FIELD JOURNALS

Field journals are invaluable records of our observations while in the field, and are really the starting point for documenting and interpreting patterns in nature. For our field journals, we will be using a variation of the Grinnell Method that emphasizes the collection and organization of field observations for scientific investigation. This method was developed by Joseph Grinnell (1877-1939), a noted field biologist and the first director of UC Berkeley’s Museum of Vertebrate Zoology. For over a century, field biology and natural history students at UC Berkeley have been trained in this method and it is probably the method most used by professional naturalists. While we want you to use the general format because it provides a good framework for making and recording your observations, don’t lose sight that this is your journal — over time you may modify or develop new techniques that work best for you.

Our variation of the Grinnell method involves two main steps: Observations are first recorded in a field notebook; this information is then transcribed into a field journal.

Field notebook
This is actually what you take in the field for recording your observations. The notebook should be spiral or hard bound, but the format is pretty flexible; the important point is to record detailed observations. It often helps to have an “Observation Checklist” in your notebook (either the first or last page) that you can reference for your notes. This information will often make up the first part of the written description in your field journal.

- Time & Date (use 24-hour clock format – 1330 for 1:30 pm)
- Location (w/ arrival and departure time)
- Route traveled – include maps marking locations and direction of travel
- Weather (include temperature, wind, precipitation type, cloud cover, other…)
- Habitat / Vegetation type (woodland, grassland, wetland, etc.)
- Species, rocks, or other natural events observed.
- General observations, comments and reflections
- Sketches and drawings, photos (w/ digital photo number)

Field journal
Journal entries involve rewriting your field observations from your field notebook in a format that is easy for you and others to read. Each field day should have a separate journal entry consisting of a written narrative of the day's observations along with drawings/sketches, a species list, and maps showing the route of travel. Any species accounts and catalog entries of collected specimens are also included with the day’s entry.

Here are some specific points for formatting your journal...

♦ Narrative– this is a general account of the day’s events including where you went, the conditions, what you saw and any additional thoughts or comments.
  - Begin each page with the location of that entry. This should be underlined with a wavy line (see sample below).
  - Write in full sentences and narrate what you observed
  - Only write on one side of a sheet. Use the opposing page for sketches, maps, or photos (taped onto the page).
  - Underline species names. Use straight lines for scientific names and wavy lines for common names (this actually helps in scanning your journal for observations)
♦ **Sketches/Drawings** – just remember the purpose is to capture information rather than producing something aesthetically pleasing. With this in mind, don’t be deterred from adding notes or scribbling comments on your sketches to highlight specific details or reflections.

♦ **Species List** -- Compile a species list at the end of the written description of the day’s events. It is helpful to have different categories (e.g. birds, plants in flower, rocks,…)

♦ **Maps** -- Include maps (pasted into your journal or drawn) that shows locations of your route and/or activities.

**Species Account (if any)** – this is a record of specific nature observations of interest, usually in a single place and pertaining to the ecology or behavior of an organism, although this could really apply to any natural phenomena (e.g. weather, rock formations, wave action, etc.)
• Title the page with the name of the species (scientific name, if known)

**Catalog Entry (if any)** – this is a record of any specimens that you collect.
• Title each page “Catalog”
• Label or tag each specimen you collect with the following information.
  - Catalog number
  - Date collected
  - Collection location
  - Collector’s name
  - Identification

**Other aspects of your journal to consider**
• Duration – each journal should cover one calendar year
• Margins – 3 cm from the left side and from the top of the sheet
• Date each entry in the space to the left of the page margin
• Put your name and the year in the upper left corner of each page
• Number all pages – this often goes in the upper right on the page.
• For numbers, use numerals instead of words (e.g. 1 rather than one)
• Avoid abbreviations (it is easy to forget these or others may not be able to interpret)
• Use a water-resistant ink pen (e.g. Micron pens work well)
• Use bound journal with acid-free archival paper (recommended)

**For more information...**

[http://mvz.berkeley.edu/Grinnell/index.html](http://mvz.berkeley.edu/Grinnell/index.html) - this website highlights a current project to resurvey many of Grinnell’s (and other researchers’) early collection sites.
[http://mvz.berkeley.edu/FieldnotePhotoMap_Collection.html](http://mvz.berkeley.edu/FieldnotePhotoMap_Collection.html) - this website allows you to see archived field journal entries of many field biologists. It also has archived historic photos of California.

Attached is a sample of a journal entry from Robert Stebbins, Professor Emeritus of herpetology at UC Berkeley and author of *A Field Guide to the Western Reptiles and Amphibians* (Peterson Field Guides).

You can see Robert Stebbin’s full journal entry and the scanned journals of other scientists and naturalists at: [http://bscit.berkeley.edu/mvz/volumes.html](http://bscit.berkeley.edu/mvz/volumes.html)
Nov. 25

Napa, Santa Rosa, San Rafael Trip

Anna Rose, the children and I left
our Canyon residence at 8:00 A.M. for a
Sunday outing to north Bay localities.
As we left Canyon, the sky was blue but
with wisps of cirrus clouds. We drove
N. through Orinda, on past the San
Pablo Reservoir, making junction with
U.S. 40 north of Richmond. We crossed
the Bay at the Carquinez Bridge a thence
N. to Napa. The sky was gray over Napa.
The hills surrounding this town, to the
N.E. looked like good Eucalyptus country.
At a place 4.5 miles out of town, we crossed a stream
Willows, sycamores, oaks and other vegetation
were found along this creek. The surrounding
country was farm land, with little
native growth. I explored the W. bank
of the stream S. of the bridge for 100 yd.
N. No Eucalyptus were found. Two
Batrochioeps, along with earthworms,
millipedes x snails, were found under
a log 20 ft x 10 ft. The substratum beneath
the log was sandy loam, without humus.

At 7 miles W. of Napa on combined
State highway 12 & 37, 4.5 mi. E. of the
intersection of these roads we stopped
Napa, Santa Rosa, San Rafael Trip
Nov. 25 again for Ensatina. The terrain was as follows: low rounded hills, most of which were covered with short new grass; practically no other herbaceous growth except in gullies; a small E-W oriented stream flowing to the E; along the stream were blackberry brambles, poison oak, stream alder, bay, coast live oak, valley oak (dominant on higher ground); rocks and logs scattered about; cattle grazing. Here we collected many Triteana gracilis (5) & a single T. torquata, many Batrachoseps 2 & Anidez lugubris. Two adult male Ensatina were taken. These prove the typical Alameda - Contra Costa Co. coloration! I had fully expected to find intergrades in the area between the unnamed Ensatina population north of the Bay & the Bay area animals. Such intergrades occur in Marin Co. (Muir Woods). Up until now I had considered the Bay & the Sacramento River as the barrier to be correlated with these differences.

13.6 mi. S.E. of Santa Rosa, on State Hwy. 12, measuring from the