## **Animal Disturbances in Forests**

Ecology Laboratory Writing Practicum
Biological Sciences 0391
Fall 2018
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Clapp 213

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## Please follow all instructions carefully

## 1. Paper content and deadlines:

You are required to write a minimum 15-page review paper designed to thoroughly explore the impact of VERTEBRATE disturbances (NOT EATING, BROWSING, OR GRAZING) on forest communities in the U.S. and worldwide. Animals like deer do more than just eat plants. Indeed, they also cause disturbances by trampling on top of wildflowers and other herbs, thereby crushing them. Birds like turkeys also create soil disturbances via scratching and foraging for food. These disturbances may impact understory wildflowers and grasses as well as the seedlings and saplings of tree species. Deer and other vertebrates (e.g., elephants, peccaries, turkeys) are often overabundant in many forests. For example, it is common to see turkeys on Bigelow Boulevard near downtown Pittsburgh. While there have been many studies on the direct and indirect effects of vertebrate browsing on forests, there have been relatively few studies of the non-trophic (non-feeding) effects of vertebrates.

Your paper should be focused on how ALL TYPES OF vertebrates (except humans) impact FORESTS of the United States and OTHER FORESTS around the world. For example, cassowaries are large birds that live in tropical forests in Australia and cause forest disturbances and sometimes even attack people. Peccaries (large wild pigs) cause damage to tropical forests in Central America and feral pigs can do the same thing in temperate forests of the United States.

You MUST include information on the non-trophic impacts of two large vertebrates, specifically the giant armadillo (*Priodontes maximus*) which digs large holes and is native to South America and moose (*Alces alces*) native to Europe and North America. Moose break branches and where they bed down they depress and trample vegetation.

Your paper should NOT include anything on **beavers**, their impacts have been well discussed in the scientific literature.

While it is not required, I highly advise that you meet with me prior to when the paper is due and before the rewrite is due. Your paper is due on **Friday Oct. 21** at my office (Clapp 213) no later than 5:00 PM. In addition, you must send

me your paper as an attachment via email. Please slip the paper under the door if no one is in the lab. All students must turn in a rewrite of this paper on **Friday**, **Dec. 7** at my office no later than 5:00 PM. The final grade on this paper will be an average of the original grade and your rewrite. Late assignments will lose 10% per day.

You must hand in with your paper, copies of the five most important papers that you cited from the primary literature. Additionally, you must hand in your old draft with your final draft. If you do not turn in the old draft with your new draft, your grade will be the one you received on your old (first) draft.

## 2. Paper format:

You may use only 4 Internet sources for this paper. You are not permitted to cite magazines (e.g., Newsweek, Time etc) nor lectures from any classroom material. At least 70% of your sources must come from the primary scientific literature (i.e., journals, not books, encyclopedias, etc). You must include a 350-word abstract that summarizes your major findings and is placed at the beginning of the paper ahead of the introduction. The paper should include a title page with your institution and email address.

The citation format **must** follow that used by the journal *Ecology*, which can be found in Langley Library or on line (do not use footnotes). All papers must be typed **double spaced** using a **Arial 12 font** with print on only one side of the paper. Each deviation from the specified format will lose **5%** from the final grade **per infraction**. The paper should be stapled and printed on one side of the page only. Please number all pages.

A note on plagiarism: Students in the past have had a tendency to pull long phrases, whole sentences, and at times even entire paragraphs straight out of published material without using quotes or even worse without providing a relevant reference. Doing this is plagiarism. You must take notes on the papers and books that you consult and then write the paper in your own words. Plagiarism is easy to spot and will result in a failing grade. I will check for plagiarism via several different software programs (e.g., Turnitin). Plagiarism will result in a failing grade!

If you have questions please stop by my office at any time, call to make an appointment, or send me an email (Clapp 213, 624-5496, walt@pitt.edu).

Good Luck!

Dr. Carson