

EEB 4261 ORNITHOLOGY LABORATORY
CLASS SURVEY PROJECT: Hillside Environmental Educational Park
Point Count Protocol for Independent Observations at the HEEP

The focus of this exercise is to build a reliable, comprehensive inventory of all the species of birds using the Hillside Environmental Educational Park in the winter-to-early spring. Once you have qualified as an observer you can then go out to the HEEP site and start performing point counts. As you should recall from our discussion in lab, no detection or survey method is free of bias. However, unlimited-distance point counts are a good compromise of the methods available. Furthermore, being experienced and proficient with point counts will greatly increase your employment opportunities in ornithology.

Where: We have set up **a total of 10 point count stations:** 9 at the HEEP site north of the parking-lot, and 1 on the bike path which runs from N. Hillside Road to Hunting Lodge Road. The 9 stations at HEEP are marked with flagging at the center of the plot, usually on or around a tree/bush. There is no flagging for the station on the bike trail, but the small wetland depression is easy to find, as it is the only wetland on the bike trail. The 9 stations at HEEP are more-or-less arranged in a circuit. You do not have to follow this exact route each time; in fact it's important that you don't! (You should be able to tell me why on the final exam!)

How many visits: You may bird as frequently as you wish at the HEEP site! However, for grading purposes, these 5 independent field observations are worth **7 pts each, up to a maximum of 35**. An observation is defined as the completion of a single point count at one of the 10 point count stations (1 observation = 1 point count).

When: To get an accurate and minimally-biased count of the individuals and species present at the HEEP site, we need to vary the time of day and year when we conduct our point counts. You can conduct your point counts at anytime of the day between dawn and dusk. We strongly encourage everyone to vary the times that you visit the HEEP site. We're guessing that early mornings will be under-represented, but this is often the most active and exciting time of day to watch birds! **You may conduct no more than 2 observations in a single day for points.** You are certainly welcome to do, and record, more than 2 observations in a single day, but you will only receive credit for 2 of them. Remember, some species will be migrating into the Storrs area later in the semester and you'll want to get a chance to observe them as well, right?

Protocol: Point count protocols vary widely, but we'll be using the most commonly used method: unlimited-distance point counts. The name says it all. At each station, you will count every bird (no matter how far away) that you detect by sight and sound within 5 minutes. You'll need to print out one point count data sheet from the lab website for each point count station that you plan to survey.

1) Walk up to the center of the point count station (marked with flagging). You should be prepared to start recording birds immediately for 5 minutes. Ideally, you would have a digital watch with a timer that produces an audible alarm. Otherwise, you'll need to keep looking down at your watch.

2) Do not walk around the area during the count. You must remain more-or-less within 3 meters of the plot center. Walking around changes your ability to detect birds and will likely scare-off some individuals as well.

3) You are responsible for counting all birds, including those soaring overhead so look up! You should record all birds—even if you just hear them, and even if you can't identify them. Unidentified birds should be counted and marked down as 'Unknown Species'. If you can be more specific (e.g., Unknown swallow species) then be so.

4) Record each species and the total number of individuals of that species that you detected during the 5-minute period. **Do your best to count each individual only once.** Obviously, this can be tough when you have a flock of birds moving back and forth. Just do your best.

5) Do not count the same individual at more than one station. If you're absolutely sure that you've already counted an individual bird at a previous station that day, then do not count it.

Who with: We encourage you to bird in groups for safety reasons. More than one person can do a point count at the same time and location. **However, each person in a group of birders must record their OWN point count data on their own sheet and put their sightings on ebird. DO NOT COMPARE NOTES UNTIL AFTER YOU HAVE RECORDED YOUR OWN DATA,** and don't change your data sheet after you have compared notes, or you will make it impossible for us to make sense of the observer bias in the data later on. Don't forget to fill out the datasheet completely, or you will lose points.

E-bird: To receive any credit for your independent observations, you must enter those observations onto ebird, an ornithological internet database maintained by Cornell University. It's really easy to set up a free account and use, and we have provided a separate sheet on how to use ebird and how to upload your sightings. For now, check it out at <http://ebird.org>. **By the final exam, you'll need to turn in a print-out from ebird that shows a summary of all the sightings that you have entered online.** Again, this is really easy, and is an absolute requirement to receive credit for any of your independent observations.