

# UC Santa Barbara

## Educational Materials

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Insect Collection Databasing using Symbiota

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### Author

Horsley, Pam

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# INSECT COLLECTION DATABASING USING SYMBIOTA

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By Pam Horsley



CHEADLE CENTER FOR BIODIVERSITY AND ECOLOGICAL RESTORATION UNIVERSITY OF  
CALIFORNIA, SANTA BARBARA  
HARDER SOUTH, BUILDING 578  
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## INTRODUCTION

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This guide was developed at UC Santa Barbara as a general guide for how to database invertebrate zoology specimens using a Symbiota natural history collection specimen database (<http://symbiota.org>). The UCSB Invertebrate Zoology Collection is a small collection with taxonomic strengths in Hymenoptera and Diptera. Originally used as a teaching collection for a general entomology course taught from 1961 to 1993, this collection's diversity (9,000 insects in 21 orders and 246 families) makes it a valuable historical record of insects in endangered coastal California habitats. This report was developed as part of the Institute of Museum Library Services Grant (award #MA-30-16-0387-16) to curate and digitize the Adrian Wenner Historic Insect Collection at University of California, Santa Barbara.

The general workflow in this guide starts with images and labels of images taken and uploaded to the Symbiota database. Specimen information is transcribed directly from the images. How to create specimen image reports are also available through the Cheadle Center for Biodiversity and Ecological Restoration online eScholarship publication venue for open access publications and reports (<https://escholarship.org/uc/ccber>).



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## USING SYMBIOTA TO DIGITIZE INSECT SPECIMENS FROM IMAGES

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To access and login to the UCSB Invertebrate Zoology Collection Symbiota database:

<https://symbiota.ccber.ucsb.edu>

If you need to create an account, click on the link below the login to do so. You may have been assigned a login ID already.

*\*Make sure to write down your user ID and password, as you will need it every time to log in to the database.*

*\*It can be helpful to change the settings on your browser to “enable autofill in forms”, as many fields will be repetitive and entered many times when databasing. This can save time, as the fields will pop up as you type them and you can select from the list when previously used.*

**Once you are logged in, go to:**

My Profile (upper right)

Specimen Management tab

Under Collection Management, select “University of California Santa Barbara Invertebrate Zoology Collection (UCSB IZC)”

“Edit Existing Occurrence Records”

Custom Field 1: Select “Scientific Name” from drop down menu

Next field will show “Equals”, change to “is null” from drop down

menu

Click “Display Editor”

Now you are in the editing page for database records and you can begin entering the information found on the photographed labels.

University of California Santa Barbara Invertebrate Zoology Collection (UCSB:IZC)  
[Home](#) >> [Collection Management](#) >> [Public Display](#) >> Editor

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

Collector Info

Catalog Number ? Other Cat. #s ? Collector ? Number ? Date ? Dupes? Auto search

UCSB-IZC0000887 UCSB Zoology 125 1989-05-27

Associated Collectors ? Verbatim Date ?

Latest Identification

Scientific Name ? Author ?

Chrysomelidae Latreille, 1802

ID Qualifier ? Family ? Chrysomelidae

Identified By ? Date Identified ?

Locality

Country ? State/Province ? County ? Municipality ?

United States California Santa Barbara

Locality ? Refugio

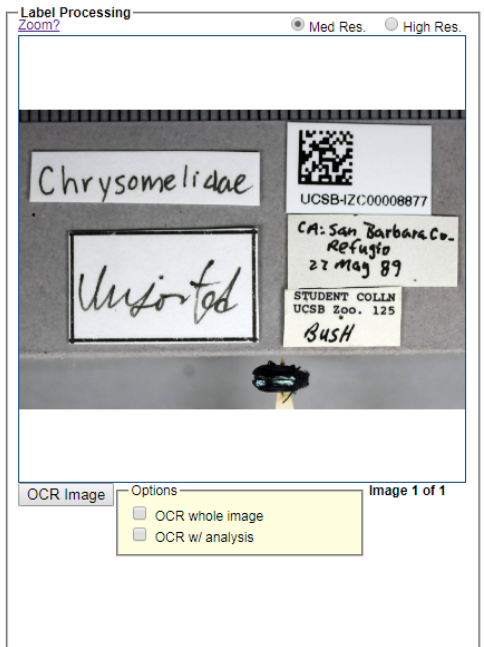
Latitude Longitude Uncertainty ? Datum ? Verbatim Coordinates ?

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

Misc

Habitat ? Bush

Substrate ?



The main fields that you will need to type in are:

## COLLECTOR INFO

Collector Info

Catalog Number ? Other Cat. #s ? Collector ? Number ? Date ? Dupes? Auto search

UCSB-IZC0000887 UCSB Zoology 125 1989-05-27

Associated Collectors ? Verbatim Date ?

### Catalog Number

- this should already be filled in
- confirm the number in image matches the number already in field

### Collector

- please write out name in full, when provided or known. e.g., Katja Seltmann, UCSB Zoology 125: name of student, when given
- if full name is not given or known, type whatever is given

### Date (format has to be dd-mm-yyyy or dd-3-letter-month-yyyy)

- if format does not fit this, i.e., March, then write in "Verbatim Date" field instead

## LATEST IDENTIFICATION

**Latest Identification**

Scientific Name ?	Author ?
Chrysomelidae	Latreille, 1802
ID Qualifier ?	Family ? Chrysomelidae
Identified By ?	Date Identified ?

### Scientific Name (name provided at the highest taxonomic level)

- will auto-fill as you type, select correct name from list.
- if name does not pop up in list, then the name is not in the Taxonomy Tree. *Please skip* the database record without filling anything in. **If you skip a record, always set the record Processing Status to "Expert Required."** If you have filled in some fields, you will be asked whether you want to save the record, so just select no and it will continue to the next record.

### \*Family (if not auto-filled after typing in "Scientific Name")

- \*If Scientific Name is a Family name (i.e., Carabidae), then you will have to copy and paste it into the "Family" field as well.

### Identified By

- will often be blank or Rachel Behm.
- if no name given, leave blank

### Date Identified (year, xxxx)

- leave blank if not provided

## LOCALITY

**Locality**

Country ?	State/Province ?	County ?	Municipality ?
United States	California	Santa Barbara	
Locality ?			
Refugio			
<input type="checkbox"/> Locality Security ?			<input type="checkbox"/> Deactivate Locality Lookup
Latitude	Longitude	Uncertainty ?	Datum ?
			C F
Verbatim Coordinates ?			
Elevation in Meters ?	Verbatim Elevation ?	Depth in Meters ?	Verbatim Depth ?

### Country

- Most often "United States", will auto-fill when typing

### State/Province

-most often “California”, will auto-fill when typing

**County**

-most often “Santa Barbara”, will auto-fill when typing

**Municipality** (incorporated place)

-Goleta, Santa Barbara, Santa Ynez, etc.

**Locality**

-Write everything out in full

-e.g., Santa Cruz Is. = Santa Cruz Island; Riv. = River; SP = State Park; NP = National Park; Cyn. - Canyon; Rd. = Road; IV = Isla Vista and should actually be in “Municipality”; etc.


**\*\*Latitude & Longitude**

-must be decimal format

-if not, then see \*\* below

**Datum** (if provided, WGS84 most often if after 1998)

**Verbatim Elevation** (i.e., 4m or 5’, will auto-fill “Elevation in meters”)


*If the coordinates are provided on the label, click on  to reveal further Georeferencing fields and fill in:*



**Locality**



Country ?	State/Province ?	County ?	Municipality ?
United States	California	Santa Barbara	


Locality ?

Refugio 

Location Remarks ?


Locality Security ?  Deactivate Locality Lookup

Latitude Longitude Uncertainty ?   C F Datum ? Verbatim Coordinates ?

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


Lat: [ ]° [ ]' [ ]" N ▾	Zone: [ ]	T [ ] N ▾ R [ ] E ▾
Long: [ ]° [ ]' [ ]" W ▾	East: [ ]	Sec: [ ] Details: [ ]
<input type="button" value="Insert Lat/Long Values"/>	North: [ ]	Meridian Selection ▾
	Hemisphere: North ▾	<input type="button" value="Insert TRS Values"/>
	<input type="button" value="Insert UTM Values"/>	

Georeferenced By Georeference Sources ? Georeference Remarks

Georeference Protocol ? Georef Verification Status ? Footprint Polygon 

**Georeference Sources**

- Options are:
- on label;
  - GPS, on label
  - Google Earth, on label

\*\*If latitude and longitude are NOT in decimal format or there are Transect/Range/Section data, you will have to click on  to reveal further Georeferencing fields to enter the data.

## MISC

Misc

Habitat ?  
Bush

Substrate ?

Associated Taxa ?

Description ?

Notes (Occurrence Remarks) ?

Life Stage ? Sex ? Individual Count ? Sampling Protocol ? Preparations ?  
[ ] [ ] [ ] [ ] [ ]

Phenology ? Establishment Means ?  Cultivated

Fields most often provided, but not always:

### Habitat

-this field will vary greatly, but just write out in full whatever information is provided on the label

### Notes

-this is the field where you should write anything that doesn't seem to "fit" anywhere else

-Please provide label information in the following format:

On label: xxxx (write out details in full, but be sure to include "On label:" to ensure clarity)

### Sex

-write out "Male" or "Female", when information is given

### Sampling Protocol

-sometimes provided

-e.g., Hand Collecting, Sweep Net, Yellow Pan Trap, Pitfall Trap, etc.

## CURATION

Fill in nothing.

Some fields are auto-filled for every record, so leave as is.

**Curation**

Type Status ?	Disposition ?	Occurrence ID ?	Field Number ?
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Basis of Record ?	Language	Label Project	Dupe Count
PreservedSpecimen ▼	<input type="text"/>	<input type="text"/>	<input type="text"/>
Institution Code (override) ?	Collection Code (override) ?	Owner Code (override) ?	Processing Status
UCSB	IZC	UCSB	Unprocessed ▼
Data Generalizations			
<input type="text"/>			


Key: 102749      Modified: 2018-03-20 12:17:48      Entered by: not recorded [2018-03-20 12:17:48]

Click **Save Edits** at bottom left

Status Auto-Set:  ▼


**Additional Options**

Carry over locality values

Then, click  at top right to go to the Next Record.

**Repeat.**

**Symbols:**

 Each field has a question mark next to it. If you are in doubt and are not sure about what a field name is, click on the question mark and it will take you to the definition.

 Click on this symbol to expand for further editing capabilities.

**FURTHER SYMBIOTA DATABASE READING:**

Data fields: <http://symbiota.org/docs/symbiota-occurrence-data-fields-2>

LepNet guide to data entry: [http://www.lep-net.org/?page\\_id=47](http://www.lep-net.org/?page_id=47)