

Point Counts: Standards & Guidelines

(Adapted from: Ralph, C. J., S. Droege, and J. R. Sauer, eds. [1995] *Monitoring Bird Populations by Point Counts*, USDA-Forest Service, Gen. Tech. Rep. PSW-GTR-149.)

1. Locate census stations systematically from random starting point.
2. If need habitat-specific population estimates, stratify census stations by habitat.
3. Placement of stations ... should avoid boundaries between habitat types, if possible.
4. Use small roads or trails for ease of access. Avoid wide, primary roads.
5. Determine number of samples necessary using analysis of pilot data (i.e., power analysis).
6. Counts should last 5 minutes; 10 minutes if travel between stations > 15 min.
7. Distinguish between birds detected during 1st 3 min vs. detections during last 2 min.
For 10 min. counts, distinguish between detections in 1st 3 min, 2nd 2min, and last 5 min.
8. Leave a minimum of 250 m between point count stations.
9. Do not record birds previously recorded at another sampling station.
10. Record all individual birds detected at a station.
11. Record birds detected within 50 m of the point separately from birds detected at greater distances.
12. More sampling stations are usually better than repeated counts of a smaller number of stations.
13. Conduct counts when (time of day & year) detection rate is most stable.
In general, conduct counts during the 3-4 hours following sunrise.
14. Do not conduct counts during rain, heavy fog, or high winds (w/ noise from wind-blown vegetation).
15. Only one observer should count birds at a given station.
16. Only observers able to identify all target species by sight and sound should conduct point counts.
17. Use a standard field data form to ensure comparability of data.
18. Record juvenile birds separately.
19. Birds detected flying over the station should be recorded separately from birds detected within the vegetation.
20. Most point count survey effort should occur during the breeding season.
21. Modifications to these guidelines may be appropriate for surveys of rare or cryptic species.
e.g., use of playback during nocturnal owl surveys
22. Start counts immediately upon reaching the census station.
23. If the observer flushes a bird within 50 m of a station upon approach or departure of the station, count that bird if it was not observed otherwise during the count period. Record such flushed birds separately from other counted birds.
24. If a flock is encountered during a count, it may be followed after the count period to determine size and species composition of the flock.
25. A bird giving an unknown song or call may be tracked down after the count period for confirmation.
26. Do not use attracting devices or records, except in counts for special species. (See #21)
27. Record latitude and longitude for each location, to the nearest 10 seconds and with accurate topographic maps.
28. Collecting data using a tape recorder can increase visual observations by reducing time looking at a data sheet.