DIGITIZING MARINE INVERTEBRATE COLLECTIONS
The task at hand

- Adding 835,000 lots, representing 7.5 million specimens to iDigBio and GBIF databases
- Georeferencing 175,000 existing and newly digitizes station records
- Improving nomenclatural standardization, facilitating taxonomic resolution
- Unifying the collections community with best practices and training
- Collaborating with K-16 educators to develop open and modifiable lessons
- Develop tools and resources for undergraduate student training, public engagement, and online participation via Zooniverse and other platforms
Key challenge: workflow diversity

- Marshalling existing digitized records — diversity of sources and platforms
- Expedition station data — cross-collection, cross-institutional
  Shared centralized resource for all collections
- Georeferencing — new features: complex geospatial representation, elevation & bathymetry
- Specimen data
  Data capture from specimen labels, paper/cards
  Linking existing specimen images (minimal new specimen imaging)
  Linking existing genetic/tissue data
  Nomenclatural reconciliation (based primarily on WoRMS)
  Multiple workflows needed to capture data from specimen containers
One lesson learned
Just say no to email
Gnathophyllum circellum Manning, 1963

Florida Keys, Bahamas

SCIENTIFIC NAME: Thor paschalis (Heller) 1861
IDENTIFIED BY: Dr. W. C. Van Name
LOCALITY: Lake Worth, Florida
DATE WHEN COLLECTED: February 1946
CHARACTER OF SPECIMEN: Alc
COLLECTOR: T. McGinity
REMARKS: Color of back dark brown with large orange black bordered ocellate spots. Color sketch by A. H. Verrill.
Natural History Collections + NEON Biorepository

Symbiota data portals make biodiversity data collected at different scales interoperable.
Symbiota Collections of Arthropods Network (SCAN): A Data Portal Built to Visualize, Manipulate, and Export Species Occurrences

Symbiota Collections of Arthropods Network (SCAN) serves specimen occurrence records and images in over 100 North American arthropod collections for all arthropod taxa. The focus is on North America global in scope. SCAN is built on Symbiota, a web-based collections database system that is used for other taxonomic data portals, including (Symbiota Portals). SCAN is the primary repository for occurrence data produced by the four continuing Thematic Collections Networks (TCNs), the Southwest Collections of Arthropods Network (SCAN TCN), the Lepidoptera of North America Network (LepNet TCN), Terrestrial Site Tracker (TPT), and arthropod data produced by InVertEBase TCN. InVertEBase serves occurrence data for mollusk and other non-arthropod taxa. We also host observational data, the largest data provider in the world. Each collection is primarily responsible for their data and we have structured the database to make it easy to include collections of interest when querying the database.

Important features of all Symbiota portals include:

1. Easy web-based data entry.
2. Download entire datasets in two clicks.
3. Map georeferenced records in two clicks.
4. Upload high-resolution images & create species profile pages.
5. Design custom species lists for any locality at multiple scales.
6. Develop educational games with data.
Mahalo- Let’s go DigIn!
Say yes to Slack
Just say no to email

- Google drive space (Google docs, sheets, presentations, recordings, etc.) – filing hierarchy for all documents and folders
- Working groups or recurring meetings have a single agenda document – just add agenda items to the top of the page, and add meeting notes in real-time during the meeting – one stop shopping, chronologically ordered – everyone has editing privileges
- Slack mandatory for all communication – everything we write to each other is posted and archived in one place and completely searchable
- Slack channels for topics and working groups – these are places for discussion, making announcements, organizing threads, and archiving conversations – calendars automatically linked to send reminders
- Connect your Slack to other groups (e.g., ESB TCN, BugFlow, and others)
It takes a large village to digitize