

Literature Review

Due February 11, 2016

The purpose of this assignment is for you to explore current research approaches and findings in the field of animal behavior, and for you to become more comfortable reading and evaluating research findings.

For this assignment you will need to select a recent paper of interest in the field of animal behavior published in the primary literature. Primary literature papers contain original data and ideas, and are generally the first published record of an investigation. Examples of primary literature include research articles, research monographs, dissertations, conference proceedings, as well as review articles (those that synthesize many previous articles). For this assignment your selected paper should be a research article. I strongly recommend selecting a paper from one of the following journals, which are among the top journals in the field: *Animal Behaviour*, *Behavioral Ecology*, *Behavioral Ecology and Sociobiology*, *Proceedings of the Royal Society B*, *Behaviour*. You are free to select a paper from another journal (except *Science*, *Nature* or *Current Biology* as it will be more difficult to complete the assignment with an article from one of these journals) provided the topic of the paper is animal behavior. Since the focus of this assignment is recent research findings, you should select a paper that was published no earlier than 2006.

Here are some tips that will help you locate an appropriate research article:

1) One way to locate an article is by looking through recent issues of journals in the field of animal behavior (see list above). The table of contents for the journal will list the titles of the papers published in that issue. To keep up with recent developments in the field, many researchers look over the table of contents of these journals every month for papers of interest. Recent issues of the most journals are available online through the library's webpage or via Inter-Library loan. You can search for a journal by name and then follow the link to the online version.

2) If there is a particular topic that is of interest to you, you can search for an article on that topic. Google Scholar is a good place to start.

If you have any questions about whether or not your selected paper is appropriate, please email the full citation of the paper to me at least one week before the assignment is due. I will not be able to answer last minute emails!

Example of citation:

Boogert, N. J., Reader, S. M., Hoppitt, W. & Laland, K. N. 2008. The origin and spread of innovations in starlings. *Animal Behaviour*, 75, 1509-1518.

Once you have selected a paper, you will write a review of the paper in your own words (typed, double-spaced, 12 pt font, 1-1.25 inch margins, 2 page maximum). The review

must address the following:

- 1) What is the main scientific question that the authors are trying to answer?
- 2) What were the specific hypotheses and predictions of this study? If the study was purely descriptive (i.e. not hypothesis testing), state this (but you will lose points if you say it was descriptive when there was in fact a hypothesis). Be aware that some papers don't label their hypotheses and predictions as such so you will need to read the introduction carefully.
- 3) Briefly describe how the authors went about collecting their data. Were their data collected in the field or in captivity? What type of data did they collect? Was it observational? Experimental?
- 4) What were the conclusions of this study and why are they significant in the larger picture? For example, how are these findings useful in better understanding behavior in general, management or conservation of this species, etc?
- 5) Lastly, generate a question based on their findings and a hypothesis for your new question.

Your paper should be well written. It should have good organization and flow from one topic to another. It should NOT be in the format of a standard research article (i.e. Introduction, Methods, Results, Discussion). Overall, you should write this paper so that someone could read your review and understand the main points of the research article without having to read the article itself. It is very important that you do not copy the text of the original research article in your review paper. This is plagiarism. You will need to use your own words to explain ideas. When referring to the original article it may be useful to use the authors' names (e.g. "Edler and Friedl used two approaches to test their hypothesis..."). If your paper was written by three or more authors you can abbreviate the list as "Edler et al.", which means Edler and colleagues). Include a full citation of your research article, and attach a full copy of your research article to your literature review. The Research article should be in the pdf format (or photocopy of the actual article). Do not print off the HTML version.

* This assignment is adapted from Dr. Tanner's Literature Review Assignment given at Marlboro College, VT.