

## Behavioural Ecology BIO436G: Scientific Critique

You will be assigned a scientific paper that you must critique in the form of a double-spaced, typed report. Your report should be 3-4 pages (and must not exceed 4 pages), so your report should be a marvel of conciseness, clarity, and insight. The page limit includes the title and all references you use.

The purpose of this exercise is two-fold: (1) to get you thinking critically about hypothesis testing in behavioural ecology; and (2) to be sure you are familiar with original research and journal articles.

Your report should clearly outline:

1. The key hypothesis being tested
2. The significance or importance of this hypothesis in behavioural ecology (as argued by the authors or yourself)
3. The most important prediction(s) that the authors attempted to test
4. Your view on how convincing the authors' tests and conclusions are; For example, do the authors use statistics to justify all claims made in the discussion? Do the authors over-interpret their results? Do the authors consider alternative hypotheses that might also explain their data.
5. Overall, is the paper a poor, average, or excellent example of how behavioural ecology research is done?

There is no need to go into exhaustive detail on methods, state simply and concisely what experimental design was used and how well this design allowed the authors to test the hypothesis. Assume the person reading (and marking) your critique has never read the paper in question. Thus, you have to do a good job explaining the paper. You don't have space to explain every aspect and detail in the paper, so it is your job to pick out the most important parts for your critique.

Remember, this is supposed to be a critique. If you think the authors did a superb job say so, and explain why. If you think the data presented are not convincing then say so, and explain why. *Importantly, your critique must draw on other literature to support a counter argument that you make.* Also remember to number your pages, and printing duplex is recommended. The title of the report should be, "A critique of [place title of paper here]". A title page is not required.