

# Guide to Major Presentations

The goal of the major presentation is to:

- (1) Introduce students to some of the most important aspects of the ecology of wintering birds in eastern Ontario.
- (2) Provide each student an opportunity to become intimately familiar with one area of ecological research central to wintering birds.
- (3) Provide students with experience in reviewing scientific literature, oral presentations, and answering questions.

Presentations should last 25-30 minutes, with 3-5 minutes of questions per presentation. Powerpoint or pdf format is required, but may be supplemented with other material if you wish (not necessary). (If you would like to use a different format, please check with me first.)

Below I provide a few hints for your presentation. Also refer to 'Tips for Effective Oral Presentations' at the end of the presentation rubric.

- (1) Provide a broad (but short) introduction to the important biological issue(s) to put your presentation in context. By broad, I really mean broad (e.g., all organisms require a source of energy, or many organisms, including birds, maintain body temperatures above the temperature of their environment, etc.).
- (2) Review selected papers covering the subject matter relevant to the eastern Ontario region in winter. You are welcome to use studies that took place anywhere in the world, but whose results have relevance to the birds in our region. If you are discussing adaptations to environmental conditions, focus on adaptations used by birds in eastern Ontario (although you may briefly mention others).

How do you find relevant literature? One great way is to use key search terms in Google Scholar (<https://scholar.google.ca/>). Once you find some relevant articles, search their literature cited to see if they cite other important papers, and use Google Scholar to search the papers that cite the paper of interest (by clicking on 'Cited by' underneath the paper as listed in Google Scholar).

- (3) If you are feeling overwhelmed with the material, narrow your focus. For example, reviewing all of the literature on a subject may be too much work. If so, focus on a specific group (e.g., perching birds), or on specific adaptations to make your presentation more manageable.

- (4) A good structure for your presentation might be: What is the broad biological issue? Why is this issue important? How is this issue relevant to birds wintering in cold environments like eastern Ontario? Review the relevant interactions between wintering birds and other species or climate. What selective pressures do these other species/climate exert on wintering birds? How have birds evolved in response to these selective pressures? If your topic includes interactions with other organisms, how have these other organisms evolved in response to wintering birds? You may want to include details of a specific study or a specific species of interest. Include

examples that you find fascinating. Finish your presentation by broadening again - why is your subject matter important for our understanding of adaptation, or local ecosystems, or "community" dynamics, or interactions among ecosystems? [Note that this organization is just a suggestion. You may wish to organize your presentation differently.] You are welcome to reproduce figures from the literature, but make sure that your audience can read the axis labels and understand the figure.

Your major presentation will be worth 20% of your final mark. Please see the evaluation sheet/rubric for details on how you will be graded, and Tips for Effective Oral presentations at the end of the rubric.