

## Notes on Scientific Writing

These notes are written by your TA and vetted by your instructor. They are intended to help improve your scores and help you write and structure reports in the generally accepted framework of science writing. Hope this helps.

### Table and Figures

All tables and figures should include:

- IMPORTANT - A caption that allows for independent interpretation without the paper.
  - An excellent way to think of this is if you were to find a paper with only that table or figure printed on it blowing in the wind down the street, you would be able to completely understand the results it portrays WITHOUT the report from which the page was lost.
- Correct axis titles with units.
- In general table captions are placed at top and figure captions are placed at bottom.
- Each figure and table should be referenced in the body of the text. For example:
  - The mean weight of invertebrates from site one were not significantly different from those of site two (Figure 1). *This is a parenthetical example.*
  - The standard deviation of species diversity outlined in Table 1 shows that smaller plots differ less in diversity than do plots of larger area. *This is an in text reference example.*
- Lastly, do not make any interpretations in a caption. That is for the discussion.

### Writing and Content

- Always re-read your writing OUTLOUD before you submit it. I promise you will find several errors, even the best writers will.
- Less is more – a good habit is often to read your writing and with a marker cross out everything that is not completely imperative to the understanding of each sentence.
  - Bad Example: Survivorship of females was longer in Bellingham during the early 19<sup>th</sup> century because females ~~more often than not~~ did not do the laborious and ~~often~~ dangerous work such as logging and coal mining that men tended to ~~do in the Northwest~~.
  - Much better might be: Female survivorship in Bellingham was prolonged in that women were less subject to the difficult and dangerous occupations of men.
- Note that the numbers zero through ten (0-10) in text are spelled out and 11 + are written in their numerical characters. In general, avoid beginning sentences with numbers.

### Last Important Notes

- A lack of data or explicit evidence (such as statistical) or visual evidence doesn't preclude or excuse you from making a thoughtful analysis of what trends are present. At minimum, do your best to describe the trends you can identify and give the reader the tools to evaluate the strength of evidence. We ALWAYS do the best with what we have.
- Follow the outline of questions provided, answer each question directly by listing the number at the beginning of your response. Review the handouts to make sure you don't miss anything.