

Point Count protocol – Oak Willamette Project



Project goal: document avian use of oak habitats in the City of Portland’s most intact oak habitats in order to inform restoration activities to meet the particular needs of oak associated wildlife.

Study design parameters: This project will be completed at 6 sites (see table and map) during 3 spring seasons (2014-16). Three count replicates will be conducted at each site per season between 15 April and 30 June spaced approximately 1 month apart. In a given replicate, all sites should be sampled within a week. This protocol is based on methods recommended by Huff et al¹. (2000, <http://www.fs.fed.us/pnw/pubs/gtr501.pdf>).

Site name (also see map)	Point count station location name and description	Coordinates (WGS84)	Parking area access
Baltimore Woods	BW01 (rebar) BW02 (fence post)	45.592017 N; 122.762556 W 45.590498 N; 122.760982 W	N. Decatur St. & N. Catlin Ave.
University of Portland	UP01 (edge of bluff) UP02 (edge of parking lot) UP03 (manhole cover off Waud Bluff Trail)	45.572222 N; 122.731679 W 45.571994 N; 122.723475 W 45.573002 N; 122.721402 W	1. Campus – end of N Bluff St. 2. Campus – on N. Mocks Landing Road (in front of Christie Hall) 3. Off Campus – near intersection of N. Olin Ave. & Harvard St.
Adidas / Kaiser area	KA01 KA02	45.559978 N; 122.696197 W 45.558146 N; 122.694303 W	N. Greeley and N. Emerson St. (do not park in Kaiser parking lot)
Oaks Bottom	OB06 (at oak with hole at base 5m E. of gazebo) OB07 (on trail up to Sellwood Park) OB08 (upslope of bluff trail below Mausoleum at root of fallen tree) OB09 (6m upslope off bluff trail)	45.471016 N; 122.66329 W 45.469019 N; 122.661475 W 45.47575 N; 122.653706 W 45.479224 N; 122.652936 W	Oaks Park parking lot
Elk Rock Island	ER01 ER02	45.435447 N; 122.647738 W 45.436652 N; 122.647979 W	19 th & Sparrow street; if water is high: Milwaukie boat launch
Willamette Cove	WC01 WC02	45.58325 N; 122.74599 W 45.58180 N; 122.74649 W	Access for both points: N. Lombard & N. Edgewater

¹ Huff, M. H.; K. A. Bettinger; H. L. Ferguson; M. J. Brown; and B. Altman. 2000. A habitat based point-count protocol for terrestrial birds, emphasizing Washington and Oregon. U.S. Department of Agriculture/Forest Service Gen. Tech. Rep. PNW GTR-501. Available online: www.fs.fed.us/pnw/pubs/gtr501.pdf

DATA FORM SPECIFICS:

Site: full name of the site monitored

Date: mm/dd/yy (be sure to record year since many projects are multi-year)

Visit number: Visit 1, 2, or 3

Observer: Full name of person conducting the survey

Recorder: Full name of person recording the data

Field notes: any notable observations that provide insight into project goal (e.g. find nest in oak)

Weather information: record cloud cover, wind, and temperature data

- If you don't have a thermometer to record the temperature, after the survey you can look up local weather conditions on the internet
- Do not conduct counts under the following weather conditions: Rain, cold drizzle (light drizzle okay if birds are active), sleet, snow, heavy ground fog, strong winds (>10-15mph).

Noise Scale:

- 0 = no noise
 - 1 = gentle babbling brook noise or faint urban noise, probably not missing any birds
 - 2 = babbling creek or other urban noise, might miss some of the higher pitched songs and calls or some distant birds
 - 3 = rushing creek noise or other loud background sound(s), probably detecting only those birds within 50 m and might be missing the high-pitched songs and calls of some species close to the center of the station
 - 4 = roaring creek or traffic, probably detecting only the very loudest calls and songs within 50 m
- If a very close loud train or plane completely interferes with the count either: 1) stop the clock and resume after it has passed (if it's quick) or 2) restart the count including a new quiet 1min. settle time.

Site Visitation Procedure:

General notes:

- Alternate starting station each visit (i.e. start at first station on visit #1, start at last station on visit #2, etc.).
- Conduct all counts during period of peak bird activity (~15min. before sunrise & 9:00am).
- Visit all point count stations at a given site in one day.
- Travel as quietly as possible between stations to avoid disturbing birds
- Wait 1-2 min. at each station before starting count to allow birds to "settle down"
- Use landmarks on study site map to estimate 50m perimeter around point count stns.
- Be careful of double counts! Once you have detected a bird once and recorded it, you do not want to note it again.

STN #: point count station code and identification number (for example BW01)

Start time: record time you initiate count

Species: Use the 4-letter AOU (American Ornithologist’s Union) code (e.g. Song sparrow = SOSP). When in doubt, record the complete name and then determine the AOU code later. The following website provides a key for AOU codes:

<http://www.birdpop.org/alphacodes.htm>

http://www.birdpop.org/DownloadDocuments/Alpha_codes_eng.pdf

Typical detections and flyover detections

- Spend **8 mins. at each point**, separating birds detected into 3 time intervals: **0-3 min., 3-5 min., 5-8 min.**
- Record bird detections as either “**typical**” or “**fly-over**”. A **typical detection** is spatially defined (i.e. in relation to the 50-m radius). A **fly-over** detection is defined as a bird detection above the highest vegetation (i.e. tree canopy). An **associated fly-over** detection is one where the bird appears actively involved in the site (habitat type), whereas an **independent fly-over** is not using the site.
- Record **typical detections** as either **0-50 meters** (within the point count radius) **or >50 meters**.
- Instead of using hash marks to record bird detections, record the behavioral cue that alerted you to the presence of the individual as “**S**” for song, “**V**” for visual, or “**C**” for call (“**D**” for drumming woodpecker, “**H**” for humming hummingbird)². If a bird sings after it has been detected via a different cue, this is indicated in the data, but the initial detection cue is preserved. Circle the original detection cue (“**V**” or “**C**”) to note that a bird was singing after its initial detection, but otherwise, no changes in behavior are noted. Use one alpha symbol per individual. If you see a group or flock you can use a number and a symbol. For example 7 crows together can be 7V.

Juv: Record juveniles separately during point counts under the “Juv” column. Point counts are designed to estimate number of breeding adults in a given area, therefore juveniles from that year can skew the results. For example, Bushtit family groups may travel through a point count plot during the timed count. Try to quantify the number of young and record under “Juv”. Starlings are another great example.

Flush: record detections of **birds neither seen nor heard during the timed station counts** that are flushed as a person enters or leaves a point count station, **but are found within the 50m point count radius.**

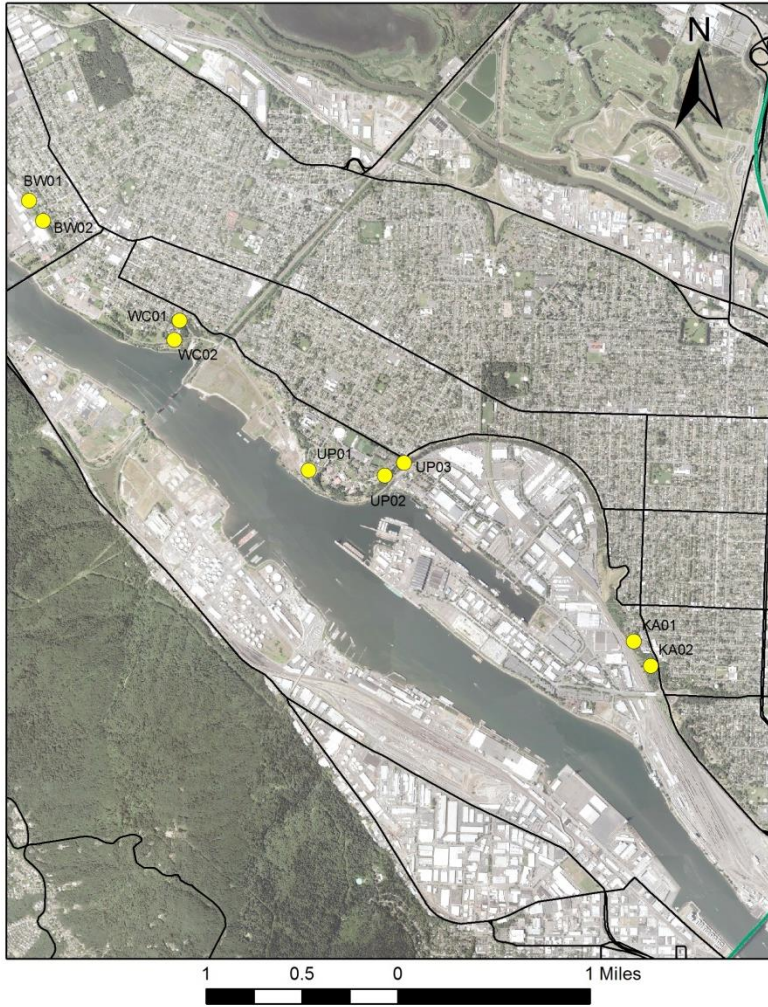
Add. Det. (Additional Detections): record all birds encountered between point count stations but greater than 50m from any point count station (i.e. all birds encountered outside 50m plots) **only if you are in Oak habitat.** Typically, these are found traveling between stations. Often, these are less common species and/or species not found during timed counts.

Equipment list

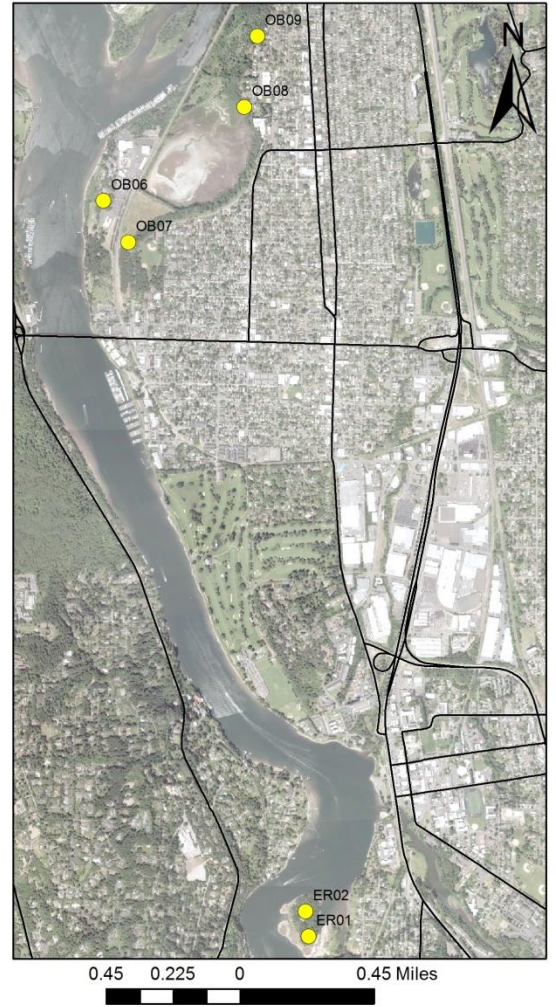
Appropriate clothing and footwear	Map of site
Binoculars	Dataform/clipboard + writing utensil
Stop watch	

² Adopted from PRBO Point Count Methodology Grant Ballard, Thomas Gardali, and Diana Humple

North Bird Points: Baltimore Woods, Willamette Cove, University of Portland, Kaiser-Adidas



South Bird Points: Oaks Bottom, Elk Rock Island



Map depicting location of all study sites and point count locations.

