

Bee Library Portal Advancement Campaign

Office Hours - August 31, 2023



iDigBio
Integrated Digitized Biocollections



Introductions

Welcome, bee research community!

- Participants overview
 - 45 registrants!
 - US-based institutions, Belgium, and Brazil
 - Use the form to introduce yourself and your bee data
 - So far participants have reported...
 - Specimen data, observational data, phenological data
 - Data in spreadsheets, TaxonWorks, TEAMS, Ecdysis

- Add your information to the form: bit.ly/bee-library-intros

Agenda

1. Background
 - a. Symbiota
 - b. iDigBio & the Symbiota Support Hub
 - c. Bee Library
2. Portal Advancement Campaign: goals and schedule
3. Why mobilize your data?
4. Bee Data Mobilization 101
5. Resources and services available

Questions and comments welcome!
(use chat and/or raise your Zoom hand)

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The logo for Symbiota features the word "Symbiota" in a sans-serif font. The "Sym" is in black, and "biota" is in white, set against a green, rounded, leaf-like shape. The background of the slide is a light green gradient.

Symbiota

What is Symbiota?

Open source software for creating **themed data portals** that help people **share** and **actively manage** biodiversity data.

What is a Symbiota portal?



The screenshot shows the Bee Library website. At the top right is the Symbiota logo. The main header features the text "Bee Library" and the tagline "An online resource connecting images, specimen records, and natural history information about bees." Below this is a navigation bar with links for Home, Search, Images, Inventories, Global Biotic Interactions, and Big-Bee News. The main content area is titled "Extending Anthophila Research Through Image and Trait Digitization" and contains a detailed description of the repository's scope and a "Taxon Search" box. At the bottom, there are logos for the UC Santa Barbara Center for Biodiversity & Ecological Restoration, iDigBio, and ASU Biodiversity Knowledge Integration Center. A footer note mentions funding from National Science Foundation Awards.

Biodiversity
data
aggregator



Collections
Management
System

Open Source Software
github.com/BioKIC/Symbiota

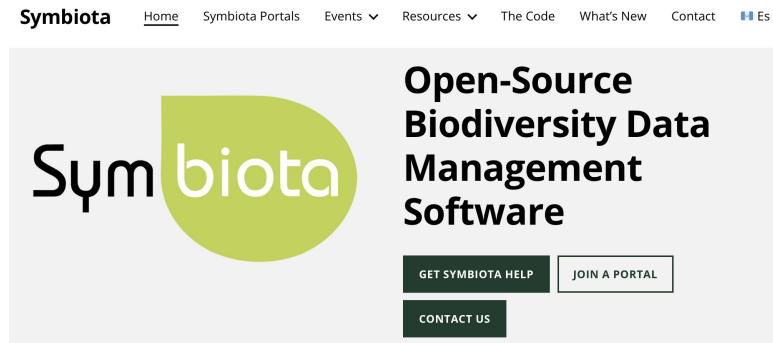
Symbiota Portal Landscape

66 portal communities served

- 54 hosted on ASU infrastructure, 53 updated to latest code base (Symbiota v3.0.10)

90.9 million records shared in SSH-hosted portals from >1,800 collections

- **1,040 live-managed collections** use Symbiota as their primary collections management system to curate 25.1 million specimen records
- **21 million edits** made by 1000+ users in the last year



symbiota.org

Symbiota Portal Landscape

Themed portals with **communities** and **common goals** (digitization/data mobilization)

- Taxonomic
- Geographic
- Institutional
- Project-based

Portal Directory:
symbiota.org/symbiota-portals



Portal Advancement Campaigns

Macroalgae.org



The Macroalgae Portal aggregates global algal collections. In 2022, this portal was migrated to ASU's servers, enabling full support for this portal by the Symbiota Support Hub.

Contact: Chris Neefus, chris.neefus@unh.edu

Google Group: groups.google.com/g/algae-collections-consortium

Global Algal Collections

949k occurrences

61 collections

MidAtlanticHerbaria.org



The MAHC portal was created for the Mid-Atlantic Megalopolis TCN to collaboratively digitize and aggregate occurrences of vascular plants collected in the urban corridor from New York City to Washington, DC.

Contact: Cindy Skema, midatlanticherbaria@gmail.com

Mid-Atlantic U.S. Herbaria

(NY, NJ, PA, DE, MD, DC)

20 collections

2.6M+ occurrences

Symbiota

Support Hub

More campaigns coming next year!



Biodiversity Knowledge Integration Center

Arizona State University



UNIVERSITY OF FLORIDA

CAL POLY



iDigBio and the Symbiota Support Hub are made possible by National Science Foundation Award # 2027654. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

SoRoHerbaria.org

Southern Rocky Mountain Herbaria



5.5M+ occurrences

33 collections

The Consortium of Southern Rocky Mountain Herbaria primarily aggregates herbarium records Colorado, Wyoming, Montana, and Idaho. **Contact:** Ryan Allen, james.r.allen@colorado.edu

MyCoPortal.org

Global Fungal Collections

MYCOLOGY COLLECTIONS PORTAL

MyCoPortal is a large Symbiota portal community that aggregates fungal collections and observations contributed from the global mycological community. **Contact:** help@mycoportal.org

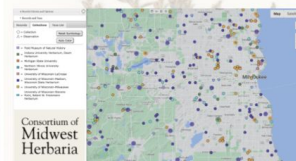


9.7M+ occurrences

153 collections

MidwestHerbaria.org

Midwestern U.S. (IL, IN, MI, MN, OH, WI)



3.2M+ occurrences

51 collections

The Consortium of Midwest Herbaria collaboratively digitizes and aggregates occurrences of vascular plants housed in collections from states that border the western Great Lakes.

Google Group: groups.google.com/g/midwest-herbaria

SERNECportal.org

Southeastern U.S. Herbaria

The Southeast Regional Network of Expertise and Collections invites participation from herbaria located in the southeastern United States.

Contacts: Herrick Brown, herrick.brown@gmail.com (SERNEC mailing list) and Michael Denslow, notesfromnature.pn@gmail.com (Notes from Nature)



5.5M+ occurrences

123 collections

TORCHherbaria.org

Texas & Oklahoma Herbaria

The TORCH Data Portal aggregates data from herbaria located in Texas and Oklahoma. Digitization activity is currently supported by the "American Crossroads" TCN (NSF 1902078 and others) led by the Botanical Research Institute of Texas. **Contact:** Diego Barroso, dbarroso@brit.org



28 collections

2.4M+ occurrences

Pteridoportal.org

Modern & Fossil Pteridophytes

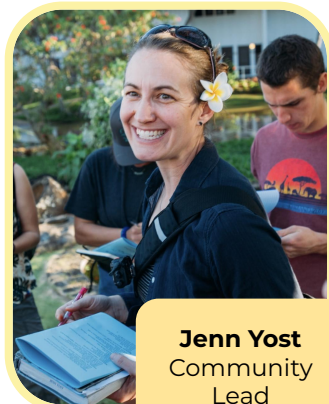


2.1M+ occurrences

50 collections

The Pteridoportal is the first Symbiota portal to commingle extant and fossil occurrence records. As the portal's taxonomic thesaurus was recently updated to include extinct and extant taxa, portal leadership is seeking taxonomic expertise to help curate this resource. **Contacts:** Carl Rothfels, carl.rothfels@asu.edu and Cindy Looy, looy@berkeley.edu

Symbiota Support Hub Team



Jenn Yost
Community
Lead

Katie Pearson
Project & Data
Manager



Greg Post
IT & System
Administrator

Samanta Orellana
Community Coordinator
for Latin America



Ed Gilbert
IT Management
Lead



Lindsay Walker
Community
Manager



Nico Franz
Management @ ASU



Logan Wilt
Developer



Mark Fisher
Developer



Bee Library

An online resource connecting images, specimen records, and natural history information about bees.

Carpinteria Salt Marsh Reserve *Games*

Authors: Katja C. Seltmann

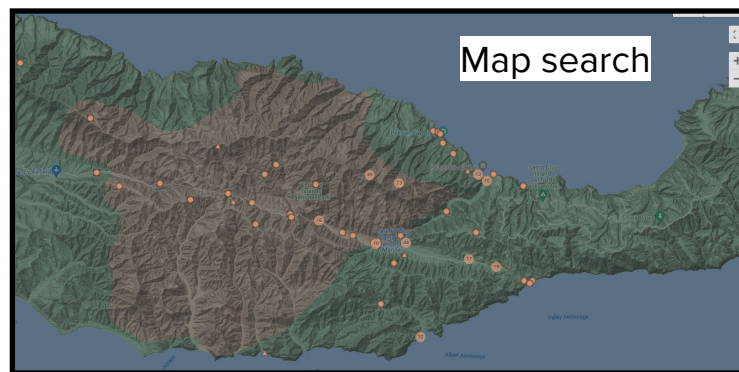
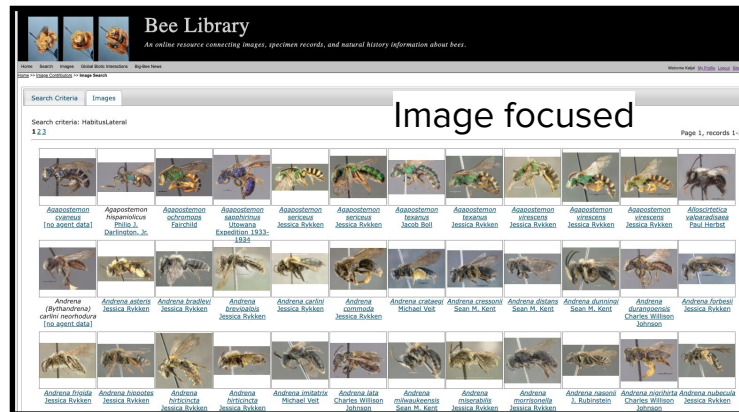
Families: 3
Genera: 11
Species: 15
Total Taxa: 15

Page 1 of 1: 1

APIDAE

- Apis mellifera* Linnaeus, 1758** ▣
UCSBes Survey 2019-04-14 [UCSB], UCSB-IZC00038771 2019-08-15 [UCSB], UCSB-IZC00044324 2020-01-09 [UCSB], UCSBes 2019-07-24 [UCSB], more...
- Bombus crotchii* Cresson, 1878** ▣
Observed July 2018 on Chloropyron maritimum ssp. maritimum
- Bombus melampyrgus* Handlirsch, 1888** ▣
source: https://www.inaturalist.org/listed_taxa/36715850
- Ceratina acantha* Provancher, 1895** ▣
UCSBes Survey 2019-03-19 [UCSB], UCSBes 2019-10-17 [UCSB], UCSBes 2019-10-17 [UCSB]
- Diadasia diminuta* (Cresson, 1878)** ▣
UCSB-IZC00042194 2019-08-15 [UCSB], UCSBes 2019-10-17 [UCSB], UCSB-IZC00042193 2019-08-15 [UCSB], UCSB-IZC00042198 2019-08-15 [UCSB]
- Diadasia ochracea* (Cockerell, 1903)** ▣
UCSB-IZC00042239 2019-08-15 [UCSB], UCSB-IZC00041586 2019-08-15 [UCSB], UCSBes 2019-08-15 [UCSB], UCSB-IZC00042196 2019-08-15 [UCSB], more...
- Diadasia rinconis* Cockerell, 1897** ▣
UCSBes 2019-07-24 [UCSB]
- Euclera actiosa* (Cresson, 1878)** ▣
UCSBes Survey 2019-04-14 [UCSB]
- Melissodes tepida* Cresson, 1878** ▣

Create checklists and research datasets



- Species pages that include trait data
- Discover Life based taxonomy (with synonyms)

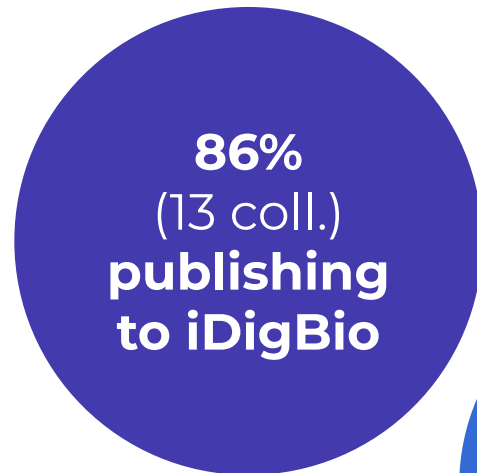


Bee Library

An online resource connecting images, specimen records, and natural history information about bees.

Portal Stats

- 22 collections
 - 2 live-managed
 - 18 snapshots
- 1,697,151 occurrences
 - 428,284 (25%) total images
 - 1,398,184 (82%) georeferenced
 - 392,175 type specimens

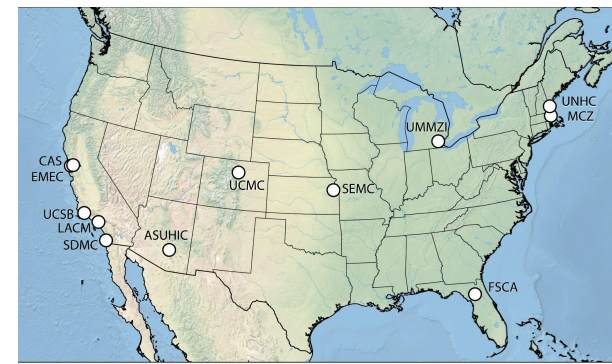


(Stats as of August 2023)

Current Contributors

Big-Bee Partner Collections

- ASU Hasbrouck Insect Collection
- Bee Biology and Systematics Laboratory, USDA-ARS Pollinating Insect-Biology, Management, Systematics Research
- California Academy of Sciences
- Essig Museum of Entomology, University of California Berkeley
- Florida State Collection of Arthropods
- Museum of Comparative Zoology, Harvard University
- Natural History Museum of Los Angeles County
- San Diego Natural History Museum Entomology Department
- University of California Santa Barbara Invertebrate Zoology Collection
- University of Colorado Museum of Natural History
- University of Kansas Natural History Museum Entomology Division
- University of Michigan Museum of Zoology Division of Insects
- University of New Hampshire, Donald S. Chandler Entomological Collection
- USGS Native Bee Inventory and Monitoring Lab



Current Contributors

- **External Bee Data Providers**
 - New Brunswick Museum
 - Smithsonian Institution, National Museum of Natural History, Entomology Collection
 - iNaturalist Research-Grade Observations <- **research grade observations**
- **Project-based and individual research collections**
 - The Bees they are a Changin project <- **postdoc research project**
 - Collaborative databasing of North American bee collections within a global informatics network project <- **dataset from prior bee digitization effort**
 - UCSB material examined <- **research project**

Suggestions welcome:
bit.ly/new-portal-contributors

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Portal Advancement Campaign: Goals

- Build capacity in portal community
 - Training and improved documentation
 - Troubleshooting to overcome current roadblocks
 - **Incorporation of data from collections/datasets not currently in the portal**

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- Improve data quality, accessibility, and mobilization
 - Ensure metadata is up to date
 - Provide data cleaning services
 - Discuss duplicate georeferencing harvesting protocols

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 - Provide data cleaning services
 - Discuss duplicate georeferencing harvesting protocols
- Discuss next steps
 - Identify and incorporate portal improvements or desired modules
 - Identify current needs and potential avenues for future support from iDigBio and/or SSH

What we need from you:

- Bring out your data!
- Provide feedback
- Ask questions
- Let us know how we can help

Portal Advancement Campaign: Schedule

- **Aug. 31:** Campaign Orientation
 - Intro to the campaign & Bee Library
 - Collections vs. Observational data
 - Management types in Symbiota
- **Sept. 7:** Bee Data Mobilization Part I
 - *Bring your data and questions!*
- **Sept. 16:** Bee Data Mobilization Part II
 - *Bring your data and questions!*
 - Datasets & Checklists



**Thursdays
at 1:00 PM
Pacific/AZ**

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Bee Library & The Data Publishing Ecosystem

The screenshot shows the Bee Library website. At the top right is the Symbiota logo. The main header features the text "Bee Library" and "An online resource connecting images, specimen records, and natural history information about bees." Below this is a navigation bar with links for Home, Search, Images, Invertebrates, Global Data Interactions, and Big-Bee News. The main content area is titled "Extending Anthophila Research Through Image and Trait Digitization" and contains a search box, a list of featured images of bees, and a detailed text block about the project's goals and funding. At the bottom, there are logos for the Center for Biodiversity & Ecological Restoration, iDigBio, and ASU's Biodiversity Knowledge Center.



Observations + Preserved Specimens

The screenshot shows the GBIF Occurrences page for the taxon "Apidae". The page has a green header with navigation links: Get data, How-to, Tools, Community, About, and a search bar. Below the header, the page title is "Occurrences" with a count of 193,241 with images. The left sidebar contains a list of filters: Occurrence status (Present checked), Licence, Scientific name, Basis of record (Preserved specimen checked), Location, Administrative areas (gadm.org), Coordinate uncertainty in metres, Year, Month, Dataset, Country or area, Continent, Issues and flags, and Media type. The main content area is a grid of image thumbnails, each representing a specimen record. Each thumbnail includes a small image of the bee, a label with the taxon name and date (e.g., "Apidae Latreille, 1802"), and a scale bar with a TAMZ logo and a unique identifier (e.g., "0101393").

Why mobilize (share) your data?

- **Greater access** to your data → **greater visibility** for your project

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- Allows other researchers to **compile combined datasets** and do science

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- You can **cite your dataset** as a product that you (and your collaborators) created and should **get credit for**



Evan Waite Invertebrate Collection (EWIC-EWIC)

39 citations

collectors & determiners

11

collectors & determiners

11

DOI [10.5281/zenodo.6774592](https://doi.org/10.5281/zenodo.6774592)

The personal research collection of Evan S. Waite focuses primarily on ground beetles (Coleoptera: Carabidae Latreille, 1802) of North America though specimens from other families and geographic locations are present as well. Currently housed at the Arizona State University Biocollections, this collection is part of my ongoing dissertation work. A special thank you to Courtney Curtis of CotinisCreative for designing and creating the EWIC logo.

Contacts: Evan Waite, waitesevan@gmail.com

Collection Type: Preserved Specimens

Management: Live Data managed directly within data portal

Global Unique Identifier: ff59ebc1-27ef-4137-aded-ca4b673496c7

DwC-Archive Access Point: https://ecdysis.org/content/dwca/EWIC-EWIC_DwC-A.zip

Live Data Download: [DwC-Archive File](#)

Digital Metadata: [EML File](#)

Usage Rights: [CC0 1.0 \(Public-domain\)](#)

GBIF Dataset page: <http://www.gbif.org/dataset/8b0665a6-e35f-4d57-a493-481111d15f14>

Cite this collection:

Evan Waite Invertebrate Collection. Occurrence dataset (ID: ff59ebc1-27ef-4137-aded-ca4b673496c7) https://ecdysis.org/content/dwca/EWIC-EWIC_DwC-A.zip accessed via the Ecdysis Portal, ecdysis.org, 2023-08-16).

Collection Statistics

August 7, 2023

Dataset

Open Access

Natural history specimens collected and/or identified and deposited.

Evan Waite

Natural history specimen data collected and/or identified by Evan Waite, <https://orcid.org/0000-0001-6877-3964>. Claims or attributions were made on Bionomia, <https://bionomia.net> using specimen data from the Global Biodiversity Information Facility, <https://gbif.org>.

90

views

56

downloads

[See more details...](#)

Indexed in

Can link to publications and create new versions

Why mobilize (share) your data?

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- If you subsequently share to GBIF from a portal, you can take advantage of their **citation tracking** tools and **data quality flags**

OCCURRENCE DATASET | REGISTERED APRIL 12, 2017

Arizona State University Charles W. O'Brien Collection

Published by [Arizona State University Biocollections](#)

DATASET METRICS ACTIVITY [↓ DOWNLOAD](#)

49,835 OCCURRENCES

112 CITATIONS

The Charles W. O'Brien Collection (legacy coden: CWOB) is now (August, 2018) relocated to Tempe, Arizona, and contains approximately one million weevil specimens (Coleoptera: Curculionoidea sensu Bouchard et al. 2011), with a global range and emphasis on New World (and Neotropical) regions. Lois B. O'Brien - a planthopper specialist - has made invaluable contributions to this collection. In 2017, Arizona State University entered an agreement with the O'Briens to gradually transfer and permanentl... [More](#)

Publication date: July 31, 2023

Metadata last modified: July 31, 2023

Hosted by: [Symbiota Support Hub](#)

Licence: [CC0 1.0](#)

[How to cite](#) [DOI](#) 10.15468/eeqtx0



49,835
Occurrences



99.7%
With taxon match



99.6%
With coordinates



99.7%
With year

49,649 GEOREFERENCED RECORDS



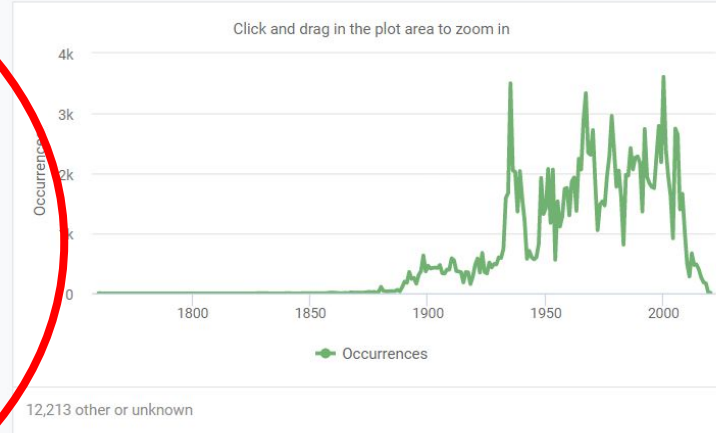


OCCURRENCES PER ISSUES AND FLAGS

Issues and flags	Count
Collection match none	173,869
Institution match fuzzy	173,869
Geodetic datum assumed WGS84	70,631
Coordinate rounded	42,669
Recorded date invalid	10,220
Coordinate reprojected	1,549
Taxon match higherrank	743
Taxon match fuzzy	314
Taxon match none	110
Country coordinate mismatch	67

NEXT

OCCURRENCES PER YEAR



Why mobilize (share) your data?

- Greater access to your data → greater visibility for your project
- Allows other researchers to compile combined datasets and do science
- You can cite your dataset as a product that you (and your collaborators) created and should get credit for
- If you subsequently share to GBIF from a portal, you can take advantage of their citation tracking tools and data quality flags
- **Other reasons? Put yours in the chat!**
 - *Question from introductions form:* Does sharing data to the Bee Library supersede opportunities to share in other places? → Nope!

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Bee Data Mobilization 101

2 ways to manage data in a Symbiota portal (like the Bee Library)

Bee Data Mobilization 101

2 ways to manage data in a Symbiota portal (like the Bee Library)

- 1. Live manage**
- 2. Snapshot upload**

Bee Data Mobilization 101

2 ways to manage data in a Symbiota portal (like the Bee Library)

1. **Live manage:** the portal is your database
2. Snapshot upload

Bee Data Mobilization 101

2 ways to manage data in a Symbiota portal (like the Bee Library)

1. **Live manage:** the portal is your database
2. **Snapshot upload:** a copy of your data is displayed in the portal

Live manage: data entry, editing, and cleaning

California Channel Islands Beetles (CCIB:CCIB)

Home >> Collection Management >> Public Display >>

< << | 1 of 575 | >> > >

Occurrence Data Determination History Images Linked Resources Traits Admin

Collector Info

Catalog Number ? UAIC1062306 Tag Name (optional) ? Additional Identifier Value

Collector / Observer ? Number ? Date ? Duplicates Auto search

Associated Collectors ? Verbatim Date ?

Latest Identification

Scientific Name ? Blapstinus coronadensis Author ? Blaisdell

Identification Qualifier ? Family ? Tenebrionidae

Identified By ? Date Identified ?

Locality

Country ? United States State/Province ? California County ? San Diego Municipality ? Location ID ?

Locality ? North Island

Security: Security not applied ? Deactivate Locality Lookup

Latitude 32.697274 Longitude -117.199201 Uncertainty ? Datum ? WGS84 Verbatim Coordinates ?

Elevation in Meters ? Verbatim Elevation ? Depth in Meters ? Verbatim Depth ?

Label Processing

Zoom? + - Rotate: L <> R Med Res. High Res.

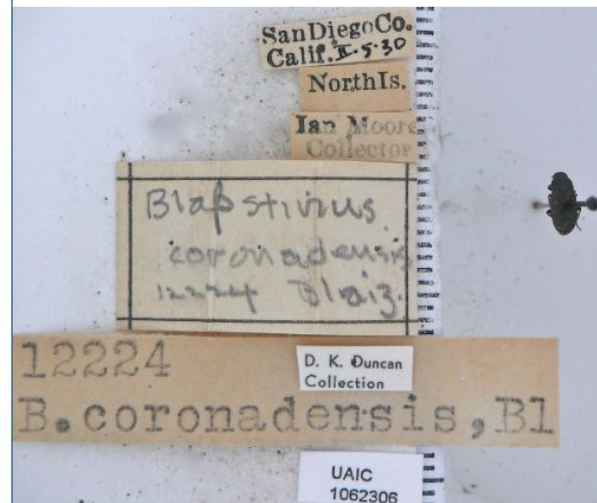





Image 1 of 1

Tesseract OCR

- OCR whole image
- OCR w/ analysis

OCR Image

Live manage: data entry, editing, and cleaning

- Resolving #10: *Dinothenarus luteipes* (Staphylinidae) [[22 specimens](#) 
 - Checking **Catalog of Life**...
 - Taxon not found
 - Checking close matches in thesaurus...
 - *Diaphorus luteipes* => [remap to this taxon](#)
 - *Dicranomyia luteipes* => [remap to this taxon](#)
 - *Dicranoptycha luteipes* => [remap to this taxon](#)
 - Manual search: **Remap**
- Resolving #11: *Eronyxa angustus* (Trogossitidae) [[29 specimens](#) 
 - Checking **Catalog of Life**...
 - Taxon not found
 - Checking close matches in thesaurus...
 - *Eronyxa angusta* => [remap to this taxon](#)
 - *Eremaeus megistos* => [remap to this taxon](#)
 - *Erirhinus moestus* => [remap to this taxon](#)
 - *Erirhinus mucidus* => [remap to this taxon](#)
 - *Eureum cimicoides* => [remap to this taxon](#)
 - *Euryngysius meschioides* => [remap to this taxon](#)
 - Manual search: **Remap**
- Resolving #12: *Eronyxa expansus* (Trogossitidae) [[2 specimens](#) 
 - Checking **Catalog of Life**...
 - Taxon not found
 - Checking close matches in thesaurus...
 - *Eronyxa expansa* => [remap to this taxon](#)
 - *Erirhinus affinis* => [remap to this taxon](#)
 - *Erronus affinis* => [remap to this taxon](#)
 - *Eurema javanica* => [remap to this taxon](#)
 - *Eurymesosa affinis* => [remap to this taxon](#)
 - Manual search: **Remap**

California Academy of Sciences (CAS-ENT)

This collection is a snapshot of an external collection database where only the Bee (Apoidea:Anthophila) records are included.

Collection Manager: Christopher Grinter, cgrinter@calacademy.org (ORCID #: [0000-0002-3769-1664](https://orcid.org/0000-0002-3769-1664))

Collection Type: Preserved Specimens

Management: Data snapshot of local collection database

Last Update: 24 July 2023

IPT / DwC-A Source: [CAS IPT import with BeeFilter](#)
[Import from Monarch-off](#)

Digital Metadata: [EML File](#)

Usage Rights: [CC0 1.0 \(Public-domain\)](#)

Collection Statistics

- 884 specimen records
- 300 (34%) georeferenced
- 3 (0.34%) with images (16 total images)
- 843 (95%) identified to species
- 6 families
- 23 genera
- 18 species
- 18 total taxa (including subsp. and var.)

Bee Data Mobilization 101

- The Bee Library mostly follows Darwin Core: <https://dwc.tdwg.org/>

Collection Manager Guide

- [Joining an Existing Portal](#)
- [Management Types](#)
- [Managing Multiple Portals](#)
- [Collection Statistics](#)
- [Comments on Records](#)
- [Crowdsourcing](#)
- [Adding Specimens to Crowdsourcing Queue](#)
- [Removing Specimens from Crowdsourcing Queue](#)
- [Reviewing and Approving Crowdsourcing](#)
- [Paleo Data](#)
- [Data Citations](#)

Data Import Fields

Note

This page lists the possible specimen fields that can be imported into a Symbiota data portal. The type of field (text, number, etc.) is listed in the **Type** field. The number of characters allowed in that field is displayed in parentheses.

If the data portal is being used to displaying a “snapshot” of your data stored in your local central database, the upload file **MUST** have a field that serves as the unique identifier for each incoming specimen record (dbpk). This field serves a link between the source record and the snapshot record within the portal. If import is a CSV file, the first row must contain field names. Note that field names do not have to match the name used below, but there cannot be any characters (\$#@&%) in the column names.

For more information about data fields, also see our [Symbiota Data Fields](#) page.

Italic = Darwin Core fields

Bold = strongly encouraged fields, though none of the fields are technically required

* = for import only, merged into another field after import

Name	Type	Notes

Bee Data Mobilization 101

Your first step:

- Do I want to manage my data in a Symbiota portal, or just upload a copy?

Manage live in Ecdysis → send snapshot to Bee Library

Quick Search by Taxon

[Search](#)

About ecdysis

Welcome to **ecdysis** - a portal for live-managing arthropod occurrence data. **ecdysis** is designed to serve the entomological community as a robust and efficient environment for collections digitization and data-driven research projects. The **ecdysis** community is open to and welcomes all collections and individuals who wish to publish, manage, and analyze arthropod occurrence data - especially in the form of digitized specimens.

Visit our [Contact page](#) for more information about the portal, its steering committee, and more help and resources.

Bee Data Mobilization 101

To import data into Bee Library (or another Symbiota portal), you just need to know:

- **What data do I have?**

Bee Data Mobilization 101

To import data into Bee Library (or another Symbiota portal), you just need to know:

- What data do I have?
- **What data do I want to have displayed in the portal?**

Bee Data Mobilization 101

To import data into Bee Library (or another Symbiota portal), you just need to know:

- What data do I have?
- What data do I want to have displayed in the portal?
- **Are there are localities I would like to redact?**

Bee Data Mobilization 101

To import data into Bee Library (or another Symbiota portal), you just need to know:

- What data do I have?
- What data do I want to have displayed in the portal?
- Are there are localities I would like to redact?
- **Are there images I would like to associate with my records?**

Bee Data Mobilization 101

To import data into Bee Library (or another Symbiota portal), you just need to know:

- What data do I have?
- What data do I want to have displayed in the portal?
- Are there are localities I would like to redact?
- Are there images I would like to associate with my records?
- **What is the primary unique identifier for my records?**

Bee Data Mobilization 101

To import data into Bee Library (or another Symbiota portal), you just need to know:

- What data do I have?
- What data do I want to have displayed in the portal?
- Are there are localities I would like to redact?
- Are there images I would like to associate with my records?
- What is the primary unique identifier for my records?

The **Symbiota Support Hub will then help you** get what you have into the portal.

Bee Data Mobilization 101

If your data are in a single spreadsheet, we can help create:

- Saved mapping profile (which column goes in what field?)
- Associated stored procedure (to convert your data into a different format for import, etc.)

Bee Data Mobilization 101

If your data are in a single spreadsheet, we can help create:

- Saved mapping profile (which column goes in what field?)
- Associated stored procedure (to convert your data into a different format for import, etc.)

From then on, as long as you use the **same format** as the initial spreadsheet and uses the **same unique identifiers**, you can update your data whenever you want.

Agenda

1. Background
 - a. Symbiota
 - b. iDigBio & the Symbiota Support Hub
 - c. Bee Library
2. Portal Advancement Campaign: goals and schedule
3. Why mobilize your data?
4. Bee Data Mobilization 101
- 5. Resources and services available**

symbiota.org/docs

Symbiota Documentation

Growing archive of help files for one of the most popular Natural History content management systems

Quick search for terms here. Press enter to go to results page.



Browse articles by subject



User Guide

Learn to access, view, and download data and checklists.



Editor Guide

Learn to edit, manage, import, and export data in Symbiota portals



Collection Manager Guide

Learn to clean data, edit permissions, upload data, and perform other administrator functions.

YouTube Channel

bit.ly/
symbiota-recordings

The screenshot shows the YouTube channel page for Symbiota. At the top left is the Symbiota logo and name, with 46 subscribers. Navigation tabs include HOME, VIDEOS, PLAYLISTS, CHANNELS, and ABOUT. Two buttons, 'CUSTOMIZE CHANNEL' and 'MANAGE VIDEOS', are on the right. The 'Uploads' section is active, showing a list of five videos:

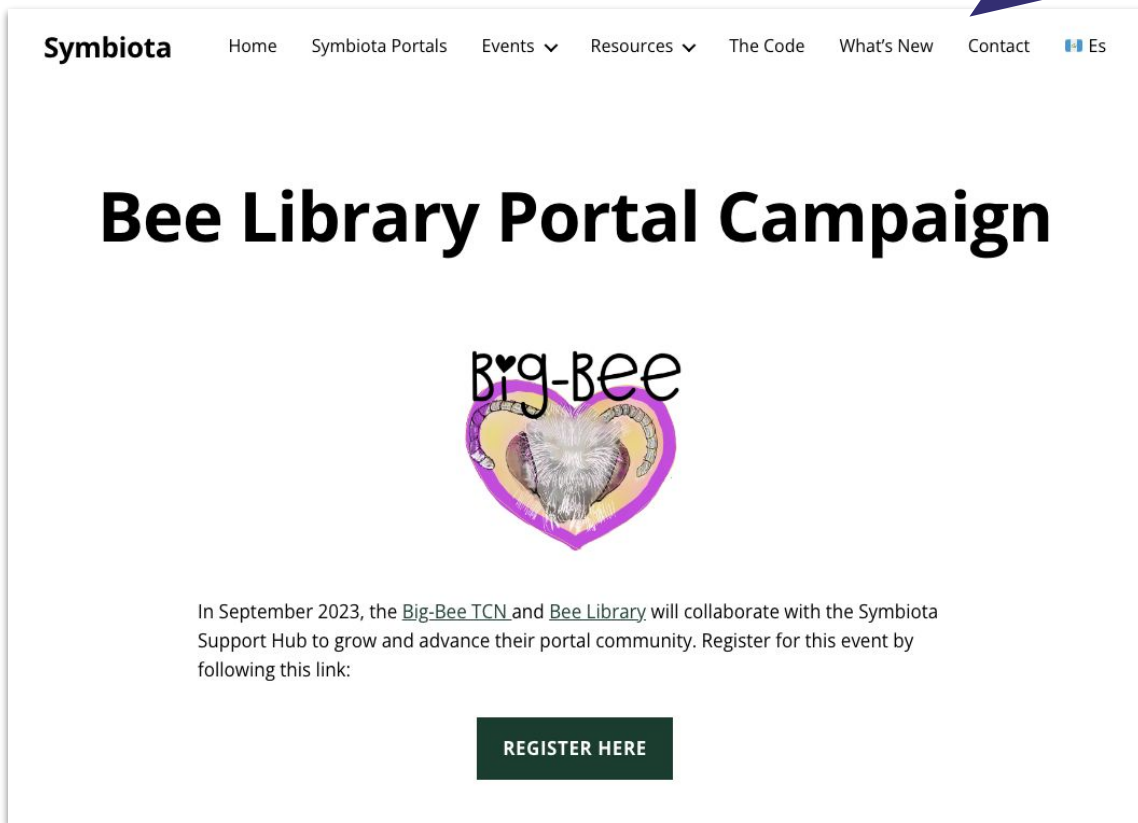
- CCH2 Lunch Break: Linked Resources Tab** (22:37, 1 view • 1 day ago)
- Importing/ Copying Records into a Symbiota Collection** (2:58, 14 views • 3 weeks ago)
- Taxonomic Cleaning Tool in a Symbiota Portal** (6:52, 13 views • 3 weeks ago)
- Data Editor and Administration Control Panels in Symbiota** (6:42, 17 views • 3 weeks ago)
- Uploading Text Files to a Symbiota Portal** (16:23, 6 views • 4 weeks ago)

Any materials
you'd like to
add?


Let us know!

Campaign Docs


[symbiota.org/
portal-advancement-campaigns/
bee-library-portal-campaign](https://symbiota.org/portal-advancement-campaigns/bee-library-portal-campaign)



The screenshot shows the Symbiota website's main navigation bar with links for Home, Symbiota Portals, Events, Resources, The Code, What's New, Contact, and a flag icon for Es. The main heading is "Bee Library Portal Campaign". Below it is a logo for "Big-Bee" featuring a bee inside a heart shape. The text below the logo reads: "In September 2023, the [Big-Bee TCN](#) and [Bee Library](#) will collaborate with the Symbiota Support Hub to grow and advance their portal community. Register for this event by following this link:" followed by a dark green button labeled "REGISTER HERE".

Symbiota Home Symbiota Portals Events ▾ Resources ▾ The Code What's New Contact  Es

Bee Library Portal Campaign



In September 2023, the [Big-Bee TCN](#) and [Bee Library](#) will collaborate with the Symbiota Support Hub to grow and advance their portal community. Register for this event by following this link:

REGISTER HERE

Symbiota Discussions

github.com/BioKIC/
symbiota-docs/discussions

BioKIC / symbiota-docs Public

Unwatch 6 Star 0 Fork 0

<> Code Issues 12 Pull requests Discussions Actions Projects 2 Wiki Security Insights Settings

General
Welcome to symbiota-docs Discussions!
arbolitoloco

Announcements
We are the Symbiota Support Hub
themerekat

Search all discussions

New Top: All Answered Unanswered Label

New discussion

Categories

- View all
- Announcements
- Funding
- General
- Q&A

↑ 0 Add catalog number to label printing tools
themerekat started 5 days ago in Wish List

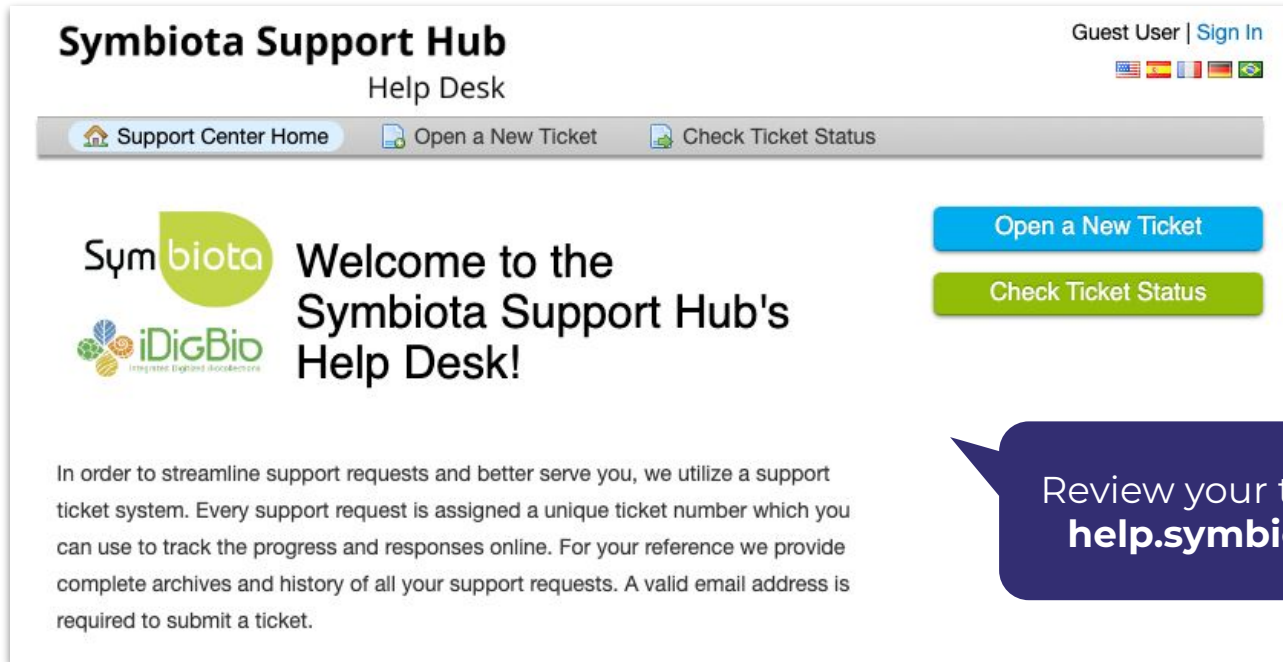
↑ 1 We are the Symbiota Support Hub
themerekat announced 5 days ago in Announcements

↑ 1 Welcome to symbiota-docs Discussions!
arbolitoloco started on Mar 15 in General

Discussions tutorial:
symbiota.org/symbiota-discussions

Help Desk Support

- Contact the Symbiota Support Hub at help@symbiota.org



The screenshot shows the Symbiota Support Hub Help Desk interface. At the top left, it says "Symbiota Support Hub" and "Help Desk". On the top right, it says "Guest User | Sign In" with flags for USA, Spain, France, Germany, and Brazil. Below this is a navigation bar with three buttons: "Support Center Home", "Open a New Ticket", and "Check Ticket Status". The main content area features the Symbiota logo (a green leaf shape) and the iDigBio logo (a colorful circular logo with the text "iDigBio Integrated Digital Biodiversity"). To the right of the logos is the text "Welcome to the Symbiota Support Hub's Help Desk!". Below this text is a paragraph: "In order to streamline support requests and better serve you, we utilize a support ticket system. Every support request is assigned a unique ticket number which you can use to track the progress and responses online. For your reference we provide complete archives and history of all your support requests. A valid email address is required to submit a ticket." To the right of the text are two buttons: "Open a New Ticket" (blue) and "Check Ticket Status" (green). A dark blue speech bubble on the right side of the page contains the text "Review your tickets at help.symbiota.org".

Symbiota Support Hub
Help Desk

Guest User | [Sign In](#)

[Support Center Home](#) [Open a New Ticket](#) [Check Ticket Status](#)

Symbiota
iDigBio
Integrated Digital Biodiversity

Welcome to the
Symbiota Support Hub's
Help Desk!

Open a New Ticket

Check Ticket Status

In order to streamline support requests and better serve you, we utilize a support ticket system. Every support request is assigned a unique ticket number which you can use to track the progress and responses online. For your reference we provide complete archives and history of all your support requests. A valid email address is required to submit a ticket.

Review your tickets at help.symbiota.org

Help Desk Support

- Contact the Symbiota Support Hub at help@symbiota.org
- The Symbiota Support Hub can help with backend tasks.

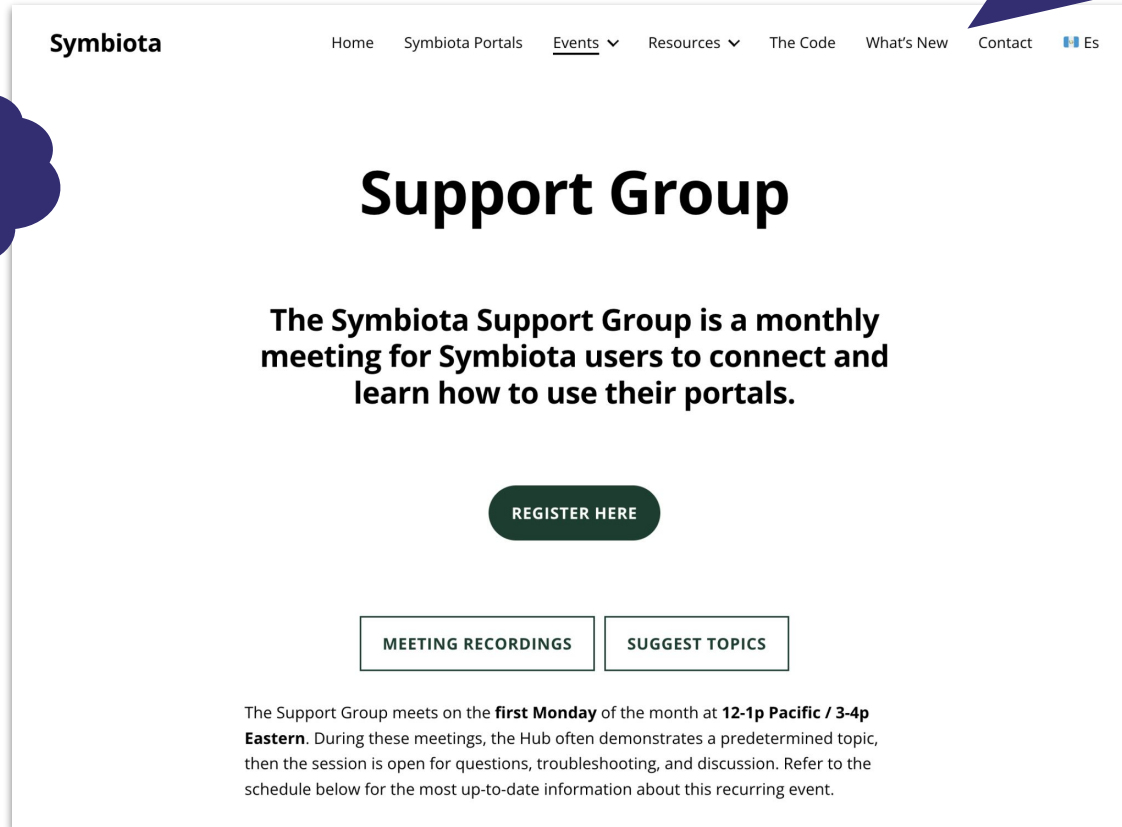


Quick links to all resources are on our website:
symbiota.org/help-resources

Monthly Support Meetings

[symbiota.org/
symbiota-support-group](https://symbiota.org/symbiota-support-group)

1st
Mondays



The screenshot shows the Symbiota website's 'Support Group' page. The navigation bar includes 'Home', 'Symbiota Portals', 'Events', 'Resources', 'The Code', 'What's New', 'Contact', and 'Es'. The main heading is 'Support Group'. Below it, a paragraph describes the group as a monthly meeting for users to connect and learn. A prominent 'REGISTER HERE' button is centered. Below that are two buttons: 'MEETING RECORDINGS' and 'SUGGEST TOPICS'. At the bottom, a paragraph provides meeting details: 'The Support Group meets on the first Monday of the month at 12-1p Pacific / 3-4p Eastern. During these meetings, the Hub often demonstrates a predetermined topic, then the session is open for questions, troubleshooting, and discussion. Refer to the schedule below for the most up-to-date information about this recurring event.'

Symbiota

Home Symbiota Portals Events Resources The Code What's New Contact Es

Support Group

The Symbiota Support Group is a monthly meeting for Symbiota users to connect and learn how to use their portals.

[REGISTER HERE](#)

[MEETING RECORDINGS](#) [SUGGEST TOPICS](#)

The Support Group meets on the **first Monday** of the month at **12-1p Pacific / 3-4p Eastern**. During these meetings, the Hub often demonstrates a predetermined topic, then the session is open for questions, troubleshooting, and discussion. Refer to the schedule below for the most up-to-date information about this recurring event.

Upcoming



Add
hub@symbiota.org
to your contacts



Dear Bee Library Portal Campaign registrants,

Thank you for registering for the [Bee Library Portal Campaign](#). The [Symbiota Support Hub \(SSH\)](#) and leadership of the Bee Library, a [Symbiota data portal](#), look forward to working with you in the coming weeks. During this event, we'll introduce you to the Symbiota software project, related SSH services, your data mobilization and publication options using Symbiota, and the greater data ecosystem to which the Bee Library belongs.

For planning purposes, we would like to gather some information about your bee data in advance of this event. **Please fill out some introductory details about yourself, your bee collections, and your associated data using our [Participant Introductions form](#):**

[Participant Introductions Form](#)

If you're ready to **share a dataset or example of your data**, please do so [here](#) (*messy*)

Next meeting: Thurs, Sept. 7 @ 1:00 PM Pacific/AZ

Homework:

- **Assess whether your data are appropriate for the Bee Library** (not sure? Email help@symbiota.org & seltmann@ucsb.edu)
 - ✓ Physical specimen collections with identifiers
 - ✓ Observational data
- **Upload your dataset** to Google Drive, or email us:
 - bit.ly/bee-library-datasets
 - Add an introduction (and file name) to the participants form to accompany your data: bit.ly/bee-library-intros



Bee Library Portal Advancement Campaign

Office Hours - September 14, 2023



iDigBio
Integrated Digitized Biocollections



Agenda

1. New data contributors
2. Data publishing
3. Creating Datasets (lists of *occurrences*)
4. Creating Checklists (lists of *taxa*)

Agenda

1. **New data contributors**
2. Data publishing
3. Creating Datasets (lists of *occurrences*)
4. Creating Checklists (lists of *taxa*)

New Collections

- Connecticut Agricultural Experiment Station
- Hannah Kernen Collection
- Maine State Museum
 - Brianne Du Clos Collection
- Natural History Museum of Utah
- New Zealand Arthropod Collection
- Rutgers University
- UC Sagehen Creek Field Station
- Southeast Missouri State
- Texas Tech University
- University of Arizona
 - UA Insect Collection
 - RL Minckley Insect Collection
- Virginia Tech
- William Murphy Collection
- + *others in progress*

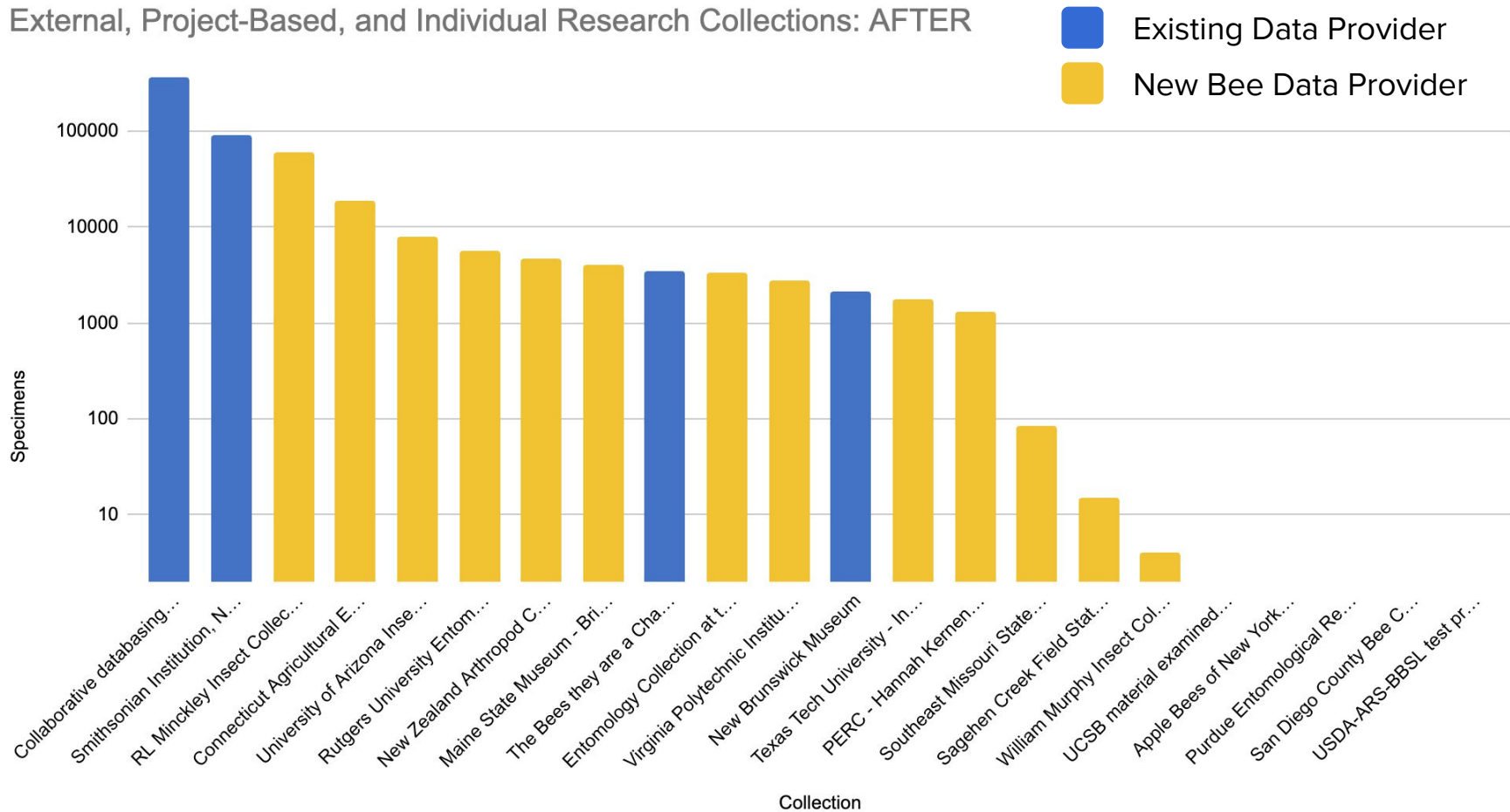


**NATURAL HISTORY
MUSEUM OF UTAH**

Rio Tinto Center | University of Utah



External, Project-Based, and Individual Research Collections: AFTER



Agenda

1. New data contributors
- 2. Data publishing**
3. Creating Datasets (lists of *occurrences*)
4. Creating Checklists (lists of *taxa*)

Bee Library & The Data Publishing Ecosystem

The screenshot shows the Bee Library website. At the top right is the Symbiota logo. The main header features the text "Bee Library" and "An online resource connecting images, specimen records, and natural history information about bees." Below this is a navigation bar with links for Home, Search, Images, Invertebrates, Global Data Interactions, and Big-See News. The main content area is titled "Extending Anthophila Research Through Image and Trait Digitization" and contains a search box, a list of featured images of bees, and a detailed text block describing the project's goals and funding. At the bottom, there are logos for the Center for Biodiversity & Ecological Restoration, iDigBio, and ASU's Biodiversity Knowledge Center.



Observations + Preserved Specimens

The screenshot shows the GBIF Occurrences page for the taxon "Apidae". The page has a green header with navigation links: Get data, How-to, Tools, Community, About, and a search bar. Below the header, the page title is "Occurrences" with a count of 193,241 with images. There are tabs for TABLE, GALLERY, MAP, TAXONOMY, METRICS, and DOWNLOAD. A left sidebar contains a list of filters: Occurrence status (Present checked), Licence, Scientific name, Basis of record (Preserved specimen checked), Location, Administrative areas (gadm.org), Coordinate uncertainty in metres, Year, Month, Dataset, Country or area, Continent, Issues and flags, and Media type. The main content area displays a grid of specimen images, each with a small information box showing the taxon name and a specimen ID (e.g., "Apidae Latreille, 1802").

What is GBIF?

“an **international network** of country and organizational Participants that exists to enable **free and open access to biodiversity data** from all sources and to support biodiversity science, environmental research, and evidence based decision-making.”



How do I publish to
GBIF?

GBIF Structure

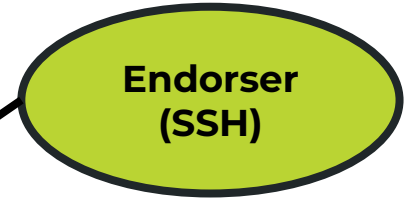


**Publisher
(institution)**

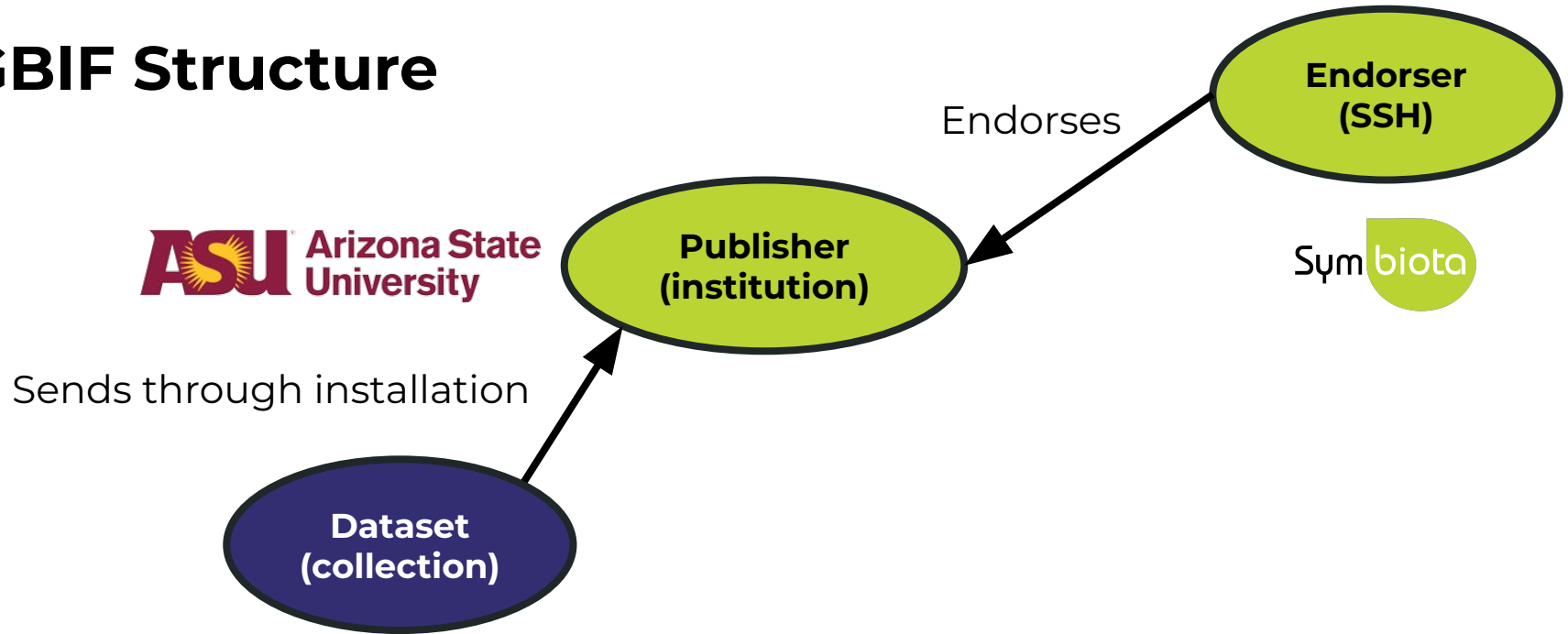
GBIF Structure



Endorses



GBIF Structure



ASU Arizona State University

Sends through installation

**Dataset
(collection)**

**Publisher
(institution)**

Endorses

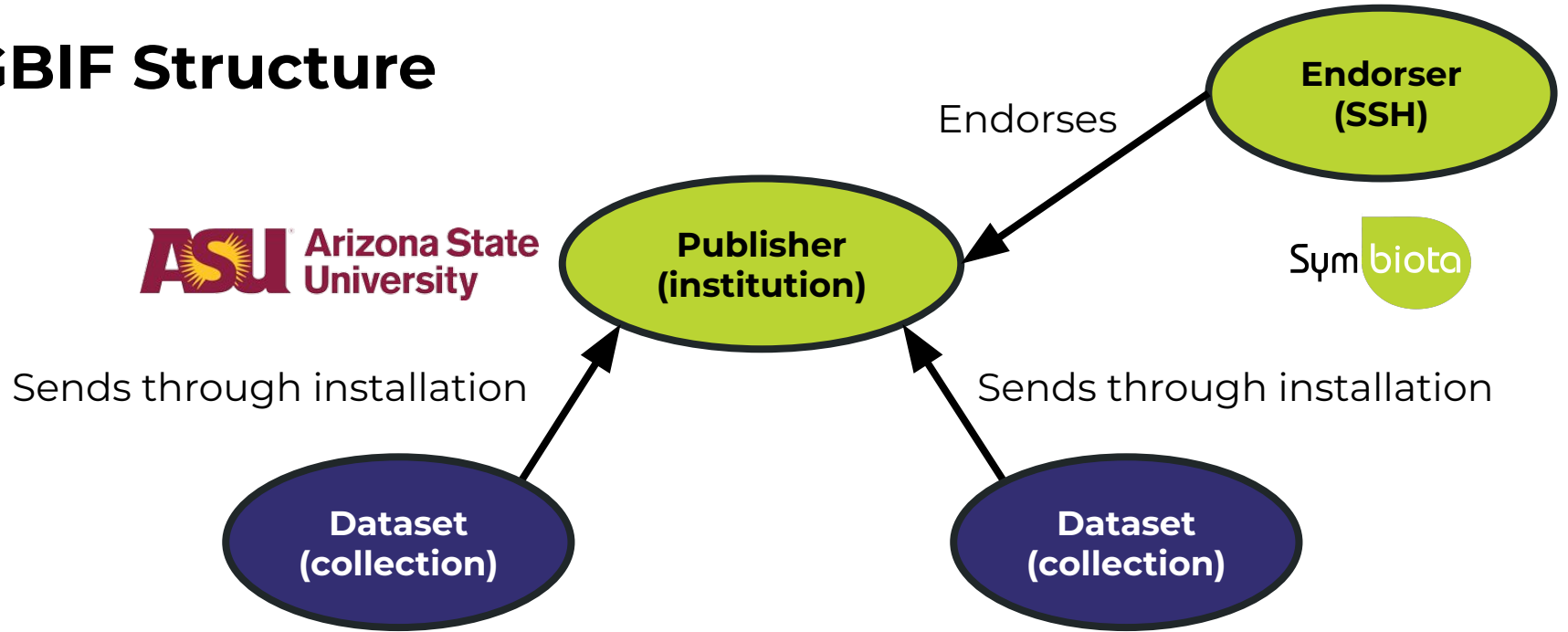
**Endorser
(SSH)**

Symbiota

Arizona State University Mammalogy Collection

Consortium of
Small
Vertebrate
Collections

GBIF Structure



Arizona State University Mammalogy Collection

Arizona State University Vascular Plant Herbarium

Consortium of
Small
Vertebrate
Collections



Arizona State University Biocollections

[ABOUT](#) [METRICS](#) [HOME PAGE](#)

673,214 OCCURRENCES

18 DATASETS

691 CITATIONS

Description: The Arizona State University Biocollections comprise two sets of distinct collections: (1) the Arizona State University Natural History Collections - currently with nine collections focused on documenting Greater Sonoran and New World biodiversity; and (2) the NEON Biorepository at Arizona State University, with a unique constellation of organismal and environmental samples generated in the context of monitoring and forecasting long-term ecological change in the North American subcontinent, including Alaska, Hawaii, and Puerto Rico.

Endorsed by: [Symbiota Support Hub](#)

Administrative contact: [Nico Franz](#)

Technical contact: [Laura Rocha Prado](#)

Country or area: [United States of America](#)



ALL OCCURRENCE CHECKLIST SAMPLING EVENT METADATA

DOWNLOAD AS TSV

Arizona State University Vascular Plant Herbarium

Occurrence dataset

The Arizona State University Vascular Plant Herbarium (ASU) is among the most important in the greater Sonoran Desert region with over 315,000 specimens. We are particularly proud of our holdings of C...

Published by Arizona State University Biocollections

283,279 occurrences 407 citations



Arizona State University Hasbrouck Insect Collection

Occurrence dataset

The ASU Frank F. Hasbrouck Insect Collection contains approximately 1,000,000 insect specimens, representing at least 25 orders, 390 families, 4,000 genera, 12,000 species and 1,240 subspecies. Most s...

Published by Arizona State University Biocollections

167,107 occurrences 155 citations



Arizona State University Lichen Herbarium

Occurrence dataset

No description available

Published by Arizona State University Biocollections

123,620 occurrences 105 citations



Arizona State University Herpetology Collection

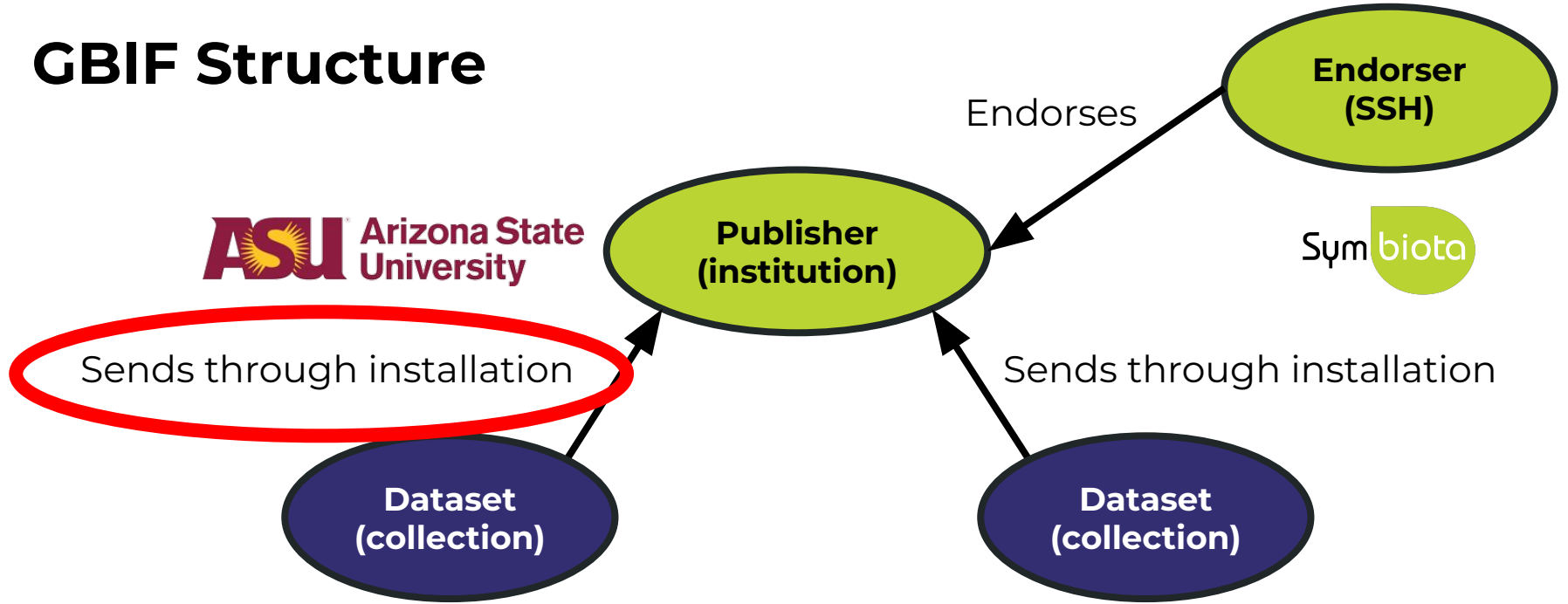
Occurrence dataset

The Herpetology Collection at the ASU Natural History Collections contains approximately 38,000 specimens representing more than 900 species, with a geographic concentration in the western United Stat...

Published by Arizona State University Biocollections



GBIF Structure



Sends through installation

Arizona State University Mammalogy Collection

Consortium of
Small
Vertebrate
Collections

Arizona State University Vascular Plant Herbarium



How to publish to GBIF

- You can send your data to GBIF using a Symbiota portal **OR** an Integrated Publishing Toolkit (IPT)
- You can use someone else's IPT (e.g., VertNet, iDigBio), or install and manage your own IPT

How to publish to GBIF

- Fortunately, **if your data are in a Symbiota portal, you don't need an IPT.**
- Publishing is as easy as clicking a button, once you are registered with GBIF!

Publishing to GBIF from a Symbiota portal

1. Make sure your **metadata are accurate**

[Home](#) >> [Collection Search Page](#) >> [Collection Profile](#)

Arizona State University Vascular Plant Herbarium (ASU-Plants)

← 548 citations

The Arizona State University Vascular Plant Herbarium (ASU) is among the most important in the greater Sonoran Desert region with over 315,000 specimens. We are particularly proud of our holdings of Cactaceae which include over 1,100 chromosome counts.

An herbarium is a collection of pressed, dried, and archived plants that are systematically arranged - each specimen a physical record of a plant growing at a particular place and at a particular time. Like most herbaria, we seek to document the geographical and ecological distribution of the regional flora, facilitate research, support teaching, and promote conservation. Vouchers from floristic studies have resulted in comprehensive collections of many important geographic regions in Arizona.

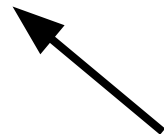
ASU Type Specimens: <http://swbiodiversity.org/seinet/checklists/checklist.php?cl=2638>

Administration Control Panel

- View Posted Comments
- Edit Metadata
- Manage Permissions

Publishing to GBIF from a Symbiota portal

1. Make sure your metadata are accurate
2. *(If not already done)* **Request to become a publisher** in GBIF:
<https://www.gbif.org/become-a-publisher>



This page allows you to search for your institution to see if it's already registered.

Publishing to GBIF from a Symbiota portal

1. Make sure your metadata are accurate
2. (If not already done) **Request to become a publisher** in GBIF:
<https://www.gbif.org/become-a-publisher>

Endorsing node

To support publishers and review data quality all publishers are associated with a GBIF node. Please check the suggestion below, and correct it if needed:

Help me with endorsement

Marine data publishers: request endorsement for OBIS (Ocean Biogeographic Information System) related data

If endorsement through the country node suggested above is not the right option, please check this list of associated participants for multinational or thematic networks:

- Symbiota Support Hub
- Amazon Cooperation Treaty Organization

SSH can (and wants to) endorse you!



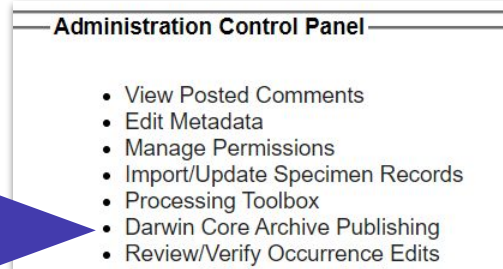
Publishing to GBIF from a Symbiota portal

1. Make sure your metadata are accurate
2. *(If not already done)* Request to become a publisher in GBIF:
<https://www.gbif.org/become-a-publisher>
3. Once approved, enter your **dataset key** in “Darwin Core Archive Publishing” in your portal
4. **Email GBIF** (helpdesk@gbif.org) to notify them that the portal has your permission to push your dataset to GBIF (an example email is provided!)
5. Once approved, **publish** the data!

**We can help with Steps 3-5
(Email us after Step 2)**

Important notes

- **GBIF doesn't automatically harvest your data**
- Push the button to refresh:
“Create/Refresh Darwin Core Archive”
 - Portal managers will do this regularly
 - Data that are redacted in your Symbiota portal will also be redacted in GBIF



Administration Control Panel

- View Posted Comments
- Edit Metadata
- Manage Permissions
- Import/Update Specimen Records
- Processing Toolbox
- Darwin Core Archive Publishing
- Review/Verify Occurrence Edits

A blue arrow points to the 'Darwin Core Archive Publishing' item in the list.

Darwin Core Archive Publishing

OBI - Robert F. Hoover Herbarium, Cal Poly State University

Use the controls below to publish occurrence data from this collection as a Darwin Core document that describes the content. The occurrence data file is required, but idc is an optional exchange standard. We recommend that you also review instructions for Publishing Darwin Core Archives.

RSS Feed: <https://cch2.org/portal/webservices/dwc/rss.xml>

Title: OBI DwC-Archive ✖

Description: Darwin Core Archive for OBI - Robert F. Hoover Herbarium, Cal Poly State University

EML: <https://cch2.org/portal/collections/datasets/emlhandler.php?collid=12>

DwC-Archive File: https://cch2.org/portal/content/dwca/OBI_DwC-A.zip

Pub Date: Tue, 01 Feb 2022 09:53:45

Publishing Information

GUID source: symbiotaUUID

GBIF Dataset page: <http://www.gbif.org/dataset/f56df26e-73f5-4d37-bfed-411111111111>

Publish/Refresh DwC-A Data

- Include Determination History
- Include Image URLs
- Redact Sensitive Localities

Create/Refresh Darwin Core Archive

OBI - Robert F. Hoover Herbarium, Cal Poly State University (OBI)

🔍 393 citations

The Hoover Herbarium houses 85,000+ specimens of vascular plants, algae, lichens, and bryophytes. The geographic focus is San Luis Obispo areas of California, other states of the US, particularly Arizona, and some from other regions of the world, especially Mexico. Emphasis areas in collections include Robert F. Hoover (1946–1969), David J. Keil (1966–present), Rhonda Riggins (1970s–2000), Tracy Call (mostly Apiaceae—extensively in undergraduate teaching and training).

Important Collections: Robert F. Hoover (1946–1969), David J. Keil (1966–present), Rhonda Riggins (1970s–2000), Tracy Call (mostly Apiaceae)

Director and Associate Professor: Jenn Yost, jyost@calpoly.edu

Curator: Katie Pearson, kdpearso@calpoly.edu

Homepage: <http://bio.calpoly.edu>

Collection Type: Preserved Specimens

Management: Live Data managed directly within data portal

Global Unique Identifier: 3818d95b-b6a4-11e8-b408-001a64db2964

DwC-Archive Access Point: https://cch2.org/portal/content/dwca/OBI_DwC-A.zip

Live Data Download: [DwC-Archive File](#)

Digital Metadata: [EML File](#)

Usage Rights: [CC BY-NC \(Attribution-Non-Commercial\)](#)

GBIF Dataset page: <http://www.gbif.org/dataset/f56df26e-73f5-4d37-bfed-3d46c0834e82>

Address: Robert F. Hoover Herbarium 📍
Biological Sciences Department, California Polytechnic State University
San Luis Obispo, CA 93407-0401
USA
(805) 756-5869

Collection Statistics

- 93,149 specimen records
- 64,830 (70%) georeferenced
- 81,168 (87%) with images (81,417 total images)
- 89,512 (96%) identified to species
- 400 families
- 2,673 genera
- 11,464 species
- 14,186 total taxa (including subsp. and var.)



Important notes

- **Snapshots can be published from the Bee Library**
 - Make sure your institution does not have a preference for using an IPT
 - Do not publish from the Bee Library if you live manage in *Ecdysis*



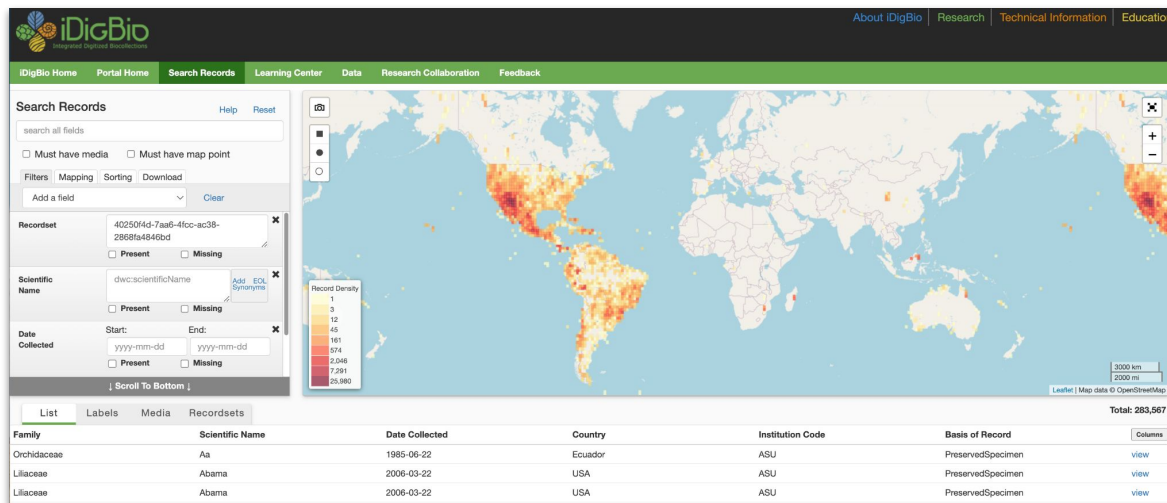
The screenshot shows the homepage of the ecdysis portal. At the top, there is a dark blue header with the ecdysis logo (an orange leaf-like icon) and the text "ecdysis" in orange. Below the logo, it says "A portal for live-data arthropod collections". On the right side of the header, there is a "Welcome Lindsay!" message, a "My Profile" button, and a "Logout" button. Below the header is a dark blue navigation bar with links for "Home", "Search", "Map Search", "Checklists", "Images", "Contacts", and "Sitemap". There is also a language dropdown menu set to "English".

In the center of the page, there is a "Quick Search by Taxon" box with a search input field and a "Search" button. Below this is a section titled "About ecdysis" with a paragraph of text: "Welcome to ecdysis - a portal for live-managing arthropod occurrence data. ecdysis is designed to serve the entomological community as a robust and efficient environment for collections digitization and data-driven research projects. The ecdysis community is open to and welcomes all collections and individuals who wish to publish, manage, and analyze arthropod occurrence data - especially in the form of digitized specimens." Below this paragraph is a link to the "Contact page".

At the bottom of the page, there is a section titled "Distribution of collections within ecdysis" with two maps. The left map is a world map showing collection distribution in orange and yellow. The right map is a map of the United States showing collection distribution in orange and yellow.

What about iDigBio?

- Once you've published to GBIF, publishing to iDigBio is **very easy**
- The SSH can facilitate publishing to iDigBio for everyone who publishes to GBIF. **Please let us know if you would like to opt out of publishing to iDigBio.**



The screenshot displays the iDigBio website interface. At the top, there is a navigation bar with links for "About iDigBio", "Research", "Technical Information", and "Education". Below this is a secondary navigation bar with "iDigBio Home", "Portal Home", "Search Records", "Learning Center", "Data", "Research Collaboration", and "Feedback".

The main content area is divided into two sections. On the left is the "Search Records" panel, which includes a search input field, checkboxes for "Must have media" and "Must have map point", and options for "Filters", "Mapping", "Sorting", and "Download". Below this are sections for "Recordset" (with a unique ID and checkboxes for "Present" and "Missing"), "Scientific Name" (with a field for "dwc:scientificName" and checkboxes for "Present" and "Missing"), and "Date Collected" (with "Start" and "End" date pickers and checkboxes for "Present" and "Missing").

On the right is a world map showing record density, with a legend indicating density levels from 1 to 25,380. The map shows high density in North and South America.

At the bottom, there is a table with columns for "Family", "Scientific Name", "Date Collected", "Country", "Institution Code", "Basis of Record", and "Columns". The table shows three records:

Family	Scientific Name	Date Collected	Country	Institution Code	Basis of Record	Columns
Orchidaceae	Aa	1985-06-22	Ecuador	ASU	PreservedSpecimen	View
Liliaceae	Abama	2006-03-22	USA	ASU	PreservedSpecimen	View
Liliaceae	Abama	2006-03-22	USA	ASU	PreservedSpecimen	View

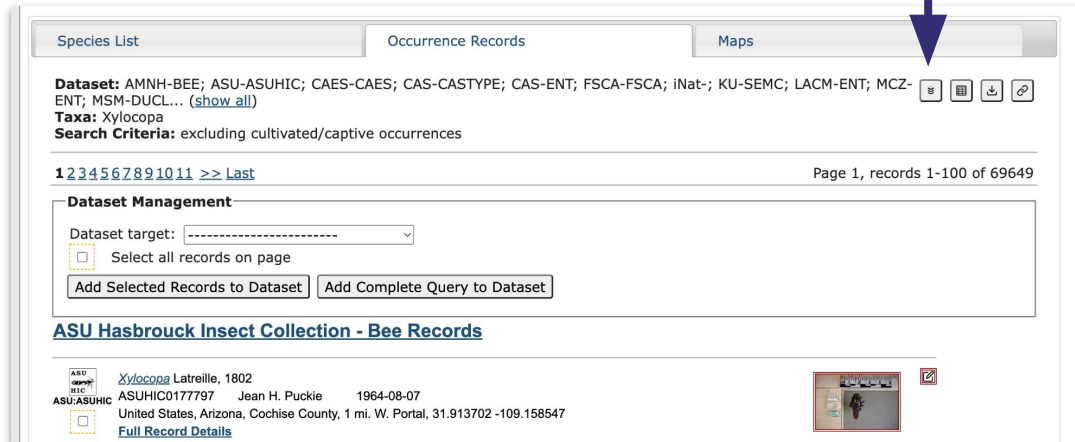
The total number of records is 283,567.

Agenda

1. New data contributors
2. Data publishing
- 3. Creating Datasets (lists of occurrences)**
4. Creating Checklists (lists of *taxa*)

Datasets

- Saved lists of **occurrences**
- Can be created in different ways in the interface, but most importantly: occurrences in search results can be added to Datasets



The screenshot shows a web interface with three tabs: 'Species List', 'Occurrence Records', and 'Maps'. A blue arrow points to the 'Occurrence Records' tab. Below the tabs, the following text is displayed:

Dataset: AMNH-BEE; ASU-ASUHC; CAES-CAES; CAS-CASTYPE; CAS-ENT; FSCA-FSCA; iNat-; KU-SEMC; LACM-ENT; MCZ-ENT; MSM-DUCL... ([show all](#))
Taxa: Xylocopa
Search Criteria: excluding cultivated/captive occurrences



Navigation links: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [11](#) >> [Last](#) Page 1, records 1-100 of 69649

Dataset Management

Dataset target:

Select all records on page

ASU Hasbrouck Insect Collection - Bee Records

	<i>Xylocopa</i> Latreille, 1802		
ASU:ASUHC	ASUHC0177797	Jean H. Puckie	1964-08-07
<input type="checkbox"/>	United States, Arizona, Cochise County, 1 mi. W. Portal, 31.913702 -109.158547		
	Full Record Details		<input type="checkbox"/>



Datasets

Saved lists of **occurrences** to use for:

- Future reference (private)
- Sharing with colleagues (public)
- Programmatic analyses (private/public)
- Data cleaning (private/public)
- Specimens used in publications (public)
- Featured specimens selected by arbitrary theme (public)

Datasets - Examples

- [NEON Biorepository Public Datasets](#)
- [SEINet Public Datasets](#)

Datasets

More information here:

<https://biokic.github.io/symbiota-docs/user/dataset/>

Agenda

1. New data contributors
2. Data publishing
3. Creating Datasets (lists of *occurrences*)
- 4. Creating Checklists (lists of *taxa*)**

Checklists

Saved lists of **taxa**

May or may not be linked to **occurrences**

Checklists

Saved lists of **taxa** to use for:

- Faunal lists / [inventories](#) / [surveys](#)
- Preparation for bioblitzes, inventory efforts, or [field trips](#)
- [Teaching](#), [learning](#), [professional development](#)

All public checklists in the Bee Library:

<https://library.big-bee.net/portal/checklists/index.php>

Checklist Features

- View a checklist by scientific names, common names, images in the image library, or a combination of these options
- Link voucher specimens from the Symbiota portal
- Manage notes (either public or private) associated with taxa in the checklist
- Use identification and name recognition/spelling games (study aids)
- Use identification keys consisting of only taxa from the checklist

Creating Checklists

- From an existing list
- Dynamically in the portal from occurrence records

Checklists

More information here:

<https://biokic.github.io/symbiota-docs/user/checklist/>

Last call!

It's not too late!

- Assess whether your data are appropriate for the Bee Library
 - ✓ Physical specimen collections with identifiers
 - ✓ Observational data
- Upload your dataset to Google Drive, or email us:
 - bit.ly/bee-library-datasets

Need help?

Email help@symbiota.org & seltmann@ucsb.edu



Feedback survey

<https://bit.ly/post-campaign-survey>

Questions?