed next?**
 - Project tracking review; online data delivery is key...
 - TPT Data Entry/Interactions Webinar April 1st
 - Next iDigBio QReport May
 - Next TPT workshop FMNH (October 2020 *tentative*)
 - Last TPT workshop TBD (year 3)

Workshop Information and Agenda

- **Materials/handouts**
 - Workshop folder
 - USB Drives
 - Association data mapping x platform
 - TaxonWorks files



2020 TPT Personnel Organizational Chart

Research Advisory Board

Julie Allen
 Jen Zaspel
 Jessica Light
 Rob Guralnick
 Nate Lemoine
 Anna Monfils
 Sarah Bush
 Jason Weckstein
 Others TBD

Bioinformatics Teams

Data Integration



Jorrit Poelen
 Katja Seltmann
 Jen Zaspel

Project Leads

Jen Zaspel
 Stephen Cameron

Project Manager

Kat Sullivan

Project communications, goals, and tracking

Data Providers

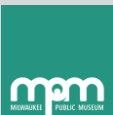
PU-Stephen Cameron/Jen Zaspel
 TAMU-Jessica Light/Karen Wright
 UH-Dan Rubinoff
 UM-Barry OConnor/Erika Tucker
 UMSP-Robin Thomson
 UNL-Scott Gardner
 UNH-Istvan Miko
 UU-Sarah Bush
 UNM-Mariel Campbell/Joe Cook
 UWM-Dan Young/ Craig Brabant
 UWSP-Sarah Orlofske

ANSP-Jason Weckstein
 BPBM-Jim Boone
 BYU-Mike Whiting
 CAS-Chris Grinter
 CU-Michael Caterino
 FMNH-Petra Sierwald/Maureen Turcatel
 INHS-Dmitry Dmitriev
 MSU-Anthony Cognato
 MPM-Julia Colby/Jen Zaspel
 OSU-Hans Klompen
 PSU-Andy Deans

Taxonomy



TaxonWorks-
 Matt Yoder
Management, curation, and file formatting



Kat Sullivan
 Jen Zaspel
Taxonomy file aggregation



David Bloom
Vertebrate taxonomy

Digitization

Mark Smith
Pinned and slides
 Alyssa Caywood
Pinned



Image/Label Data Aggregation



Katja Seltmann Neil Cobb

Broader Impacts

Anna Monfils Julie Allen
 Jen Zaspel Emily Graslie
 Rob Guralnick Katja Seltmann

Scanning

Kat Sullivan
 Trays
 Julia Colby
Slides and vials; barcodes
 Jen Zaspel



Insect-Julia Colby,
 Kat Sullivan
 Jen Zaspel

Machine Learning Species Identification



Fieldguide-Andre Poremski

NOTES FROM NATURE

Julie Allen
 Michael Denslow
 Rob Guralnick

Update on Research Advisory Board and Georeferencing Working Group

- RAB is comprised of researchers from academic and non-academic institutions
- Working to define project goals and conditions for collaboration (e.g., how to handle student data, data requested for proposals, publications, etc.)
- Developing digitization priorities for research publications
- TPT needs a GR working group to synthesize existing resources and develop standards
- DD2021 TPT Talks

Workshop Ground Rules

Guidelines for Participation

- Everyone's input is equally valued; no idea is bad
- Only one conversation will go on at once (unless subgroups are working on a topic)
- Respect each speaker: Don't take part in side conversations; listen and ask clarifying questions
- Off-target discussions are limited to five minutes and then recorded as issues
- Discussions and criticisms will focus on interests, not people
- Encourage other team members
- Support everyone's right to be heard; share "air time"
- Keep phones on silent or vibrate mode during the session
- Include everyone in the discussion, respect one another's ideas
- Exchange relevant workshop information with non-group members

TPT Equipment Update

- Scanning Trays
 - Next batch order around end of March
 - Tray template information documents on flash drives
 - Still able to order trays!

TPT Taxonomy Update

- Taxonomy
 - Available csv files in Google drive
 - Astigmata mites and Acari higher taxonomy
 - Worldwide fleas
 - Black flies
 - New csv files
 - Psychodids--sandfly list from WRBU
 - Diptera coming soon (NA mosquitoes)
 - Other resources
 - Vectorbase ontology
<https://www.vectorbase.org/ontology-browser>



PARASITE TRACKER

DOCUMENTING ARTHROPOD VERTEBRATE PARASITISM

TPT Taxonomy Update

TaxonWorks is the new taxonomy management tool for TPT

- 3 files live in TW now, try to access during workshop
- Long term sustainability
 - Collaborative
 - Generate project checklists
 - Tool to navigate collections
 - Batch download files in variety of formats, advanced filtering available
 - Community paper



TaxonWorks

Describe life.

TaxonWorks is an integrated web-based workbench for taxonomists and biodiversity scientists.

It allows you to capture, organize, and enrich your data; share it with collaborators; and package it for analysis and publication.