

ASSIGNMENT - Biological Journal Article Review

The assignment is to be one page, typed in a 10-12 point standard font, double spaced, with 1 inch margins. The page limit will be strictly adhered to. **Points will be deducted for not following directions.** Please, no cover pages. Type your name in the upper right corner (does not have to be inside the 1 inch margin). The assignment is due by the beginning of lecture (11:00 am) on the date printed in the course schedule. *No late work will be accepted.*

Biological Journal Article Review (10 pts.): Biology advances through the discussion of hypotheses, experiments, conclusions, and theories among researchers. This communication of ideas is an absolute tenet of all the sciences. The most formal method of communication is through articles in scientific journals. Some journals focus in on a very narrow field of research (e.g., *Journal of Pineal Research*), but others are incredibly broad in scope (e.g., *Science* and *Nature*). This assignment's purposes are: a) to introduce you to the scientific literature that you will be using in all of your subsequent biology courses, b) to familiarize you with the format of a scientific paper (which you will write in subsequent biology courses), and c) to teach you proper citation methods for biological research papers. You will 1) need to either go to our library's current periodicals section (northeast corner) or use the journal finder on the Abell Library Home page and find a scientific journal on-line or find an article on-line using a different search method; and 2) select an article which looks interesting to you and which is relevant to the content of this course (something to do with Evolution, Behavior, or Ecology). You may use an article from one of the following journals.

American Journal of Botany
Auk
Biotropica
Conservation Biology
Evolution
Ibis
Science
Southwestern Naturalist
Systematic Botany

Animal Behavior
Behavioral Ecology and Sociobiology
Canadian Journal of Zoology
Ecology
Herpetologica
Nature
Sida, Contributions to Botany
Systematic Biology

The article must be a **research** report (not a review, summary, or response). The article **must** be divided up into sections titled (typically): abstract, introduction, methods (or materials and methods), results, discussion, and literature cited (or references). Frequently the introduction will not have a title, but it is the section between the abstract and the methods.

Your **one page (maximum)** review should have the following sections:

- **article citation:** Your review of the article should begin with a citation of the article. Use the following format: [Lead author's last name], [first initial], [middle initial], and [2nd author's first initial], [middle initial], [2nd author's last name]. [Year published]. [Article's title, only first word capitalized]. [Journal's title, no italics or underline] [Vol#]:[pages].

Examples:

- McMellen, A. B., K. V. Snipes, and W. E. Meyer. 1997. The effects of propylthiouracil (PTU) on the development of thermoregulation in neonatal Japanese Quail (*Coturnix japonica*). *Auklet* 23:101-108.
- Goldsmith, S. K. 1996. Body size, male aggression, and mate selection in *Plectrodera scalator*. *J. Insect Behav.* 9:719-727.
- Diggs, G.M., Jr. and P.C. Schulze. 2003. Soil-dependent fire frequency: A new hypothesis for the distribution of prairies and oak woodlands/savannas in North Central and East Texas. *Sida* 20:1139-1153. [Note that there are standardized journal abbreviations which are used. Look in the lit. cited section for them.]

The format for citations is very rigid. Note the periods, commas, indentation, and double spacing between items. Even if the particular journal from which you article was taken has a different format, you **must** follow the format given above for the citation in your review.

- **article summary and critique:** In *one* short paragraph summarize the article, including a) the question the researchers investigated, b) their method of investigation, and c) their most significant finding and conclusion. Also, critique the article. Could you understand it? Is the article a good example of science?

- **how the article is relevant to the content of this course:** Explain in one short paragraph.

ALL OF THE ABOVE (citation, answers to section questions, summary, and critique) MUST FIT ON ONE PAGE TYPED WITH 1 INCH MARGINS! The default margins on Microsoft Word are 1.25 in. Change the format settings to 1 in., and then measure the final product with a ruler. *All your margins will be checked!*

- **copy of article:** Attach a photocopy of your article to your review.

- **copy of Instructions to Contributors, Information for Authors, etc.:** Attach a photocopy to your review (explained in class). These instructions are essential for authors submitting papers for publication.