

Long-billed Curlew Survey Protocol: Blackfoot Valley

This volunteer survey effort marks our 4th year of surveying curlews as a team! Thanks for your continued support of this project! This protocol together with route maps, data forms, and more are available here: <https://missionvalleycurlews.weebly.com>. You can even download an app to make data collection easy! Together with Montana Natural Heritage Program and Montana Fish, Wildlife & Parks, we have designed an ArcGIS application just for the Long-billed Curlew project. Just use the above and navigate to our-billed Curlew Survey Resources page.

This year, we will again have two survey windows available. Ideally every route will be run at least once within a survey window. Window 1 is April 15th – May 7th, and window 2 is May 8th – May 31st. We are also asking you to record any Sandhill Cranes that you see.

How it works:

- ✓ Survey between April 8th and May 31st during 1 of 2 survey windows: Window 1 - April 8th- May 7th and Window 2 -May 8th – May 31st. If you want to survey your route twice, please do one in each window!
- ✓ Survey anytime between just after sunrise and ~ noon, *a little longer if temperatures remain cool. The earlier you survey the better traffic conditions will be!*
- ✓ Do not conduct surveys in the following weather conditions:
 - Temperature >85°F
 - Consistent wind speed >20 mph; note effects of higher winds on counts under count quality.
 - Fog or precipitation that reduces visibility to ~ <125 meters.
- ✓ Sample 10-15 locations, ½ mile or 800-m apart along primary or secondary roads. Try for at least 10 points, but as many as you can get in give the route and time.
- ✓ Use a car odometer to measure between points. Or if you know how to use GPS, you can create a waypoint at first stop and then use GPS to “find – nearest waypoint” and travel away for ~800m.

At each survey stop location and on accompanying form:

- **Record** the Route and **stop number** information. Route # will be provided; stop is 1 – 15.
- **Record the start time** of each survey stop
- **Record** your **stop location** on the provided **road map!**
- If you have GPS, write down latitude/long WGS 84 (e.g. 44.45494, -114. 54935). If doing many routes and you know how to create a GPS waypoint you can download the lat/longs from your unit after. Label carefully!
- **Record** the **count quality** at each stop.
- **Record** the **Dominant land use** (*see below*) at each stop, and for each **curlew or group of curlews** observed record **dominant land use** within ~ 200-m radius of the point.
- **Record any curlews** that flush on arrival and make note that they flew upon arrival.
- Conduct a 5-minute survey. Stand in one place and scan with binoculars to locate birds, use spotting scope if you have one to confirm sightings.
- **Record each bird one time only.** For each bird observed:
 - Record how you detected the bird under How detect?: **V** – visual, **C** – calling, **F** - flyover
 - Record the approximate distance (meters) to each **curlew or group of curlews**. A distance is required for all curlew observations except Flyovers (marked as F).
 - Record the total number of birds in the group. Group is defined as an aggregation of more than one bird
- If you detect Curlews **between points or before/after** the 5 minute count, add to the closest point and add any relevant detail (where found and distance from you).
- **Record** number of **Sandhill Cranes** at each location using the check-box on the data sheet

Count Quality: TO BE RECORDED FOR EACH STOP

E – Excellent – quiet, good visibility, no wind, not interrupted by traffic, temperatures not too hot or cold
M – Moderate – light disturbance (wind, traffic, other noise), cold (< 32F or hot (> 75 F)

P – Poor – hard to hear or see for some reason, really cold or hot or wet!

Dominant Land Use

R – Rangeland/grassland **C** – Cropland **S** – Sagebrush steppe **O** – Other (residential, forest – describe)

Sample Data for one stop:

STOP 1: start time: __6:35__ Marked map: yes no. Lat: 44 . 59815 long - 114 . _69844 Way point? _no_

Curlews: **NO** **YES** (circle one). If yes, numbers of curlews, distance to each individual or group, if flyover only, and how detected (Visual, Call, Both), and dominant cover (if you can): R, C, S O.

1 pair. 50 meters, north side of road. Detected via V - visual. Pecking around in R (rangeland).

1 individual – Flyover – 300 meters

If YES, **Count Quality:** Excellent **Medium** Low (*circle one*). Breezy but no big gusts. Two cars drove by during the stop.

Sandhill Cranes – Y/N? Number? **2**

Return forms to:

Montana Audubon

Peter Dudley, peter@mtaudubon.org or Carmen Borchelt, carmen@mtaudubon.org

Address: P.O Box 595 Helena, MT 59624