Data Sheets

Field Biology

Your data sheet is one of the most important parts of your project. A good data sheet has blanks for every single thing you will need to write down each time you collect data. This way, if there are any blanks left unfilled, you will know there is something that you forgot to collect.

You should make your data sheet in Microsoft Excel – when you have completed it, please e-mail it to me along with your written methods.

Here are some tips for working in Excel:

- 1. You can resize columns and rows by clicking in between them and dragging.
- 2. You can make borders for cells by selecting the area you want to put borders around, choosing "Cells..." from the Format Menu, and clicking on the "Borders" tab.
- 3. To make sure your data sheet will fit on one page, select your whole data sheet, then choose "Page Setup..." from the File Menu. After you click "OK", dashed lines will appear that will show you where page breaks will occur.
- 4. To turn the Excel gridlines on or off, choose "Options" from the Tools Menu, then click on "Gridlines" under "Windows Options".

Here are some general things to think about with your data sheet:

- 1. Make sure to include ALL the relevant data you need to collect.
- 2. Make sure to include extra information such as weather, time, air temperature, etc. This may be important later on ...
- 3. Design your data sheet so that the blanks appear in the correct order you should be able to start at the top of your data sheet and work left to right and top to bottom without skipping around.
- 4. Include location information (such as latitude/longitude from a GPS; also include grid coordinates).
- 5. Where possible, set your data sheet up so you can simply circle or check items, rather than writing out information.
- 6. Include some space for miscellaneous notes.

Here are some specific items you should think about including on your data sheet:

- 1. All background data for tracking your project and the information you collect
 - a. Names
 - b. Dates
 - c. Times
 - d. Site location/number
 - e. Replication location/number
 - f. Sample number
 - g. Subsample number
- 2. Any relevant general information for your study
 - a. Weather
 - b. Sun exposure

- c. Elevation
- d. Surrounding vegetation
- e. Annotative descriptions
- f. Cross-references to other groups or other samples
- g. Other notes
- 3. Any information you need to collect in the field
 - a. Amount of material
 - b. Plant names
 - c. Soil information (texture, color, etc.)
 - d. Distances
 - e. Latitude/longitude
 - f. Counts
 - g. Size
 - h. Temperature
- 4. Any information that will be measured back in the lab
 - a. Mass (make sure to include before/after spaces and masses for everything you might measure for example, a petri dish)
 - b. Species information
 - c. Dissolved oxygen
 - d. pH
 - e. Turbidity
- 5. Any simple calculations you will need to make (not analysis; just intermediate or summary calculations)
 - a. Averages
 - b. Totals
 - c. percent water content
 - d. Other percentages