

Paper Reviews
BIOL 607 - Fundamentals of Ecology

During this course you will choose and review four journal articles, one for each of the main topic areas: physiological, population, community, ecosystem/landscape. Articles should be chosen from a refereed journal in each field. Articles should be mainly original research with data collection, not review articles or totally theoretical. The instructor can provide you with some suggestions as to which journals contain which types of articles. If you have any question about whether an article is appropriate, you should email the instructor with the title and full citation of the article well in advance of the due date for the review. The instructor will let you know, normally within 24 hr, if the article is appropriate and then you can proceed with your review.

Your review should be written in paragraph form and address the following points:

Introduction

- What is the intellectual context of the study? What general concepts/ideas/theories are being examined?
- What have other similar studies found?
- What are the specific hypotheses that the author is attempting to test?

Methods

- What is the test organism/system?
- What variables are being measured?
- How many replicates are involved?
- What statistical procedures or other forms of analysis are being employed?

Results

- What are the principal findings of the study?
- How are the results presented (graph/table/other)?
- Is raw data presented or are results in a summarized form? How summarized?
- Do the results help to bolster or refute the hypotheses? (May also be in Discussion)

Discussion

- How do the results change our knowledge about the specific hypotheses?
- How does this study compare with other similar studies?
- How do the results of this study advance our understanding of the general concept/ideas/theories that were the context of this study?