

ENGL 301 99A  
Formal Report Proposal

**To:** Dr. Erika Paterson

**From:** Mila Tung

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**Subject:** Proposal for a campaign to raise awareness on human activity which mitigate bird migration

**Introduction:**

Birds are an essential component to the well being of our environment. As assessed by the UN Millennium Ecosystem Assessment, birds provide ecosystem services through: Provisioning (food, medicine, clothing, ornamentation), Regulating (pollination, pest control, seed dispersal, scavenging), Supporting (ecosystem engineering, nutrient cycling) and Cultural services (tourism, caged birds, falconry/sports, art, religion, hunting). Birds are attracted to light, warm areas, and require a safe area to rest.

**Statement of Problem**

Although people really care about migratory birds, they do not fully realize how terribly birds are doing, and most people do not understand how much of an impact that wildfires pose to migratory birds. 90% of the birds in North America migrate. In North America alone, 3 billion birds have died in the past 50 years due to human activity. Light pollution affects the migratory route of birds, urbanization alters local temperature, and wildfires deplete habitat and resources needed to sustain them along their dangerous migration journey. With light pollution, urban development and the increasing wildfire occurrences, bird populations are facing significant migratory complications.

**Proposed Solution**

Start a campaign that will not only bring further awareness of human effects on migratory birds to the public, but also generate traction for people to want to proactively contribute to helping migratory birds by introducing a potential app idea similar to that of the existing iNaturalist. This will involve encouraging individuals to download the potential app. How iNaturalist works, is users take a photo of the organism they observe, insert their location, and the app will provide the correct name of the species. The new app will allow users to do the same, except it will appeal to the instinctive, protective nature of humans. After the photo is taken, based on the migratory pattern of the particular bird, the user will receive updates on the location of where the bird would be. In addition, users who observe the same bird species will connect with other users who also observed the same species.

**Scope**

To determine the feasibility of this proposed solution, I plan to assess the following questions:

- How does light pollution affect migratory birds?
- How does urban development affect migratory birds?
- How do wildfires affect migratory birds?
- What solutions exist to better prevent superfires?
- What will encourage the public to download a new app?
- What format of advertisement will spread knowledge of light pollution, urban development and wildfire effects on migratory birds to the public, in particular individuals along the migratory route of birds?

### **Methods**

Research will be conducted on light pollution, urban development and wildfire effects on migratory birds. There will also be research on the migratory patterns of at least one species of migratory bird to determine the route they take. Surveys will be completed to determine the method of advertisement that would best promote app users to download the app in addition to what features motivates users to download certain apps.

### **My Qualifications**

I am a fourth year UBC Biology student and I have a passion for animal conservation, particularly migratory birds.

### **Conclusion**

The rapid depletion of birds is a direct result of human activity. By promoting a campaign that can provide better understanding of the severity of light pollution, urban development and wildfires, it can create movement among bird lovers to create change to support migratory birds with their migration journey.