

BIOL 3301—Field journals

The following is a guide to help you with the format of your field notebook. Joseph Grinnell, field biologist and the first director of the University of California's Museum of Vertebrate Zoology (MVZ), developed this format. His philosophy was that field notes were mainly for the use of other researchers, and so a standard format is necessary to help find information quickly and easily.

Detailed field notes are an extremely valuable part of natural history collections. They are used extensively for museum research, conservation, and management. For example, because the distribution and abundance of plants and animals changes over time — due to natural causes as well as human-mediated impacts on the environment, we can document the changing status of biodiversity in a given area by looking back at field notes from 100 years ago.

Why you want to keep a field (or lab) notebook

1. To provide yourself with a complete record of what you observed, and in case of doing an experiment, it is a place to keep record of your data.
2. To encourage objective observations and systematic data collection. It also provides a place to think: to speculate about how your observations can be interpreted.
3. To provide historical record of your activity to a person who may be interested using your observations (this may be YOU a few years later), or to allow someone else to recreate or build upon your observations/research.

Which notebook to use as a notebook

In this class you will use a composition notebook. But you should know that there are many other viable options, including some notebooks with waterproof paper (!), or smaller notebooks which can fit into your pocket (which I prefer), and you should also consider digital notebooks (but these require charged batteries and good weather, so may not be useable in all environments).

General guidelines for setting up your notebook

- On the outside front of notebook (and also on the spine of the notebook, if present), put your full name, and date-range of use.
- On the inside cover, put your full name, mailing address, phone number, and e-mail.
- Write legibly throughout your notebook (this is for others to read as well as your future self)
- Use pen
- Either use military time for all time entries, OR append AM/PM to all your times
- Use date format: 18 May 2016 (day: numeric; month: letters abbreviated; year:full)

- Write on only one side of the paper.
- Never remove a page. This ‘rule’ was originally favored to prevent unscrupulous researchers from “losing” data that might not have been favorable to their research objectives, but is just a good practice so that you have a *complete* record of all your work. Along the same lines, if you make a mistake, draw a *thin* line through the word or number rather than obliterating the entry with a blob of ink (and don’t use white-out).

Specific guidelines writing in your journal

- Leave a generous left margin
- In the upper left of every page, write your last name, then first, and the year below your name.
- In the upper middle page write the ‘type’ of entry:
 - ‘Journal’, or
 - ‘Catalogue’ (or subtitle, like ‘Capture log’), or
 - ‘Species account’ (note that for species accounts, the top center of the page should have listed the species common name and scientific name)
- In the upper right page write the page number (you can do this as soon as you get your notebook)
- For each entry, write the date to the left of the margin in the following format: 03 July
- For each entry, write the locality (place) in full detail, including county and state. Go from the most detailed item in your locality-heading to the most general, ending with the state. Underline the locality with a wavy line (the latter is important to easily keep track of where you were).

The field notebook consists of three main sections: the **journal**, the **catalogue**, and **species accounts**. (see below for instructions on maintaining these sections).

Journal entries

The journal is like a diary (see below for content). Usually, the journal entry will be written at the end of each period in the field. Be accurate. If you have to guess about something, identify your guess as a guess. Sketches and drawings and diagrams can be very useful.

Your journal entry should include: (and should be bullet pointed)

- locality information (e.g., “west slope of ‘wildcat field’, Bamberger Ranch, Kendal Co., Texas”)
- Route of travel, or locations of collecting, including a map if possible
- Habitats and topography
- Hours of observation
- Weather conditions
- Participants (e.g., Trinity Univ 3301 course)
- A general description of your activities (i.e., why were you in the field?)
- Any general impressions

—List of species seen AND estimated numbers of each species (estimated numbers is generally filled in at the end of journal entry, or it is done as a tally). Be detailed and quantify your data as much as possible. “few ducks on the pond” is not as useful as “saw 12 pintail (7 males and 5 females) on the southeast end of Olcott Lake about 5 m from the shore.”

Catalogue

The catalogue section of the field notebook contains a list of specimens that were collected, or animals captured and marked, with all of the appropriate locality information. We will only collect specimens and mark animals on our weekend field trips, and we’ll discuss the format for this section in more detail once we begin these activities.

Species Accounts (last 30 pages)

A species account is devoted to a more detailed description of a particular species. Create a page for each species you observe. This is the place for more in-depth descriptions and observations of an individual or group of one particular species. This is an important place to draw sketches—no matter how rough your artistic skills— of your observations. Include in your description sights, sounds, smells, textures, patterns, sizes, shapes, colors, and movements. Include numbers of individuals, sizes, frequencies and behaviors. Write in complete sentences and paragraphs—think of your entries as a letter to someone visiting the area 20 years later who is unfamiliar with the area. If you do not know what species you’re looking at, you should describe the animal as best you can.

The information you want to record is:

- What does it look like (again: drawings are appropriate here!)
- What does it sound like (feel free to give it human-words, i.e.: ‘phoebe’ for a Chickadee call)
- Where was the species found? (Habitat, height in canopy, distance from shore, etc.)
- What is it doing? Who is it interacting with? Are there specific traits/behaviors of note? Are there repeated patterns of behavior worth noting?

(look at examples of Dr. Ribble’s notebook entries)