INSECT COLLECTION DATABASING USING SYMBIOTA

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INTRODUCTION

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).
USING SYMBIOTA TO DIGITIZE INSECT SPECIMENS FROM IMAGES

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

**COLLECTOR INFO**

- **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

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

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 [F] to reveal further Georeferencing fields and fill in:*
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 F to reveal further Georeferencing fields to enter the data.**
**MISC**

**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.
Click **Save Edits** at bottom left

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

Repeat.

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**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:**


LepNet guide to data entry: http://www.lep-net.org/?page_id=47