



## CNDDDB Data Submission Guidelines (brief<sup>1</sup>)

The California Natural Diversity Database (CNDDDB) is a program that inventories the status and locations of California's rare plant and animal species in a GIS for resource management. Data submitted must contain the following information:

- Who detected it (name, address, phone number, email)
- What was detected (species common name and scientific name<sup>2</sup>)
- When was it detected (date or date range)
- Where was it detected (location)
- Biological & ecological information<sup>3</sup>

Some data submitted to the CNDDDB may require further information in order for our biologists to properly interpret the data, such as survey methodology or protocol, or transplant/relocation information.

Data may be submitted to the CNDDDB in a number of formats including:

- CNDDDB [online field survey form](#) web application (preferred)
- Digital and tabular data

For further details, see our webpage "[Submitting Data to the CNDDDB](#)."

### CNDDDB standard field survey form

For a few rare species detections, it is best to fill out our new (Oct 2014) [online field survey form](#) web application. This application is similar to our earlier PDF field survey form, but has several advantages: internet mapping application with several base-map layers, captures data into a spatial database, field validations and restrictions, and users can see their previously entered records and generate a PDF field survey form report on demand. See our [Submitting Data to the CNDDDB](#) page or our online FSF [Frequently Asked Questions](#) and online FSF [Help](#) documents for further information.

Our PDF field survey form is still available from our website. The [General Instructions for Completing CNDDDB Field Survey Form](#) contains examples of completed forms and detailed descriptions of the fields requested on the form. The detailed field descriptions may also be used as an attribute guide in constructing digital or tabular data (below).

### Digital and tabular data submissions

Digital datasets are welcomed, however, there are requirements. The combination of metadata, spatial reference, and attributes should work together to portray a clear, unquestionable story about the data.

- **Metadata** must be included and at a minimum must state 1) the purpose of the dataset, 2) what the records represent, 3) why and how the data were collected, and 4) definitions of the attribute fields and values. More details on the purpose and creation of metadata are on the [BIOS metadata page](#). Detailed annual project reports may compliment or substitute for metadata in some cases.
- **Spatial information** for each observation or location can be provided either as a GIS file, or as tabular geospatial coordinates in an Excel or standard DBF file. Data may be in either geographic (latitude/longitude) or projected format (UTM, State Plane, etc).<sup>4</sup> You may submit the data in any format; however, you must note the projection and datum with your submission.
- **Attributes** must accompany the spatial information. The minimum attributes consist of the 5 attributes at the top of this page (who, what, when, where, biology/ecology) and a unique key field linking the spatial feature to the corresponding attribute record. The meaning of the attributes and values must be clearly defined. Further attributes may be requested.

**Avian detections** require more information about observed animal behavior. Please see our document [General Information for Submitting Avian Detections to the CNDDDB](#) for further information.

<sup>1</sup> Please see the [CNDDDB webpage](#) for more detailed information or [contact us](#) for submission details.

<sup>2</sup> Common names and scientific names for CNDDDB tracked species are found in the [Special Plants List](#) and the [Special Animals List](#) available from our "[Plant & Animal Information](#)" webpage.

<sup>3</sup> CNDDDB Element Occurrences are populated with information regarding age class, number of individuals, animal site use (foraging, breeding, etc), animal behavior, phenology, habitat quality, land use, occurrence condition, disturbances and threats, etc. See our [field survey form instructions](#) for complete descriptions of the attribute fields we prefer.

<sup>4</sup> The CNDDDB document [Instructions for Reporting Coordinates to the CNDDDB](#), available from our "[Submitting Data to the CNDDDB](#)" webpage, explains more information about coordinates and coordinate systems.