Long-billed Curlew Survey Protocol: Blackfoot Valley

This volunteer survey effort marks our 5th 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 11am, *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.
- ✓ If you know how to use GPS, you should import the given GPS points for your route in a GPS software. This works for OnX, Google Maps (through a custom map,) and on Gaia GPS. You can also use a car odometer, although this is not preferred.

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**!
- **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 species comments: **V** – visual, **C** – calling, **F** - flyover
  - Record the approximate distance (meters) to each ***curlew or group of curlews***. A general distance is required for all curlew observations except Flyovers (this does not need to be perfect.)
  - 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).