

Exercise: How to Read a Scientific Paper

This is an exercise to help you both in understanding how to read a scientific paper. First, read *What Horses and Humans See: A Comparative Review* (www.hindawi.com/journals/ijz/2009/721798.html). Read over the paper carefully. However, don't read it to learn about the subject itself; rather, read it to learn **how a scientific paper is written**. Pay attention to the writing style, and how it differs from other types of writings (i.e., textbooks, magazine articles, or novels). Pay attention to what kinds of things go into each section, and what kinds of things are not included in each section. After you read this, or as you read it, see if you can answer the following questions. If you can, and you fully understand them, try to keep these things in mind when you write your papers.

The Abstract: [*We'll come back to this, since it is usually written last.*]

The Introduction:

1. What is the purpose of this introduction?
2. What kinds of information do the authors provide (and what do they save for later)?
3. Do they make clear why the topic is of interest to them?
4. Do they clearly state the objectives (goals/purpose) of the study?

The Methods:

1. What is the purpose of this section?
2. Do they describe what they did in enough detail?
3. Do they provide any unnecessary details?
4. What is the style?
5. What tense and person do they use when writing?

The Results:

1. What is the purpose of the results section?
2. Do the authors talk about the reasons for the results, or what they mean in terms of the biology of the birds?
3. How have they organized this section?
4. Are there any graphs or figures?

The Discussion:

1. What is the purpose of this section?
2. Do they discuss what their results might mean?
3. Do they discuss how their methods might have influenced (in good or bad ways) their results?

The Abstract:

1. What does the abstract provide?
2. How much detail is included?