

## Instructions for using the CBP Excel Record Spreadsheet

### Recommendations

- Implementing a specimen cataloging system
  - In order to inspire confidence in the future users of your data, it would be ideal if each record were traceable to a uniquely numbered, or otherwise identifiable specimen. Though I'm well aware that few entomology collections are catalogued in this way, I would strongly encourage anyone keeping or managing a collection to consider it. This way if any questions arise regarding the specimen, whether questions about its identity, or simply about details of its morphology, it will be possible for users to track the record to its source.
  - This is entirely optional, and I wouldn't want to discourage any contributors in the slightest from contributing data regardless. However, if anyone is interested in implementing such a system in their collection, I am more than willing to provide guidance based on my experiences with this (Michael Caterino, mcaterino@sbnature2.org).
- Confident identifications
  - Ultimately, only you can know how confidently identified a specimen in your collection is. Where questionable identifications correspond to potentially interesting records (outside of known range for the species, etc.), please add a note to the effect that the identification is not 100% certain.



### Types of records you may enter in this spreadsheet

- The project database can accept three types of records.
  - specimen records – data right off specimen labels.
  - literature records – distributional data taken from published work, monographs especially.
  - sightings – if a species was seen in the field, but not collected, such records for easily identifiable species are valid additions.

### General Information

- Each line in the spreadsheet corresponds to a single record, whether a specimen, literature record, or sighting. It is not necessary to fill in all fields. Even records that provide no more than a species name and a state or county record may be valuable. The only absolute requirements are BasisOfRecord, a genus and species, and data for at least one geographic field. Note that we are not cataloging records of specimens only identified to genus (though this may change in the future.)
- Please do not edit the column headings. These correspond to the Table and Field in the database into which the data are imported. If they are not in this exact form, the database will choke when trying to import the data.

### Rationale and content of each field

- **Record: Reference** – If entering literature records, put the citation here (e.g. Caterino, 2005), and provide full reference in a separate file.

- **Record: BasisOfRecord** – One word corresponding to the type of record: either 'specimen', 'literature', or 'sighting'.
- **Family: Family** – Current family assignment, following most recent American Beetles.
- **Species: Genus** – Current genus assignment.
- **Record: SpecificEpithet** – Species name, or epithet. (no author)
- **Locality: County** – California county.
- **Locality: AdminArea** – If the specimen came from any managed area, whether a particular national forest, state park, county park, preserve, or other area, putting the name of the area in this field can help managers find data on their beetles easily.
- **Locality: Locality** – Full locality description as recorded on the label, including offsets (e.g. '5 mi E of..'), roads, river crossings, all of it.
- **Locality: DecimalLatitude** – Latitude if recorded as decimal degrees (e.g. 34.2645). Include only the number, without any degree symbol or cardinal direction (North will be assumed.)
- **Locality: VerbatimLatitude** – Latitude if recorded as anything other than decimal degrees. Use 'deg', 'm', and 's' to indicate degrees, minutes, and seconds. Allowable formats include: 34deg26.36m, 34deg26m46s.
- **Locality: DecimalLongitude** – As for DecimalLatitude above. Please use '-' (minus symbol) for W longitude.
- **Locality: VerbatimLongitude** – As for VerbatimLongitude above.
- **Locality: elevation** – Numerical value for elevation. Please put units in next field.
- **Locality: elevation units** – Units for elevation, preferably 'ft' or 'm'.
- **CollectionEvent: DateBegin** – If full date known, date of collection, as mm/dd/yyyy. Beginning date if a trapping event.
- **CollectionEvent: DateEnd** – End date if a trapping event, as mm/dd/yyyy.
- **Month** – If full date not known, the month of collection, as full name or roman numeral.
- **Year** – If full date not known, the year of collection.
- **CollectionEvent: CollectingMethod** – Type of trap or technique used. Sometimes the line between this and 'ecological\_data' is blurry, and not all that critical in any case.
- **CollectionEvent: ecological\_data** – Any information on the beetle's natural history that can be gleaned from the collection data: host plant, microhabitat where found, specific bait attractant, etc.
- **CollectionEvent: Collector** – First initial and last name of collector.
- **Record: TypeStatus** – Whether holo-, para-, or other kind of type specimen.
- **Record: notes** – Any other information about the specimen or circumstances of collection that doesn't fit into any of the above categories.
- **Record: Repository** – Name of collection where specimen housed, preferably as an 'Arnett, Samuelson, and Nishida, 1993-style' coden (e.g. FMNH, SBMN, CASC, etc.).
- **Record: LastName [determiner]** – Last name of person who made identification.
- **Record: CatalogNumber** – If the collection uses some kind of cataloging system, with unique identifiers for specimens, enter that number or identifier here.

### When you're done

- Simply save the spreadsheet and email it to [mcaterino@sbnature2.org](mailto:mcaterino@sbnature2.org).

**Thank you for helping to improve the California Beetle Project database!**