

ScienceBite Article Instructions

A ScienceBite is a short-format article **1,000 to 1,250 words in length** that presents one specific topic from the field of environmental science. The article should include **4 to 6 figures** (illustrations, graphs, tables, photographs) that are of high quality and help describe your topic. Your article should be **written for an audience of university students, faculty and professionals**.

The ScienceBite article will be worth **25% of your final grade**.

First, you should pick one topic in the field of environmental science to focus upon. Next, you should **read a minimum of 10 articles from well-respected sources** (see example list below and Twitter @OSUEnViRo), which are related to your topic. **A minimum of 6 of these articles must be from primary sources (journals)**. After reading these articles, you will write an article describing the topic, issue, and/or problem. Dr. Lower will provide more details about this project in class.

You need a **minimum of 10 references for your ScienceBite article and 6 of your references must be from a scientific journal**. The remaining references can be from secondary sources such as books, book chapters or newspaper articles from well-respected sources (for example, The New York Times, The Wall Street Journal).

Journals (Primary Sources): Biological Conservation, Chemical & Engineering News, Ecology, Environmental Science & Technology, Proceedings of the National Academy of Sciences USA, Science, Nature. You can use any of the journals that @OSUEnViRo is following on Twitter.

Newspapers (Secondary Sources): BBC, The New York Times, Washington Post, Chicago Tribune, Columbus Dispatch, NPR, etc. You can use any of the newspapers that @OSUEnViRo is following on Twitter.

Government & International Agencies (Secondary Sources): EPA, NIH, NSF, NOAA, FDA, NASA, U.S. Forest Service, U.S. Fish & Wildlife Service, United Nations, World Health Organization, Intergovernmental Panel on Climate Change. You can use any of the agencies that @OSUEnViRo is following on Twitter.

Magazines (Secondary Sources): National Geographic, TIME, Newsweek, The New Yorker, Smithsonian, Forbes, The Economist, Bloomberg, National Wildlife, Popular Science, Audubon, Scientific America, Discover Magazine. You can use any of the magazines that @OSUEnViRo is following on Twitter.

Your ScienceBite article should focus on one specific topic in environmental science rather than a general topic. For example, if you are interested in climate change do NOT write an article describing climate change on Earth, but rather write your article about how climate change is affecting the polar bear population living off the Alaska North Slope.

Good **examples of short-format articles** can be found from a number of sources including: The Earth Institute Columbia University (<http://blogs.ei.columbia.edu>), Stanford Woods Institute for the Environment (<http://woods.stanford.edu/news-events/news>) and Duke Nicholas School of the Environment

(<http://www.nicholas.duke.edu/news/>).

Your article should include, but is not limited to, the following:

1. An introduction to your topic, issue, situation, problem, etc. Who is involved, what is involved, how important is the issue or problem?
2. A description of why it's important. Figures, graphs, tables can be useful tools that you can use to tell your story.
3. A description of the key elements or players. What is the problem or issue? What has caused it? Who or what has been impacted?
4. What has been done or can be done to resolve the problem?
5. A summary of the research that has been conducted. What knowledge was gained? Did the research change the situation for the better or worse? How was the research conducted? Who conducted the research?
6. What are the real and potential results and/or impacts? Describe this from a quantitative and/or qualitative view. Were behaviors and/or policies changed? What was the scope of the impact (campus, statewide, national, global)? How long will it take to reach the end results or make an impact of the problem (is there hope for the future)?

In addition to writing your short-format article, each student will also be responsible for providing **peer reviews for 2 other articles** from your classmates. Prof. Lower will assign each student 2 articles to review.

Reviews and Grading – grades will be based on reviews provided by Prof. Lower, teaching assistants, and student peers. The reviews will be based on these criteria:

A. Intellectual Impact of the Article

1. How well does the article function as a piece of writing (i.e. quality of language, exposition, description, voice)?
2. Is the article scientifically accurate?
3. Does the design, flow and the creativity of the article encourage learning?

B. Broader Impact of the Article

1. How well does the article function as a piece of teaching (i.e. quality of pedagogy, clarity of explanations)?
2. Does the article contain all the necessary components needed to describe the story or are some things missing that could enhance the story?

C. Technical Details of the Article

1. Has the author included at least ten sources and at least 6 from primary journals?
2. Has the author included at least 4 high-quality figures and/or tables? Did the author provide a reference for each and every figure and/or table? Could the figures be improved, if so how can they be improved?
3. Has the author properly referenced their sources throughout their article with either a number or using author's last name?
4. Is the article approximately 1,000 words long?

D. Based on your answers above, what is your final recommendation?

1. Publish the article in its current state (the article is excellent).
2. Publish the article with minor revisions (the article is very good).
3. Publish the article with major revisions (the article need substantial work before it is ready for publication; this could include major changes required to fix figures/tables, major changes required to large portions of the text).

Article Text

1. Total text should be between **1,000 to 1,250 words** in length.
2. Use the template that is provided by Dr. Lower.

Figures (Illustrations, tables, graphs and photographs)

1. You need a minimum of 4 and can use a maximum of 6 figures.
2. The figures should be high quality and/or high-resolution images.
3. You need to include at least 1 original figure (table, graph, image, etc.) that you yourself designed, created or photographed.

Legends for figures, illustrations, tables, graphs, and photographs

1. Legends should be short (that is, less than 50 words) but descriptive.
2. Remember to cite the source of your figure if you are not using an original figure that you made yourself.

References

1. You need a **minimum of 10 references and 6 of your references must be from**

a scientific journal such as, but not limited to: Science, Nature, Environmental Science & Technology, Proceeding of the National Academy of Sciences USA. The remainder of your references can come from well-respected newspapers (for example, The New York Times, The Chicago Tribune, The Columbus Dispatch), books, chapters appearing in edited books or technical reports from government agencies such as the U.S. NOAA or U.S. EPA.

2. Journal articles are freely available to all OSU students through the OSU Libraries. **Journal articles can be found and downloaded onto your laptop using ISI Web of Science** (<http://library.ohio-state.edu/record=e1001369~S7>). Web of Science is a database that allows you to search for journal articles by topic, author name, journal, subject, or title.
3. Citations should be numbered in the order that they appear in the article.
4. References should follow the styles shown in the examples below.

1. Journal article: Authors, surname first followed by comma and initials of given names. Date in parenthesis. Journal title in italics. Volume number in bold, issue number in parenthesis:page numbers.

Journal article with two authors:

McMurrin, M., & Christopher, G. (2009). *Legal & Criminological Psychology*, **14**(1):101-107.

Journal article with more than two authors:

Post, E., et al. (2009). *Science*, **325**(5946):1355-1358.

2. Online journal article: Should give authors, date of publication in parenthesis and journal or newspaper name in italics, volume number and or page numbers, followed by URL in full – or DOI if known.

Dionne, M.S., Schneider, D.S. (2002) *Genome Biol.* 3:REVIEWS1010.
<http://genomebiology.com/2002/3/4/reviews/1010>

3. Book Chapter: Authors surname first followed by comma and initials of given names. Date of publication in parenthesis. Chapter title, page numbers. Editors of book, book title in italics, city of publication, name of publisher.

Forman, M.S., and Valsamakis, A. (2003). Specimen collection, transport, and processing: virology, p 1227-1241. Murray, P.R., et al. (Eds.), *Manual of clinical microbiology*, 8th ed, Washington, D.C.: Penguin Press.

4. Patent: Name surname first followed by comma and initials of given names. Date in parenthesis. Title of patented item/process in italics. Patent number.

Odell, J.C. (1970, April). *Process for batch culturing*. U.S. patent 484,363,770.

5. Book:

Anderegg, D. (2007). *Nerds: Who they are and why we need more of them*.

New York: Jeremy P. Tarcher/Penguin.

6. Magazine article in a database:

Taibbi, M. (2009, September 3). Sick and wrong. *Rolling Stone*, 1086, 58-65. Retrieved from <http://www.rollingstone.com>

7. Magazine Article in print:

Miller, J. M. Road map to a great deal. (2009, October). *Consumer Reports*, 74(10), 44-47.

8. Newspaper article in a database:

Moran, S. (2009, September 7). If you don't snooze, you lose: Most Americans aren't getting enough sleep. And for both adults and students, there are health consequences. *Star Tribune*. Retrieved from <http://www.startribune.com/>

9. Newspaper Article in print:

Lucchetti, A. & Craig, S. (2009, September 11). Morgan Stanley taps new boss. *The Wall Street Journal*, pp. A1, A16.

10. Podcast:

Nature (Producer). (2009, July 16). *Moon gazing* [Audio podcast]. Retrieved November 5, 2009, from <http://www.nature.com/nature/podcast/index-2009-07-16.html>

11. Video / Movie:

Donner, R. & Lee, S. (Producers), & Hood, G. (Director). (2009). *X-Men Origins: Wolverine* [DVD]. USA: Twentieth Century-Fox Film Corporation.

12. Web Page:

Roszak, T. (1996, September). Why ecology needs psychology, why psychology needs ecology. *Ecopsychology Online*, 1. Retrieved from <http://ecopsychology.athabascau.ca/0996/ecowelcome.htm>

13. Web Page organization / group of authors:

National Museum of American History. (2006, July 7). *National museum of American history displays recent hip-hop acquisitions*. Retrieved from <http://www.americanhistory.si.edu/news/pressrelease.cfm?key=29&newskey=383>