

## **Instructions for Completing the Daily Data Sheet and YBCU data table\_June 2017**

These instructions provide guidance for completing the daily data sheet and associated excel file.

The daily data sheet provides a record of the positive and negative detections at each call point during a survey. Please ensure that you record both. The purpose of the excel file is to aggregate data from the daily datasheets to facilitate importing this data into USFWS' spatial database.

At the completion of each survey season, you should send all of your data sheets and any associated documentation to the appropriate office of the U.S. Fish and Wildlife Service. For Utah, that office is the Utah Ecological Services Field Office, located at 2369 W. Orton Circle, Suite 50, West Valley City, Utah 84119. For electronic submissions, please send your data via email to the cuckoo species lead in the Utah Field Office, Amy Defreese at [amy\\_defreese@fws.gov](mailto:amy_defreese@fws.gov). This is in addition to annual reporting requirements as outlined in your ESA section 10(a)1(A) permit.

One excel file should be used to aggregate the daily data for an entire survey season at one site. The pdf of the daily data sheet is provided for your convenience. Only the excel file should be returned to USFWS. Fields in the excel file that are not used (e.g. detection type when there was no detection) should be left blank. Descriptions of the fields used in the data sheet and excel file are below.

**Survey ID:** Surveyor's first initial and last name, in lowercase, followed by the date (YYMMDD) – jsmith170613.

**Total Detections:** Record the total number of unique individual adult/fledgling Yellow-billed Cuckoos detected during this particular survey. Do not count nestlings. (But do record whether nestlings or fledglings were found in the comments section. Be aware that most 10(a)1(A) permits to do not authorize nest searches or monitoring).

**Page\_ of \_:** Used to record how many data sheets are associated with the survey.

**Surveyor name:** Record your first initial and last name and those of additional surveyors.

**Affiliation :** Name of the company or agency for whom you work.

**Contracting Company/Agency:** Name of company or agency on whose behalf you are performing work.

**Permit #:** USFWS ESA section 10(a)1(A) permit number.

**Survey Period:** The survey period in which the survey is being conducted, as defined in the protocol.

**Visit Number:** The number of times the site has been visited, numbered sequentially from the start of the survey season to the end.

**Site Name:** Write the full name of the site to be surveyed.

**Waterway:** The name of the river, stream, or drainage where the site is located.

**Survey Date:** The month (mm) / day (dd) / year (yyyy) the survey is conducted.

**Datum:** Datum used to record GPS coordinates. NAD83 is required. If another datum is mistakenly used, record that datum instead. Check GPS settings to confirm datum.

**UTM Zone:** UTM zone used to record coordinates. All of Utah falls within zone 12. Colorado is split between zones 12 and 13.

**Call Point ID:** Unique ID for each call point. Can use site abbreviation plus a number.

**Start Time:** Write in the start time of the broadcast-point using the hour and minute format using military time. Fill in all four digits. Examples are 0630 (6:30 am), 0802 (8:02 am).

**End Time:** Write in the end time of the broadcast-point using the hour and minute format using military time. Fill in all four digits. Examples are 0630 (6:30 am), 0802 (8:02 am).

**Easting:** Enter the UTM Easting (6 digits).

**Northing:** Enter the UTM Northing (7 digits).

**Detection:** Record yes if a cuckoo is detected at the point, no if no detections at the point. If more than one cuckoo is detected at the point, record the second detection in the next row on the data sheet and complete the appropriate data fields. In the columns to the left (Call Point ID, Start Time, UTM coordinates), record "" to denote that these values are the same as those in the row directly above. Also, if more than one cuckoo is detected at a point, be sure to thoroughly describe your observations in the notes or on the back of the datasheet as described under "Note #".

**Detection Time:** Record the time that the cuckoo was detected, using the hour and minute format using military time. Fill in all four digits. Leave blank if no detections.

**Detection Method:** Record how the cuckoo was detected. I = Incidental (between call broadcast points) or P = Playback (following broadcast calls). Leave blank if no detections.

**Detection Type:** = Audio, V = Visual, or B = Both.

**Compass Bearing:** Record the estimated compass bearing, in degrees, to the detected cuckoo. The compass declination should be set to zero.

**Estimated Distance:** Record the horizontal distance in meters between the broadcast point (where you are standing), and the location or presumed location of the cuckoo where you first detect it.

**Estimated Distance Accuracy:** Indicate some kind of relative accuracy of your estimate using the codes below.

**Table 1. Codes for quantifying the degree of accuracy in estimating the distance to a detected cuckoo.**

Accuracy Code	Explanation
1	Measured distance, using laser rangefinder or pacing, to a known location.
2	Measured distance, using laser rangefinder or pacing, to an estimated location.
3	Estimated location of detection and distance, feel confident it was within <b>25 m</b> of true location.
4	Estimated location of detection and distance, feel confident it was within <b>50 m</b> of true location.
5	Estimated location of detection and distance, feel confident it was within <b>100 m</b> of true location.
6	Little confidence in your estimate, a complete “guesstimate”.

**Vocal Code:** Record the appropriate code (see data sheet), or series of codes for the calls heard when you made the detection.

**Behavior/Breeding Code:** Record the appropriate breeding behavior code(s), for the behavior observed using the codes on the data sheet.

**Wind:** Record the wind code (0 through 6) as it applies to the strength of the wind during the call point. Record the average wind condition, not the maximum condition (e.g., periods of gusty winds).

**Cloud Cover:** Record cloud cover as: C (clear <25%), PC (partly cloudy: 25%-49%), MO (mostly overcast : 50-74%), or O(overcast: 75+%) If there are patches of clouds in different areas of the sky, try to image gathering all of them together into one part of the sky and recording what percent of cloud cover that would represent.

**Precipitation:** Record the appropriate code: 0 (none) through 4 (heavy rain) or 5 (snow).

**Noise:** Record the noise code that applies to background noise conditions during the transect, as it relates to your ability to hear cuckoos: 0 (quiet), 1 (faint noise), 2 (moderate), 3 (loud). Record the average noise conditions, not the maximum condition.

**Temperature:** Record the ambient temperature in Fahrenheit.

**Note #:** To record observations of cuckoo detections, or other note-worthy information, first record a sequential number, starting with the number 1 for the first observation of the survey, in the row pertaining to the broadcast - point in which the observation was made. Use the space on the bottom of the data sheet to record detailed notes regarding your observations. Use the back of the data sheet if more space is needed.

**YBCU Excel File:** Enter data from the daily data sheet into the excel file. Send one excel file containing data from all daily data sheets to USFWS (see instructions on page 1).