

This first assignment is designed to show you that an understanding of statistics is important for you to be able to understand the literature in your own field. In addition, it will make it easier for me to find applied examples of statistics that are interesting to you.

This assignment sends you to the library (or to an electronic journal) in search of a scientific article in the biological sciences that (1) you think is interesting, and (2) uses statistics. Please select an article carefully, as you will refer to it again in future homework assignments. From the web and an on-campus browser, you have access to many electronic journals. Begin at the web page of the University Library (<http://www.library.wisc.edu/>) and follow links [Journals, Magazines and Newspapers]:[Electronic Journal List]. Alternatively, you can go to the current periodicals section of your departmental library.

1. Locate a published article in a scientific journal with ten or fewer pages that is interesting to you and that uses statistics. (Do not use an article that is published only on the web.) Make copies for yourself and for me (please staple the pages). Write your name on the paper that you turn in.
2. Briefly describe the method of data collection. If the authors make comparisons between groups, are the groups determined by an observed characteristic (such as sex) or by an experimental procedure (such as random assignment to different treatment regimes)?
3. What is one scientific question that your article addresses?
4. What results does the article include regarding the scientific question?
5. Select one graph from the article (if it has one). Describe the included variables. What does the graph show?
6. Identify a variable that is measured by the authors. What are the units of measurement? Is the variable summarized with a statistic? If so, what is the value of the statistic?
7. Identify a method of statistical analysis used by the authors and report a given result.