Research Paper

General Information
This project is designed for you to independently investigate a topic related to biogeography that is of interest to you. You can either complete a literature review on a topic or critically evaluate a selection of peer-reviewed papers.

Topics—Paper topics should be relevant to the information covered in class. The paper topic should revolve around a specific ecological question (or set of questions) or a taxonomic group of interest to the student and should draw on the literature to either review and evaluate a specific debate or to summarize the relevant literature in such a manner so as to be able to answer the paper’s central question.

Paper topic examples include:

- Relationship between abundance and distribution among some particular species
- Species diversity in fragmented habitats.
- Paleooecology of certain families or genres. For instance, what were the major centers of species diversity (evolutionary radiations) of Pinaceae (pine trees) or Psittacids (parrots) and why were they in those locations?
- Landuse change impacts on the distribution or abundance of grizzly bears.
- Invasive species impacts on native species.
- Changes in body size and home range of particular species groups along latitudinal/altitudinal gradients and the physiological, evolutionary, and energetic reasons for these changes.
- The role of disturbances (e.g. fire or pathogens) in limiting or broadening the distribution of certain species.
- How does the predator-prey relationship of Canadian lynx and snowshoe hare change across the latitudinal distribution of lynx?

Key Dates
Oct. 10th: Summary due
Nov. 16th: Final paper due

Plagiarism—Students should feel free to discuss their paper topics with the course instructor or TA or with other students who may be working on similar topics. However, each student must write their own paper. If papers are found to contain strong overlap in the paper’s structure or specific written content (i.e. both papers have the same or some of the same sentences in them or parts of sentences) or if papers employ plagiarism so that it appears the student wrote the paper or part thereof when they actually copied the information off the web or from some other source, the paper will be assigned a grade of “F” (zero points). All materials adopted from other sources should be clearly cited.

Paper Format—Papers must be based on information taken from scientific journals and textbooks and all information properly cited using the format demonstrated below in the section “Proper Citing of the Literature.” A minimum of 10 peer-reviewed references is required.
Papers should be double spaced and be 8-10 pages long including the citations in a section entitled “Literature Cited”. All papers should have 1 inch margins and should be in 11-12 point font (Times New Roman, Courier New, or Arial). Please number your pages and include a title at the beginning of the paper. Any graphics, figures, charts or tables should be cited in the text and included at the end of the paper following the Literature Cited section. These pages won’t count towards your 8-10 page minimum.

Make sure that the first section of the paper provides a clear description of the purpose of the paper, its central questions, and the motivations for the research. The main body of the paper should be devoted to presenting the information gathered from the literature review you have conducted and to evaluating those results in the light of the paper’s central questions/motivations. The paper should finish with a summary of the paper’s main findings, their broad significance, limitations or important gaps in the knowledge base that you have identified, and some final conclusions.

Grading—Papers will be graded on the following:

- Thoroughness of the discussion of the topic.
- Accuracy of the information and demonstration of an understanding of the information discussed.
- An understanding of the interrelatedness of issues and points discussed in the literature (example—how might the coat color of the artic fox impact its ability to avoid predation and at the same time affect thermoregulation).
- Clarity and structure of ideas and quality of writing.
- Succinctness.

Proper Citing of the Literature

All references must be cited where appropriate in the paper and listed in alphabetical order in a "Literature Cited” section at the end of the written paper. At least 10 peer-reviewed articles are required, although books, textbooks, and other academic sources may be included. Peer-reviewed articles do not include newspaper, internet, popular magazine articles or government publications. Please do not include information from websites, popular magazines or newspaper articles in your list of citations. Sources for peer-reviewed articles can be found at Norlin Library, on the Web of Science or Google Scholar. Citations should follow the below formats.

For a book by a single author or a group of authors:


For a chapter in a book by multiple authors:

For an article in a scientific periodical by a single author or a group of authors:


Format/style for citing references used in a the body of the paper are as follows

For one author with one or more papers:
- Martin (1908) reported that daphnia are not a major part of the stream food web.
- It has been reported that daphnia are not a major part of the stream food web (Martin, 1908).
- Martin (1908, 1910) reported that daphnia are not a major part of the stream food web.
- It has been reported that daphnia are not a major part of the stream food web (Martin, 1908, Martin 1910).

For two authors with one or more papers:
- Martin and Cutler (1908, 1910) reported that daphnia are not a major part of the stream food web.
- It has been reported that daphnia are not a major part of the stream food web (Martin and Cutler 1908, Martin and Cutler 1910).
- Martin and Cutler (1908, 1910) reported that daphnia are not a major part of the stream food web.

For three or more authors with one or more papers:
- Martin, et al. (1908) reported that daphnia are not a major part of the stream food web.
- It has been reported that daphnia are not a major part of the stream food web (Martin, et al., 1908).

Author(s) with multiple papers in one year:
- Martin (1908a, 1908b) reported that daphnia are not a major part of the stream food web.
- Martin and Cutler (1908a, 1908b) reported that daphnia are not a major part of the stream food web.

Note that some of the primary references you will need may not be in Norlin Library. You may have to request them through interlibrary loan. You should start your research early. You should be able to find most references via Chinook, the Web of Science or Google Scholar. If you are having trouble, see me or the course TA and we will help you get started. Be sure to note the schedule of class activities below so you know when various items are due to me or to be presented.