

Lab write-up directions

We will collect data each field trip, and will spend the following class in the computer lab analyzing our data. Data will be analyzed using a variety of computer programs, including spreadsheets, statistical packages, and other specialized software. Lab write-ups of the exercise and data analysis are due ONE WEEK after the analysis session. Please use the following guidelines for writing your lab reports.

Each lab write-up will be a collective effort produced by the group of students who worked together in the field. The lab write-ups will follow standard scientific format (introduction, methods, results, discussion), as discussed below. Write-ups must be typed in 12-point font and not exceed 5 single-spaced, 8.5 x 11 pages, including figures, tables, and references. Rambling will not be rewarded, so take your time to outline what you need to say before you write and then do so as clearly and concisely as possible.

Introduction

Your introduction will be shorter than most you read in published papers, but it should still contain the same important elements: statement of the problem, discussion of its significance, pertinent literature review (you can use Krebs primarily), the purpose of your study, and hypotheses (where necessary).

Methods

The methods are clearly outlined in the lab assignment itself. It is your job to write the methods in your own words and discuss any changes or specific decisions you may have made in the field. This section should include the details of the system under study, a description of materials, the details of products used, sampling and data gathering techniques, treatment of data (i.e. the types of analyses used), and any assumptions of your methods or statistics. Feel free to use sub-headings to clarify this section. The overall goal is to produce a roadmap that would allow the study to be repeated, but without unnecessary detail.

Results

Keep the results clear and to the point. This section should include just the results and references to any figures or tables. Report calculated values, measurements of error, *P* values, etc. Remember that any desire to talk about how you obtained the results should have been discussed in the methods section, and any desire to interpret these results should be saved for the discussion section.

Discussion

The discussion is your chance to show us you understood the lab and the analyses you conducted. Make sure to explain what the results mean and their significance. Discuss the hypotheses and any limitations of the study as well as your conclusions. Again, feel free to use sub-headings to clarify this section.

Other points

- You can use the title of the lab for your lab write-up title.
- You will not have an abstract (you will write an abstract for your methods paper).
- The bibliography will follow the *Ecology* format
- Graphs and figures should be attached at the back of the lab write-up in the order they are referred to in the text. Legends should accompany each graph or table describing their contents.

Writing

Above all remember that clear, concise writing is important for conveying information in any field. Please edit the final report to ensure a consistent tone and a coherent outline in your writing. Write in the active voice, think about your audience, and avoid jargon and redundancy.