

# CAP LTER BIRDING POINT COUNT PROTOCOL

Revised December 2014

## POINT COUNTS

A point count consists of one person standing in a specific location for a fixed length of time at a specific time of day, and counting all birds seen and/or heard within a specific distance (“Fixed Radius”) or as far as the eye can see (“Open Radius.”)

- CAP LTER uses 15-minute observation periods
- Counts are completed within 4 hours of local sunrise (see provided table for sunrise time)
- Counts are done using the “Open Radius” method

## ADDITIONAL OBSERVERS

The primary observer may be accompanied to the point by an additional observer. However, only the observations of the primary observer should be recorded on the data sheet. To avoid any bias that would invalidate the data collected, the secondary observer should not verbalize, point out birds, or give any non-verbal cues to the primary observer (e.g., looking at a bird with binoculars is a non-verbal cue). The second observer should position itself in order to minimize disturbance to birds as well as to the primary observer. Ideally, the second observer will stand near the primary observer and slowly move around or bend down so that he/she doesn’t obstruct the primary observer views.

- Please note in the “*Site Condition*” section of the datasheet if an additional observer was present during the count.
- If the secondary observer sees a species that the primary observer did not see, it may be noted in the “*Notable additional bird species*” section.

## COUNT CONDITIONS

- The first point count should be started no earlier than local sunrise. The final point count should be finished no later than 4 hours past local sunrise.
- Do not conduct point counts in steady or heavy rain, though it is acceptable to conduct counts in light, intermittent drizzle (be sure to make note of this in the “*Precipitation*” section of the data sheet).
- Do not conduct point counts in steady winds above 20 mph (visual cue = branches of a moderate size move, small trees in leaves begin to sway). Make a note of the wind condition in the “*Wind*” section of the datasheet.

- In the “*Disturbance*” section, note if yes or no any type of disturbance occurred during the count, and describe the disturbance under the “*Site Condition*” section of the datasheet. A disturbance may involve disturbing you, the observer (e.g., a homeowner came and talked to you), or disturbing the birds (e.g., a cat chasing birds, garbage truck making lots of noise and flushing birds, predator flew by and flushed birds, etc.).
- If YOU, the observer, are being disturbed during the 15-minute count period for any reason, make a note of the interruption in the “*Site Condition*” section. Time should be paused for the duration of the interruption and resumed once the interruption event is terminated. Redo the count entirely if you are unsure of the time you were disrupted for.
- Make a note of the overall noise condition for the whole count period in the “*Noise*” section of the datasheet.

### **APPROACHING THE POINT and FILLING TOP OF DATASHEET**

- Park your vehicle at >40m from the bird point.
- Approach the plot as quietly as possible to minimize disturbance to the birds present.
- In the “*Notable additional bird species*” section, make note of any bird species flushed by the approach in case they do not return during the count.
- Under “*Notable additional bird species*”, note bird species seen/heard before and/or after the count. Bird species recorded under this section are species NOT observed during the count but observed while at the site.
- Stand quietly at plot center for 5 minutes before starting the count. This is essential to allow any disturbance caused by the approach to settle down.
- Use this 5-minute settle-down time to fill out the information at the top of the datasheet, set up the noise meter, and find your distance brackets (5m, 10m, 20m, 40m) with the range finder. Note that the range finder MAY be in yards. If so, the conversion of yards to meters is:  
5m = 5.4yrd; 10m = 10.9yrd; 20m = 21.9yrd; 40m = 43.7yrd.
- Record in the “*Site condition*” section any unusual circumstances around the plot, such as construction activity or flooding, or anything you noticed that have changed since your last visit. Also note presence of water (or absence of it) at sites where water is typically present such as at the riparian sites (site code starting with “EE”, “EN”, “PE”, or “PN”).
- Record “*Site Obstruction*” as the percent of the horizon view that is blocked by something within a 20-m radius of the point. Record this every visit, even if it does not appear to have changed since your last visit. Record in 5% increments.

### **CONDUCTING THE COUNT**

After the 5-minute settle-down period, set a watch or timer and conduct the count for 15 minutes. Rotate slowly in place and record all birds seen and/or heard. For each observation, note the following in the appropriate column of the data sheet.

### Species

- Use the four-letter (English name) 54<sup>th</sup> AOU Supplement (2013) alpha codes if known (see bird list code provided), or write down the complete common name.
- If the species can't be positively identified, use the closest taxonomic affiliation (it is better to record something as "unknown" rather than guessing). Make sure you look at all the "unidentified" code options listed on the bird list code provided to pick the most appropriate code.

### Number of Individuals and Distance

- Usually, a single individual bird will be recorded per line.
- Only record a number greater than one on a single line if birds of the same species are observed very close together, such as a flock or family group.
- If a mixed flock is observed, put each species on a separate line and note in the "Notes" column that they were part of a mixed flock.
- Record estimated flock sizes (e.g., "10-20" or "15+") only if you cannot count them all.
- Write the number of individuals observed in the appropriate distance columns.
- If a bird moves during the count, record only the distance at which it was first observed.
- Pay close attention to bird movement to avoid counting birds twice.
- Birds such as hummingbirds should be recorded in the distance column if they are using the habitat (such as when they are observed foraging) even if they are not perched per say. However, if you see them just flying quickly by or chasing each other, then they should be recorded as FT.

### Fly-Throughs (FT)

- If a bird is seen flying through the count area below the tallest structure or vegetation, and not observed taking off or landing, record it in the "FT" column only, not in the distance columns.
- See note above regarding when to record hummingbirds as FT.
- High flying birds can be noted as a FT only if they are "aerial screeners" using the habitat, such as a hawk circling 100 feet overhead looking for food. Make a note if the aerial screener is flying higher than the tallest structure.

- You may note in the “*Site Condition*” section any unusual fly-overs of birds NOT using the habitat, such as a flock of Pelicans flying above the city.

#### Seen (S) or Heard (H) Columns

- Record with a check mark whether the bird was identified from sight (S) or sound (H), or both. Use caution with similar-sounding birds like Juncos and Chipping Sparrows, or with mimics and imitators, like Mockingbirds and Starlings.

#### Direction

- Record the direction the bird was first observed or heard. This may mean recording a bird heard to the south (S) even though you were facing northwest (N/W) at the time.
- Use the cardinal and mid-cardinal points of the compass (N, N/E, E, S/E, S, S/W, W, N/W) in this column.

### **ADDITIONAL INSTRUCTIONS**

- After the count is completed and before leaving the site, review your data sheet to ensure you have filled it correctly: make sure you have a count and distance for all observations, and that the top part of your datasheet is complete.
- Record under “*Notable additional bird species*” section ONLY birds USING THE HABITAT. This section is to record bird species seen using the habitat, but not recorded during the count.
- Under the “*Site Condition*” section, you may note species such as Cormorants or Pelicans flying high above but NOT using the habitat.
- Record under “*Non-bird species present*” any non-bird species observed at the site or fresh signs of non-bird species (i.e., coyote scat) at the site
- Wear drab clothing and avoid bold patterns that might scare away some birds, or attract other ones.
- During the count, do not “pish”, “squeak”, or use any other methods to encourage birds to show themselves. This would artificially inflate the bird densities recorded and invalidate the data collected. If you want to see a bird you had difficulty identifying, you can “pish” only after the count is completed.
- Use the 15-minute count period effectively; do not spend precious time trying to identify a bird that is far enough so that a spotting scope would be necessary to identify the species.
- Do not start or continue a count if personal safety is threatened in any way. Notify CAP LTER bird research group managers of any threat to safety encountered at a research plot.

- If the full 15-minute point count survey cannot be completed entirely for any reasons (e.g. weather, time limits, safety, etc.), the count must be re-done entirely and completed at another time within the season survey window.

## **DATA AND COMMUNICATION**

- To minimize errors, please review and complete your data sheets within a day or so after the survey, preferably the day of the survey. In between others, make sure you did not leave any blank spaces, review all the alpha codes (if uncertain of an alpha code, verify it with the bird list code provided or write the FULL common name), complete your notes and make them concise, and perform necessary research (listen to calls and/or look at different field guides) to fill in your uncertain identification(s) when possible. The datasheets must be clear and easy to read to facilitate data entry and prevent errors.
- All completed datasheets (reviewed for errors) must be returned to ASU within two weeks of the last survey completed during that season.
- To facilitate communication and to aid the supervisor in tracking project progress and scheduling, make at least one entry per week on the google+ project resource page – be sure particularly to note if you surveyed all your assigned sites for the week or if you missed some (specify which ones), report interesting/unusual sightings and specify where you saw them, and report any problems (i.e., site access issues, road closures, safety concerns, scheduling issues, etc).