

EEB 287 ORNITHOLOGY LABORATORY
SPRING 2008
CLASS SURVEY PROJECT: Hillside Environmental Educational Park
Point Count Protocol for Independent Observations at the HEEP

Our primary focus this semester 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 (by earning 30 points for your field note book) 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 (off-limits!) parking-lot construction site, and 1 on the bike path which runs from N. Hillside Road to Hunting Lodge Road. The 9 stations at HEEP are marked with pink and blue 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 to the 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 we'd prefer that you don't!

How many visits: You may bird as frequently as you wish at the HEEP site! However, for grading purposes, these 10 independent field observations are worth **70 pts total (up to 7 pts each)**. As we discussed previously, you must make at least 10 independent observations at the HEEP site after Jason has approved your field notebook. 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). By the end of the last day of classes, you must perform at least one point count at each of the 10 stations.

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 10 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 in a month or two 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 blue and pink 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 1', "Unknown Species 2", etc. If you can be more specific (e.g., Unknown swallow species) then do so. There are 3 columns on the datasheet (0-25 m, 25-50 m, and > 50 m). These columns are INITIAL detection distances, so if you spot a Song Sparrow initially at 30 m, then you'd mark it down in the 25-50 m column, even if it comes within 5 m of you later in the count. You should mark down the number of individuals detected at that distance, NOT an "X" or "check mark". See the below example:

Species	0-25 m	25-50 m	>50 m	Interesting Behavior:
B.C. Chickadee	2		1	
N. Cardinal			1	
Unknown Sp. 1			3	Calling, didn't recognize
Unknown Sp. 2	1			Small brown bird, saw briefly

4) Record each species and the total number of individuals at each distance 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.

6) You should turn in your point count datasheets to Jason. He'll make sure that you're filling them out correctly and that you fully understand the protocol and give you a grade.

Who with: We encourage you to bird in groups for safety reasons. However, you'll probably find that birding in small groups tends to be more enjoyable and makes it easier to see and hear birds. More than one person can do a point count at the same time and location. However, each person 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 10 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'll put together a separate sheet on how to use ebird and how to upload your sightings. For now, check it out at <http://ebird.org>. By May 2 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.