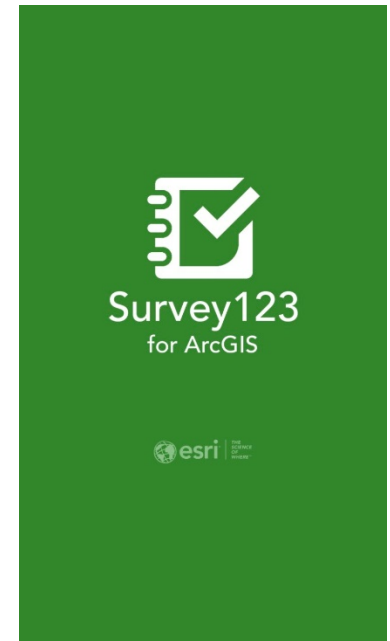


# How to use Survey 123 for Heritage Observer Collector 2.0 For Great Blue Herons

Montana Natural Heritage Program has designed an application for streamlined submission of animal observation, images, and in-field data collection, eliminating hours of extra time entering data! This guide will cover all you need to know on using Survey 123 to survey Great Blue Herons rookeries. For more information on how to survey and where, please visit MTAudubon's website: [www.montanabirdsurveys.com](http://www.montanabirdsurveys.com)

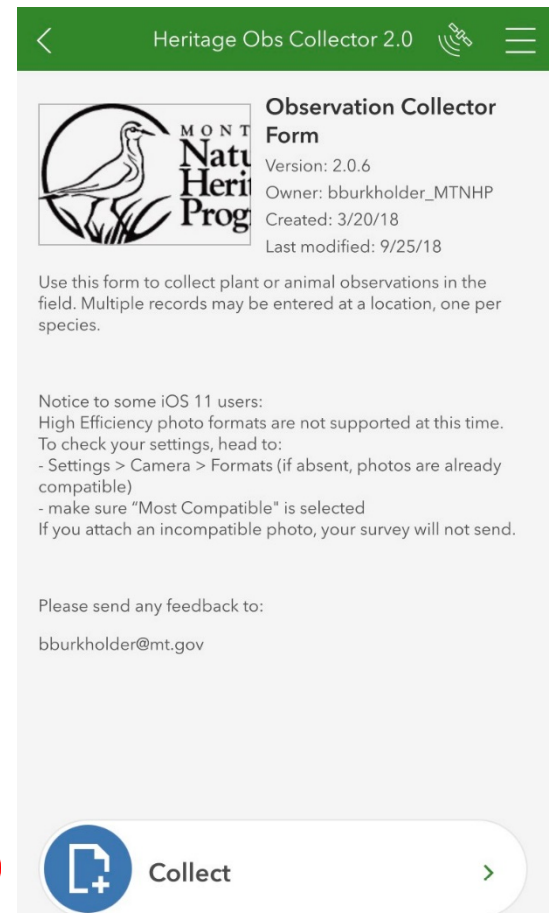
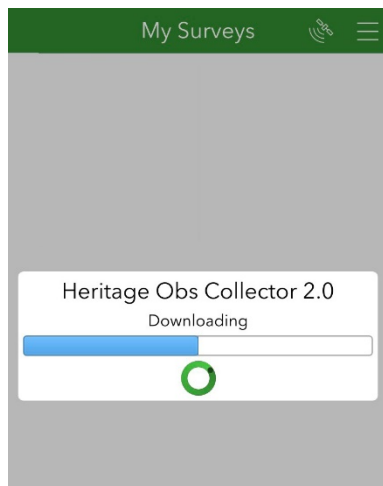
To get started:

- Log in to your preferred device's 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 right) with a "Sign In" button at the bottom. **\*\*DO NOT** sign in – you don't need to. Close the app or navigate to the link for the survey application using one of the following methods:
  - Go to [www.montanabirdsurveys.com](http://www.montanabirdsurveys.com), navigate to the 'Great Blue Herons' page. Next click on 'Survey Resources' and then 'Survey 123 for GBHE'. On this page there will be a link to download the survey application.
  - Another option is to type the link below in your browser or open this document in your email and click on the link:  
<https://survey123.arcgis.com/share/248df395acaa4ff9ae0808c1b0014445?open=native>



Heritage Observation Collector 2.0 is a program designed to run in the Survey 123 App (above) on a hand-held smart device.

- Once you open the link, it should ask you if you want to open in Survey 123 (click yes) – 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 the figure in the bottom left.
- You'll know the app is working when your screen shows "Heritage Observation Collector 2.0 " (see bottom center).
- Now you are ready to explore the app and see if you can do a "mock" observation. Click on the Heritage Observation icon (bottom center) and the screen to the right should appear. Click "Collect".



Heritage Obs Collector

**Observer/Date/Location**

Observer - Last, First (or AGOL username) \*

YOUR NAME

Date (Start) \*

Monday, March 2, 2020

Date (End) - if applicable, optional

Date

A new survey window, like the image to the left, will appear. Here is where you will enter basic survey information. NOTE – this information has to be filled out for every Great Blue Heron rookery surveyed.

- For **observer**, list your first and last name.
- The **Date and time** are automatically recorded. Start and **End date** are the same. If you are filling out this form on another day, you'll have to change this to the applicable date of the survey.

Heritage Obs Collector

**Location of Organism(s)**

Click on map and use the pin to mark the location of the organism(s), if different from your location or if GPS is off.

45.838°N 111.195°W

Swamp Rd

**Spatial Precision of Observation (meters) \***

Default is for GPS accuracy. If the actual location of organism(s) is not mapped above, estimate distance/uncertainty.

200

- Record the **Location of organisms**, i.e. the rookery. If you have high confidence in the rookery location, record **Spatial precision of observation** as '50 meters'.
  - **\*\*NOTE:** If you cannot map the rookery location, record *your location* as the **Location of organisms**; Record **Spatial precision** as the estimated distance to the rookery. **Spatial precision** should be greater than 200 or 300m).
  - **\*\*NOTE:** If you tap the 'compass' (see blue arrow) it will reset to *your current location*. You will need to use the pin to mark the location of the rookery.
- If you are entering your data at a later date, you'll have to tap on the map and position the red pin at the correct location.
- **Scroll down in the app** and go to the next page to fill out more information.

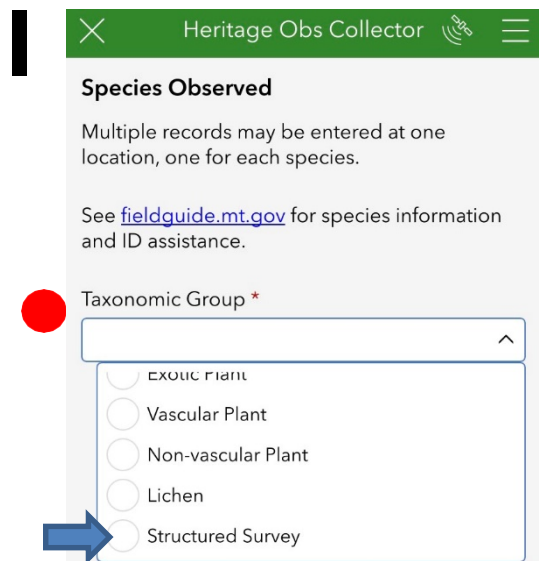
- Indicate **‘Habitat Notes’ (NOT OPTIONAL!)**
  - Record information such as the dominant tree species in the rookery (e.g cottonwood, ponderosa, Russian olive, etc.) keeping in mind nests can be in standing dead timber. Describe the vegetative structure. Things like: Have the leaves emerged? Is the foliage obstructing the observation of the rookery? Are there multiple ages of trees present?
  - Record other information like: Do beaver or pests seem to be taking a toll on the cottonwoods here?
  
- Indicate **‘Location Description’ (NOT OPTIONAL!)**
  - Record information for the location *you are observing from* (e. e.g a road pullout on I-90 at mile marker 145, rookery is on the south side of the road).
  - Make this detailed enough so that another observer can find that same location at a future time.
  
- **Tap on the next arrow** at the bottom right to continue to next page on the app.

Habitat Notes (preferred, but optional)

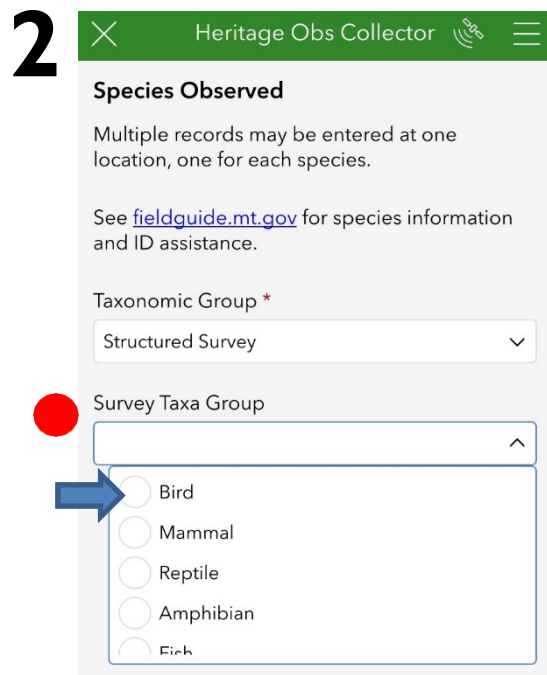
Location Description (only if needed, optional)

1 of 2

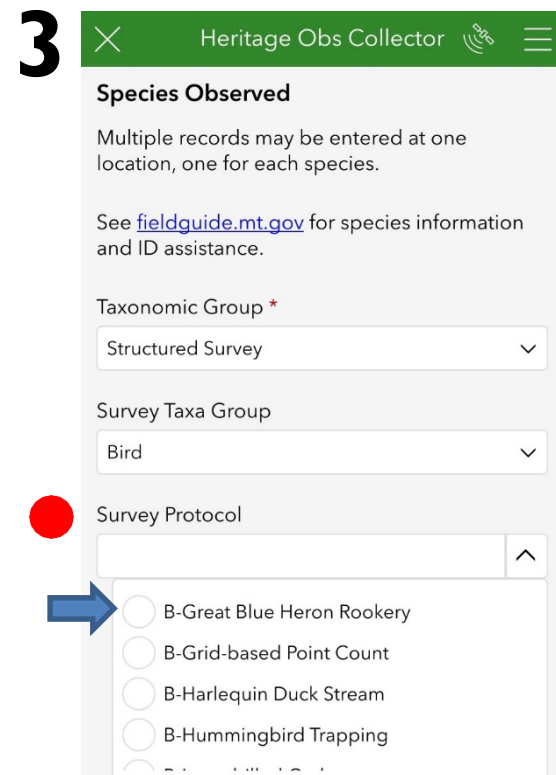




- In the **'Taxonomic Group'** drop-down. Scroll down and tap on **'Structured Survey'** (blue arrow above).
- **'Survey Taxa Group'** will show up, continue to section 2 to fill out more information.

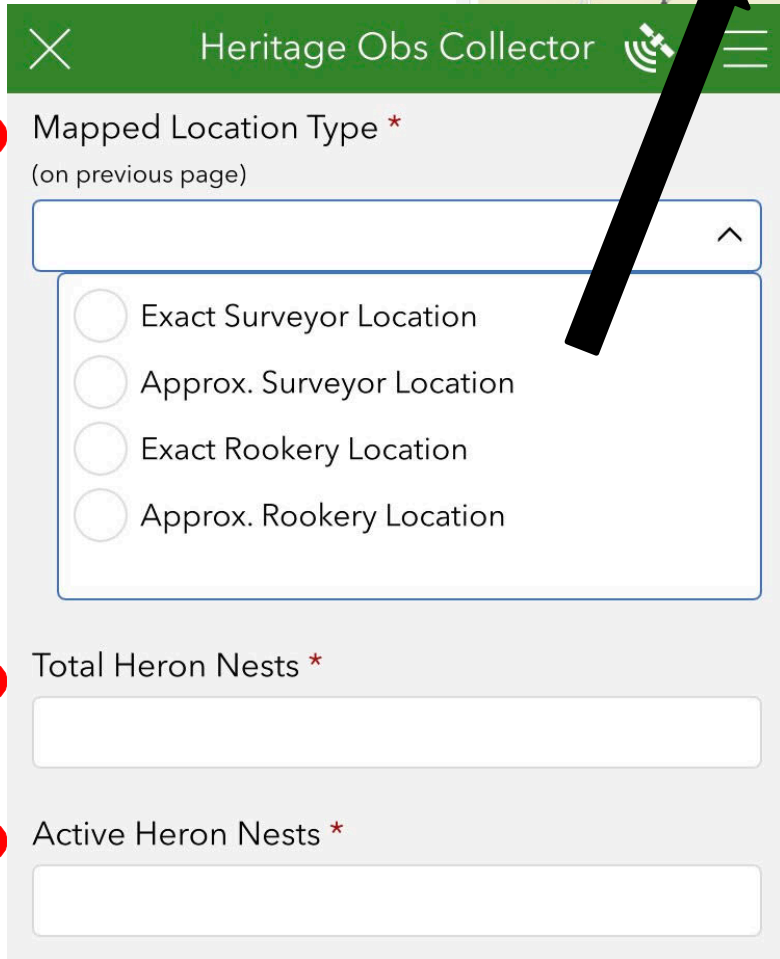


- Click the down arrow in the **'Survey Taxa Group'** box.
- Tap on **'Bird'** (blue arrow above).
- **'Survey Protocol'** will show up, continue to section 3 to fill out more information.



- Click the down arrow in the **'Survey Protocol'** box.
- Scroll down and tap on **'B-Great Blue Heron Rookery'** (blue arrow above).
  - **'B'**- Stands for Breeding
- **Scroll down in your app** and Continue to section 4 on the next page to fill out more information.

4



Heritage Obs Collector

Mapped Location Type \*  
(on previous page)

☐ Exact Surveyor Location

☐ Approx. Surveyor Location

☐ Exact Rookery Location

☐ Approx. Rookery Location

Total Heron Nests \*




Active Heron Nests \*

- Indicate **‘Mapped Location Type’**
  - When you chose your location on the 1<sup>st</sup> page indicate here if your **Mapped location type** is an **exact** or **approximate** rookery or survey location.
- Indicate **‘Total Heron Nests’**
  - Record the number of nests that can be seen in the colony (regardless of activity level). Estimate nests blocked from view.
  - NOTE – even if birds are not present at the rookery, a “nest only” observation can be recorded.
- Indicate **‘Active Heron Nests’**
  - A nest is considered *active* when: there is fresh white-wash on the edge of the nest, adults are on or directly next to the nest, an adult is incubating, or nestlings or juveniles are present in the nest. Large nestlings can be seen in the nest at ~3 weeks old.
- **Scroll down in your app** and continue to section 5 on the next page to fill out more information.



5



 Heritage Obs Collector  

Highest # of Adults, 0-15 min

Highest # of Adults, 15-30 min

Highest # of Adults, 30-45 min

Highest # of Adults, 45-60 min

Maximum Adult Heron Count \*

Number of Juveniles \*

- Indicate '**Highest # of Adults**'
  - Record highest count for each 15-minute increment of the survey under each of four boxes.
- Then record the '**Maximum adult heron count**' for the 1 hour survey
- Indicate '**Number of Juveniles**'
  - Record the total number of juveniles present for the entire 1-hour survey.
- **Scroll down in your app** and continue to section 6 to fill out more information.

# 6



Survey Comments



Photo of Survey Location



To add another record, click '+'; use **garbage can** or '-' to delete a single species record.



1 of 1



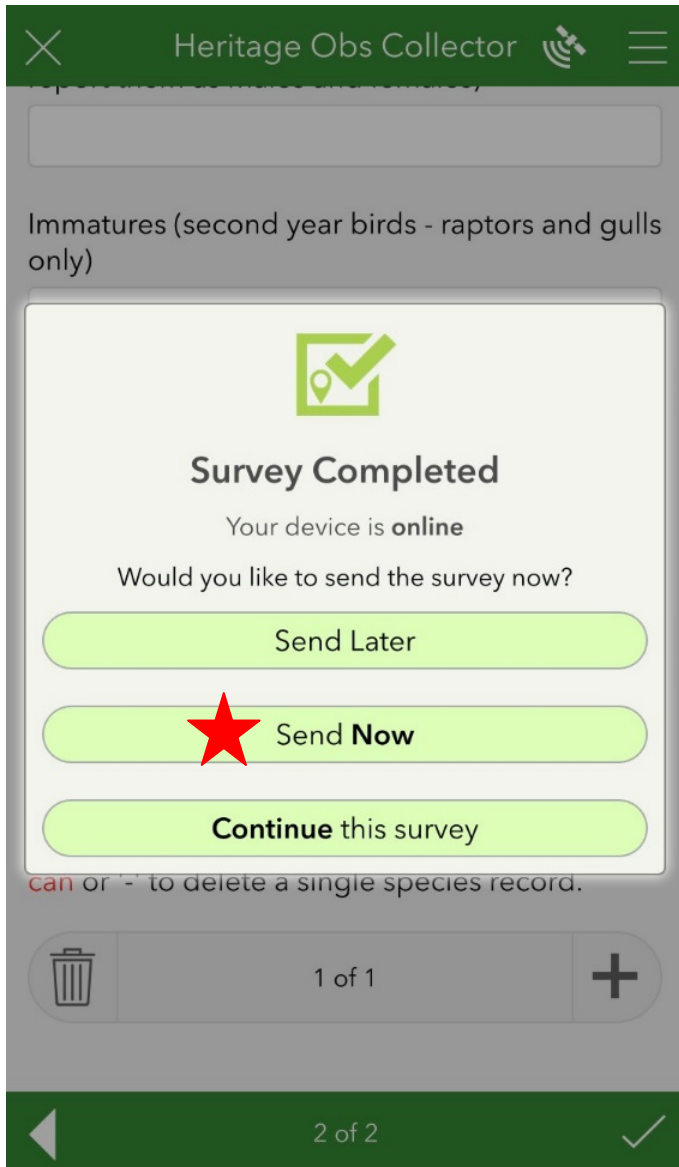
2 of 2



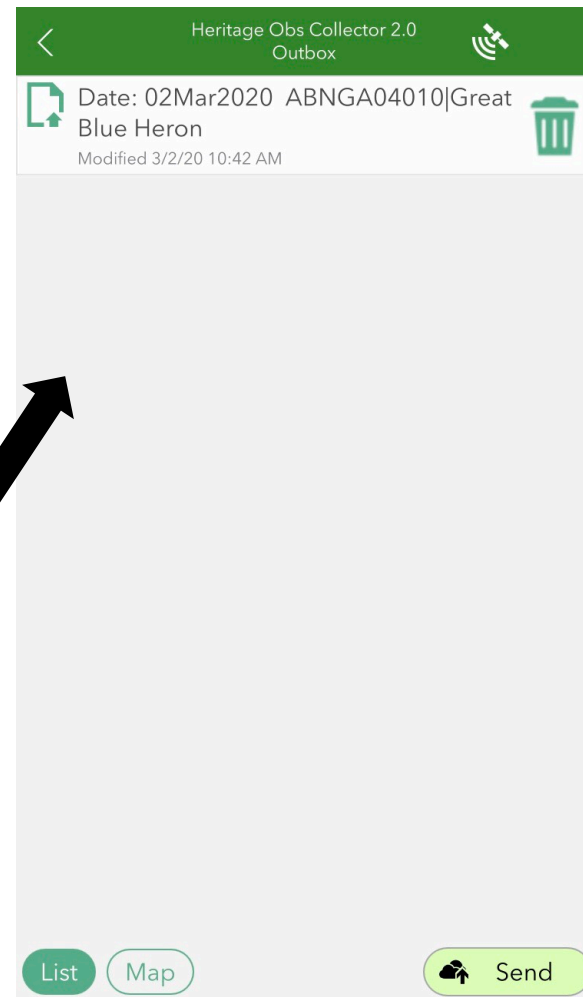
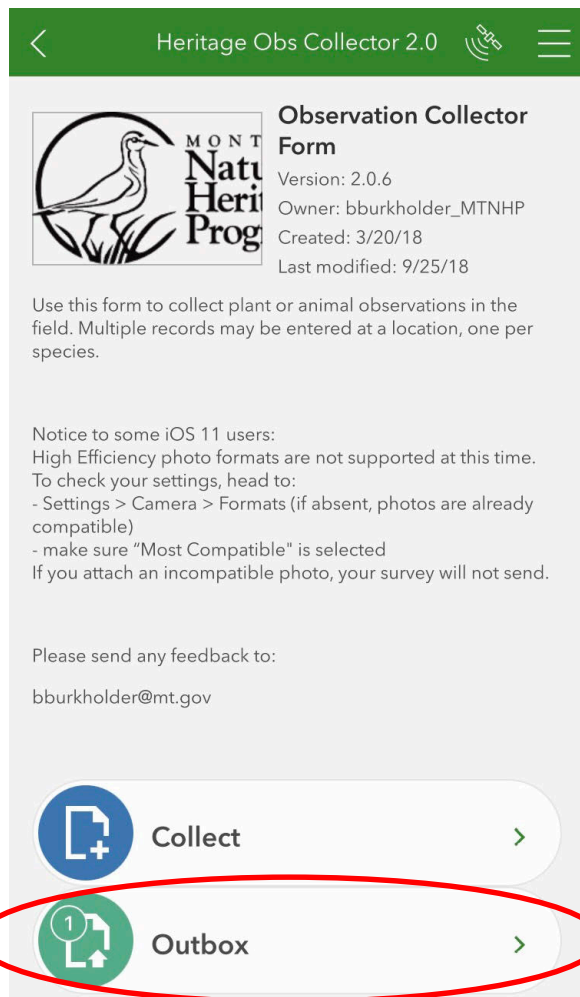
- Indicate **'Survey Comments'**
  - Record any interesting behaviors such as: pair bonding or mating, nest building, a nest exchange of incubating adults, young fighting or exercising their wings, etc.)
- Collect a **'Photo of Survey Location'**
  - Including habitat features, for each rookery. This can be done directly with your phone or uploaded later. More than one photo can be included.
- Optional **'Add Another Record'**
  - Record other species present using the rookery (e.g Great Horned Owls, or Double-crested Cormorants) with the **'add another record'** option.
- **Tap the check mark** on the bottom right of the screen. (red star)
- **'Survey Completed'** will show up, continue to section 7 on the next page to fill out more information.



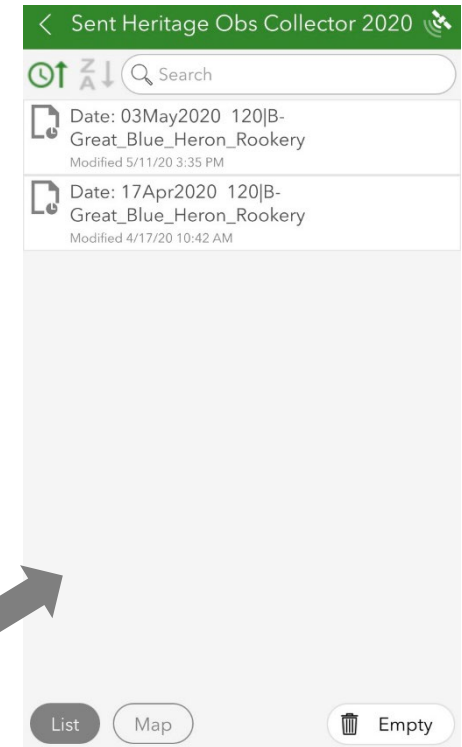
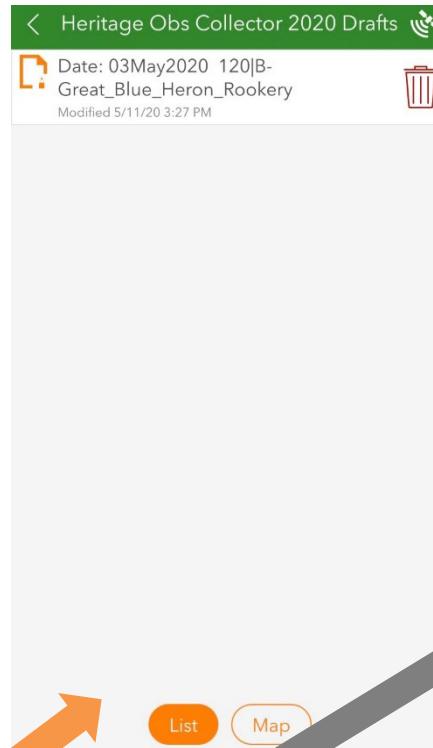
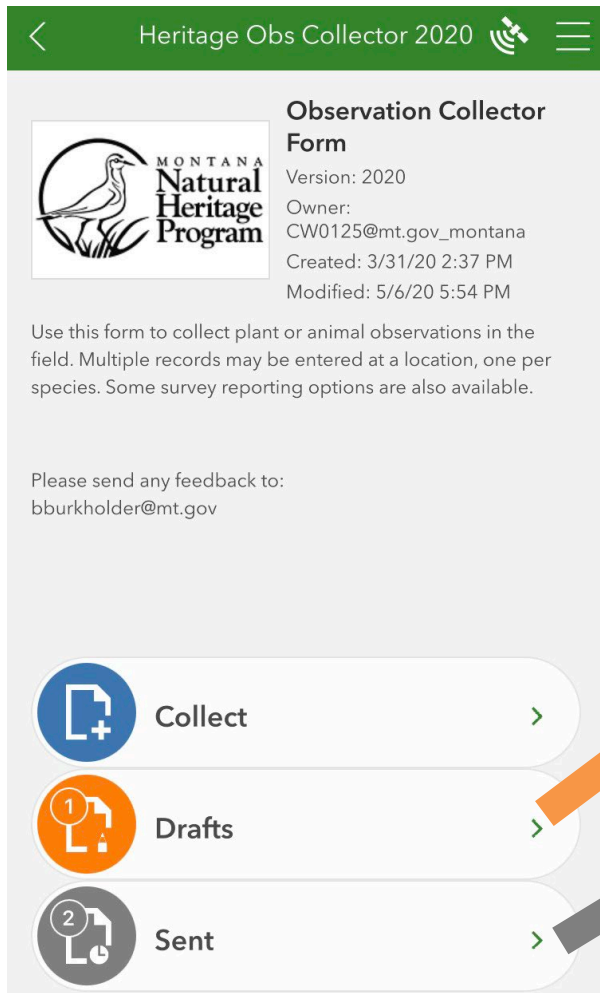
7



- You will be prompted to send the data later, now, or continue the survey.
  - If you click **'Send Later'** the data will be stored in your outbox within the app. You can access this at anytime and send when you're ready.
  - If you click **'Send Now'** the data will be sent immediately to the Montana Natural Heritage Program where it will be stored.
  - If you click **'Continue this survey'** you will be taken back to the previous step where you can view the data already entered.
- If you do not have a signal on your phone, the survey will be saved in your outbox. Once you have a signal, you'll need to open that survey again and resubmit (see next page).



- **If your survey did not send**, when you reopen the Observer Collector Survey form, you'll see that there is something in your outbox. If you click on the outbox, it will take you to a page with a list of all the surveys that have not been sent. Here you can edit you observation or add a photo. You can either click 'Send' at that point or click the 'trash can' to delete the surveys.



- **After your survey is complete**, you can view what surveys you have sent (gray) and see surveys that have been saved as a draft. (orange)



- It is recommended that you practice with the app beforehand to feel comfortable using it before your actual survey.
- For more information on the protocol, how to identify Great Blue Herons, sites to observe, or hard copy datasheets, please visit the [www.montanabirdsurveys.com](http://www.montanabirdsurveys.com) website.

We hope you will enjoy how easy and streamlined the application is, and how much time and paper it will save!

Please call or email Biological Data Analyst with MNHP,  
Braden Burkholder at [bburkholder@mt.gov](mailto:bburkholder@mt.gov), 406-444-0202  
for technical assistance.

Contact: Carmen Borchelt, [carmen@mtaudubon.org](mailto:carmen@mtaudubon.org) or  
Amy Seaman, [aseaman@mtaudubon.org](mailto:aseaman@mtaudubon.org) for questions about the survey!