

## Twenty-two tips for writing scientifically

-These are in no particular order

- 1) Sentences that include findings from another study should be followed by a citation of that work.
- 2) Text taken verbatim from another source must be in quotes and followed by a citation.
- 3) Avoid quotations as much as possible. Use your own words.
- 4) **Begin each paragraph with a topic sentence.** All sentences in that paragraph should be related to that topic.
- 5) Peer-reviewed literature includes scientific journal articles, books, and some government reports. It does not include magazine articles, newspapers, web pages and other literature that has not been reviewed by peers.
- 6) An abstract should include a brief summary of the finding for a study. Never state “results will be discussed” in an abstract.
- 7) Scientific studies should be **written in the past tense**. Exceptions may occur when discussing the implications of the study in the discussion section.
- 8) Give the full scientific name of all species at first mention. Afterwards, refer to them using either common names or scientific names, but be consistent. Common names of fish species are not capitalized unless they begin a sentence (i.e., central stoneroller, not Central Stoneroller). Example: first mention “Gizzard shad (*Dorosoma cepedianum*) is abundant in Tuttle Creek reservoir.” Second mention “Detritus and algae are the dominant food items of gizzard shad.”
- 9) Scientific names can refer to one or more individuals.
- 10) Bass, trout, char, and salmon can be singular or plural for the same species (i.e., bass can refer to one or more largemouth bass). Basses, trouts, and chars refer to multiple species of bass, trout, and char. To my knowledge, “salmons” is not a word.
- 11) The introductory section must include a statement of study objectives. This will usually be the last thing you write before the methods section.
- 12) Write 1950s instead of 1950's; 1980s instead of 1980's, and so forth.
- 13) Always double-space the main body of the article. You can single-space abstracts and references - this will be okay for our lab reports.
- 14) Use metric units only - even if we record data in English units, break out the calculator!
- 15) Fish = one or more individuals of the same species; Fishes = more than one species.
- 16) Know your audience. This is a scientific paper, don't use slang terms.
- 17) Make a pronoun refer unmistakably to its antecedent (I myself am bad about this sometimes).
- 18) Use a semicolon before a conjunctive adverb (e.g., “I really like to hunt; however, I'd rather be fishing”).
- 19) Always run your spellcheck before final printing.
- 20) Save your work frequently. Then, if your computer locks up, you don't lose hours of work.
- 21) In your discussion, don't just restate your results. Your discussion should synthesize your results with those of other studies, and state the implications and significance of your work.
- 22) Datum is singular, data are plural. In writing, always use “data are ....” and “data were....” as opposed to “data is .....” and “data was ....”.

