

Ecdysis Portal Advancement Campaign

Office Hours - February 6, 2023



iDigBio
Integrated Digitized Biocollections



Introductions

 **Steering Committee & SSH**

 **Community Members**

Add your info here: bit.ly/ecdysis-intros

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

Agenda

1. Refresher: what/who are iDigBio and the Symbiota Support Hub?
2. Portal Advancement Campaign: goals and schedule
3. Portal history, stats, and activity
4. Resources and services available
5. Portal housekeeping
6. Upcoming items
7. Questions & discussion

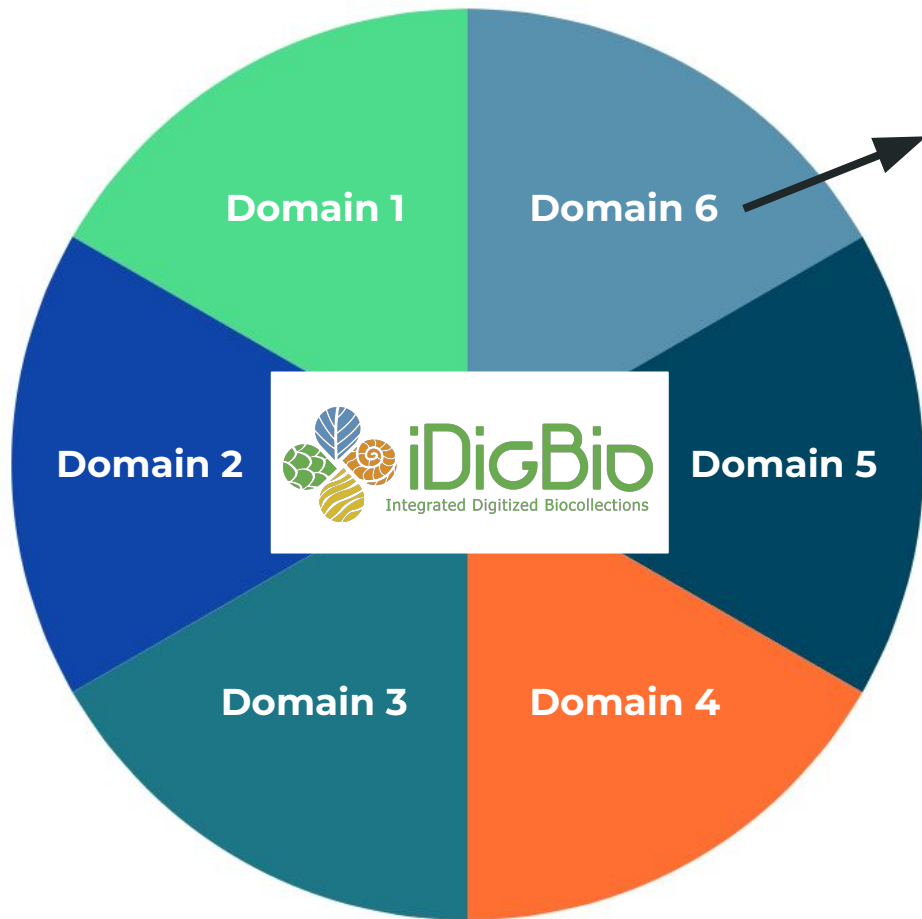
Agenda

1. Refresher: what/who are **iDigBio** and the **Symbiota Support Hub**?
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Who are iDigBio & the Symbiota Support Hub?



- National Resource for Advancing Digitization of Biodiversity Collections (ADBC) funded by the National Science Foundation
- 1st NSF grant 2011-2016, 2nd grant 2016-2022, **3rd grant 2021-2027 (sustaining)**



Symbiota Support Hub (SSH) Mission



- **Help Desk support** for portal data access, publication, sharing, and management.
- Scalable development, management, and dissemination of **documentation** for all categories of Symbiota users.
- Hosting **webinars, trainings, and workshops** to improve community capacity.
- Implementation of a **sustainable business plan** for Symbiota portal communities.

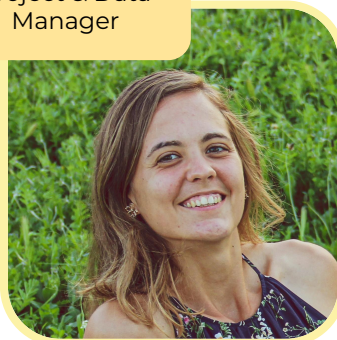
help@symbiota.org

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

SSH is here to **support**
existing communities
and managers, not
replace them.



Agenda

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Portal Advancement Campaign: Goals

- **Improve data quality, accessibility, and mobilization**
 - Ensure metadata is up to date
 - Provide data cleaning services
 - Offer data publishing assistance

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

Portal Advancement Campaign: Goals

- Improve data quality, accessibility, and mobilization
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 - Provide data cleaning services
 - Offer data publishing assistance
- Build capacity in portal community
 - Training and improved documentation
 - Troubleshooting to overcome current roadblocks
 - Incorporation of data from collections not currently in the portal
- **Discuss next steps**
 - Identify and incorporate portal improvements or desired modules
 - Identify current needs and potential avenues for future support from SSH and the Ecdysis Steering Committee

Portal Advancement Campaign: Schedule

- **Feb. 6:** Community & SSH intros, resources
 - Introduction to the campaign
 - General housekeeping
- **Feb. 13:** Introduction to data entry in Ecdysis
 - Cataloging basics and demo
- **Feb. 20:** Taxonomy tools in Ecdysis
 - Demystifying the thesaurus
 - Adding and editing taxonomy demo
- **Feb. 27:** Campaign summary
 - Data publishing 101
 - Next steps for community growth and sustainability



All at
**1PM Pacific /
4PM Eastern
Tuesdays**

What we need from you:

- Ideas
 - Feedback
 - Interact with us as much as possible
 - Take a look at your collection and give it a little extra attention this month
 - Let us know how we can help
 - Respond to our emails with questions
-

**We can help
wherever you are**



*(Ecdysis is
your database)*

Live-managed

**Not
Digitizing**

**Actively
Digitizing**

Snapshot

*(you actively manage your
data somewhere else)*

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Portal History

2019

- Launched Ecdysis to utilize **updated Symbiota code base** and be a **partner portal** to SCAN (Symbiota Collections of Arthropods Network)
- Designed to be a portal for **live-managed datasets** and **active research projects** - not to be another mid-level aggregator

Portal History

2021



- Started pushing subsets of bee data from Ecdysis collections to **Bee Library**
 - Starting to realize a **broader vision** of **interconnected data portals** during this time
- **Symbiota Support Hub** was established and began supporting the Ecdysis user community
 - Ecdysis became one of the major portals to **first receive new development features** as they were released

Portal History

Mid 2023

- Many **live-managed** collections migrated from SCAN to Ecdysis
 - Ecdysis became the primary Symbiota live-management option for insect collections

Portal History

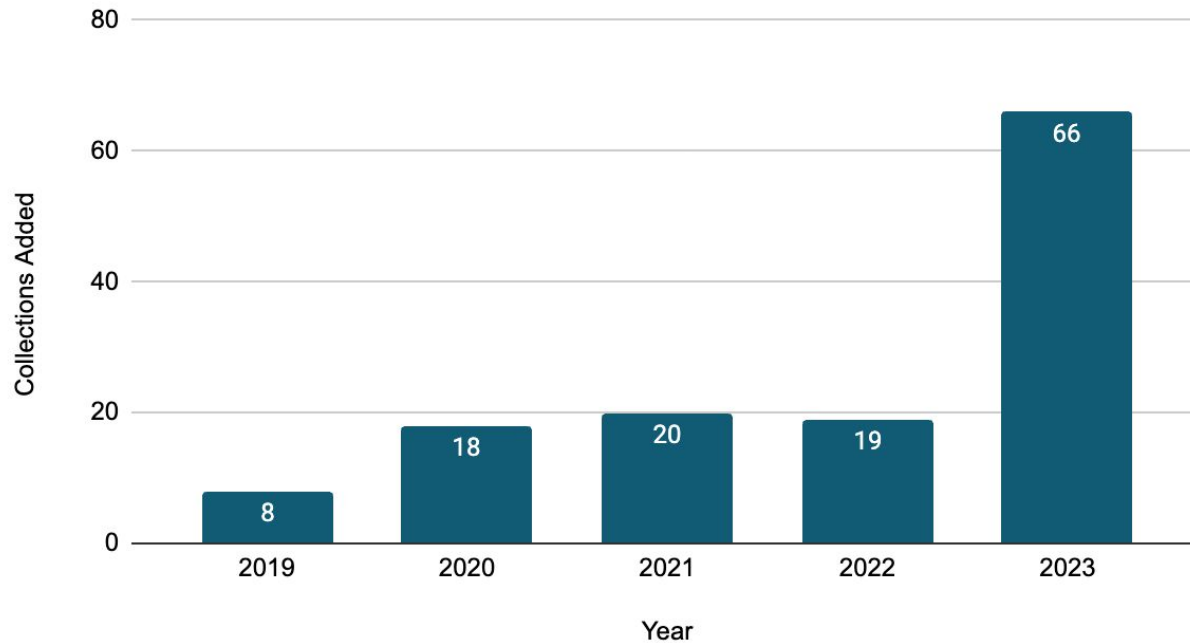
Mid 2023

- Many **live-managed** collections migrated from SCAN to Ecdysis

Late 2023

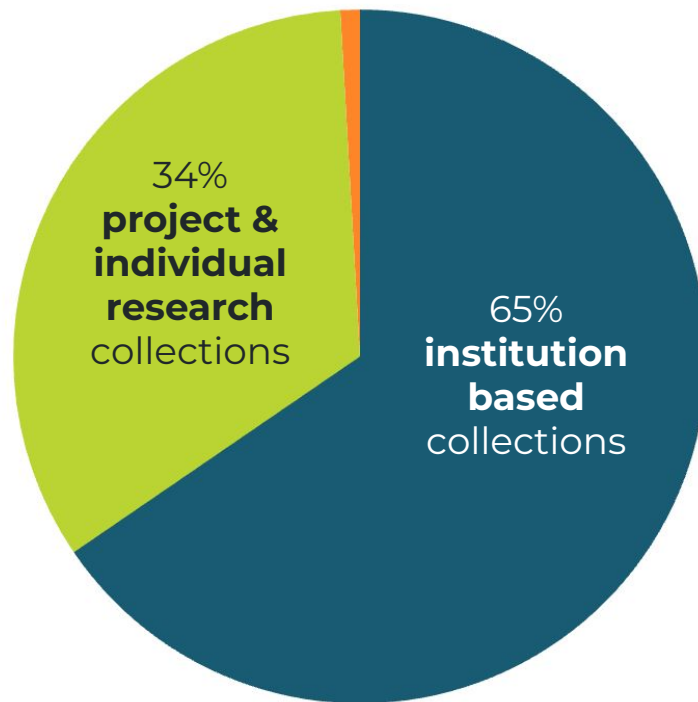
- Steering Committee formed: <https://ecdysis.org/misc/contacts.php>

Ecdysis Community Growth



- **110 collections**

- 72 institutional
- 37 project/individual
- 1 teaching collection



(Stats as of Dec 2023)

- **110 collections**
 - 72 institutional
 - 37 project/individual
 - 1 teaching collection
- **2,974,858 occurrences**
 - 532,504 (~17%) total images
 - 2,235,604 (75%) georeferenced
 - 108,296 type specimens



61%
(55 coll.)
publishing
to GBIF

(Stats as of Dec 2023)

Current Contributors - Institutional Collections

Academy of Natural Sciences
Arizona Department of Agriculture
Arizona State University
Auburn University
Broward College
California Polytechnic State University, San Luis Obispo
California State University, East Bay
Centro de Investigación en Apicultura Tropical
Clemson University
Connecticut Agricultural Experiment Station
Davidson College
Denver Botanic Gardens Collection
Denver Museum of Nature & Science
Dugway Proving Ground Natural History Collection
Escuela Politécnica Nacional, Quito, Ecuador
Florida State Collection of Arthropods
Hannam University Systematic Entomology Laboratory
Instituto de Investigaciones Botánicas y Zoológicas
Luther Entomological Research Collection
Michigan Technological University
Museo de Historia Natural Unillanos
Museo del Fin del Mundo
Museo Nacional de Historia Natural
Natural History Museum of Utah
New Zealand Arthropod Collection
Northern Arizona University

Price Institute of Parasite Research
R. M. Bohart Museum of Entomology
Richard B. Dominick Moth and Butterfly
Collection
Rutgers University Entomological Museum
Sagehen Creek Field Station
San Diego Natural History Museum
San Diego State University
Santa Barbara Museum of Natural History
Southeast Missouri State University
Southern Utah University
Spider Parasite Digital Research Collection
State of Vermont Forest Biology Lab
Texas Tech University
The Albert J. Cook Arthropod Research Collection
UCR Sede Guanacaste
Uganda National Insect Collection
United States National Museum
Universidad Autónoma de Chiriquí
Universidad de Colima
Universidad de Costa Rica
Universidad de Tierra del Fuego
Universidad del Magdalena
Universidad Nacional Agraria
University of Arizona
University of California Santa Barbara

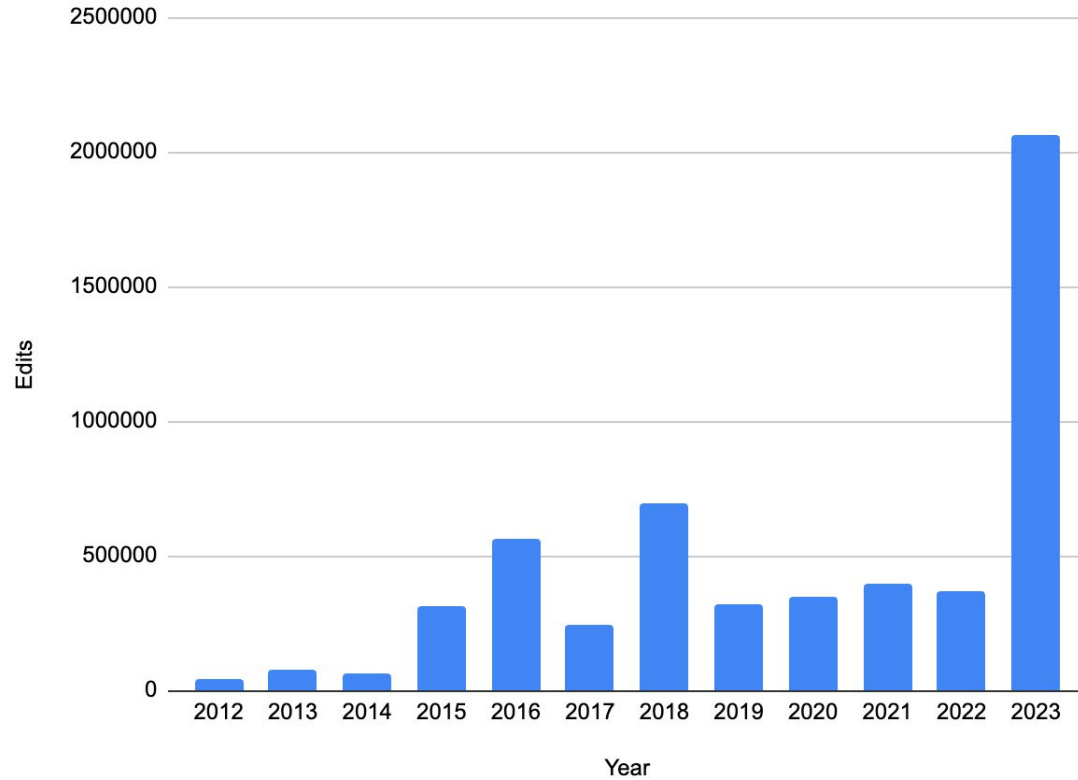
University of California Santa Cruz
University of Connecticut
University of Georgia
University of Hawaii
University of Manitoba
University of Saskatchewan
University of Tennessee at Chattanooga
University of Vermont
University of Wisconsin-Stevens Point
Utah Tech University
Virginia Tech
Western Washington University

Current Contributors - Individual & Project-based

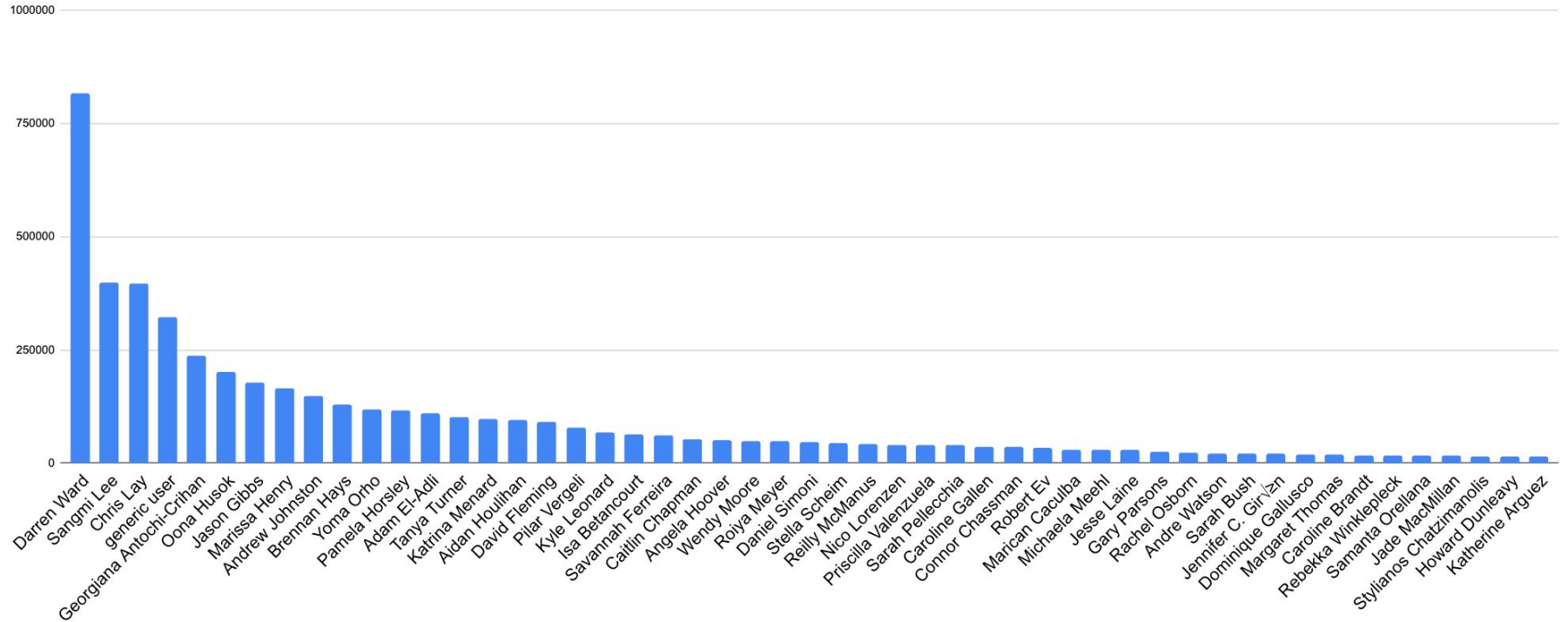
Academy of Natural Sciences – OrthopNet
Actual specimens of adult Odonata from the IIBZ Entomology Collection
Adam Haberski Research Collection
Buprestidae Specimen Database (BupBase)
California Channel Islands Beetles
Carolina Thomson MDE Scholarship and Research Collection
Chrysomelidae from the entomological collection of the IIBZ
Collection of Externally Processed Specimens (Arthropod Systematics Research)
Davide Dal Pos Research Collection
Diversidad de hormigas (Hymenoptera: Formicidae) en dos parques urbanos de la República Dominicana
Ethan Richard Wright Collection
Evan Waite Invertebrate Collection
Guy Hanley Insect Research Collection
Ian Watkinson Lepidoptera Collection
Ilgoo Kang Braconid Collection
Insect Color Specimen Database
Insectos asociados a las sabanas de montañas altas de República Dominicana
Jim Beley Entomology Collection
Kevin Cortés Research Collection
LACM Entomology Channel Islands Beetles
Louis F. Nastasi Insect Collection
M. Andrew Johnston Research Collection

M. Andrew Johnston Research Collection
Maeve Botham Research Collection
Maine State Museum - Brianne Du Clos
Nathaniel Green Research Collection
Northern Plains Research Collection
Oliver Keller Research Collection
Park Pollinators Project
Patrick S. Goring Collection
Records Included in Literature
Rick Overson and Laura Steger Invertebrate Observations
RL Minckley Plant Collection
Salvatore S. Anzaldo Collection
Samanta Orellana Research Collection
Sangmi Lee Research Collection
Tyler J. Hedlund Collection
William Murphy Insect Collection

Edits Over Time



Top 50 Editors



Potential contributors?

- **Suggestions are welcome!**
 - <https://bit.ly/new-portal-contributors>

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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 displays the YouTube channel page for Symbiota. At the top left is the Symbiota logo (a green circle with 'Sym' and 'biota' in white) and the channel name 'Symbiota' with '46 subscribers' below it. To the right are two blue buttons: 'CUSTOMIZE CHANNEL' and 'MANAGE VIDEOS'. Below this is a navigation bar with 'HOME' (underlined), 'VIDEOS', 'PLAYLISTS', 'CHANNELS', and 'ABOUT', followed by a search icon. The main content area is titled 'Uploads' with a 'PLAY ALL' button. Five video thumbnails are shown in a row. Each thumbnail includes a title, a duration in a black box, and a view count and upload date below it. The first video is 'CCH2 Lunch Break: Linked Resources Tab' (22:37, 1 view). The second is 'Importing Collectors' Data into Your Collection Database' (2:58, 14 views). The third is 'Taxonomic Cleaning Tool in a Symbiota Portal' (6:52, 13 views). The fourth is 'Data Editor and Administration Control Panels in Symbiota' (6:42, 17 views). The fifth is 'Uploading Text Files to a Symbiota Portal' (16:23, 6 views). A right arrow button is visible on the right side of the video thumbnails.

Symbiota
46 subscribers

CUSTOMIZE CHANNEL **MANAGE VIDEOS**

HOME VIDEOS PLAYLISTS CHANNELS ABOUT

Uploads ▶ PLAY ALL

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 & ADMINISTRATION CONTROL PANELS IN SYMBIOTA
6:42
17 views • 3 weeks ago

Biodiversité du Gabon
16:23
6 views • 4 weeks ago

Any materials
you'd like to
add?

Let us know!

Campaign Docs

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



The screenshot shows the Symbiota website's navigation bar with links for Home, Symbiota Portals, Events, Resources, The Code, What's New, Contact, and a language selector (Es). The main heading is "Ecdysis Portal Campaign". Below it is a dark teal banner with the Ecdysis logo (an orange leaf-like shape) and the text "ecdysis" in orange, followed by "A portal for live-data arthropod collections" in white. The announcement text states that in February 2024, Ecdysis leadership will collaborate with the Symbiota Support Hub to grow and advance the portal community, and provides a "REGISTER HERE" button.

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

Ecdysis Portal Campaign

 **ecdysis**
A portal for live-data arthropod collections

In February 2024, [Ecdysis](#) leadership will collaborate with the Symbiota Support Hub to grow and advance this 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



Help Desk Support

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

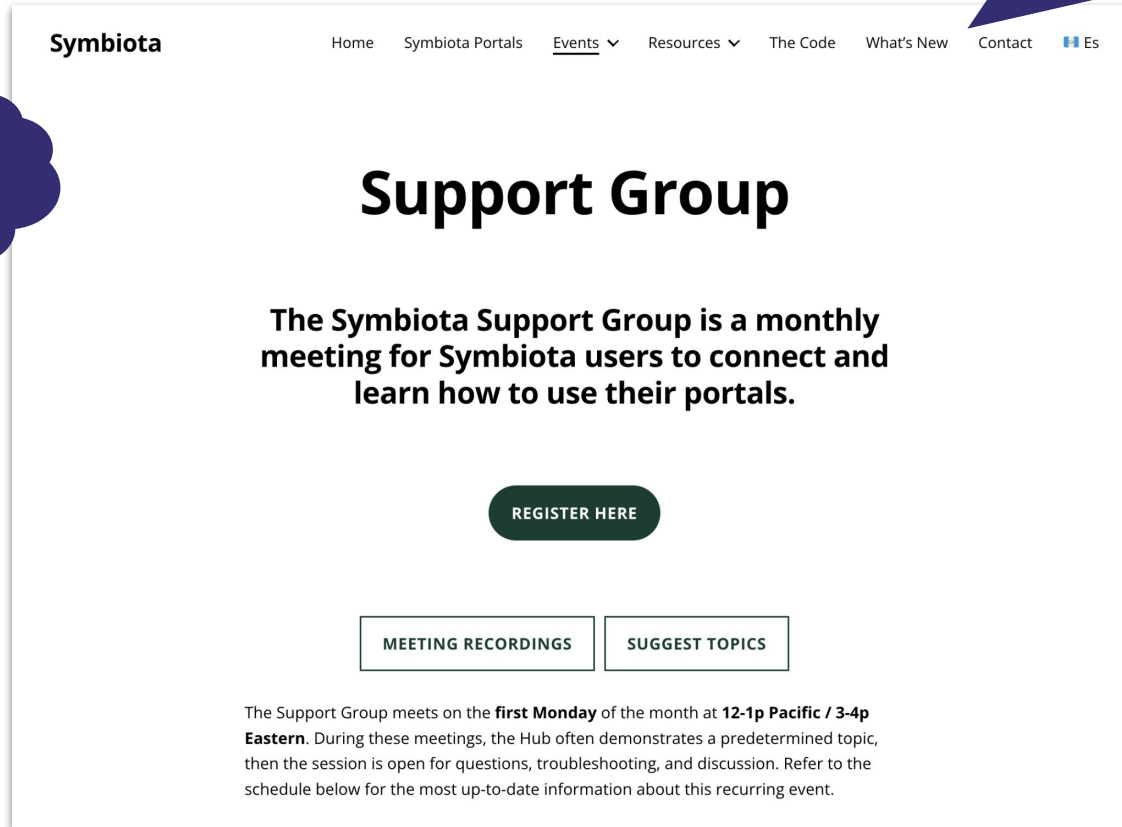


Quick links to all resources are on our website:
symbiota.org/help-resources

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 states: 'The Symbiota Support Group is a monthly meeting for Symbiota users to connect and learn how to use their portals.' There are three buttons: a dark green 'REGISTER HERE' button, and two white buttons with black borders labeled '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.

Documentación en Español

Para **colecciones entomológicas** y otros grupos

Grabaciones y más:

- symbiota.org/es
- biokic.github.io/symbiota-docs/es
- biodiversidadgt.github.io/docs/guia-rapida

Book chapter in Spanish!

<https://doi.org/10.5281/zenodo.10424127>



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- 5. Portal housekeeping**
6. Upcoming items
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Portal Housekeeping

- Are you able to **log in** to your account?



New Account

Login

[Home](#) [Search](#) [Map Search](#) [Checklists](#) [Images](#) [Contacts](#) [Sitemap](#)

English 

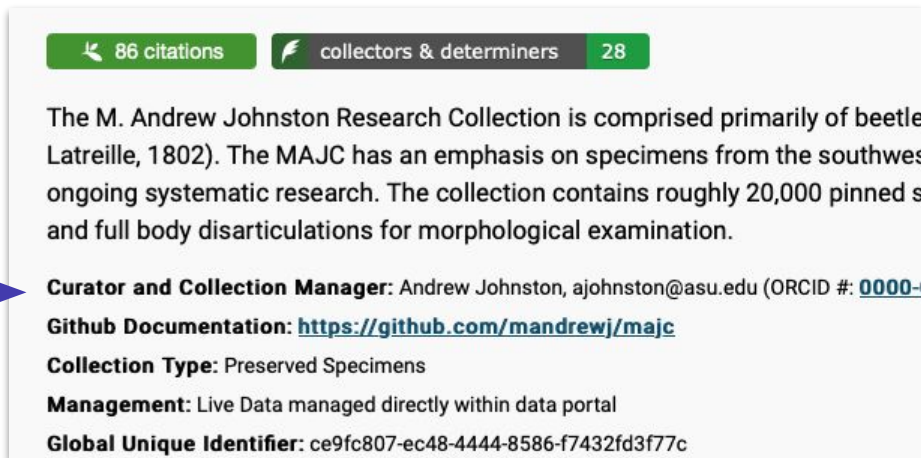
Quick Search by Taxon

Search

About ecdysis

Portal Housekeeping

- Are you able to log in to your account?
- Is the **contact information** for your account up to date?
 - Add your **ORCID** if you have one!



86 citations collectors & determiners 28

The M. Andrew Johnston Research Collection is comprised primarily of beetle (Latreille, 1802). The MAJC has an emphasis on specimens from the southwest ongoing systematic research. The collection contains roughly 20,000 pinned specimens and full body disarticulations for morphological examination.

Curator and Collection Manager: Andrew Johnston, ajohnston@asu.edu (ORCID #: [0000-1](#))


Github Documentation: <https://github.com/mandrewj/majc>

Collection Type: Preserved Specimens

Management: Live Data managed directly within data portal

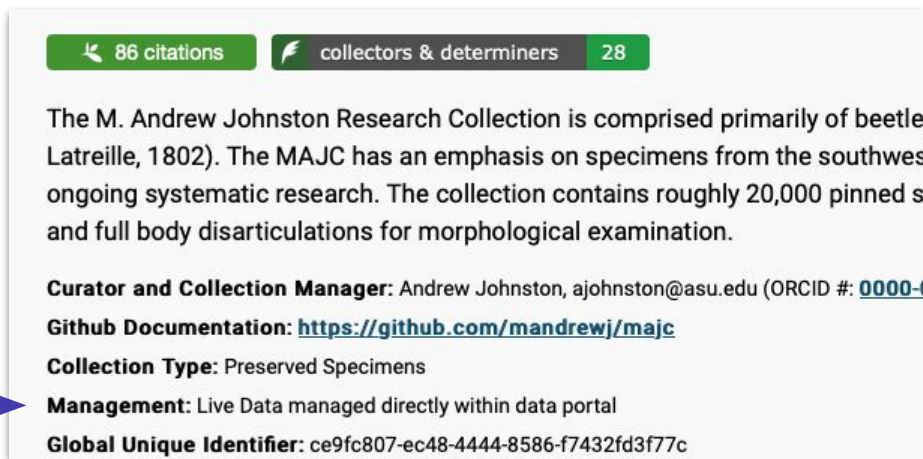
Global Unique Identifier: ce9fc807-ec48-4444-8586-f7432fd3f77c

Administration Control Panel

- 
- [View Posted Comments](#)
 - [Edit Metadata](#)
 - [Manage Permissions](#)
 - [Import/Update Specimen Records](#)
 - [Processing Toolbox](#)
 - [Darwin Core Archive Publishing](#)
 - [Review/Verify Occurrence Edits](#)
 - General Maintenance Tasks
 - [Data Cleaning Tools](#)
 - [Download Backup Data File](#)
 - [Restore Backup File](#)
 - [Thumbnail Maintenance](#)
 - [Update Statistics](#)

Portal Housekeeping

- Are you able to log in to your account?
- Is the contact information for your account up to date?
- Are you managing your data “live” or as a “snapshot”?



86 citations collectors & determiners 28

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Portal Housekeeping

- Are you able to log in to your account?
- Is the contact information for your account up to date?
- Have you **updated your statistics** lately?

Collection Statistics

- 8,400 specimen records
- 7,101 (85%) georeferenced
- 2,540 (30%) with images (2,571 total images)
- 1 BOLD genetic references
- 7,911 (94%) identified to species
- 13 families
- 149 genera
- 326 species
- 347 total taxa (including subsp. and var.)

Administration Control Panel


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Portal Housekeeping

- Are you able to log in to your account?
- Is the contact information for your account up to date?
- Have you updated your statistics lately?
- Are your **user permissions** up to date?

Administration Control Panel

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Portal Housekeeping

- Are you able to log in to your account?
- Is the contact information for your account up to date?
- Have you updated your statistics lately?
- Are your user permissions up to date?
- Do you know how to **backup your data**?
 - ***Set a calendar reminder!***  

Administration Control Panel

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Portal Housekeeping

- Are you able to log in to your account?
- Is the contact information for your account up to date?
- Have you updated your statistics lately?
- Are your user permissions up to date?
- Do you know how to backup your data?
- Do you have any **unreviewed comments**?

- [View Posted Comments](#) - 1 unreviewed comments



Administration Control Panel

- [View Posted Comments](#)
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Data Cleaning Stats & Assistance

We have identified data quality issues in some collections, some of which ***we can help batch fix!***

We will email you with data quality information specific to your collection, along **with a form that we ask you to fill out** to give us permission (or not) to conduct specific batch cleaning steps.

Please feel free to ask questions about this message during the discussion time at our upcoming Office Hours sessions.



Upcoming



Add
hub@symbiota.org
to your contacts



Dear Ecdysis community members,

As you may have heard, iDigBio's Symbiota Support Hub is working with your portal community to advance and improve the [Ecdysis](#) data portal, and we invite you to participate in this month-long event.

Join us on **Tuesdays in February at 1p Pacific / 4p Eastern** to get Symbiota training, fix long-standing data problems, start publishing your data to aggregators, and promote use of your specimen data. Register to receive the Zoom invitation below:

[Office Hours: Register Here](#)

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Ecdysis Portal Campaign

Office Hours - February 13, 2024



iDigBio
Integrated Digitized Biocollections



Agenda

- Data Entry in Ecdysis
 - Introduction
 - Data Entry Basics
 - Demonstration
- Q&A and Discussion

Agenda

- **Data Entry in Ecdysis**
 - **Introduction**
 - Data Entry Basics
 - Demonstration
- Q&A and Discussion

Introduction

Digitization = the conversion of specimen data from **analog to digital**

- Transcription of label text and other related documents
- Specimen imaging (2D, 3D)
- Georeferencing

Definition from Nelson & Ellis, 2019, *Philos Trans R Soc Lond B*, [10.1098/rstb.2017.0391](https://doi.org/10.1098/rstb.2017.0391)

Introduction

Digitization = the conversion of specimen data from analog to digital

- **Transcription of label text** and other related documents
- Specimen imaging (2D, 3D)
- Georeferencing

Definition from Nelson & Ellis, 2019, *Philos Trans R Soc Lond B*, [10.1098/rstb.2017.0391](https://doi.org/10.1098/rstb.2017.0391)

Introduction

Digitization Workflows

- Highly variable based on collection type and specimen preparation method (pinned vs. wet, bulk, etc.)
- **Common goal:** Data capture to increase specimen data accessibility

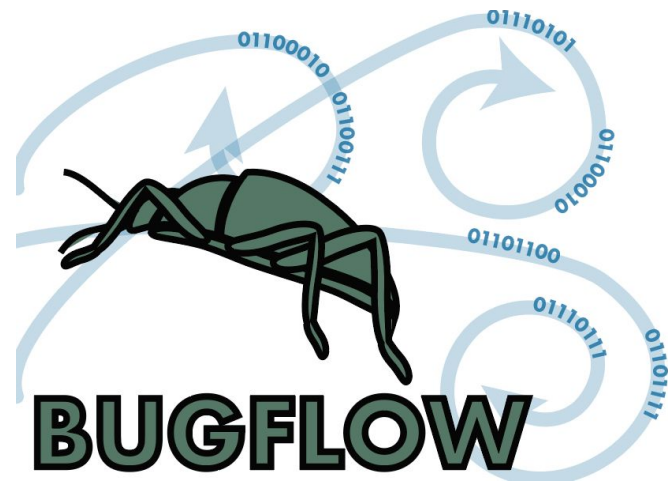
BugFlow:

<https://entcollnet.github.io/BugFlow>

Symbiota examples:

<https://symbiota.org/digitization-workflows>

- Includes full workshop recording



Introduction

Most data fields in Symbiota are **Darwin Core** (“DwC”) compliant

- <https://dwc.tdwg.org/terms>
- <https://biokic.github.io/symbiota-docs/editor/edit/fields/>
- Enables interoperability of data across collections and institutions

Navigation

Most fields in Symbiota are **Darwin Core** (“DwC”) compliant

- <https://dwc.tdwg.org/terms>
- <https://biokic.github.io/symbiota-docs/editor/edit/fields/>
- Enables interoperability of data across collections and institutions

The image shows a screenshot of a data entry form for a specimen. The form is titled "Latest Identification" and contains several input fields. Four blue arrows point to specific fields: the "Scientific Name" field (containing "Habronattus tarsalis"), the "Author" field (containing "(Banks, 1904)"), the "Identification Qualifier" field (which is empty), and the "Date Identified" field (which is empty). Other fields include "Family" (containing "Salticidae") and "Identified By" (containing "B Boyer"). A small icon of a plus sign and a pencil is visible in the bottom right corner of the form.

Latest Identification	
Scientific Name ?	Author ?
Habronattus tarsalis	(Banks, 1904)
Identification Qualifier ?	Family ?
	Salticidae
Identified By ?	Date Identified ?
B Boyer	



Navigation

Most fields in Symbiota are **Darwin Core** (“DwC”) compliant

Look for the **pencil icons** to expand the form to see **more fields!**

Latest Identification

Scientific Name ?	<input type="text" value="Habronattus tarsalis"/>	Author ?	<input type="text" value="(Banks, 1904)"/>
Identification Qualifier ?	<input type="text"/>	Family ?	<input type="text" value="Salticidae"/>
Identified By ?	<input type="text" value="B Boyer"/>	Date Identified ?	<input type="text"/>

Data Entry Methods

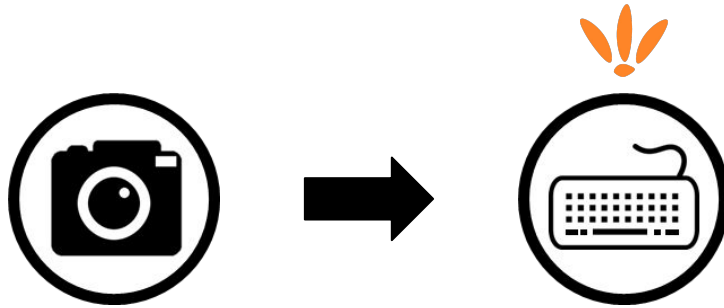
In Symbiota:

1. Direct label transcription
2. Bulk data ingestion

Data Entry Methods

In Symbiota:

1. Direct label transcription
 - a. **Image > transcribe (today's demo)**
2. Bulk data ingestion



Agenda

- Data Entry in Ecdysis
 - Introduction
 - **Data Entry Basics**
 - Demonstration
- Q&A and Discussion

Data Entry Permissions

Only users with “**Administrator**” or “**Editor**” permissions can add/edit records

- No one can bulk delete records (ask SSH for help)

Data Editor Control Panel

- [Add New Occurrence Record](#)
- [Create New Records Using Image](#)
- [Add Skeletal Records](#)
- [Edit Existing Occurrence Records](#)
- [Add Batch Determinations/Nomenclatural Adjustments](#)
- [Print Specimen Labels](#)
- [Print Annotations Labels](#)
- [Occurrence Trait Coding Tools](#)
- [Batch Georeference Specimens](#)
- [Loan Management](#)

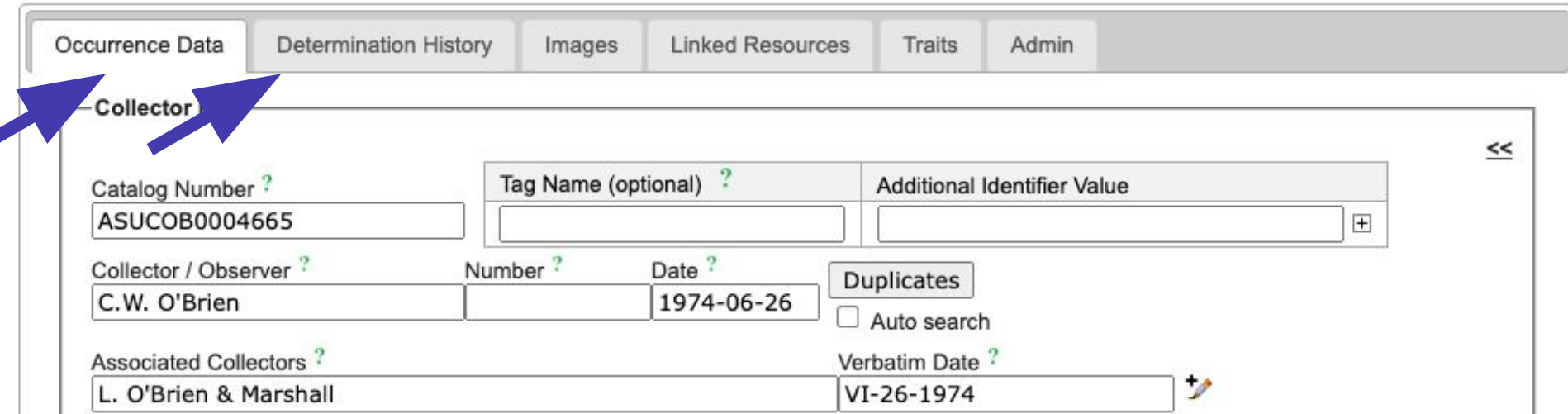
Administration Control Panel

- [View Posted Comments](#)
- [Edit Metadata](#)
- [Manage Permissions](#)
- [Import/Update Specimen Records](#)
- [Processing Toolbox](#)
- [Darwin Core Archive Publishing](#)
- [Review/Verify Occurrence Edits](#)
- [General Maintenance Tasks](#)
 - [Data Cleaning Tools](#)
 - [Download Backup Data File](#)
 - [Restore Backup File](#)
 - [Thumbnail Maintenance](#)
 - [Update Statistics](#)



Data Entry

Today: **Occurrence Data** & **Determination History** tabs



The screenshot shows a web interface with a horizontal tab bar at the top. The tabs are: Occurrence Data (selected), Determination History, Images, Linked Resources, Traits, and Admin. Below the tabs is a form area. On the left side of the form, the word "Collector" is written in bold, with two blue arrows pointing to it from the left. The form contains several input fields and sections:

- Catalog Number** (with a green question mark): ASUCOB0004665
- Tag Name (optional)** (with a green question mark): [Empty field]
- Additional Identifier Value**: [Empty field] with a plus icon (+) on the right.
- Collector / Observer** (with a green question mark): C.W. O'Brien
- Number** (with a green question mark): [Empty field]
- Date** (with a green question mark): 1974-06-26
- Duplicates**: A button with the text "Duplicates" and a checkbox for "Auto search".
- Associated Collectors** (with a green question mark): L. O'Brien & Marshall
- Verbatim Date** (with a green question mark): VI-26-1974 with a plus icon (+) and a pencil icon on the right.

On the far right of the form area, there is a double-left arrow icon (<<).

Data Entry

Occurrence Data | Determination History | Images | Linked Resources | Traits | Admin

Collector Info <<

Catalog Number ? ASUCOB0004665	Tag Name (optional) ? 	Additional Identifier Value
Collector / Observer ? C.W. O'Brien	Number ? 	Date ? 1974-06-26
Associated Collectors ? L. O'Brien & Marshall	Verbatim Date ? VI-26-1974	

Auto search

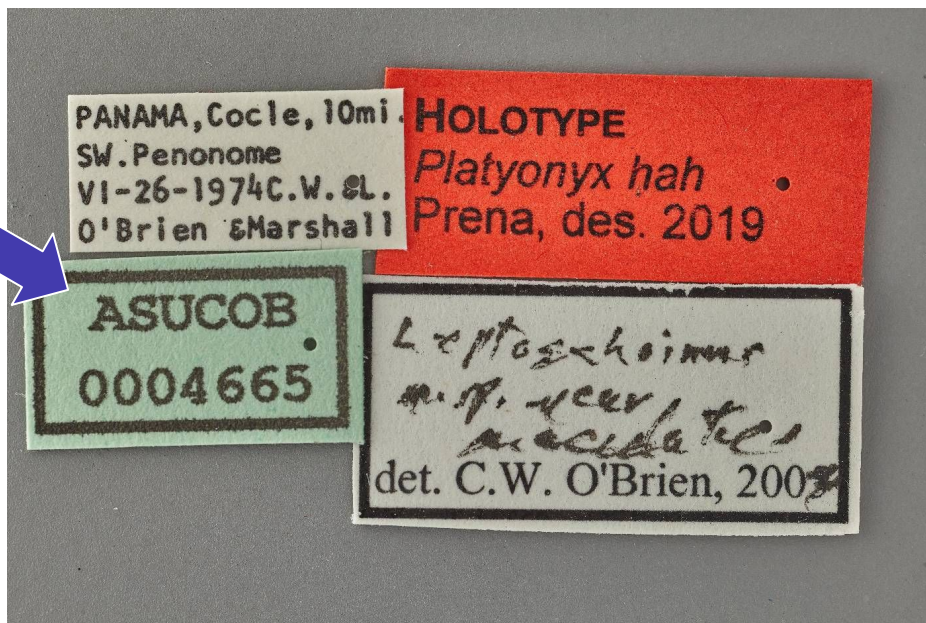
Duplicates

#1 Rule

Every record must have a **Catalog Number** value

- Recommended format = "Code#####", e.g. "ASUCOB0004665" (no spaces)
- All other fields are optional, though many are strongly recommended

Catalog Numbers



Every record must have a *Catalog Number* value

- Critically, this number must also **accompany** the **physical specimen**

Catalog Numbers




Data Entry

Occurrence Data Determination History Images Linked Resources Traits Admin

Collector Info <<

Catalog Number ? ASUCOB0004665	Tag Name (optional) ? 	Additional Identifier Value
Collector / Observer ? C.W. O'Brien	Number ? 	Date ? 1974-06-26
Associated Collectors ? L. O'Brien & Marshall	Verbatim Date ? VI-26-1974	

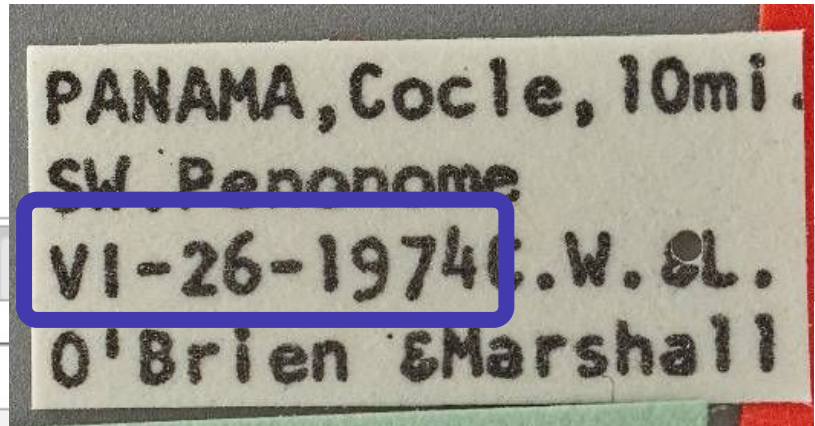
Duplicates
 Auto search



Collector Info

- Parsed by name(s) and dates

Data Entry: Collector Info



Occurrence Data Determination History Images Linked Resources

Collector Info

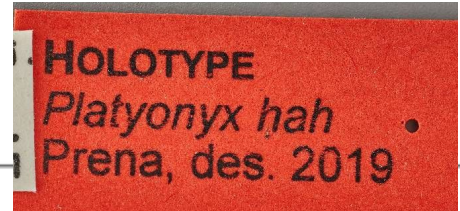
Catalog Number ? ASUCOB0004665	Tag Name (optional) ? 	Additional Identifier Value
Collector / Observer ? C.W. O'Brien	Number ? 	Date ? 1974-06-26
Associated Collectors ? L. O'Brien & Marshall	Verbatim Date ? VI-26-1974	

Duplicates
 Auto search

Collector Info


- Parsed by name(s) and dates, including ***Verbatim Date***

Data Entry



Latest Identification

Scientific Name ?	Author ?
<input type="text" value="Platyonyx hah"/>	<input type="text" value="Prena, 2019"/>
Identification Qualifier ? <input type="text"/>	Family ? <input type="text"/>
Identified By ? <input type="text" value="Prena"/>	Date Identified ? <input type="text" value="2019"/>



Scientific Names

- Can be entered on this form or the **Determination History** tab

Data Entry

Latest Identification

Scientific Name ?
Platyonyx hah

Identification Qualifier ?

Identified By ? Date Ident

Scientific Name ?

Platyonyx

Platyonyx

Platyonyx circumscriptus

Platyonyx diffusus

Platyonyx griseofasciatus

Platyonyx interruptus

Platyonyx ornatus

Platyonyx signatus

Platyonyx suturalis

Scientific Names

- Can be entered on this form or the Determination History tab
- Links to the portal's central **taxonomic thesaurus**
 - Begin typing to select a name from the dropdown

Data Entry

Latest Identification

Scientific Name ?
Platyonyx hah

Identification Qualifier ?

Identified By ? Date Ident

Scientific Name ?

Platyonyx

Platyonyx

Platyonyx circumscriptus

Platyonyx diffusus

Platyonyx griseofasciatus

Platyonyx interruptus

Platyonyx ornatus

Platyonyx signatus

Platyonyx suturalis

Scientific Names

- Can be entered on this form or the Determination History tab
- Links to the portal's central taxonomic thesaurus
 - If a name does not appear, it's not in the thesaurus (yet)
 - Best to use names in the thesaurus for **quality control**

Data Entry

Latest Identification

Scientific Name ?
Platyonyx hah

Identification Qualifier ?

Identified By ? Date Ident

Scientific Name ?

Platyonyx

Platyonyx

Platyonyx circumscriptus

Platyonyx diffusus

Platyonyx griseofasciatus

Platyonyx interruptus

Platyonyx ornatus

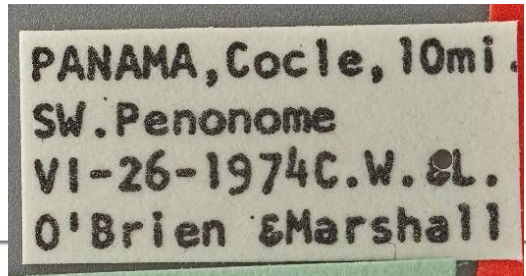
Platyonyx signatus

Platyonyx suturalis

Scientific Names

- Can be entered on this form or the Determination History tab
- Links to the portal's central taxonomic thesaurus
- For the records to be **fully searchable**, the name must be in the thesaurus → ***More on how to add names next week!***

Data Entry



Locality

Country ?	State/Province ?	County ?	Municipality ?	Location ID ?
Panama	Cocle			

Locality ?

10 mi. SW Penonome

Security: Security not applied ? Deactivate Locality Lookup

Locality Data

- Enter all information possible
 - *Country, State/Province, Locality, etc.*
- *Locality* = verbatim (including abbreviations)
- Additional information from field notes can be added later on

Data Entry

U.S.A., TEXAS; Jeff Davis Co.
TNC Davis Mountains
Preserve - Right Hand Loop
30.693487, -104.132641
16-V-2023 Col. A.J.Schmitz

Latitude	Longitude	Uncertainty ?	Datum ?		Verbatim Coordinates ?
<input type="text" value="30.693487"/>	<input type="text" value="-104.132641"/>	<input type="text"/>	<input type="button" value="C"/> <input type="button" value="F"/>	<input type="text" value="WGS84"/>	<input type="text"/>
Elevation in Meters ?	Verbatim Elevation ?	Depth in Meters ?	Verbatim Depth ?		
<input type="text"/> - <input type="text"/>	<input type="text"/>	<input type="text"/> - <input type="text"/>	<input type="text"/>	<input type="text"/>	
Georeferenced By	Georeference Sources ?	Georeference Remarks			
<input type="text"/>	<input type="text" value="Label data"/>	<input type="text"/>			
Georeference Protocol ?	Georef Verification Status ?	Footprint Polygon			
<input type="text"/>	<input type="text"/>	<input type="text"/>			

Coordinates/Georeferences

- Enter all information possible
 - Use *Verbatim Coordinates* to convert to decimal degrees
 - Example from ASU:
<https://ecdysis.org/collections/individual/index.php?occid=613913>

Data Entry



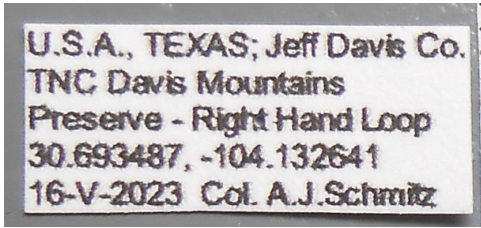
U.S.A., TEXAS; Jeff Davis Co.
TNC Davis Mountains
Preserve - Right Hand Loop
30.693487, -104.132641
16-V-2023 Col. A.J.Schmitz



Latitude	Longitude	Uncertainty ?	Datum ?		Verbatim Coordinates ?	
30.693487	-104.132641	<input type="text"/>	<input type="button" value="C"/>	<input type="button" value="F"/>	WGS84	<< <input type="text"/>
Elevation in Meters ?	Verbatim Elevation ?	Depth in Meters ?	Verbatim Depth ?			
<input type="text"/> - <input type="text"/>	<< <input type="text"/>	<input type="text"/> - <input type="text"/>	<input type="text"/>	<input type="text"/>		
Georeferenced By	Georeference Sources ?	Georeference Remarks				
<input type="text"/>	Label data	<input type="text"/>				
Georeference Protocol ?	Georef Verification Status ?	Footprint Polygon				
<input type="text"/>	<input type="text"/>	<input type="text"/>				

Coordinates/Georeferences


- Enter all information possible
 - Use *Verbatim Coordinates* to convert to decimal degrees
 - **DMS**, **UTM**, and **TRS** fields available → “**F**” button

Data Entry



Latitude Longitude Uncertainty   Datum Verbatim Coordinates


30.693487 -104.132641 C F WGS84 <<

Elevation in Meters Verbatim Elevation Depth in Meters Verbatim Depth 

- << -

Georeferenced By Georeference Sources Georeference Remarks

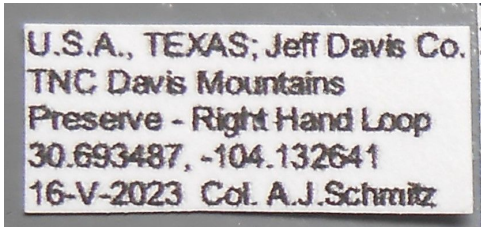
Label data

Georeference Protocol Georef Verification Status Footprint Polygon 

Coordinates/Georeferences

- Enter all information possible
 - Use *Verbatim Coordinates* to convert to decimal degrees
 - DMS, UTM, and TRS fields available → “F” button
 - Or use GeoLocate → **globe/swirl** icons to add coordinates

Data Entry



Latitude	Longitude	Uncertainty ?	Datum ?		Verbatim Coordinates ?
30.693487	-104.132641	<input type="text"/>	<input type="radio"/> C <input type="radio"/> F	WGS84	<< <input type="text"/>

Elevation in Meters ?	Verbatim Elevation ?	Depth in Meters ?	Verbatim Depth ?
<input type="text"/> - <input type="text"/>	<< <input type="text"/>	<input type="text"/> - <input type="text"/>	<input type="text"/>

Georeferenced By	Georeference Sources ?	Georeference Remarks
<input type="text"/>	Label data	<input type="text"/>
Georeference Protocol ?	Georef Verification Status ?	Footprint Polygon
<input type="text"/>	<input type="text"/>	<input type="text"/>

Coordinates/Georeferences

- Georeferencing Metadata
 - Who determined the coordinates?
 - Where did the coordinates originate? (label? handheld GPS?)
- Best practices/recommendations for many fields need to be defined

Data Entry

“Misc” Fields

- Enter all information possible
- Refer to Darwin Core definitions

Misc

Habitat ?

Substrate ?

Associated Taxa ?

Description ?

Notes (Occurrence Remarks) ?

Life Stage ?

Sex ?

Individual Count ?

Sampling Protocol ?

Preparations ?

Phenology ?

Establishment Means ?

Cultivated/Captive

Data Entry

Habitat

Example values:

- Coastal prairie
- Nest
- Chaparral
- Riparian
- Disturbed
- Meadow
- Grassland
- Urban
- Dry/Wet forest

Misc

Habitat ?

Substrate ?

Associated Taxa ?

Description ?

Notes (Occurrence Remarks) ?



Life Stage ?

Sex ?

Individual Count ?

Sampling Protocol ?

Preparations ?

Phenology ?

Establishment Means ?

Cultivated/Captive

Data Entry

Substrate

Example values:

- Leaves
- Litter
- Clay
- On rocks
- Sand
- Loam
- At flowers
- Small intestine
- Fur

Misc

Habitat ?

Substrate ?

Associated Taxa ?

Description ?

Notes (Occurrence Remarks) ?



Life Stage ?

Sex ?

Individual Count ?

Sampling Protocol ?

Preparations ?

Phenology ?

Establishment Means ?

Cultivated/Captive

Data Entry

Life Stage

Example values:

- Adult(s)
- Larval
- Immature
- Nymph(s)
- Pupa
- Brood
- Ootheca
- Gall
- Mixed

Misc

Habitat ?

Substrate ?

Associated Taxa ?

Description ?

Notes (Occurrence Remarks) ?



Life Stage ?

Sex ?

Individual Count ?

Sampling Protocol ?

Preparations ?

Phenology ?

Establishment Means ?

Cultivated/Captive

Data Entry

Sex

Example values:

- female
- male
- unknown
- hermaphroditic
- workers
- queen
- mixed

Misc

Habitat ?

Substrate ?

Associated Taxa ?

Description ?

Notes (Occurrence Remarks) ?



Life Stage ?

Sex ?

Individual Count ?

Sampling Protocol ?

Preparations ?

Phenology ?

Establishment Means ?

Cultivated/Captive

Data Entry

Sampling Protocol

Example values:

- Net
- Malaise trap
- Pitfall trap
- Bowl
- Pan trap
- Litter sifting
- At light
- Sweeping
- Berlese

Misc

Habitat ?

Substrate ?

Associated Taxa ?

Description ?

Notes (Occurrence Remarks) ?



Life Stage ?

Sex ?

Individual Count ?

Sampling Protocol ?

Preparations ?

Phenology ?

Establishment Means ?

Cultivated/Captive



Data Entry

Preparations

Example values:

- Pinned
- Alcohol
- Slide
- Pointed
- Papered
- Envelope
- Frozen
- Pressed
- X% ETOH

Misc

Habitat ?

Substrate ?

Associated Taxa ?

Description ?

Notes (Occurrence Remarks) ?



Life Stage ?

Sex ?

Individual Count ?

Sampling Protocol ?

Preparations ?

Phenology ?

Establishment Means ?

Cultivated/Captive

Data Entry

Curation

Type Status ?	Disposition ?	Occurrence ID ?	Field Number ?
<input type="text" value="Holotype"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Basis Of Record ?	Language	Label Project	Dupe Count
<input type="text" value="PreservedSpecimen"/> ▼	<input type="text"/>	<input type="text"/>	<input type="text"/>
Institution Code (override) ?	Collection Code (override) ?	Owner Code (override) ?	Processing Status
<input type="text" value="ASU"/>	<input type="text" value="ASUCOB"/>	<input type="text" value="ASU"/>	<input type="text" value="Pending Review"/> ▼
Data Generalizations			
<input type="text"/>			

Key: 571516 Modified: 2023-04-27 17:19:16 Entered by: elengasser [2019-11-19 14:33:05]

Curation

- Enter all information possible
 - *Type Status*

Data Entry

Record Cloning

- Use to expedite cataloging

Record Cloning

Carry over: Collection event fields All fields

Carry over images

Relationship: ▼

Number of records:

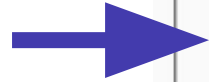
Pre-populate catalog number(s)

Demo

Data Entry

Bulk Data Ingestion

- Can also spreadsheet catalog and bulk ingest data through the **Specimen Uploader**
 - All of the same fields and guidelines apply!
 - Webinar on this topic:
<https://youtu.be/zrwHIDtae-c>



Administration Control Panel

- [View Posted Comments](#)
- [Edit Metadata](#)
- [Manage Permissions](#)
- [Import/Update Specimen Records](#)
 - [Skeletal Text File Import](#)
 - [Full Text File Import](#)
 - [DwC-Archive Import](#)
 - [IPT Import](#)
 - [Notes from Nature Import](#)
 - [Saved Import Profiles](#)
 - [Create a new Import Profile](#)
- [Processing Toolbox](#)
- [Darwin Core Archive Publishing](#)
- [Review/Verify Occurrence Edits](#)
- General Maintenance Tasks
 - [Data Cleaning Tools](#)
 - [Download Backup Data File](#)
 - [Restore Backup File](#)
 - [Thumbnail Maintenance](#)
 - [Update Statistics](#)

Reminder

Images in Ecdysis

- Any images uploaded to the portal should be “web ready” (<10 MB JPEGs)
 - Smaller is better for web display
- A **thorough review of this topic** was presented during last week’s Symbiota Support Group meeting. Recording:
<https://youtu.be/m1HHN4g4NGg?si=JTS5e1BFEZM70PjO>

Ecdysis Portal Campaign

Office Hours - February 20, 2024



iDigBio
Integrated Digitized Biocollections



Announcement

- **Data quality workshop** at the Digital Data in Biodiversity Research Conference (May 28-31, Lawrence, KS)
 - Applications for **participant support** due February 26
 - symbiota.org/dd-2024-workshop

A promotional banner for the Digital Data Conference. The background is blue with a network of white dots and lines. On the right, there is a stylized orange bird with its beak open. The text is arranged in several boxes: a dark blue box at the top left with 'DIGITAL DATA CONFERENCE' in orange and white; a white box below it with 'Save the Date' in blue; a light blue box with 'HYBRID EVENT MAY 29 - 31, 2024' in orange and white; a white box with 'Event Location: University of Kansas Biodiversity Institute & Remotely via Zoom' in blue; and a white bar at the bottom containing three logos: iDigBio (Integrated Digitized Biocollections), NSC ALLIANCE, and KU Biodiversity Institute (The University of Kansas).

DIGITAL DATA CONFERENCE

Save the Date

HYBRID EVENT MAY 29 - 31, 2024

Event Location: University of Kansas Biodiversity Institute & Remotely via Zoom

iDigBio
Integrated Digitized Biocollections

NSC
ALLIANCE

KU BIODIVERSITY INSTITUTE
The University of Kansas

Agenda

- Introduction to the Taxonomic Thesaurus
- Taxonomic thesaurus editing
 - Adding New Taxa
 - Editing Existing Taxa
- Taxon profiles

Agenda

- **Introduction to the Taxonomic Thesaurus**
- Taxonomic thesaurus editing
 - Adding New Taxa
 - Editing Existing Taxa
- Taxon profiles

Introduction to the Taxonomic Thesaurus

We also recommend this recording: <https://youtu.be/ipSIXOHud8A>



The screenshot shows a Zoom meeting interface. At the top, a black bar contains the text "Taxonomic Thesauri in Symbiota Portals". The main content area features a large green banner with the text "Today's Topic: Taxonomic Thesauri" in white. On the right side, there is a vertical stack of video thumbnails for participants, including names like "Lindsay Walker" and "Robert Kilps". At the bottom of the screen, a "Google Chrome" notification is visible on the left, and the number "11" is on the right.

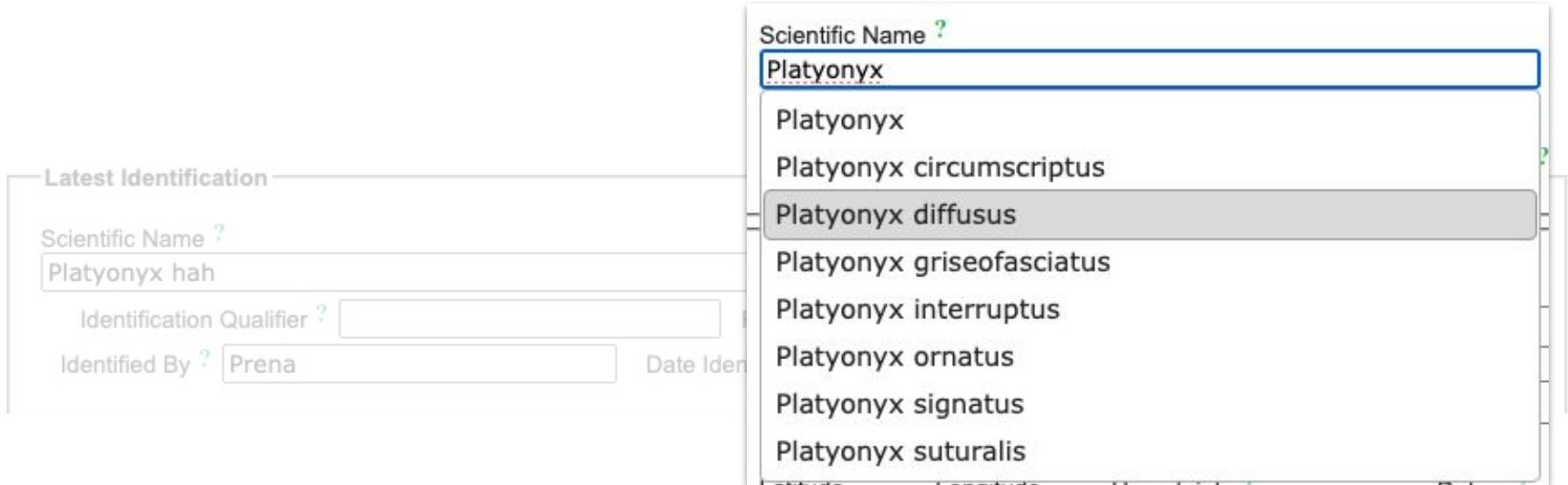
Who can add/edit taxonomy in Ecdysis?

Ecdysis **Collections Administrators** can request Taxonomy Editor permissions

- Admins can add their Ecdysis username to this sheet to request permissions: bit.ly/ecdysis-taxonomy
 - After the campaign, email help@symbiota.org to receive Taxonomy permissions.

Why add/edit taxonomy in Ecdysis?

- Increases the searchability/visibility of your specimen records in the portal
- Enables use of thesaurus during cataloging



The image shows a screenshot of a web form for specimen identification. The form includes fields for 'Latest Identification', 'Scientific Name', 'Identification Qualifier', 'Identified By', and 'Date Identified'. A dropdown menu is open for the 'Scientific Name' field, which currently contains 'Platyonyx hah'. The dropdown list shows the following options: 'Platyonyx', 'Platyonyx circumscriptus', 'Platyonyx diffusus', 'Platyonyx griseofasciatus', 'Platyonyx interruptus', 'Platyonyx ornatus', 'Platyonyx signatus', and 'Platyonyx suturalis'. The 'Platyonyx diffusus' option is highlighted with a grey background. A green question mark icon is visible next to the 'Scientific Name' label in both the form and the dropdown menu.

Latest Identification

Scientific Name ?
Platyonyx hah

Identification Qualifier ?

Identified By ? Prena Date Identified


Scientific Name ?
Platyonyx
Platyonyx
Platyonyx circumscriptus
Platyonyx diffusus
Platyonyx griseofasciatus
Platyonyx interruptus
Platyonyx ornatus
Platyonyx signatus
Platyonyx suturalis

Taxon Search

Taxon:

Display authors

- Kingdom: Animalia
 - Subkingdom: Bilateria
 - Phylum: Annelida
 - Phylum: Arthropoda
 - Subphylum: Chelicerata
 - Subphylum: Hexapoda
 - Class: Entognatha
 - Class: Insecta
 - Subclass: Apterygota
 - Subclass: Dicondylia
 - Subclass: Monocondylia
 - Subclass: Pterygota
 - Infraclass: Neoptera
 - Superorder: Dictyoptera
 - Superorder: Holometabola
 - Superorder: Neuropterida



ecdysis
A portal for live-data arthropod collections

New Account

Home Search Map Search Checklists Images Contacts **Sitemap**

- Superfamily: Chrysomeloidea
- Superfamily: Cleroidea
- Superfamily: Coccinelloidea
- Superfamily: Cucujoidea
- Superfamily: Curculionoidea
- Superfamily: Lymexyloidea
- Superfamily: **Tenebrionoidea**
 - Family: Aderidae
 - Family: Anthicidae
 - Family: Archeocrypticidae
 - Family: Boridae
 - Family: Chalcodryidae
 - Family: Ciidae
 - Family: Melandryidae
 - Family: Meloidea



Introduction to the Taxonomic Thesaurus

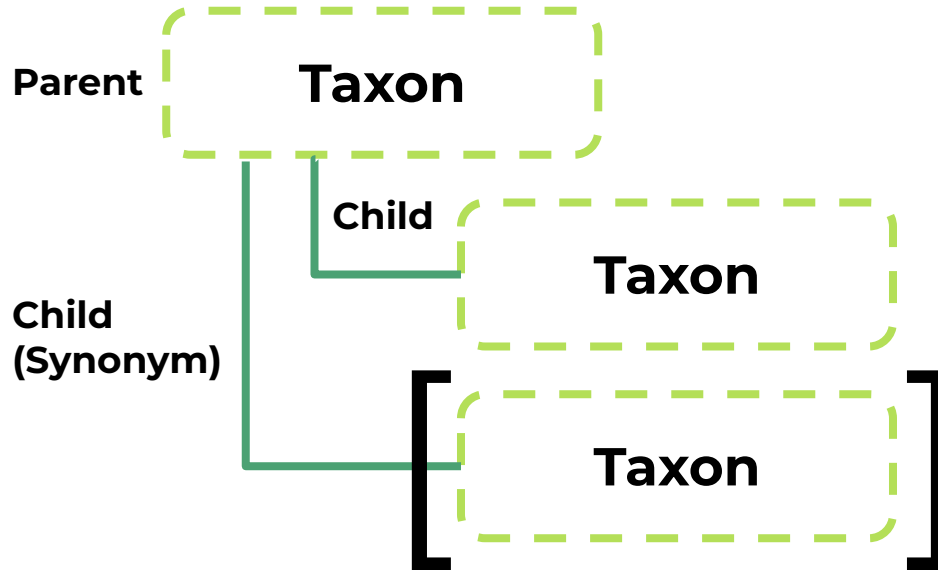
Anyone can view the thesaurus by navigating to:

Sitemap >

Additional Resources >

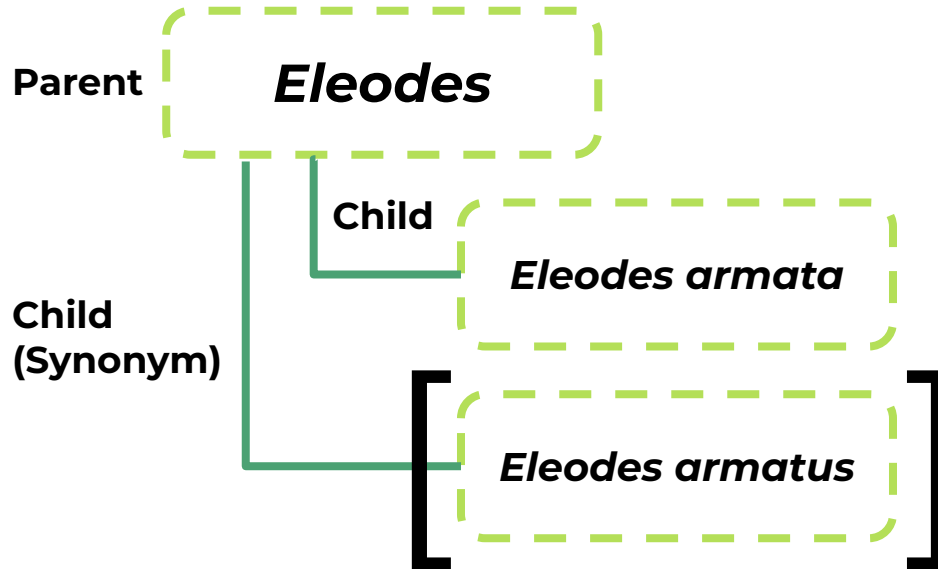
Taxonomic Tree Viewer
or **Taxonomy Explorer**

<https://ecdysis.org/taxa/taxonomy/taxonomydynamicdisplay.php>



Introduction to the Taxonomic Thesaurus

- Hierarchical list of names
- Accepted & unaccepted taxa
- **Parent-child relationships**



Introduction to the Taxonomic Thesaurus

- Hierarchical list of names
- Accepted & unaccepted taxa
- **Parent-child relationships**



Image Usage Rights:
M. Andrew Johnston Research Collection: CC0

Every taxon MUST be linked to a **parent** taxon and an **accepted** taxon.


Taxon name	Parent taxon	Accepted taxon
<i>Eleodes armata</i>	<i>Eleodes</i>	<i>Eleodes armatus</i>

Every taxon MUST be linked to a **parent** taxon and an **accepted** taxon.

Taxon name	Parent taxon	Accepted taxon
<i>Eleodes armata</i>	<i>Eleodes</i>	<i>Eleodes armatus</i>

(The accepted taxon can also be itself)

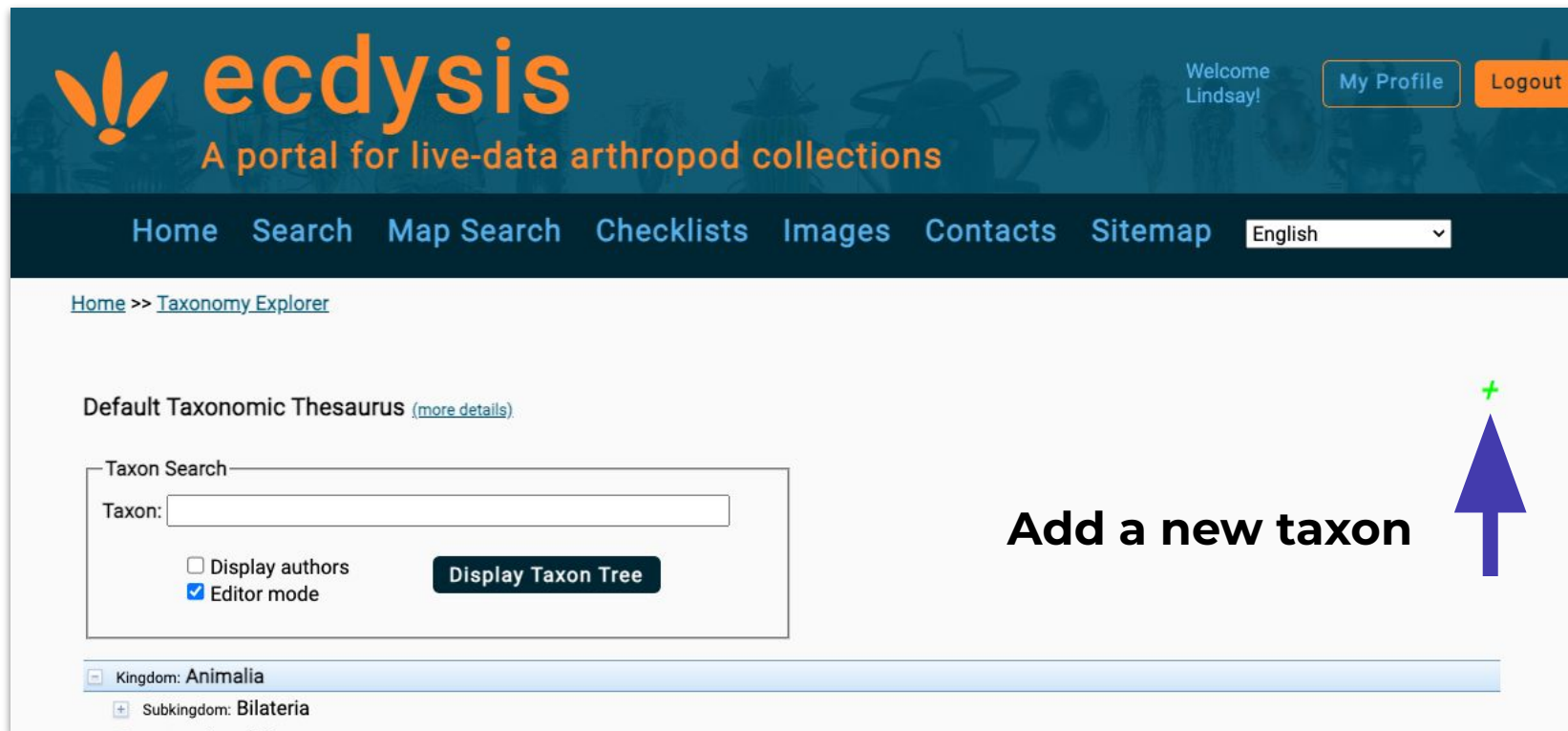
Taxon name	Parent taxon	Accepted taxon
<i>Eleodes armata</i>	<i>Eleodes</i>	<i>Eleodes armata</i>

 Changes made in the taxonomic thesaurus will **not** change the taxonomic names of specimens.

Agenda

- Introduction to the Taxonomic Thesaurus
- **Taxonomic thesaurus editing**
- Taxon profiles

1) Adding new taxa: Taxonomy Explorer



The screenshot shows the Ecdysis website interface. At the top left is the Ecdysis logo, a stylized orange insect head, followed by the text "ecdysis" in orange and "A portal for live-data arthropod collections" in white. On the top right, there is a "Welcome Lindsay!" message, a "My Profile" button, and a "Logout" button. Below the header is a navigation bar with links for "Home", "Search", "Map Search", "Checklists", "Images", "Contacts", and "Sitemap", along with a language dropdown menu set to "English".

The main content area shows the breadcrumb "Home >> Taxonomy Explorer". Below this is the "Default Taxonomic Thesaurus" section with a "(more details)" link. A "Taxon Search" form is present, containing a "Taxon:" input field, checkboxes for "Display authors" (unchecked) and "Editor mode" (checked), and a "Display Taxon Tree" button. To the right of the form, the text "Add a new taxon" is displayed in large black font, with a blue arrow pointing upwards towards a small green plus sign icon.

At the bottom, a taxonomic hierarchy is shown: "Kingdom: Animalia" (with a minus sign) and "Subkingdom: Bilateria" (with a plus sign).

1) Adding new taxa

[Home](#) >> [Taxonomy Tree Viewer](#) >> Taxonomy Loader

Add a New Taxon

Taxon Name:

Author:

Taxon Rank:

UnitName1:

UnitName2:

UnitName3:

Parent Taxon:


Notes:

Source:

Locality Security:

Acceptance Status

Accepted Not Accepted



1) Adding new taxa

Home >> Taxonomy Tree Viewer >> Taxonomy Loader

Add a New Taxon

Taxon Name:

Author:

Taxon Rank:

UnitName1:

UnitName2:

UnitName3:

Parent Taxon:

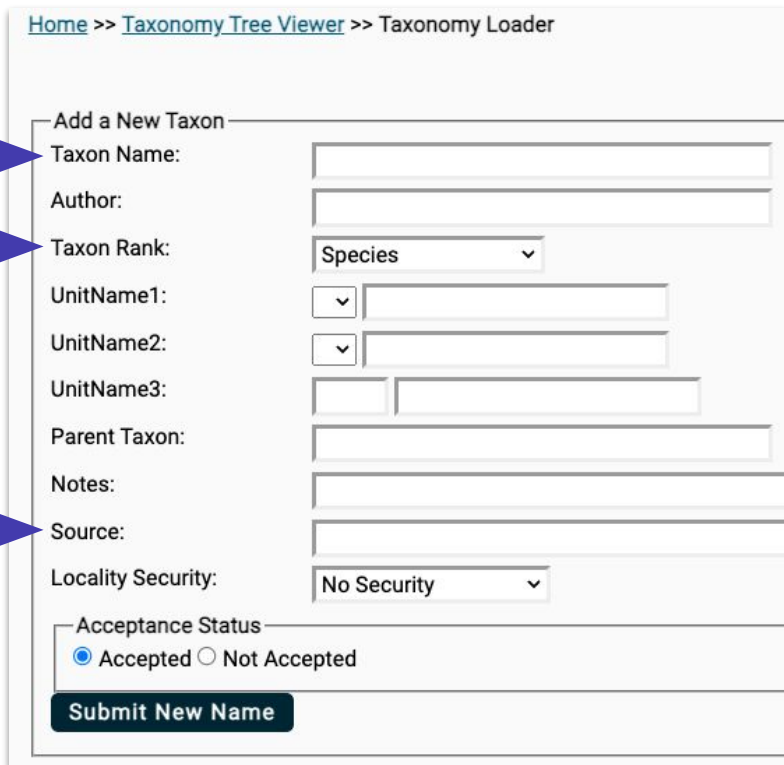
Notes:

Source:

Locality Security:

Acceptance Status

Accepted Not Accepted



1) Start by adding *Taxon Name*

- Include **Author + Year** for **species-level** names

2) Assign *Taxon Rank*

3) Add reference URL in *Source*, if available

<https://ecdysis.org/taxa/taxonomy/taxonomyloader.php>

1) Adding new taxa

Home >> Taxonomy Tree Viewer >> Taxonomy Loader

Add a New Taxon

Taxon Name:

Author:

Taxon Rank:

UnitName1:

UnitName2:

UnitName3:

Parent Taxon:


Notes:

Source:

Locality Security:

Acceptance Status

Accepted Not Accepted



- **Parent** taxon must exist **first** for the record to save
 - Create the parent taxon record if needed

ecdysis.org says
Parent taxon required

OK

<https://ecdysis.org/taxa/taxonomy/taxonomyloader.php>

1) Adding new taxa

Home >> Taxonomy Tree Viewer >> Taxonomy Loader

ecdysis.org says
Accepted name needs to have a value

OK

UnitName3:

Parent Taxon:

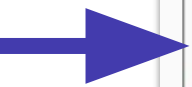
Notes:

Source:

Locality Security:

Acceptance Status
 Accepted Not Accepted


Submit New Name



- Parent taxon must exist first for the record to save
 - Create the parent taxon record if needed
- **Accepted name** must exist **first** if “not accepted”
 - Create the accepted taxon if needed

2) Editing existing taxa: Taxonomy Tree Viewer

The screenshot shows the 'Taxonomic Tree Viewer' interface. At the top, there is a navigation bar with links: Home, Search, Map Search, Checklists, Images, and Contact. Below this, the breadcrumb path is 'Home >> Taxonomic Tree Viewer'. The main section is titled 'Default Taxonomic Thesaurus (more details)'. It features a 'Taxon Search' box with the text 'Eleodes armata LeConte, 1851' and a 'Display Taxon Tree' button. Below the search box are four checkboxes: 'Display authors' (unchecked), 'Match on whole words' (checked), 'Display full tree below family' (unchecked), and 'Display species with subgenera' (unchecked). At the bottom, a taxonomic tree is displayed, showing a hierarchy from 'Animalia' down to 'Eleodes armata' and '[Eleodes armatus]'. The tree levels are: Animalia, Arthropoda, Hexapoda, Insecta, Pterygota, Neoptera, Coleoptera, Polyphaga, Cucujiformia, Tenebrionoidea, Tenebrionidae, Tenebrioninae, Amphidorini, Eleodes, Eleodes armata, and [Eleodes armatus].

- 1) Navigate to the Tree Viewer
 - *Sitemap* > *Taxonomic Tree Viewer*
- 2) Search for taxon to edit >  icon
- 3) Navigate to
 - Editor tab
 - Taxonomic Status tab


<https://ecdysis.org/taxa/taxonomy/taxonomydisplay.php>

Agenda


- Introduction to the Taxonomic Thesaurus
- Taxonomic thesaurus editing
- **Taxon profiles**

Taxon Profiles

- Provide additional information about taxa in the thesaurus
- Each profile displays **links** to **internal** and **external resources** related to taxa in the thesaurus

Limenitis arthemis arizonensis Edwards 1882 

Family: Nymphalidae



Sangmi Lee


Resources

Internal Resources


- [35 occurrences](#)
- [Taxonomic Tree](#)

External Resources

- [Encyclopedia of Life](#)
- [Animal Diversity Web](#)
- [BOLD Systems - Barcode of Life Data Systems](#)
- [Catalog of Life](#)
- [Google Images](#)
- [Google Search Engine](#)
- [NCBI - National Center for Biotechnology Information](#)
- [Wikipedia](#)



Sangmi Lee



Open Interactive Map

<https://ecdysis.org/taxa/index.php?taxon=Limenitis+arthemis+arizonensis>


Taxon Profiles

- Provide additional information about taxa in the thesaurus
- Each profile displays links to internal and external resources related to taxa in the thesaurus


To find taxon profiles:

- Search on home page
- Select taxa in search results (list view)

<https://ecdysis.org/taxa/index.php?taxon=Limenitis+arthemis+arizonensis>

Limenitis arthemis arizonensis Edwards 1882 

Family: Nymphalidae



Sangmi Lee


Resources

Internal Resources


- [35 occurrences](#)
- [Taxonomic Tree](#)

External Resources

- [Encyclopedia of Life](#)
- [Animal Diversity Web](#)
- [BOLD Systems - Barcode of Life Data Systems](#)
- [Catalog of Life](#)
- [Google Images](#)
- [Google Search Engine](#)
- [NCBI - National Center for Biotechnology Information](#)
- [Wikipedia](#)



Sangmi Lee




Open Interactive Map

Taxon Profiles

- Any portal user can **view** taxon profiles
- Editing taxon profiles requires **different user permissions** than editing taxonomy in the thesaurus

Eleodes armata LeConte, 1851 ↗

Family: Tenebrionidae
[*Eleodes armatus* LeConte, 1851]



Species Diagnosis Resources

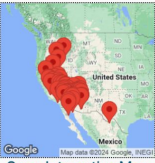

Johnston et al. 2015

Diagnosis:

Body elongate, robust. All femora spined in both sexes. Pronotum widest just before middle, arcuate laterally, anterior angles projected and acute. Elytra parallel sided (males) to moderately inflated (females), smooth and faintly punctate striate. Prosternum projected posterior of procoxae, deflexed ventrally at apex.

Distribution (From Amphidorini of Arizona):

Mohave, Coconino, La Paz, Yavapai, Yuma, Maricopa, Pinal, Pima counties AZ. CA, OR, ID, NV. Sonora and Baja Norte, Mexico.



Google
Map data ©2024 Google, REI
Open Interactive Map

<https://ecdysis.org/taxa/index.php?taxon=Eleodes+armata>

Questions?

Next week

- Campaign wrap up 🎉
- Publishing data to GBIF: why and how?
- Questions & Discussion

Ecdysis Portal Campaign

Final Office Hours - February 27, 2024



iDigBio
Integrated Digitized Biocollections



Agenda

- Portal campaign accomplishments: a recap
- Publishing to GBIF & iDigBio
- Further opportunities
- Discussion time

Agenda

- **Portal campaign accomplishments: a recap**
- Publishing to GBIF & iDigBio
- Further opportunities
- Discussion time

153,712

specimen records added over the course of the campaign

22,090



specimen images added over the course of the campaign

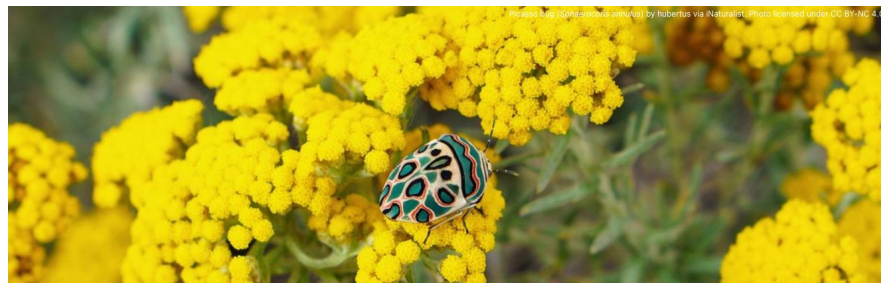
A stylized, light gray map background with white lines representing roads and paths. Several circular navigation icons are overlaid on the map, including a compass, a location pin with a tree, and a location pin with an arrow. The text '85k+' is prominently displayed in the center.

85k+

records with georeferences added

Other Success Stories

- Collections records updated in GRSciColl
 - registry.gbif.org
- New GBIF publishers
 - *Coming in 3.. 2.. 1..*



Sphaerocoris annulus by hubertus via iNaturalist. CC BY-NC 4.0.

Agenda

- Portal campaign accomplishments: a recap
- **Publishing to GBIF & iDigBio**
 - What is GBIF?
 - Why publish to GBIF?
 - How to publish to GBIF?
 - What about iDigBio?
- Further opportunities
- Discussion time

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.”



GBIF data portal: gbif.org

GBIF | Global Biodiversity Information Facility

Free and open access to biodiversity data

[OCCURRENCES](#) [SPECIES](#) [DATASETS](#) [PUBLISHERS](#) [RESOURCES](#)

Search



[What is GBIF?](#)

[About GBIF United States of America](#)

Delonix regia (Bojer ex Hook.) Raf. observed in Guinea by Anne-Helene Paradis (CC BY-NC 4.0)



2,640,176,605

Occurrence records



92,874

Datasets



2,189

Publishing institutions



10,152

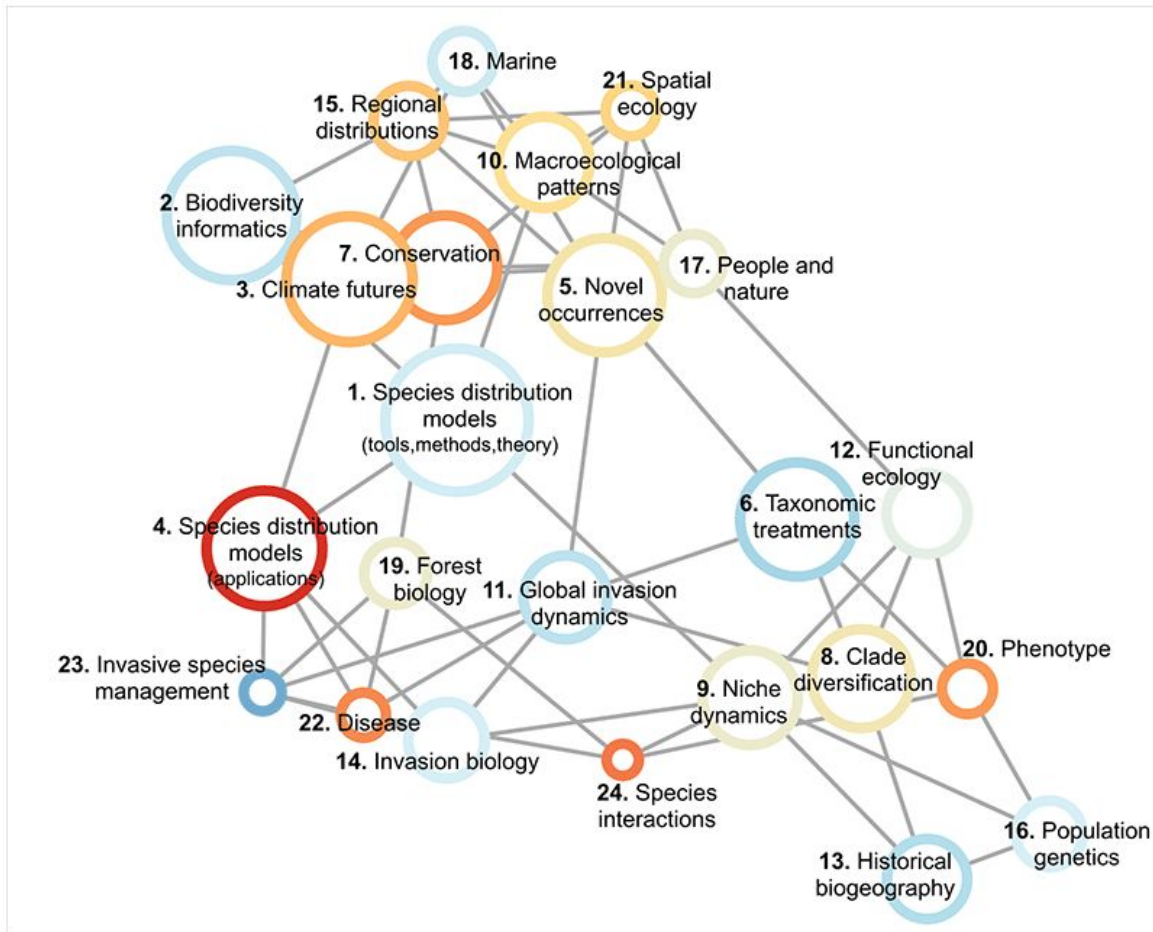
Peer-reviewed papers using data

Why Publish to GBIF?

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

Why Publish to GBIF?

- Greater access to your data → greater visibility for your collection
- Allows **researchers** from a broader **range of disciplines** to compile **more comprehensive datasets**



Structural topic model results from 4,035 studies that used GBIF-mediated data published between 2003 and 2019.

<https://docs.gbif.org/course-introduction-to-gbif/en/how-is-gbif-mediated-data-used.html>

Why Publish to GBIF?

- Greater access to your data → greater visibility for your collection
- Allows researchers from a broader range of disciplines to compile more comprehensive datasets
- **Citation tracking**

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](#)



Why Publish to GBIF?

- Greater access to your data → greater visibility for your collection
- Allows researchers from a broader range of disciplines to compile more comprehensive datasets
- Citation tracking
- **Data quality flags**

Arizona State University Biocollections

ABOUT

METRICS

HOME PAGE

673,214 OCCURRENCES

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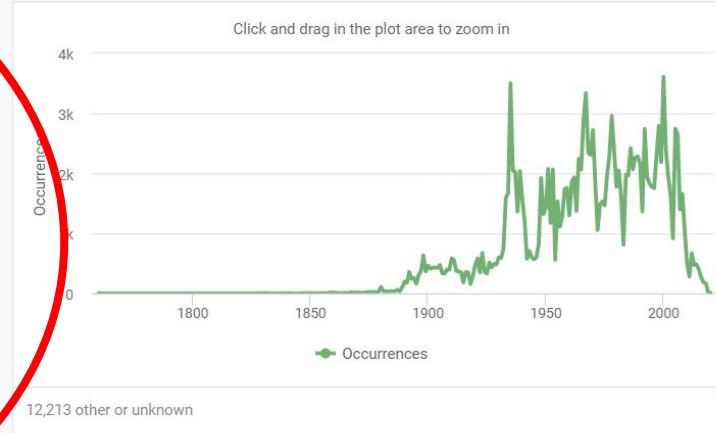


OCCURRENCES PER ISSUES AND FLAGS

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



How do I publish to
GBIF?

GBIF Structure

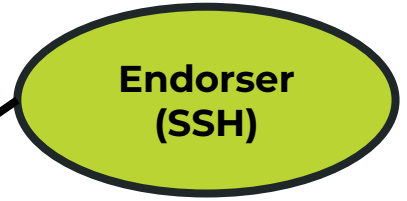


**Publisher
(institution)**

GBIF Structure



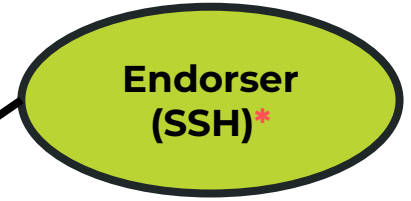
Endorses



GBIF Structure



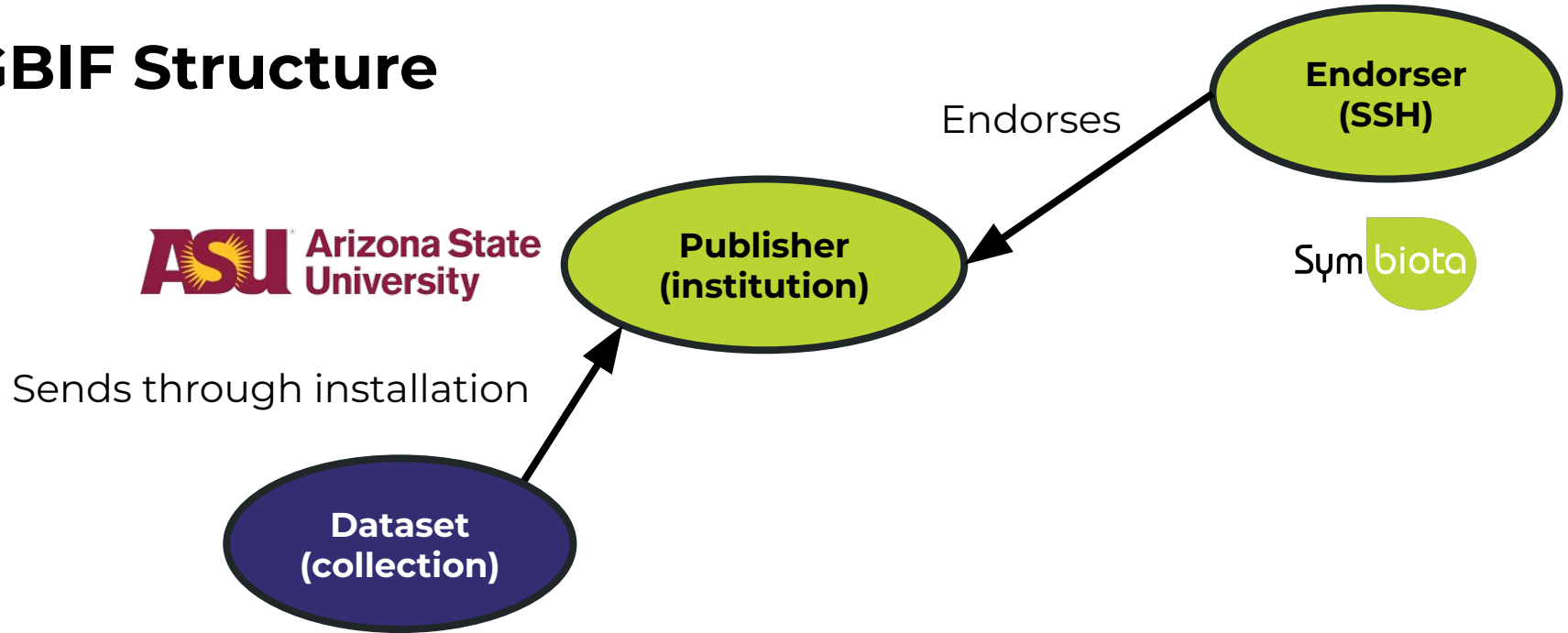
Endorses



*Or your country's node, if not US-based

*Or (possibly) SSH if your country does not have a node

GBIF Structure



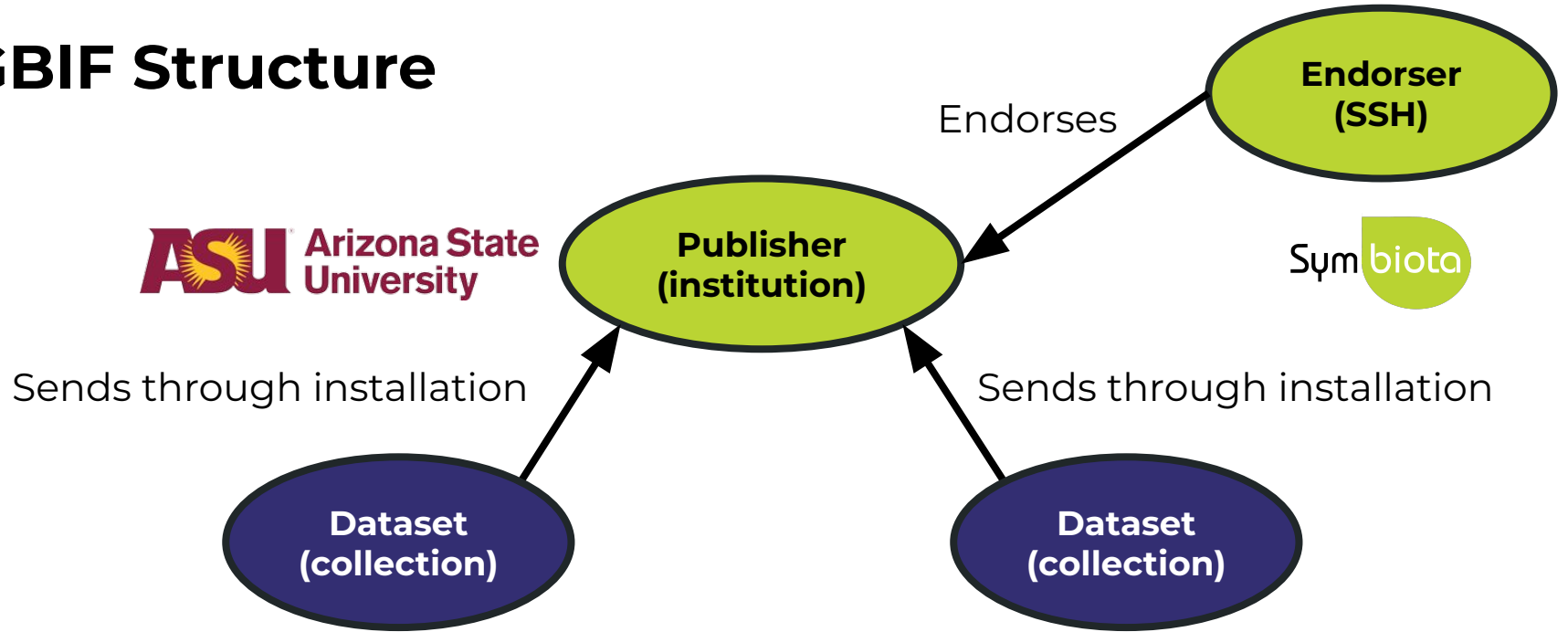
ASU Arizona State University

Symbiota

Arizona State University Mammalogy Collection

Consortium of
Small
Vertebrate
Collections

GBIF Structure



Arizona State University Mammalogy Collection

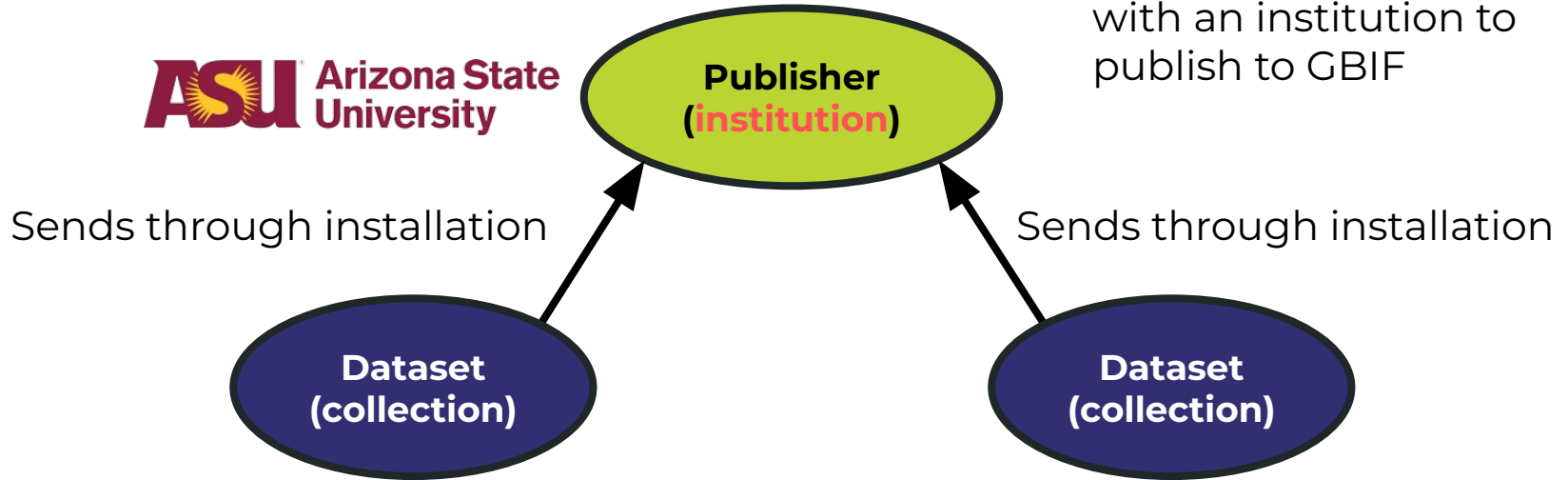
Arizona State University Vascular Plant Herbarium

Consortium of
Small
Vertebrate
Collections



GBIF Structure

*If your collection is **project-based/personal**, you must coordinate with an institution to publish to GBIF



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

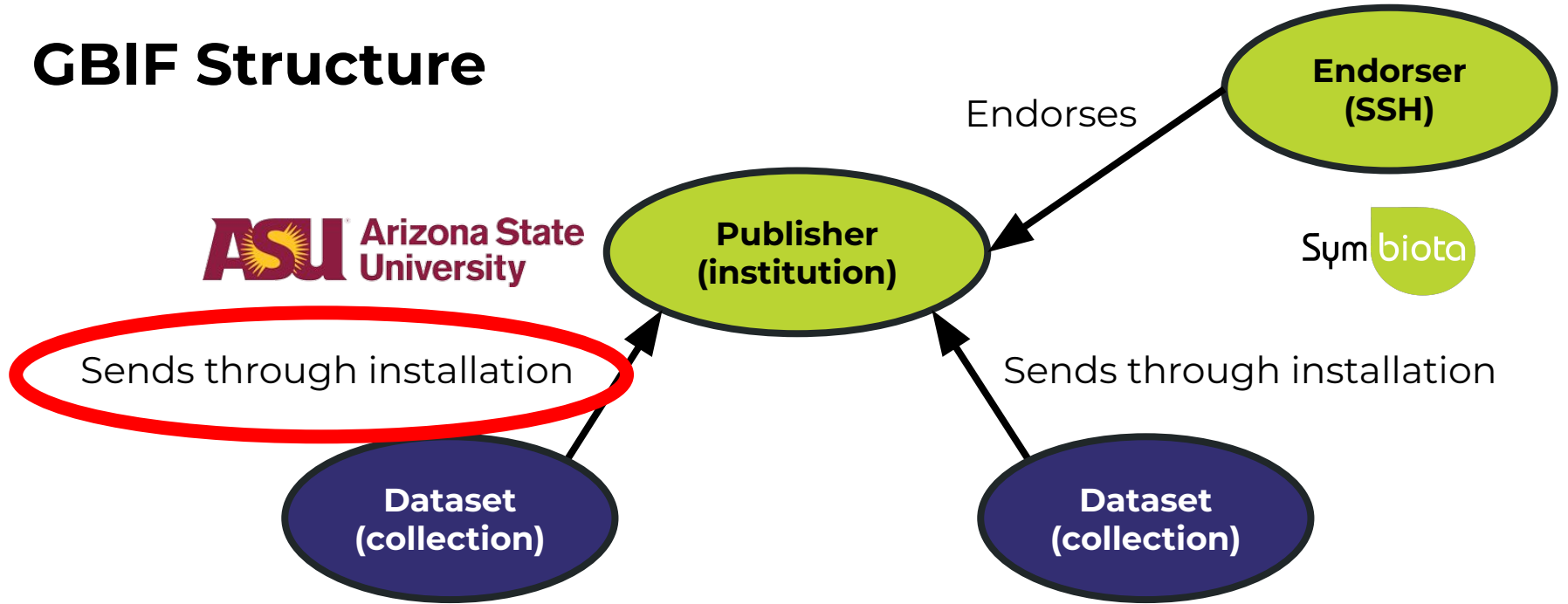
Occurrence dataset

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.**
- Once your institution is registered with GBIF, publishing is as easy as clicking a button!

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.

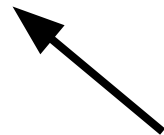
ASU Type Specimens: <http://swbiodiversity.org/seinet/checklists/checklist.php?cl=2638>

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 if your institution is US-based

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”
 - 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



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 id exchange standard. We recommend that you also review instructions for Publish

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

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->

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>

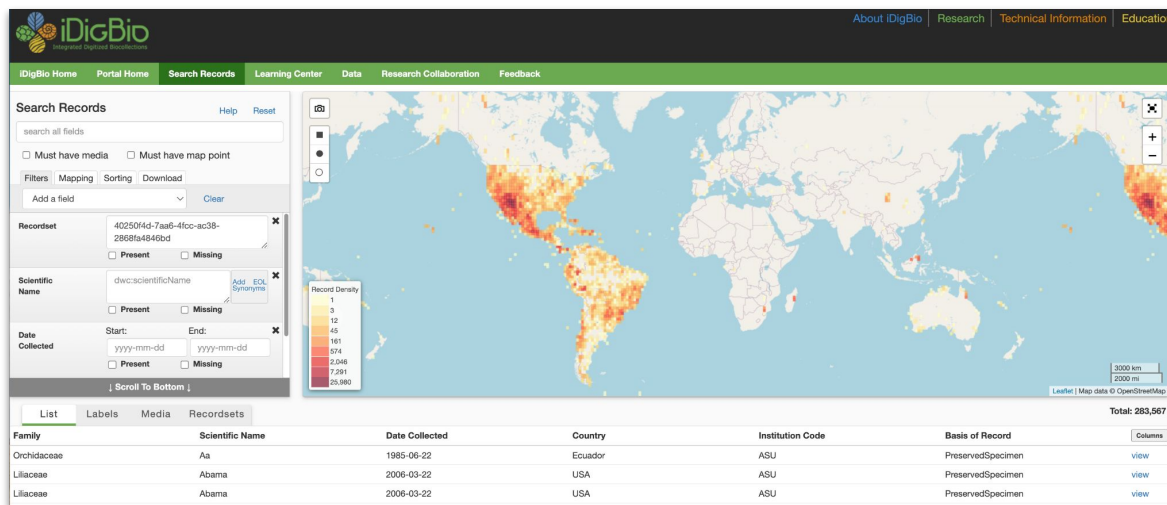
Address: Robert F. Hoover Herbarium 📍
Biological Sciences Department, California Polytechnic State University
San Luis Obispo, CA 93407-0401
USA
(805) 756-5869

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.)

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.



The screenshot displays the iDigBio web 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, the "Search Records" panel includes a search input field, checkboxes for "Must have media" and "Must have map point", and a "Filters" section with "Mapping", "Sorting", and "Download" options. Below these are three recordset filters: "Recordset" (40250f4d-7aa6-4fcc-ac38-2869ta4940bd), "Scientific Name" (dwc:scientificName), and "Date Collected" (Start and End date pickers). Each filter has "Present" and "Missing" checkboxes and an "Add EDL Synonyms" button.

On the right, a world map shows record density with a color scale legend ranging from 1 (yellow) to 25,380 (dark red). The map shows high density in North and South America.

At the bottom, a table displays search results with columns for Family, Scientific Name, Date Collected, Country, Institution Code, Basis of Record, and a "Columns" button. 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.

Questions?

Agenda

- Portal campaign accomplishments: a recap
- Publishing to GBIF & iDigBio
- **Further opportunities**
- Discussion time

Maintaining Momentum: Digitization Funding

- See: symbiota.org/funding-ideas
 - NSF grants
 - IMLS grants
- Institutional grants

Infrastructure Capacity for Biology (Capacity)

Reed Beaman

- **Synopsis:**

Support the implementation of, scaling of, or major improvements to research tools, products, and services that advance contemporary biological research.

- **Programmatic Areas:**

- **Capacity: Cyberinfrastructure**
- **Capacity: Biological Collections**
- **Capacity: Field Stations & Marine Labs (FSML)**

- Proposals accepted anytime

- NSF 21-501

<https://www.nsf.gov/pubs/2021/nsf21501/nsf21501.htm>

Portal Enhancements

The Symbiota Support Hub was funded to support existing digitization and mobilization activities, not to develop new tools...

Portal Enhancements → Funding Needed

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...however, new tool development can be initiated with outside support.

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...however, new tool development can be initiated with outside support.

So, if you want a specific tool, include funds for its development in your next digitization grant!

Including Symbiota development into your grant

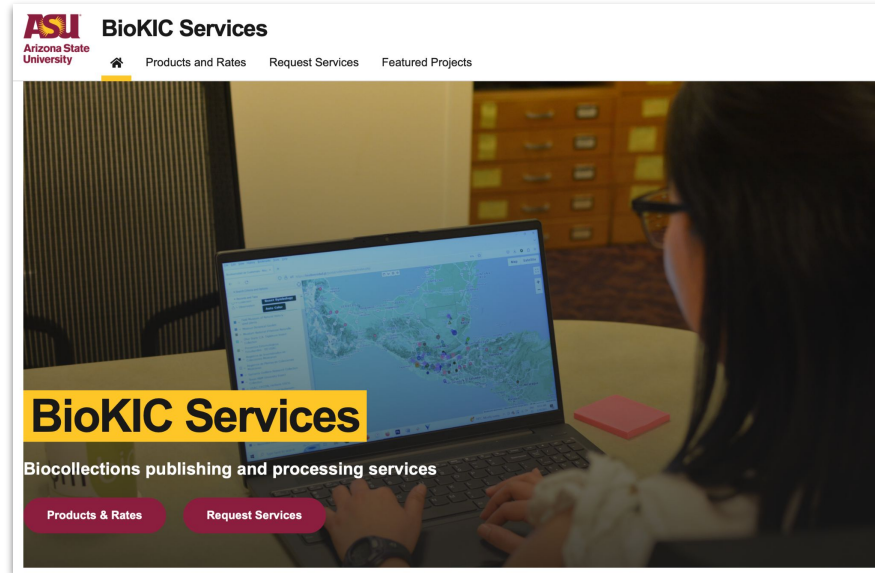
1. Determine **need(s)/want(s)** for your portal
 - a. And appropriate funding sources: symbiota.org/funding-ideas
2. **Meet with Symbiota Support Hub** team to discuss possibilities and necessary funding.
3. With SSH help, **include portal development in budget**

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 - a. And appropriate funding sources: <https://symbiota.org/funding-ideas/>
2. Meet with Symbiota Support Hub team to discuss possibilities and necessary funding.
3. **With SSH help, include portal development in budget**
 - a. **Three options:**
 - Collaborating institution
 - Subaward
 - Contract with BioKIC Services

No grant?

- Contract with BioKIC Services: services.biokic.asu.edu



More about Symbiota sustainability planning: symbiota.org/sustaining-symbiota-services

Next Steps: Working Groups?

The Steering Committee is interested in forming **Working Groups** to tackle issues relevant to our community

- **Best practices:** defining them, documenting them
 - Controlled vocabularies
 - Label transcription methods
 - Workflow documentation
 - Taxonomy maintenance
 - Taxonomy lead contact is Jennifer Girón: Jennifer.Giron@TTU.edu
 - ... and more

Staying Connected

- **New Google Group** address: ecdysis@googlegroups.com
- If you did not receive an invitation and want to join, go to:
 - groups.google.com/g/ecdysis
 - Click the “Ask to join group” button at the top, or you email the Hub to be added
 - Use to **communicate as a community**, as well as for technical updates

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Add
hub@symbiota.org
to your contacts

Standing Opportunities

To summarize:

- Contact the Hub if you need help **publishing** your data to **GBIF**
- Admins can request **Taxonomy Editor permissions**: help@symbiota.org
- **Enhance your portal** (and the Symbiota code!) by including the Symbiota Support Hub in a **grant** or contracting through **BioKIC Services**
- Start or join a **working group** in collaboration with the Steering Committee
- Join the **Ecdysis Google Group**: groups.google.com/g/ecdysis
- Take a **promotional poster** to a conference
- Participate in the monthly **Symbiota Support Group**

What about the Symbiota Support Hub?

We're still here to help!
help@symbiota.org

Feedback survey

Please complete our brief post-campaign survey

- bit.ly/post-campaign-survey