Assessment 1: Robinson - Birds v. Humans: Light and Noise

**Mindset to take this assessment in:**

Anything you write for this assessment can be used again in your research paper!!!

CITE YOUR SOURCES for Research Questions (5-7). Don't worry too much about the citation format right now. APA-ish will do. For this assessment, you may NOT cite the journal club reviews (Doupe and Kuhl, 1999; Gil and Gahr 2002). You may only cite the primary research paper (Nemeth and Brumm, 2009) if you want to talk about their original results in blackbirds. However, you may use whatever original sources those three papers cited. Don't just trust the journal club papers said about other people's work. Sometimes, scientists misinterpret or over interpret other scientist's data. You should read or skim the original sources yourself!

**Concept questions:**

**Question 1: Why is birdsong important for birds? (5 pts)** Your answer should include: A brief explanation of the two uses for birdsong and how song accomplishes these tasks (2 pts). The following keywords used in context that states or implies their definition (underlined or bolded pls!): **Dialect**, **Song Sharing, Female Preference, Countersigning, Honest Signal,** and **Sexual Selection.** (3 pts)

**Question 2: What is the difference between oscines and suboscines? (1 pt)**

**Question 3: Why can we use a photo of the light on earth as a proxy for urbanization? (1 pt)**

**Question 4: What is a citizen scientist, and what is xeno-canto? (1 pt)**

**Research questions:**

**Question 5: How do birds learn their song? (5 pts)** Your answer should include (in any order): A general explanation of the stages of song-learning in birds (3 pts). Explanation of whether all birds learn song the same way, or if there exceptions (1 pt). At least two factors that can disrupt normal song learning (1 pt).

**Question 6: Why would birds change their song in response to urbanization, and why does it matter? (5 pts)** Your answer should include (in any order): At least two facets of urbanization that can affect birdsong (2 pts). At least two examples (two species) of real song changes that have been reported in city birds relative to rural or forest counterparts (2 pts). An explanation for why knowing how birdsong changes in response to urbanization is important (1 pt).

**Question 7: Why is your list of birds worth researching? (5 pts)**

**A)** List citations for any prior work done in your species regarding song changes due to urbanization, and include a very brief explanation of what the results of those studies were (there will not be research on every species!) (2 pts).

**B)** Note whether any of your species are suboscines. Do you think suboscines would be affected by urbanization in the same way as oscines (1 pt)?

**C)** Do your birds come from the same family or different families? Explain what you think the research value is for having birds from the same and different families (1 pt).

**D)** Based on what you now know, hypothesize what changes (or lack of changes) you will find in your bird species' songs (1 pt).

**Works Cited (2 pts):**