Breeding landbird point counts (DP1.10003.001)

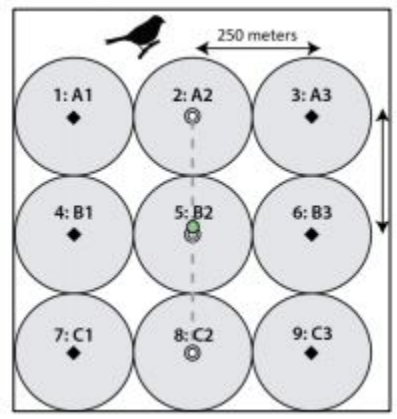
Measurement

Count of all individual birds, species identification, and age and sex when possible, during a 6 minute observation period. Additional metadata collected includes horizontal distance of bird from the observer, average windspeed, temperature, start and ending cloud cover percent, and relative humidity.

Collection methodology

Point counts at all sites are conducted by local contracted experts. At larger sites, point counts occur once per breeding season at 5-15 nine point grids with the grid centers colocated with the center of Distributed Base Plots. At smaller sites (cannot accommodate the minimum of 5 grids) point counts are conducted from the southwest corner (point 21) of 5-25 Distributed Base Plots, twice per breeding season. All point counts are six minutes long. The observer detects birds through visual (binoculars and laser rangefinder), auditory (singing or drumming), flyover, or other aural (e.g. wing beats) means.

For information about disturbances, land management activities, and other incidents that may impact data at NEON sites, see the Site management and event reporting (DP1.10111.001) data product.



Design of the point count grid, consisting of 9 points separated by a minimum of 250 m. The center of the grid is just offset from a Distributed plot center (green circle).

Data package contents

brd_perpoint: Per point metadata for breeding landbirds
brd_references: Identification references used to identify birds, by site and year
brd_personnel: Personnel conducting breeding landbird point count data and quiz scores
brd_countdata: Point count data for breeding landbirds

The National Ecological Observatory Network (NEON) is a major facility fully funded by the National Science Foundation and operated by Battelle.

variables: Description and units for each column of data in data tables
readme: Data product description, issue log, and other metadata about the data product
validation: Description of data validation applied at the points of collection and ingest

Data quality

Breeding landbird point counts are conducted by an external contractor. Quality checks conducted before data are returned to NEON include a 100% check of all data entered into the contractor database to eliminate transcription errors and an "uncommon bird" check to look for potentially misidentified bird species. Field data are transcribed from the datasheet no later than 14 days after collection including all notes and deviations from procedures. All datasheets are scanned, filed as hardcopy in addition to digital data upload. The "uncommon bird" check is conducted by contractor staff and partners whereby the proofer uses local knowledge, eBird records, field guides, and direct contact with the technician who collected the record for supporting documentation to validate the record.

Contractors who perform the point counts are periodically tested for identification skill; their quiz results can be found in the brd_personnel table.

Table joining

Table 1	Table 2	Join by field Table 1	Join by field Table 2
brd_perpoint	brd_countdata	eventID, pointID	eventID, pointID
brd_perpoint	brd_references	siteID, startDate	siteID, date
brd_countdata	brd_references	Join not recommended: References apply to entire observation period. Connect references to observations via siteID and dates.	

Table 1	Table 2	Join by field Table 1	Join by field Table 2
brd_personnel	Any other table	Join not recommended: Personnel are tested annually. To find relevant scores, measuredBy and technicianID fields match for the same observer, and test scores are relevant to data collected during the year of the test(s).	

Documentation

TOS Science Design for Breeding Landbird Abundance and Diversity
NEON.DOC.000916vD | 1.6 MiB | PDF

TOS Protocol and Procedure: BRD – Breeding Landbird Abundance and Diversity
NEON.DOC.014041vK | 3.6 MiB | PDF

NEON User Guide to Breeding Landbird Point Counts (DP1.10003.001)
NEON_bird_userGuide_vC | 290.1 KiB | PDF

For more information on data product documentation, see:
https://data.neonscience.org/data-products/DP1.10003.001

Citation

To cite data from Breeding landbird point counts (DP1.10003.001), see citation here:
https://data.neonscience.org/data-products/DP1.10003.001
For general guidance in citing NEON data and documentation, see the citation guidelines page:
https://www.neonscience.org/data-samples/guidelines-policies/citing