## Scientific paper synthesis assignment

BIOL 370 Fall 2019 100 pts

**Syntheses are due Friday 11 October 2019.** You will have an opportunity to re-write your synthesis if you wish. Your grade will be the higher of the original submission or the optional re-write. If you choose to re-write your synthesis, you *must* turn in your original synthesis that has my comments along with the re-write.

## What do I have to do?

Each student will write a synthesis of two related papers published in *Conservation Biology*. The actual articles are on the course website and can be downloaded by clicking on the PDF hyperlink listed after each article.

## What's a synthesis?

You will write a concise synthesis (2 - 2.5 double-spaced typed pages, 12-pt font, 1-inch margins) that combines the most important information in two related papers together into a cohesive whole. These papers have been selected because they are in some way(s) similar in focus. You should be able to determine the main topic that both papers address (i.e., objectives and background theory), what each study found that contributed to a better understanding of this main topic (i.e., results/discussion), and the major conclusions that were reached that relate to the main topic. I do NOT want a repeat of the Results or of the Abstracts. Instead, you should emphasize the major points of each article that brings them together, what ecological questions BOTH are addressing, how did they approach answering their questions, and what was learned.

Your synthesis should <u>not</u> provide all of the details of the two studies. Emphasize specific areas where the two papers relate to one another and use these connections to describe how our understanding has been improved. It needs to be in **your own words**. Do NOT copy or slightly re-write the text or abstracts of the papers. Furthermore, **do not quote sections** from the papers—paraphrase in your OWN words. Begin your synthesis with a brief, general introductory paragraph that connects <u>both</u> articles and describes their major objectives. Provide information about the general experimental approach used in each study, but avoid focusing on detailed methods. *Be sure to address whether the two studies reached concordant or discordant conclusions, and why.* You can (but are <u>not</u> required or expected) use information from other sources (i.e., the textbook, other primary literature) if it helps you to understand the papers, and be sure to properly cite these additional sources. Also <u>cite</u> the two papers as needed <u>throughout your</u> synthesis—you need to make it clear which paper you are talking about <u>at all times</u>. Use the citation style that is used in *Conservation Biology*. Be sure to check for errors in spelling and grammar. **Twenty percent of your grade will reflect your ability to write clearly and without spelling and grammar mistakes**.

## More rules for your synthesis:

- Start the synthesis with a general introductory paragraph that introduce both studies and end the synthesis with a general concluding paragraph. Present specifics (i.e., overall experimental approach and major findings) in the middle. Focus on presenting the specific findings that can be synthesized—not all findings.
- Do not just summarize the findings. You also must synthesize, i.e., combine findings from two separate studies into a new, cohesive whole.
- Paragraphs <u>must</u> have relevant topic sentences that introduce the main idea of each paragraph.
- Each sentence should describe just one idea (i.e., no run-on sentences).
- **Be concise and clear.** Fewer words that are specific are better than several 'fluffy' words that do not provide essential information. Re-read each sentence to ensure it makes sense, and delete all words that are not essential. For example, read your sentences with and without "the" and see if "the" is needed.
- Avoid using indefinite pronouns (e.g., "it", "they", "this"). Be specific at all times.
- Always be clear about which paper you are referring to in your synthesis. Use the authors' names when
  needed (see below). Also, do NOT write the titles of the papers in the text; that's why we use the
  authors' names.
- Use author names when referring to studies. Examples of correct citing: If there is <u>one</u> author use LastName (Year of publication); if <u>two</u> authors use Lastname1 and Lastname2 (Year); if there are <u>more than two</u> authors use Lastname et al. (Year of Publication).
- Avoid contractions in scientific writing.
- Italicize all genus and species names (e.g., *Homo sapiens*, not Homo sapiens or *H. sapiens*, not H. sapiens).
- The word "data" is plural; "datum" is singular. The word "species" is both singular and plural.