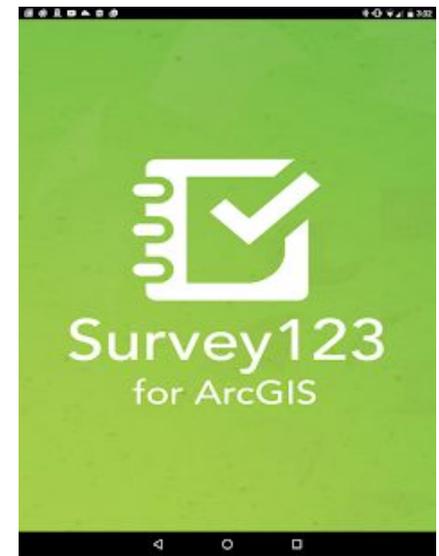


How to use Survey 123 for Long-billed Curlews

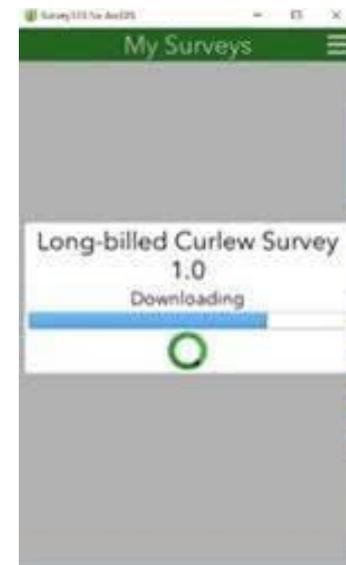
Montana Natural Heritage Program and Montana Fish, Wildlife & Parks have designed a new application for your favorite curlew surveys. Now you can use your smart device for in-field data collection, never losing track of your exact stop location and eliminating hours of time spent hand-entering data!

To get started:

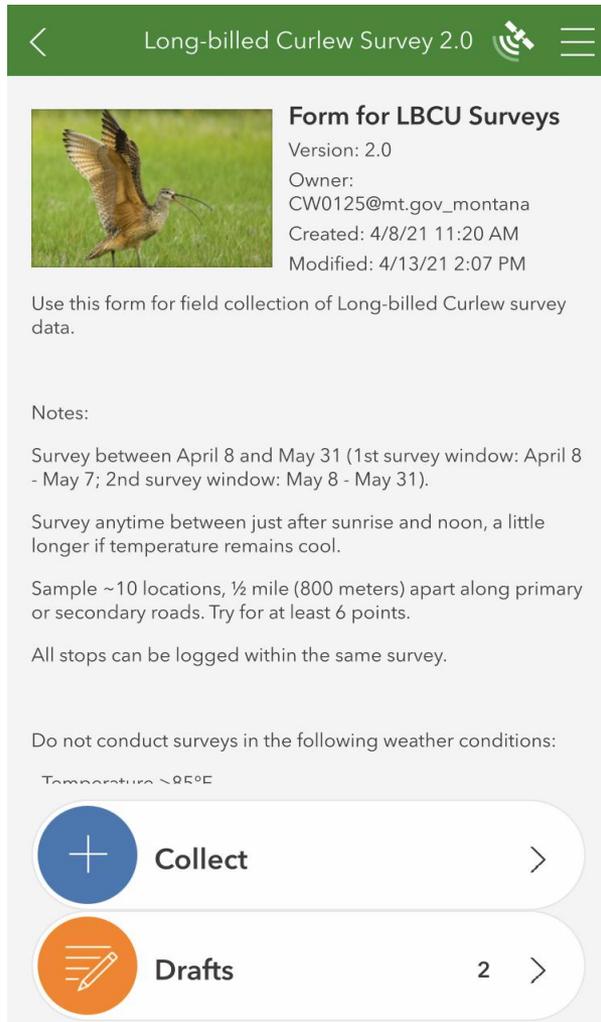
- Log in to your iPhone App store or Android Google Play
- Download “Survey 123” - Don’t worry, it’s absolutely free!
- Once the app is installed it will take you to a page that looks like this (see top right) with a “Sign In” button at the bottom. ****DO NOT** sign in – you don’t need to.
- Visit our [LBCU Survey123 page](#). Click the “Download Long-billed Curlew Survey 2.0” tab on your phone – the download may take several minutes and is best to complete when connected to Wi-Fi. Keep your phone active (i.e keep touching the screen, check your email, etc. so the process doesn’t time out or auto-lock). When downloading, the page should look like this (see bottom right).
- Here is a shortened link to the curlew survey app: <https://arcg.is/1810HX1>
- You’ll need an updated survey protocol that references how to use the survey app. This can be found under each region on [the Long-billed Curlew Sites page](#). (<https://www.montanabirdsurveys.com/lbcu-survey-sites.html>)
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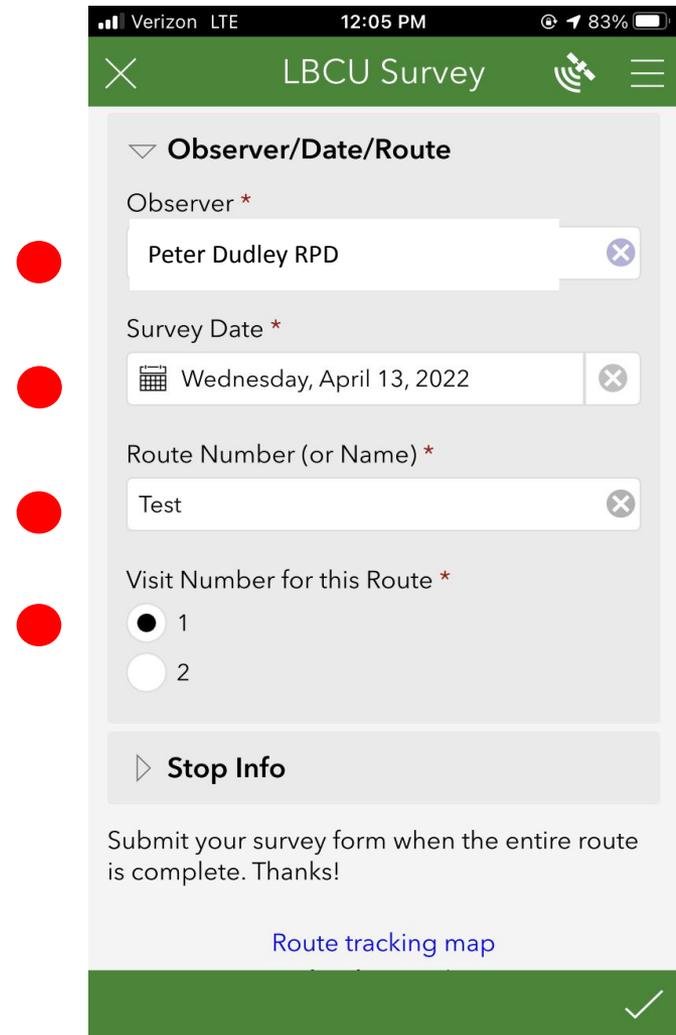
Long-billed Curlew surveys 2.0 is a program designed to run in the Survey123 App (above) on a hand-held smart device.



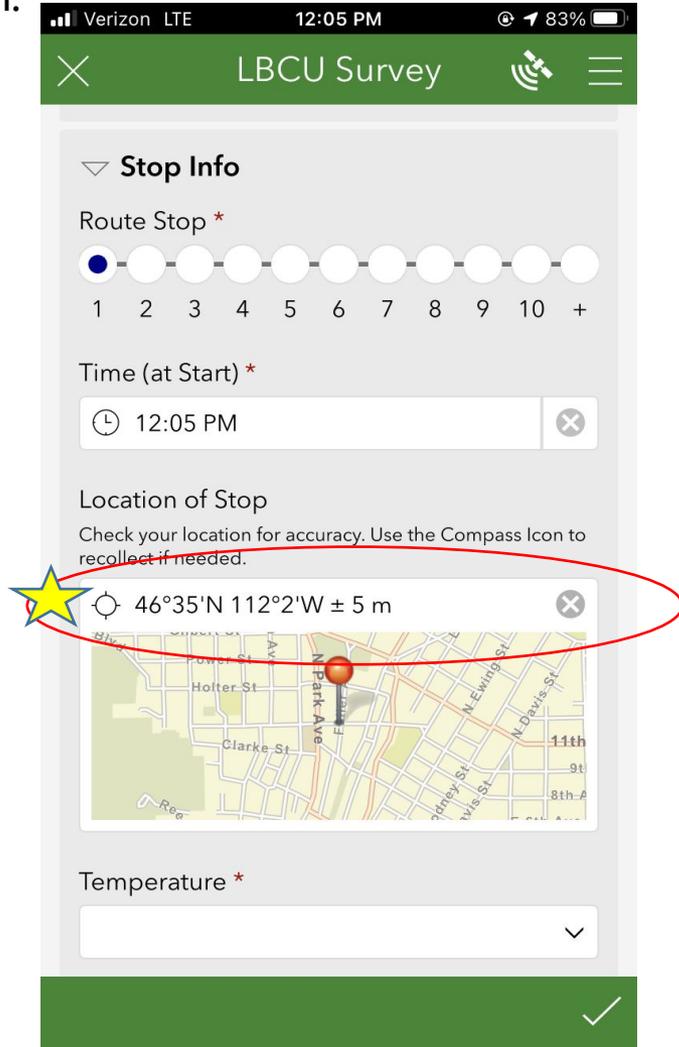
You'll know the app is working when your screen shows "Long-billed Curlew Survey 1.0" Now you are ready to explore the app and see if you can do a "mock" curlew transect. Click on the icon and the below screen should appear. Click "Collect".



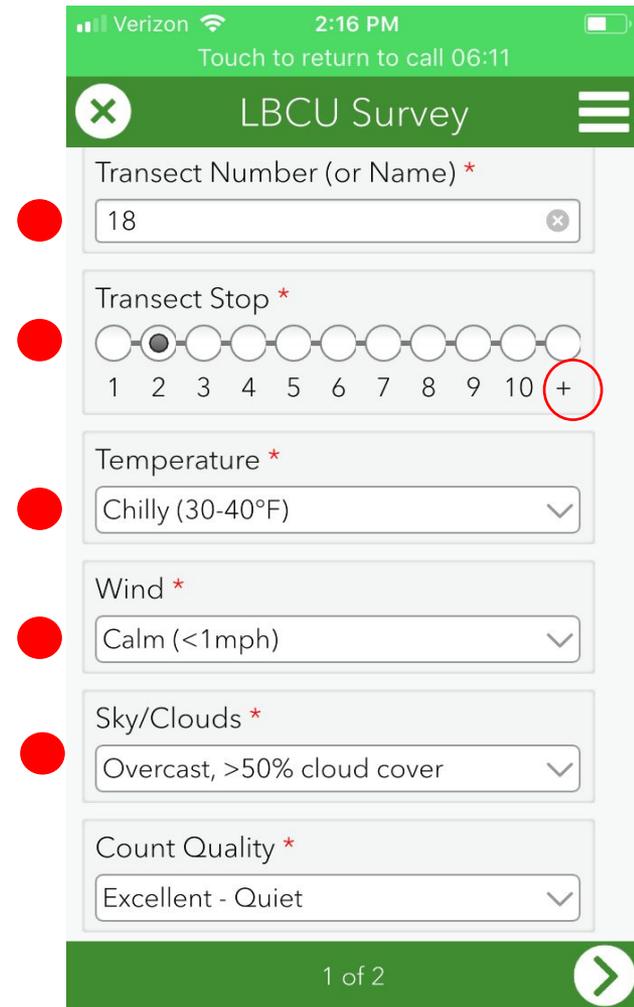
A new survey window, like the image below, should appear. Here is where you will enter basic survey information. NOTE – this information has to be filled out for every stop. If you are surveying in the early window (until May 7th) you will say Visit Number 1. The late window is Visit Number 2. For your name, put in your full name and three initials. At subsequent stops you can then use your three initials.



At each stop the GPS in the application will find your location for you, and the box indicating your location will turn from red to gray as the location is found. You should not have to edit the location data. If your location seems wrong, tap the 'compass' (see star below) to reset your location.



At each stop you will have to enter the transect number, the stop number, and a few bits of information about the weather. If your route is more than 10 stops you'll have to use the 'plus sign' button for each subsequent stop. You can enter count quality after the 5 minutes pass.



If you are surveying a route during the first window (April 8th – May 7th) you will be prompted to enter the dominant habitat type for the area. Use the “other” box to add habitat details. Primary Land Use is also recorded with an option to add any notes.

This screenshot shows the first screen of the LBCU Survey app. The status bar at the top indicates Verizon service, a Wi-Fi connection, and the time 2:16 PM. Below the status bar is a green header with a close button (X), the title "LBCU Survey", and a menu icon (three horizontal lines). The main content area is divided into four sections, each marked with a red circle on the left:

- General Habitat in Area ***: A list of radio button options: Native Grassland (selected), Introduced Grassland, Cropland, 50/50 Grass-Cropland, and Other (note in Comments below) (highlighted with a blue border).
- Primary Land Use in Area ***: A list of radio button options: Grazed (selected) and Ungrazed.
- Secondary Land Use (if applicable)**: A list of radio button options: Grazed and Ungrazed.
- General Comments**: A text input field containing "Some residential" and a clear button (X).

At the bottom, a green footer bar shows "1 of 2" and a right-pointing arrow icon.

After you have filled information up to this point (other than count quality), stop and conduct your 5-minute survey. Use the arrow in the lower right of the screen to move to the survey outcome screen (below). Indicate if birds were detected. If birds were detected,

This screenshot shows the second screen of the LBCU Survey app, titled "Survey Outcome". The status bar at the top indicates Verizon service, a Wi-Fi connection, and the time 2:17 PM. Below the status bar is a green header with a close button (X), the title "LBCU Survey", and a menu icon (three horizontal lines). The main content area is divided into two sections, each marked with a red circle on the left:

- Were Birds Detected? ***: A list of radio button options: Yes and No (selected).
- Birds Observed**: A section with a downward-pointing triangle icon, a trash can icon, the text "1 of 1", and a plus sign icon (+) circled in red.

At the bottom, a green footer bar shows "2 of 2", a left-pointing arrow icon, and a checkmark icon.

A dropdown menu of bird species will pop up (see image below). Long-billed curlew is the first option.

If curlews were detected you will have to add information on the type of observation, including evidence of breeding, detection type, number observed.

Verizon 2:17 PM Touch to return to call 07:25

LBCU Survey

Survey Outcome

Were Birds Detected? *

Yes No

▼ **Birds Observed**

Multiple records may be entered at a survey location, one for each detection.

Species Name *

- Long-billed Curlew
- Bobolink
- Burrowing Owl
- Marbled Godwit
- Sharp-tailed Grouse
- Short-eared Owl

2 of 2

Verizon 2:19 PM Touch to return to call 09:07

LBCU Survey

Species Name *

Long-billed Curlew

Bird Observation Type *

Indirect Breeding

Non-Breeding/Migratory

Direct Breeding

Nest Only

Detection Type *

Observed (visual only)

Heard Call/Song

Observed and Heard

Observed (w/ photo)

Other

Number Observed *

2 of 2

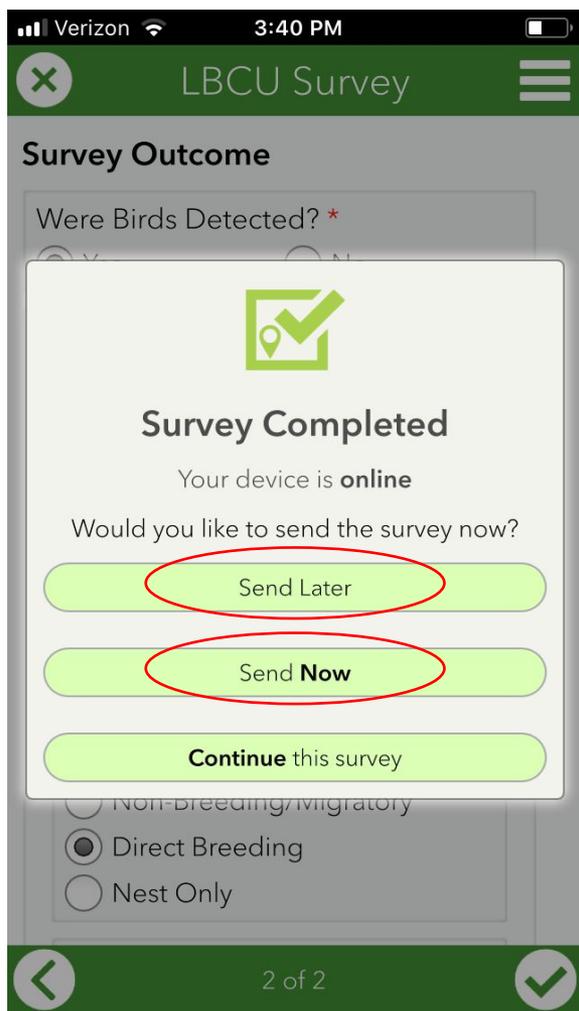
Distance to the birds observed and direction to the birds. **NOTE** – if you observe more than one group of curlews, or curlews in different locations at one stop, please enter them as individual sightings with unique distance and location information. You can also enter any comments.

This screenshot shows the 'LBCU Survey' app interface. At the top, the status bar shows 'Verizon', signal strength, Wi-Fi, and the time '2:20 PM'. Below the status bar is a green header with a close button (X), the title 'LBCU Survey', and a menu icon (three horizontal lines). The main content area has a light gray background and contains three input sections: 1. 'Number Observed *' with a text input field. 2. 'Distance to the Bird(s) in meters *' with a text input field. 3. 'Direction to the Bird(s) *' with a list of radio button options: N, NE, E, SE, S, SW, W, and NW. Below these is a 'Species Comments' text input field. At the bottom, a green navigation bar contains a back arrow, the text '2 of 2', and a checkmark icon. Three red circles are overlaid on the left side of the form, pointing to the 'Distance to the Bird(s) in meters *' field, the 'Direction to the Bird(s) *' section, and the 'Species Comments' field.

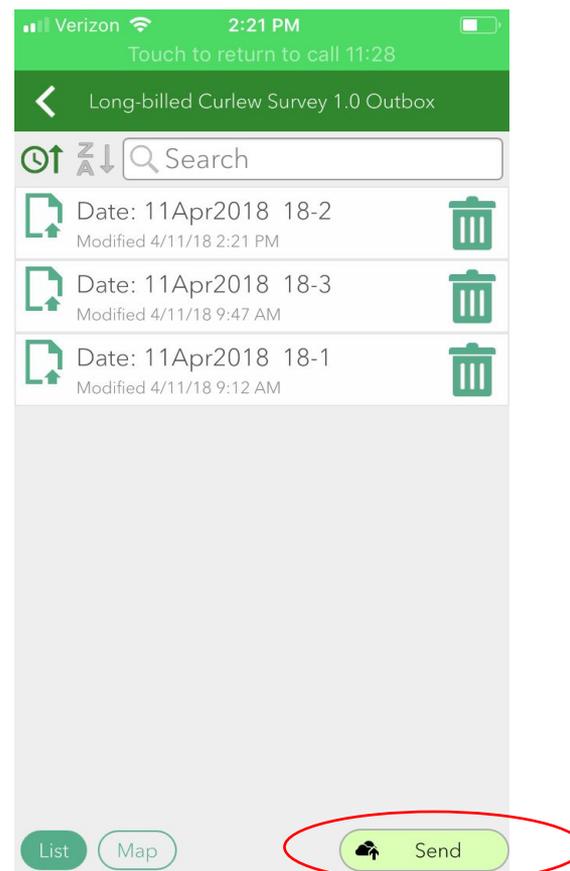
Then you will be prompted to enter the 'General habitat' where the sighting occurred and the land use where the sighting occurred. When you complete this information, note the option to add other records using the 'plus sign'. Click the 'check mark' when you have entered all species information for **ONE STOP**.

This screenshot shows the 'LBCU Survey' app interface. At the top, the status bar shows 'Verizon', signal strength, Wi-Fi, and the time '2:21 PM'. Below the status bar is a green header with a close button (X), the title 'LBCU Survey', and a menu icon (three horizontal lines). The main content area has a light gray background and contains two sections: 1. 'General Habitat at Bird(s) *' with four radio button options: Native Grassland, Introduced Grassland, Cropland (which is selected), and Other (note in Comments below). 2. 'Land Use at Bird(s) *' with two radio button options: Fallow (which is selected) and Planted crop. Below these sections is a text instruction: 'To add another record, click '+'; use **garbage can** to delete a single bird record.' At the bottom of the form is a bar with a red trash can icon, the text '1 of 1', and a plus sign icon. At the very bottom, a green navigation bar contains a back arrow, the text '2 of 2', and a checkmark icon. Two red circles are overlaid on the left side of the form, pointing to the 'General Habitat at Bird(s) *' section and the 'Land Use at Bird(s) *' section.

When you click the 'check mark', the survey will ask you if you want to send the information later, now, or if you want to continue (see below). It's okay to SEND or submit your surveys after each stop, or you can wait and send them later after the route is complete.



Travel to your next survey stop using the paper map, GPS coordinates and stop information. Click on the Long-billed Curlew Icon when you arrive at your next stop and begin the process again! If you saved your surveys on your phone instead of sending them as you go, (see image below) you can now review your information for each stop of the route.





This product is brand new and so we can expect some troubleshooting along the way. We recommend that when you are using the app in the field you can enter your initials, date, time, visit number, location, transect number, transect stop number, temperature, wind, sky, general habitat type and general land use information first and then put the app down to start the 5 minute survey. Bird observations and count quality can then be added once the 5 minutes of listening and looking are over. This way you can keep your gloves on or stay in the car and not have to fidget with your phone while you are trying to survey.

PLEASE NOTE: You **must** still use the prescribed stop locations for each route that are found on the paper maps and stop descriptions!

OTHER HINTS

- For “incidental sightings” – i.e those curlews you see between stops, open the survey and create a survey record like you would at a regular stop. Instead of entering a stop number, use the ‘plus sign’ after stop number 10 to navigate to stop “NA”. Then enter the curlew sighting data as you would for a normal stop.
- If your curlew observation is “heard only” and you cannot tell what habitat the bird is using, enter “unknown” in the ‘other’ category for habitat type.
- It’s okay to SEND or submit your surveys after each stop, or you can wait and send them later after the route is complete
- For those of you in the Mission Valley - you can abbreviate the route name with the route initials and number (i.e Mission Valley I would be MVI)
- You CAN run routes backwards, but please do not change stop numbers (i.e. if starting at stop 10 call it ‘10’)
- You do NOT need to mark curlews on paper maps if using Survey 123

I hope you will enjoy how easy and streamlined the application really is, and how much time it will save.

Please email Peter Dudley at peter@mtaudubon.org for assistance.