



Adapting to COVID: Resources for Natural History Collections in a New Virtual World

Virtual Project Management (Tips and Tools)

October 27: 2:00 - 3:00 pm ET

David Jennings - iDigBio Project Manager

Diego Barroso - TORCH TCN Project Manager, BRIT

Jen Zaspel - TPT TCN PI, Milwaukee Public Museum



Project Management Basics



David Jennings
iDigBio Project Manager
djennings@flmnh.ufl.edu





A little about me to provide some framing...

- Master's degree in Industrial & Systems Engineering with a concentration in Engineering Management
- Managed projects of various sizes for the past 25 years
- Worked in the aerospace, medical device, cosmetics, public utility, and higher education sectors
- Combination of formal, informal, and on-the-job training
- Licensed Professional Engineer in Florida
- Held a variety of leadership positions
- Lots of remote work experience

UF

Herbert Wertheim
College of Engineering
Department of Industrial
& Systems Engineering



OUTREACH
Engineering
Management

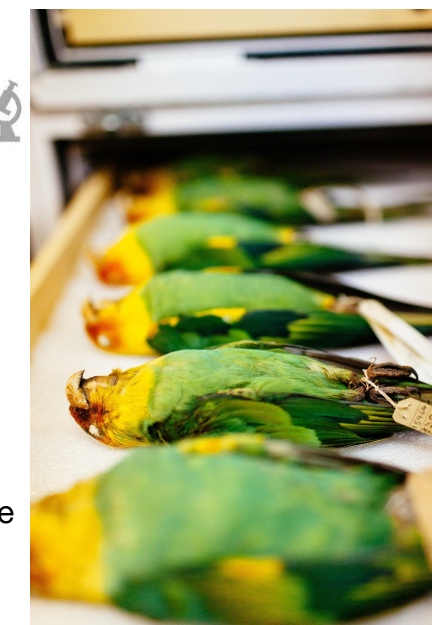
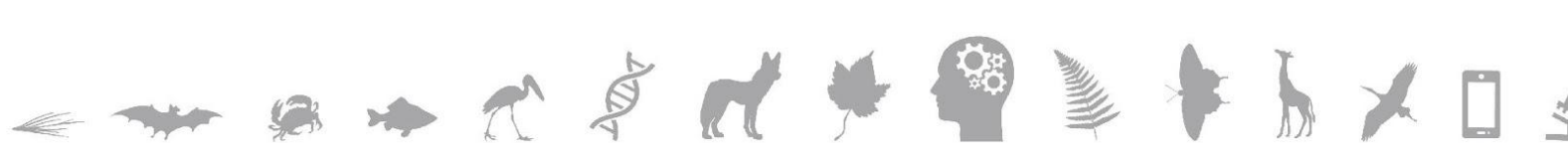


FBPE
FLORIDA BOARD OF
PROFESSIONAL ENGINEERS



CH2MHILL





Advancing the Digitization of Biodiversity Collections

iDigBio hub, Thematic Collection Networks, & Partners to Existing Networks

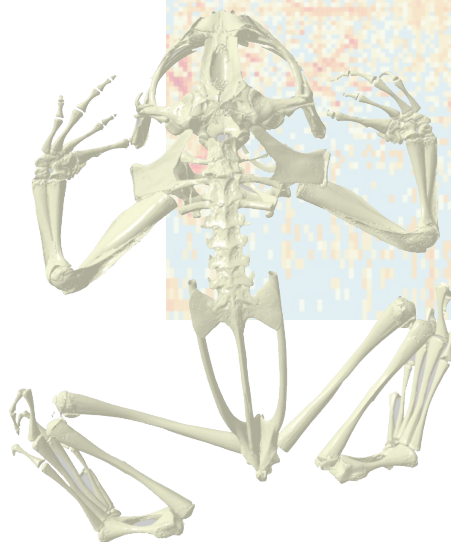


- 10-year, \$100 million national effort involving 317 institutions across 29 TCNs and 48 PENs
- iDigBio's annual budget averages \$3 million

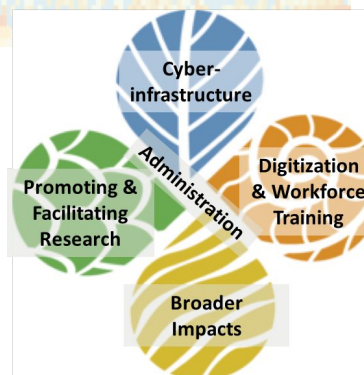
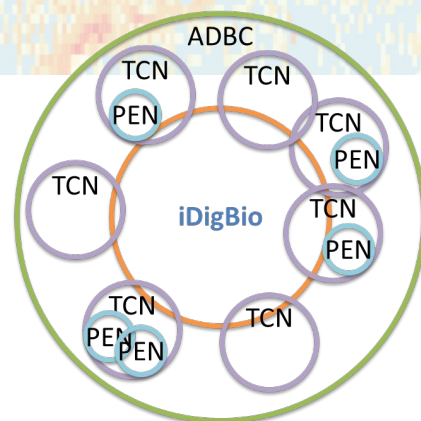
1,623 recordsets

124.9 million specimen records

39.7 million media records



Frog: Florida Museum of Natural History, UF:Herp:100788, MorphoSource S3392



Cyberinfrastructure

Data publishing for natural history collections
Data quality control review
Data access via user-friendly web portal interface
Data access programmatically via APIs

Research Use

Collaborative development of tools and products using iDigBio data
Publications exemplifying and community training on best practices for data use

Digitization, Workforce Development, and Citizen Science

Workflows for digitizing historic specimens and for born-digital new specimens
Trainings related to equipment, digitization skills, and data literacy
Products and events to integrate citizen science in digitization workflows

Education, Outreach, Diversity, & Inclusion

K-16 course materials featuring specimens
Mentoring for EODI activities organized by natural history collections
Multi-pronged efforts to broaden representation in science

Community Coordination

Digital Data in Biodiversity Research Conference (annually in June)
Biodiversity Summit (annually in September)
Alignment with similar international initiatives, e.g. GBIF, DiSSCo, ALA
Long-term sustainability of digitization and data mobilization efforts

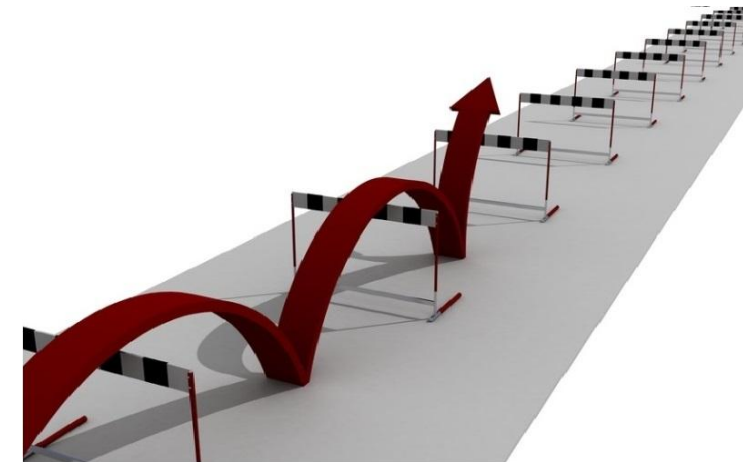
www.idigbio.org

social media @idigbio



Why a session on Project Management?

- Challenges with scientific and research projects:
 - Scientists want to do research, not administration
 - Project management & administration can be time consuming
 - Administration distracts scientists from their main interests
 - Scientists often lack training or experience in project management
 - Funding agencies desire accurate cost estimates and predictable outcomes
- There must be a better way:
 - Educate emerging scientists in the basics of project management and administration
 - Transfer knowledge and lessons from experienced scientists to those in emerging projects





Let's start with a couple of definitions...

- What is a **project**?

- “A project a **temporary** endeavor undertaken to create a **unique** product, service or result.”

- **temporary** = defined beginning and end in time, which is necessary to constrain scope and resources
 - **unique** = it is not a routine operation, but a specific set of operations designed to accomplish a singular goal

- What is **project management**?

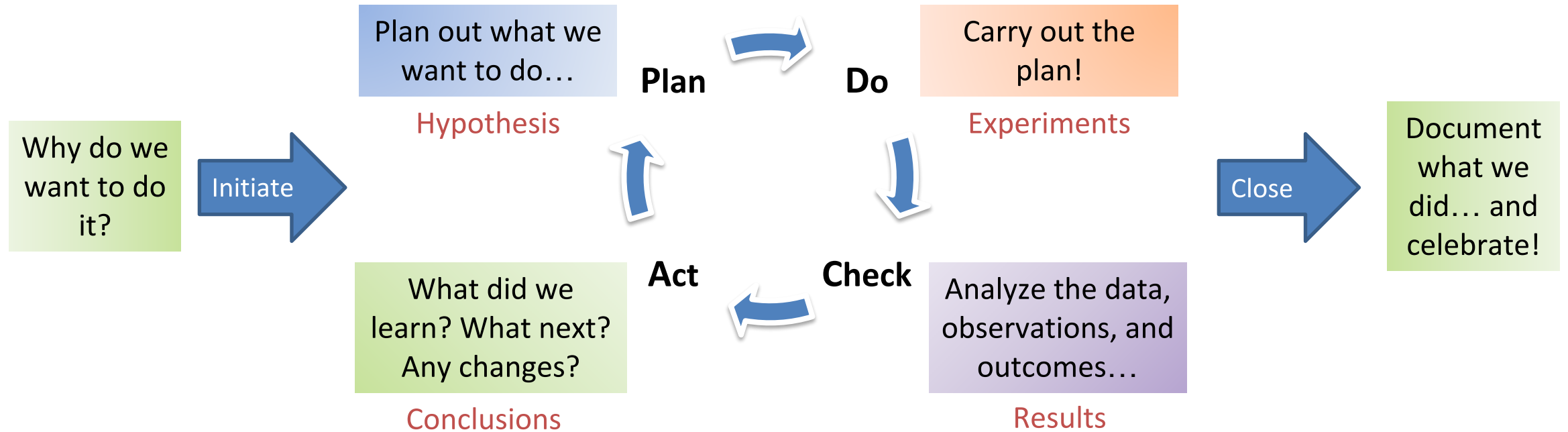
- “Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.”

- Structure to maintain focus on goals and outcomes
 - Predictably meet project requirements within established constraints



Project Management is not as abstract as you think...

“Plan-do-check-act (PDCA) represents an intersection between the scientific method and everyday operations. Given an objective, whatever process is defined to achieve that objective can be—and often unknowingly is—subject to PDCA.”





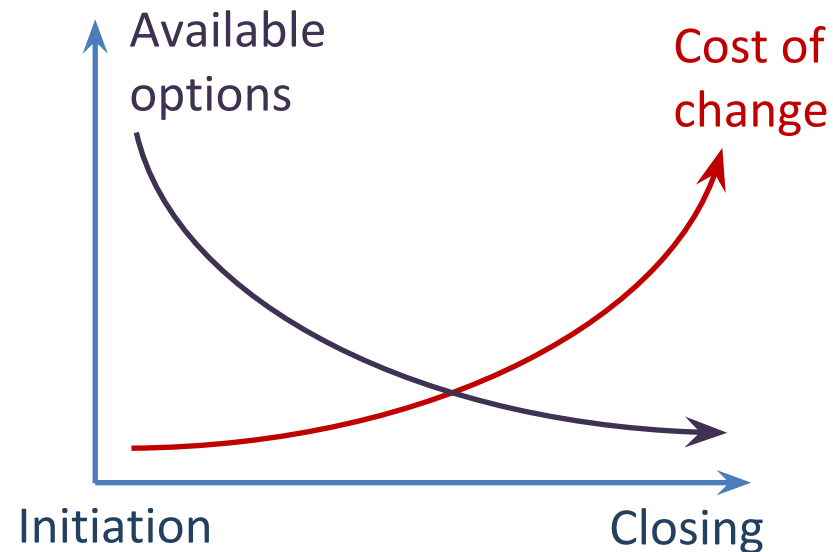
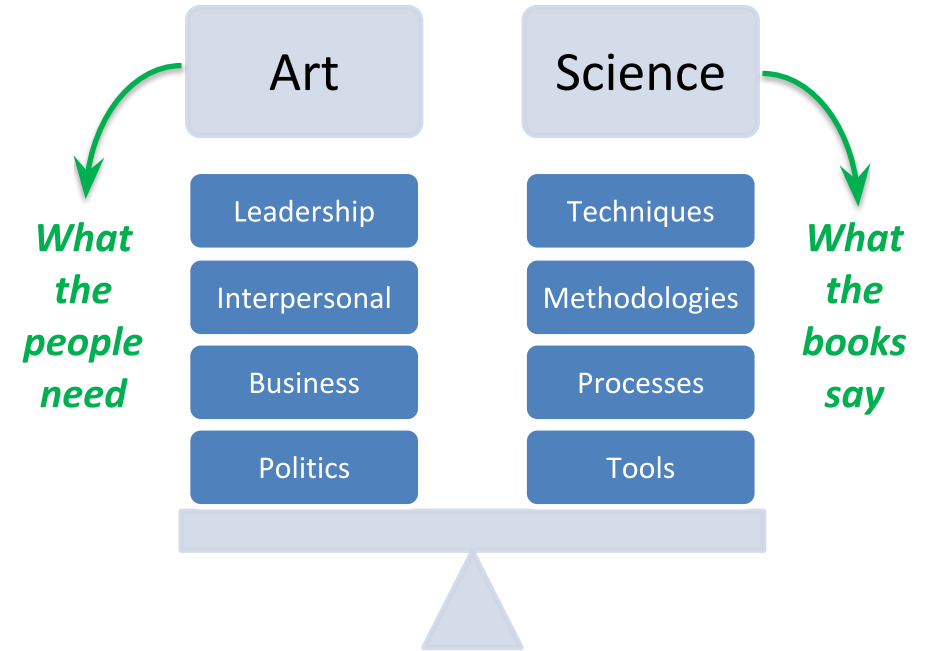
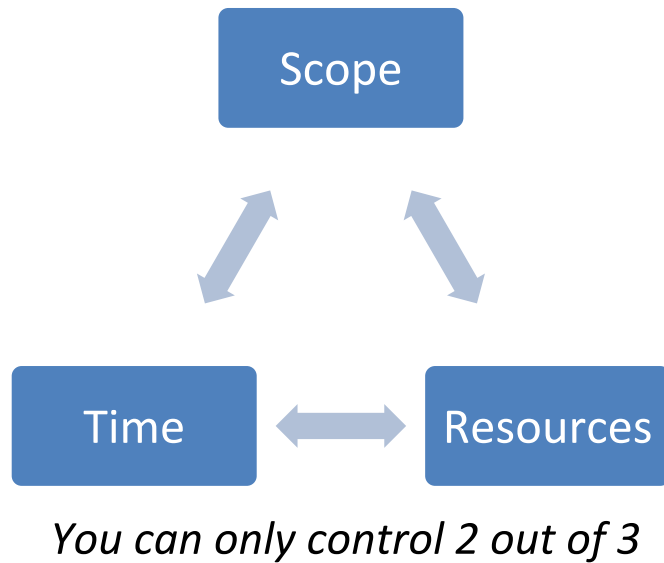
Project Management is intertwined with Leadership

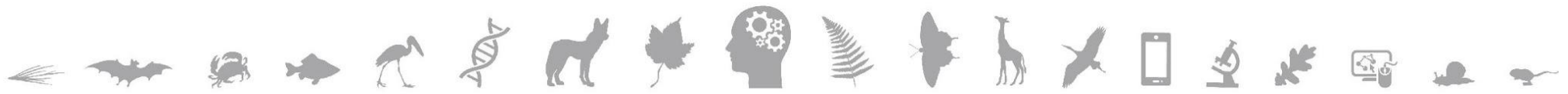
- **Management** is about coping with complexity to bring order and predictability to a situation
- **Leadership** is about coping with change to survive or compete effectively in a new environment

Management		Leadership
Planning and budgeting	↔	Setting direction
Organizing and Staffing	↔	Aligning people
Control and problem-solving	↔	Motivation



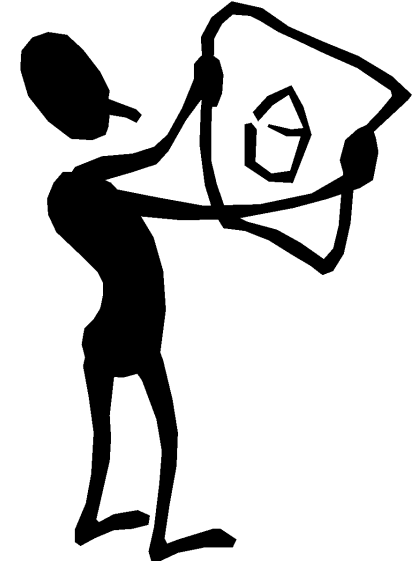
Project Management is always about balance...





Project Management begins with a Workplan

- A workplan serves as a map and guide for your team:
 - **What** needs to be done?
 - **Who** is doing the work?
 - How much will the work cost (**budget**)?
 - When will the work be done (**schedule**)?
 - How the work will be done (**workflows**)?
 - How will you manage **communications**?
 - How will you manage **risk**?
 - How will you manage **change**?
 - What **metrics** will you use to track and measure **progress, quality, and scope**?
 - What are your internal and external **dependencies**?
- Remember that a workplan is a living document
- The planning process is vitally important for your team





Advice, tips, and lessons learned...

Part 1




- Manage your risks *early* and *often*
 - Risk management is a key component that is often met with the most resistance
 - Don't put all your senior officers in one shuttlecraft 🦋
 - Enemies, like Romulans, can be cloaked 🦋
- Plan for change because it is *inevitable*
 - Quantify the impacts, prioritize, and get endorsement
 - Having is not so pleasing a thing as wanting 🦋
- Avoid using “percent complete”
 - People guess (or lie) and tend to be overly optimistic
 - Keep your phaser set on stun 🦋
 - Use *binary completion*: Is the work done? Yes/No
- Manage your time wisely
 - Work—and meetings—expand to fill available time
 - The last 20% of the work will take 80% of the time (“80/20 rule”)





Advice, tips, and lessons learned...

Part 2

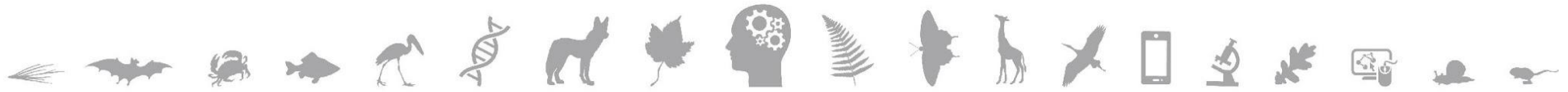
- Build relationships
 - **Shoe mail** is better than **Zoom** is better than **Phone** is better than **Slack** is better than **Email**
 - Cross-functional and diverse teams are the key to success ☐ avoid tunnel vision
 - Infinite Diversity in Infinite Combinations 
- *Don't guess!*
 - The most valuable and least said word in a project manager's vocabulary is "**No**"
 - The most valuable and least said phrase in a project manager's vocabulary is "**I don't know**"
- See both the forest and the trees ☐ understand where things fit
- You can act on incomplete data ☐ be flexible
 - Insufficient data does not compute 
 - When logic fails, trust a hunch 



Advice, tips, and lessons learned...

Part 3

- Don't spend all your time tracking progress
 - Use just enough granularity but no more
 - Avoid cascading milestones and objectives
- Complexity of coordination increases exponentially with the number of people—or PIs—involved
 - The same goes for committees and advisory boards □ keep them manageable
- Divide and conquer □ manage as a program vs. a project
 - Non-interference is the Prime Directive 🚀
- Keep your PIs and Program Officer happy
 - Live long and prosper 🚀



Thank you!



www.idigbio.org



facebook.com/iDigBio



twitter.com/iDigBio



vimeo.com/idigbio



idigbio.org/rss-feed.xml



webcal://www.idigbio.org/events-calendar/export.ics



Practical Tips for the Budding TCN Project Manager - or, “Things I’ve learned along the way”



Diego Barroso

TORCH TCN Project Manager


Fort Worth Botanic Garden / Botanical Research Institute of
Texas

[<dbarroso@brit.org>](mailto:dbarroso@brit.org)





Backstory:

- Training in Biochemistry & Neuroscience
- 2013 - 2014: Georeferencing Tech for  @ Michigan
- 2014-2018: Proj. Mgr., Great Lakes Invasives TCN @ Michigan
- 2018-2020: Proj. Mgr., MyCoPortal TCN @ Illinois Natural History Survey (Lead)
- 2020-2023: Proj. Mgr., TORCH TCN @ BRIT (Lead)

Thank you! to:



Bill Fink, Doug Nelson,
Diarmaid O'Fóighil (UMMZ)
Rich Rabeler, Matthew Foltz,
Pat Rogers (MICH)



Andy Miller, Phil Anders (INHS)

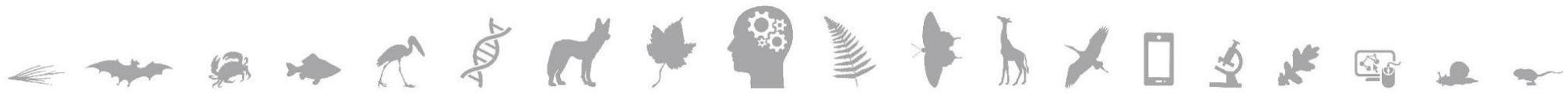


BOTANICAL RESEARCH
INSTITUTE OF TEXAS

Peter Fritsch, Tiana Rehman,
Jason Best, Clay Barrett 

Ed Gilbert, Ben Brandt, Nelson Rios





Organization & Documentation - Part 1

- Create a single, **centralized, online repository** for your project's documentation (internal documents, which you will unexpectedly need when you are 3000 miles away.)
- **Who's who? (at-a-glance):** Create a **project-wide directory** of all participating institutions (with contacts at each, like P.I., digitizer, etc.), and keep it **up-to-date**.
- **Public Documentation / Tutorials (website):** Saves you work and makes others' lives easier. Helps you **publicize** your project, gain **new collaborators** (translate it!), and create your **brand**.
- It helps to have **boiler-plate emails** for communicating things to new participants (**efficiency, standardization**), or **recurring** events (Quarterly, Annual reports).



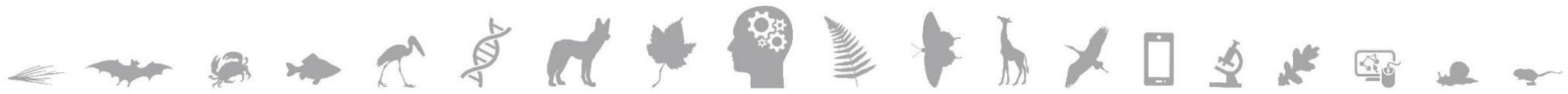
Organization & Documentation - Part 2

- Keep **painstaking records**; don't throw out emails. Build your personal **Knowledgebase** / Archive; also helps with **Accountability**.
- Create **reports as-you-go**: as soon as something “reportable” happens, **add it to the format!** When reporting time comes around, the report will be practically **done**, and with **better data**.
- Provide **personalized attention** whenever necessary -- especially when the TCN is just starting out, or for any newcomers. Do online/Zoom **demos**; **record** them -- and **publicize** them -- if possible.
- **“Under-promise and over-deliver.”** (Assume people will wait until the last minute to send you whatever it is you are requesting.)



Day-to-Day operations (production environment) - Part 1

- You are responsible for turning in **deliverables**, **on time** and within **budget**.
- Pretend you are running a **factory**; take **ownership**. **Learn the workflow**; it is your job to keep the gears turning (**tech support**). **Anticipate** possible **problems** (**listen** to your staff) and try to resolve them **before** they impact the project.
- Make processes/tutorials **as simple as possible**; **never assume** people are tech-savvy.
- **Mix it up!** After **4 hours** of any given task, productivity goes down.
- Keep your staff **engaged**. **Build the relationship** so they return (helps avoid having to train new employees every term!)



Day-to-Day operations (production environment) - Part 2

- Always **image the specimen first**, and create a **backlog**. (COVID settled this debate).
- **Automate** as much as possible: image post-processing, OCR for transcription, GeoLocate.
- Keep **costs** in mind (e.g., parking can easily amount to 10-20% of hourly wage). Remember, the project manager is one of the largest expenditures on the project (*the Foltz principle*).
- **Prioritize** tasks. In addition to “Importance & Urgency,” I like: **1) time** it will take + **2) “CPU Cycles”**. This way, I always have something to do. **Don’t waste valuable “long stretches of time”** doing a string of quick and easy tasks.



Metrics & Reporting Practices

- Suggestion: “**Daily email report.**” Provides **auto-feedback** to staff, and makes it easy to calculate numbers for report. Avoid blatant micro-managing; use **Symbiota queries** if needed. “**DigiLedger**” (Joe Lippert, at BRIT).
- Good idea to keep: **Weekly, Monthly, Quarterly, Annual summaries**; good for **projections**. **Will we deliver**, if we keep going at this rate? **Make adjustments** accordingly. **Share the data** with project stakeholders.
- Keep **up to date**. You should be able to **produce numbers within the hour** (assume you will be asked for stats at the drop of a hat, because you *will* be).



Relationships & Communication with stakeholders & workforce (1)

- For important things, prefer **email**. It creates a **permanent record**, makes communication **more thought-out**, and allows you to answer at your convenience (**fewer interruptions**).
- **Be prompt** when responding. Better to **acknowledge quickly** and reply at length later, than to not answer until done. **Keep people apprised** of where their “ticket” is, and **keep your word**.
- Each institution is **unique**; **learn the individual quirks** (e.g., **data, internal conflicts**), yet be **discreet**. Know people by **name**, and who works with whom. **Be empathetic**.
- For every institution and for every dataset, there is a “**gatekeeper**”; **respect** that, and learn to **navigate** these relationships. Remember: you may suggest and try to persuade, but they have ultimate say.



Relationships & Communication with stakeholders & workforce (2)

- A P.M. is both a “**supervisory**” and a “**public servant**” role, often to the same people (“**constituents**”). Scrum’s “**Servant Leadership**”: my goal is to help them meet theirs.
- A P.M. represents the project and is its **public face**. Always maintain the **highest standards**. **Be fair** to everyone.
- **Accept** that there’s only so much you can do; **pick your battles** wisely. “**Herding cats**” is a big part of the job. **Know your crowd**, and **don’t burn bridges**.
- We have **monthly meetings** with the P.I.’s.; helpful **input from everyone**, “keeps everyone **accountable**.” Keep (collaborative) **minutes**, including the list of attendees, and make it available within 24 hours (as a matter of **Public Record**).
- Suggestion: Monthly or Quarterly **newsletter**?



Miscellaneous - Part 1

- Don't be afraid to **ask for help**. People are nicer than you expect! Better to ask for help than to miss your mark.
- **I don't know everything, but I know someone I can ask** (Newton: "shoulders of giants"; "I got a guy for that."). Don't forget to **be someone else's "guy"** when they need it.
- **Know what you know, and what you don't know**. If you don't know, **turn it over to someone** who does.
- Occasionally, you will be dragged into things you'd rather not do. **Learn** from every experience, and **build relationships**. But also, know when -- and how -- to say **NO**.



Miscellaneous - Part 2

- **Stay up-to-date** and **on your toes**. Be **nimble** and keep a **can-do attitude** (Laura Maihofer; “3 Morelos”). (Diego: lightbulb, ballast, LED retrofitting, bash vs. Excel, csv vs. tsv, PC vs. Mac BOM, Symbiota code for Cyrillic characters, geocoding, reverse geo-coding, XML)
- On **innovation**: invent, develop, but remember -- **no need to reinvent the wheel**. (Also, avoid “N.I.H. Syndrome”). **“Explore AND Exploit”**.
- **“Expect the unexpected”** (COVID-19, anyone?). BACKUPS, BACKUPS, BACKUPS. Make a **transition** plan (aka, “if I get hit by a bus”).
- Give **credit** where credit is due. **Stick up** for your employees. **Reward** good work. **Enjoy it!**

Jennifer M. Zaspel

Associate Curator and Head of Zoology Milwaukee Public Museum

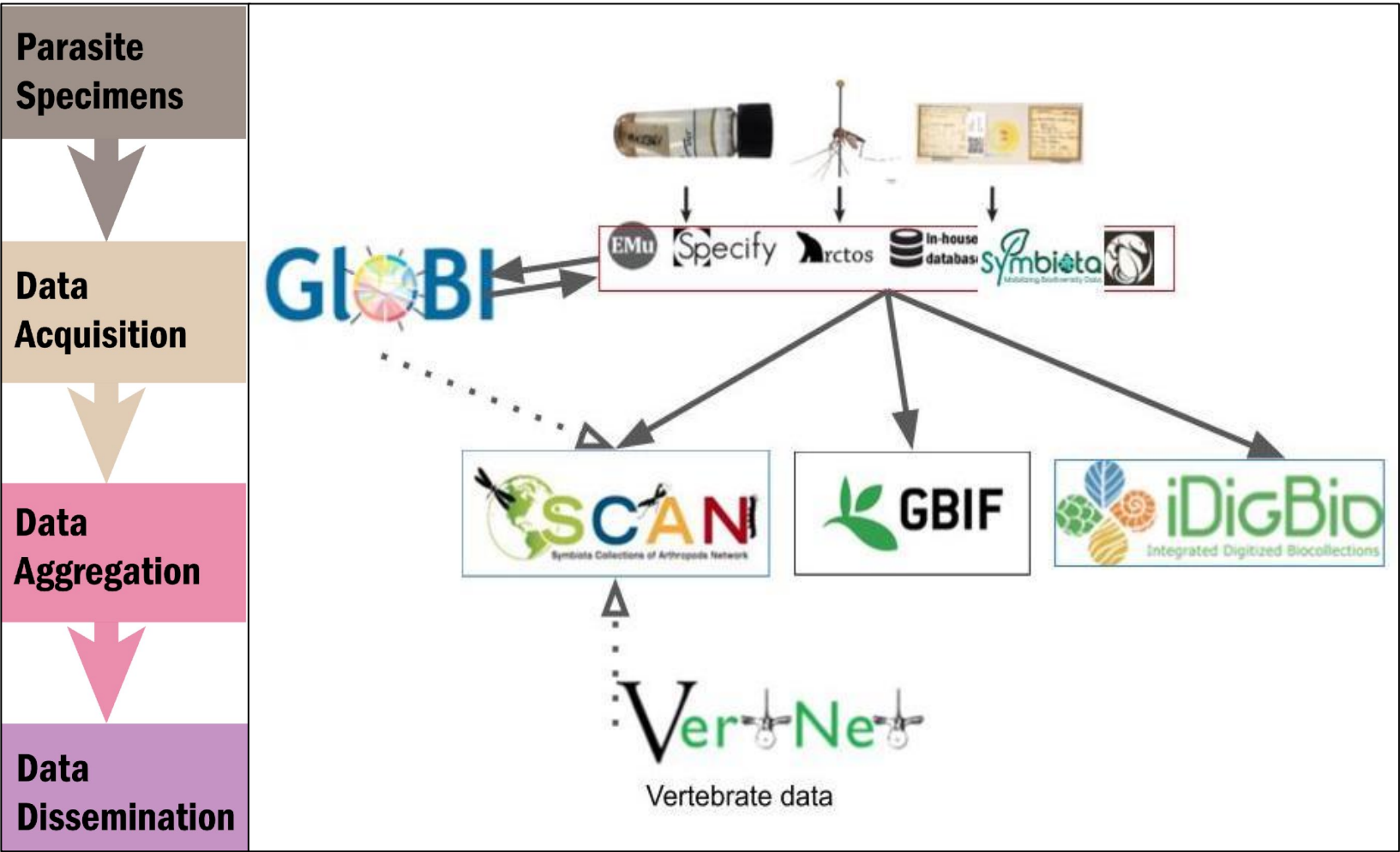
- **Project Title:** Collaborative Research: Digitization TCN: Digitizing collections to trace parasite-host associations and predict the spread of vector-borne disease
- **Project Start Date:** September 1st 2019
- **Project Period:** 3 years
- **Participating Institutions:** 28
- **Co-PIs/Leads on Subs:** 34
- **Participants:** 110+





Digitization Objectives

- Transcribe and georeference label data from **1.2+** million arthropod parasite specimens from 22 collections across North America (U.S. and territories) including ~55,000 specimens from biotic-association collections



PARASITE TRACKER

DOCUMENTING ARTHROPOD VERTEBRATE PARASITES



Pre-submission Planning and Timeline

Terrestrial Parasite Tracker Collections Survey

Please answer some brief questions about your collections, digitization, and your parasite collection

*** Required**

Your Collection Name *

Your answer

<



Parasite Collections & Digitization Plan at UNH Collection of INsects and other Arthropods

István Mikó, collections manager
UNH Collection of Insects and Arachnids

UNSM-HWML

Harold W. Manter Laboratory of Parasitology
UNSM-HWML

Project Kick-off Meeting

- Introductions to collections and collaborators
- Review expectations
- Discuss any changes in scope or IT updates
- Share resources
- Project planning

Parasite Collection & Digitization Plan:
University of Michigan Museum of Zoology
Insect Division

Erika Tucker & Barry Oconnor
iDigBio Summit 2019

DIGITIZATION TCN: DIGITIZING COLLECTIONS TO TRACE PARASITE HOST ASSOCIATIONS AND PREDICT THE SPREAD OF VECTOR-BORNE DISEASE
MICROSCOPE SLIDE DIGITIZATION AT THE FIELD MUSEUM

Petra Sierwald, Field Museum, TPT TCN PI
John Bates, Field Museum, TPT TCN PI
Insect Collection

Notes from Nature

Transcribe museum records to

TAKE NOTES FROM NATURE

START TRANSCRIBING

Search Records
<http://scan-bugs.org/portal/collections/index.php>

Spatial Module
<http://scan-bugs.org/portal/spatial/index.php>

Statistics Summaries
<http://scan-bugs.org/portal/collections/misc/collstats.php>

Quick Collection Information
<http://scan-bugs.org/portal/collections/misc/collinfo.php>

PARASITE TRACKER
DOCUMENTING ARTHROPOD VERTEBRATE PARASITES

Taxonomy Resources for TPT

Kathryn Sullivan
TPT TCN Project Manager



Digitization Project Planning Form Natural History

To be completed by Digitization Manager during project planning meeting.

Person In Charge/Collection Manager (PIC) Digitization Manager (DM) Collection Informatics (CI)
EMu Systems Administrator (SA) Digitization Core Committee (DCC)

Department: Collection: Project Supervisor: Person-in-Charge of Collection (if different):

Grant funded? ☐ Yes ☐ No Project Name: Est. # Specimens: Basis for estimate: Timeline: ☐

Start/End:

☐ Ongoing ☐ Other:

Project Development Meetings *Schedule as needed.*

- ☐ Planning Meeting (complete form below)
- ☐ EMu Data Map (PIC, DM, SA)
- ☐ Storage tour (PIC, DM)
- ☐ Image requirements (PIC, DM)
- ☐ Data Transcription & Cleaning Plan (PIC, DM, others as needed)
- ☐ File Naming (if new conventions need to be established) (PIC, DCC)
- ☐ Project workflow (PIC, DM, SA)
- ☐ Data deployment plan (PIC, SA, & CI)

☐ Other:

Digitization Plan

Who will be digitizing? (note # of each)

☐ MPM Staff ☐ Volunteer ☐ Intern ☐ Project assistant/tech. Hire date: Details:

Training requested? ☐ Data entry ☐ Photography ☐ No training needed

Who will supervise adherence to data quality standards?

☐ Project Lead /Curator ☐ Project assistant/tech. ☐ Other:

How many workstations are needed? Station equipment supplied/funded? ☐ MPM ☐ Funded ☐ No What equipment is available?

Has IES been contacted about server space, software, and other equipment requirements? ☐ Yes ☐ No Reports:

Will this project require a Crystal Report & data export Preferred data capture interface (s):
(for iDigBio or another aggregator)?

☐ Yes ☐ No

- ☐ EMu (full)
- ☐ EMu (streamlined)
- ☐ Sapphire/RDE
- ☐ Crowdsourcing transcription
 - o DigiVol

Project Planning: Who is doing what?

- Creating job descriptions & hiring staff
- Developing imaging & data entry procedures
- Overseeing specimen handling
- Training staff in handling and digitization procedures
- Tracking production
- Quality control of images
- Quality control of data
- Archiving & deploying images & data

PARASITE TRACKER

DOCUMENTING ARTHROPOD VERTEBRATE PARASITES



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 O'Connor/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

Image/Label Data Aggregation



Katja Seltmann Neil Cobb

Broader Impacts

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

Machine Learning Species Identification



Fieldguide-Andre Poremski

Digitization

Mark Smith
Pinned and slides
Alyssa Caywood
Pinned



Scanning

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



Insect-Julia Colby,
Kat Sullivan
Jen Zaspel

NOTES FROM NATURE

Julie Allen
Michael Denslow
Rob Guralnick

PARASITE TRACKER

DOCUMENTING ARTHROPOD VERTEBRATE PARASITES

Hands-on Training and Continued Sharing of Resources



TPT Workshop I
Field Museum of Natural History,
February 2020

Digital Capture Guide

Slide Scanning



Julia Colby
Milwaukee Public Museum
February 2020



Pinned Specimen & Label
Photography

Terrestrial Parasite Tracker



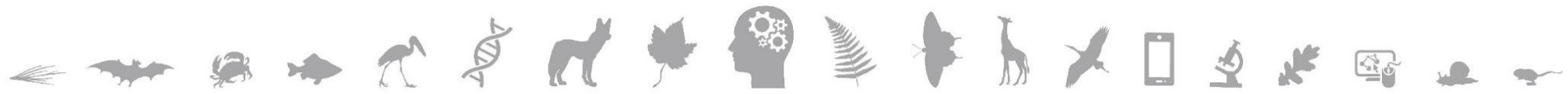
MACROSCOPIC
SOLUTIONS
Parasite Discovery

M. Smith
Macroscopic Solutions, LLC
A. Caywood
Milwaukee Public Museum
Feb 2020

Workflow Development

Making parasite-host
associations visible in TPT

Kathryn Sullivan, Katja Seilmann, Jorrit Poelen, & Jennifer Zaspel



Project Tracking and Reporting

TPT Daily Work - University of Michigan (UM)

File Edit View Insert Format Data Tools Add-ons Help

Last edit was made yesterday at 10:18 PM by Madeleine Klemz

100% \$ % .0 .00 123 Arial 14 B I U A

Running Totals		Records:	67286	Photos:	14308	Specimens:	34084							
Daily Reporting														
Employee Name	Date	Records Database d	Hours Databasing	Specimen Images Taken	Hours Imaging Specimens	Slides Scanned	Hours Scanning Slides	Ateyo Cards Scanned	Hours Scanning Cards	Sites Geo-Ref'd	Hours Geo-Ref'd	Indirect Task Hours	Hours for Day	Notes
Peregrine Ke-Lind	2/25/2020	77	5										5	
Yaeun Park	2/25/2020	128	6.6										6.6	
Alice Elliott	2/26/2020	142	5.5			142	0.5						6	
Yaeun Park	2/26/2020	157	6.6										6.6	
Madeleine Klemz	2/27/2020	161	5.67			61	1.5						7.17	
Hagan Capnerhurst	2/27/2020	137	3.75					82	1.75				5.5	110 Ateyo card scans renamed
Peregrine Ke-Lind	2/27/2020	51	2										2	
Madeleine Klemz	2/28/2020	164	6.33										6.33	
Yaeun Park	2/28/2020	84	3									3.8	6.8	3.8 hours repairing slides/renameing c
Peregrine Ke-Lind	2/28/2020	121	7.5										7.5	23 Ateyo cards entered
Madeleine Klemz	3/2/2020	207	6.67										6.67	
Alice Elliott	3/2/2020	111	5.5			111	0.5						6	
Hagan Capnerhurst	3/2/2020	44	3.5			44	0.75					0.5	4.75	repaired slides for 30 minutes
Madeleine Klemz	3/3/2020	189	6.67										6.67	111 Ateyo cards checked in Specify
Alice Elliott	3/3/2020					65	0.75					4.5	5.25	4.5 hours checking and renaming 140
Hagan Capnerhurst	3/3/2020	20	1.5			214	3.75						5.25	
Yaeun Park	3/3/2020	317	6.6										6.6	
Madeleine Klemz	3/4/2020	112	5.17			75	1.5						6.67	112 Ateyo cards checked
Alice Elliott	3/4/2020	58	1.5			57	0.5					2.5	4.5	68 Ateyo cards checked in Specify
Yaeun Park	3/4/2020	41	1.5									5.1	6.6	203 Ateyo cards checked
Alice Elliott	3/5/2020	44	3.5			44	4					2	9.5	44 Ateyo images re-named and checked
Yaeun Park	3/5/2020	78	3									3.8	6.8	297 Ateyo cards checked in Specify
Alice Elliott	3/6/2020	170	6			114	0.5					1	7.5	1 hours repairing slides
Madeleine Klemz	3/9/2020	90	5										5	
Hagan Capnerhurst	3/9/2020	125	5										5	
Madeleine Klemz	3/10/2020	102	3.5										3.5	
Yaeun Park	3/10/2020	200	6.6										6.6	
Peregrine Ke-Lind	3/11/2020		3					286					3	
Yaeun Park	3/11/2020											6.6	6.6	repaired slide labels

Daily Reporting

TPT PI Reporting ☆ 📁 ☁

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Milwaukee Public Museum (MPM)		Sep-Oct 19	Nov 19-Jan 20	Feb-Apr 20	May-Jul 20	Aug-Oct 20	Nov 20-Jan 21	Feb-Apr 21	May-Jul 21	Aug-Oct 21	Nov 21-Jan 22	Feb-Apr 22	May-Jul 22	Aug-Oct 22
1	Milwaukee Public Museum (MPM)													
2														
3	Key outcomes:													
4	Training & prof dev opportunities:	Summit kickoff-discussion of workflows, project												
5	Result dissemination:	Workflow develo Workshop Year: Prepared webinar scheduled for July about biotic association data (follow up presentation published May 2020)												
6	Partners (Type of Org, Name, Location, Contribution to TPT)	DigBio (FLMNH)-kickoff 10/1-10/3 Louise/GloBI mtg												
7	Impact to Parasitology, Entomology, Collections, Disease Ecology?	WUWM interview iDigBio IAC quarterly report compiled by Sullivan and Zaspel, report given by JZ on 2/5/20 DM Caywood and CM Colby demonstrated workflows at workshop, Zaspel and Sullivan gave up												
8	Impact to other disciplines (e.g., Medical)?	Emily Graslie bnt WRBU-provide t continued work with NMNH entomology and integrating/cleaning data												
9	Impact to Human Resources?	Collaboration with Vectorbase, WRBU, NEON, CFIA at workshop Coordination with SI-NMNH IT and Ento collections for data aggregation												
10	Institutional infrastructure resources formed?													
11	Informational infrastructure resources formed?	received macropod Coordinate EMU Symbiota instance created as IPT for MPM more trays assembled and distributed, vial scanning tray designed Self-Adhesive barcodes generated and printed for holders and individual sli												
12	Technology transfer?	iDigBio workshop 2 Taxonworks												
13	Impact to society beyond science/technology?	TW ingest of tax over 33,000 bird records were imported into EMU. Previously only 7 records were included in the EMU catalogue that spans all collections at MPM												

MPM ANS BPBM BYU CAS CU FMNH INHS OSU MSU NAU PSU PU TAMU UCSB UFL UH UM

Quarterly and Annual Reporting

Webinars, Newsletters, and Managing Correspondence



April 17, 2020

Dear TPT Network,

Welcome Dr. Vijay Barve!

Vijay Barve will be one of the new postdoctoral researchers to join the TPT Network. In the coming weeks, Vijay will be providing members of our network with taxonomy for terrestrial vertebrate hosts. The next phase of his project will be focused on developing a comprehensive list of names for the taxa we are digitizing for TPT. Vijay has a master's degree in Computer science from India where he developed an interest in Biodiversity Informatics. His doctoral research at the University of Kansas focused on harvesting biodiversity information from social networking sites. Upon completion of his PhD, he joined the Florida Museum of Natural History as a post-doctoral researcher where he continues his work on Biodiversity Informatics. His main role is to integrate heterogeneous biodiversity data sources to create data products to be consumed by researchers and projects like ButterflyNet and Map of Life and also building data handling tools. His recent research has dealt with Citizen Science in Biodiversity and he has several research publications in that area. Vijay is the recipient of the GBIF Young Researcher award and has also received two GBIF Ebbe Nielsen awards. He has trained staff and students from several countries in Africa, Asia and the Americas in Biodiversity Informatics and mentored students through Google Summer of Code projects.

Crowdsourcing and Notes from Nature

The community transcription event [WeDigBioLite](#) is happening now April 16-19! We have two expeditions up from TPT: The Lousy Expedition III and See No See Ums: Hawaii from BPBM. This is a great opportunity to get a lot of data transcribed as there are many people online helping with these kinds of projects. If you have a set of images ready please email Julie Allen (allen23@unr.edu).



In Progress:

- Diptera families
- Vertebrate host list-mammals and reptiles

BioScience Publications and Podcast

A recent press release highlights publications and a podcast in BioScience about leveraging biodiversity science infrastructure in the COVID-19 era. Congrats to several of our TPT PIs and collaborators!
https://www.eurekalert.org/pub_releases/2020-06/aioab-lb062320.php

Remote Digitization Highlights

Digital Data Presentation from University of New Hampshire on June 1, 2020

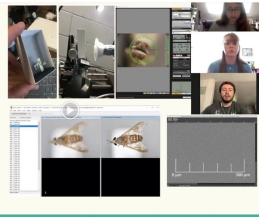
Developing the digitization practices of parasitic arthropod specimens from a university collection
Jenna O'del, University of New Hampshire; Isaac A. Bergfolk, University of New Hampshire; Holly A. Hoag, University of New Hampshire; István Mikó, University of New Hampshire

Pinned Specimens

Workflow

1. Position Specimen
2. Add to 3-axis stand
3. Adjust specimen with Live View
4. Set distance, starting and ending positions
5. Start the Stackshot shoot
6. Image stacking with Zeneo Stacker

Scale bars are added by Taxworks



Watch the undergraduates in István Mikó's lab outline their TPT digitization workflows!

[Presentation](#)
[Abstract](#)

[UWSP article](#)

Sarah Orlofske was featured in this recent article for integrating digital specimens into her undergraduate lab course at the University of Wisconsin-Stevens Point.
<https://wauasajournalandreview.com/2020/05/20/uwsp-students-use-virtual-museums-to-study-biology/>

Please continue to send us updates you would like to share in the future. We will continue sending out monthly newsletters throughout the summer.

Hope you are all safe and healthy!

Remote Digitization Highlight

FridayNightLice!!! Data transcription of louse specimens is in full swing at the Frost Entomological Museum (PennState). So far they have transcribed data from >500 slides, scanned >15k slides, and imaged over >600 vials. Check out this awesome Walrus louse specimen, complete with label data, of course!



Walrus louse - *Antarctophthirus callorhini* (Osborn, 1899)
(Phthiraptera: Echinophthiridae)
Collecting event:
Ex. *Callorhinus ursinus* (Carnivora: Otariidae)
St. Paul Island, Alaska
9. VII.1969

Staff at the Frost also discovered a batch of vials of ticks from Africa, collected off of various exotic animals. The image on the right is of ticks from a cheetah!!!

"This TPT funding has enabled us to retrieve samples from the darkest corners of our museum and to bring them into the realm of science. We had no idea what were in these vials..." Andy Deans, Professor and Director of the Frost Entomological Museum



Stay tuned for biweekly newsletters and Please send us updates you would like to share in the future.

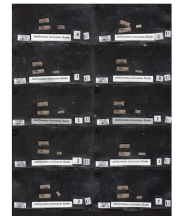
Hope you are all safe and healthy!

Jen, Kat, and Julie

using his iPad as a second monitor. With a small dip, we were able to maintain work at about 75% capacity. However, with the shutdown lasting so long, the data entry was running out. River went to campus to take home a cabinet of slides to continue prepping and imaging slides. And just this week, one student who is interested in working full time through the summer was approved on the 'essential personnel' list. He is working on campus in a room by himself prepping and imaging more alcohol specimens. As needed, I will go in periodically to organize more ethanol specimens to be processed. Without these two employees, the remote work would soon run out. Summer plans include encouraging students to continue working remotely through the summer and repopulating the workplace as slowly as possible."



Above: River Martinez processing slides at home.



We plan to switch to a monthly newsletter model beginning in June. Please send us updates you would like to share in the future.

Hope you are all safe and healthy!

Jen, Kat, and Julie



Thank You!

