Getting Started with:
ArcGIS Survey123

CONTENTS

Disclaimer: Training techniques or workflows held within are designed as basic job aids. Mobile collection tools and technology used are constantly being improved upon. End users should consult with management for current workflows and standards.

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Overview

ArcGIS Survey123 is a form centric mobile data collection application available on desktop PC or mobile device using Windows, iOS, and Android systems. PPQ's End User Tools group hosts surveys for use in the Survey123 application on the ArcGIS Enterprise (Portal) platform.

Install the Application

All PPQ survey iPads have survey applications, including ArcGIS Field Maps, automatically installed.
If you are using a PPQ iPad and do not see ArcGIS Field Maps icon on your screen, please contact CEC IT right away to correct your configuration. You likely need to be added to the PPQ Only security group.

If you already have the ArcGIS Survey123 application, skip to Sign In to ArcGIS Enterprise

Mobile Device (**Android or iOS**)
Be Prepared
You will need to confirm the following in place:

1. A phone or tablet that runs Android or iOS (Apple)
2. A reliable Wi-Fi connection
3. eAuthentication ID/Password
4. APHIS GIS Enterprise (Portal) account

App Store
ArcGIS Survey123 is available through the App Store for both Android and iOS devices for free. Search by name (**ArcGIS Survey123**) and select install or get.

If you still need help, open a ticket with CEC IT. CECHelpDesk@usda.gov or 877-873-0783

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Desktop (PC)
Be Prepared
You will need to confirm the following in place:

1. A laptop or PC
2. A reliable Wi-Fi connection
3. eAuthentication ID/Password
4. APHIS GIS Enterprise (Portal) account

For Desktop installation, go to this URL:

https://www.esri.com/en-us/arcgis/products/arcgis-survey123/downloads
https://www.esri.com/en-us/arcgis/products/arcgis-survey123/downloads

Scroll down a little and locate the heading "ArcGIS *Survey123 field app*" in the middle column of options.

Select the link to download/install the appropriate version for your Operating System.
For APHIS users, this is normally "Windows x64". (**Figure 1**)
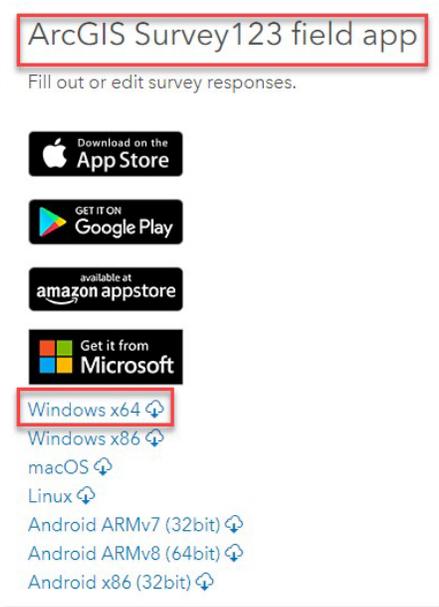

Figure 1. *ArcGIS Survey123 Desktop Download*

The file should only take 1-2 minutes to download. Once the download is complete, click on the carrot (See **Figure 2**) and choose "Open".

Select "Next" and "I accept the license." and "Next" as the install wizard prompts you. Finally, select "Finish" to complete the install.
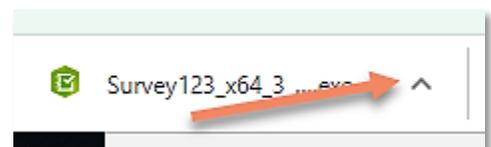

Figure 2. *Open download*

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Sign in to ArcGIS Enterprise (APHIS GIS Portal) (All devices)

Once the application is installed, locate the **Survey123 App** icon and tap to open it. (**Figure 3**)

**You will need to sign into ArcGIS Enterprise (APHIS GIS Portal) to find surveys shared with your APHIS GIS Portal user account. See details below.

Once opened, Survey123 presents a landing screen with the sign-in options of either Sign in with ArcGIS Online or Sign in with ArcGIS Enterprise.

On first opening the application, you will have to add the ArcGIS Enterprise Portal. Once established, your device saves this as a sign in option.

Official Data Collection
USDA-MRP GIS Portal URL: https://maps.mrp.usda.gov/arcgis

Training Maps and Practice
USDA-MRP GIS Stage portal: https://maps-stg.mrp.usda.gov/arcgis

To add a new connection:
Choose the option "Manage ArcGIS Connections" (**Figure 4**) and then + *Add connection* (**Figure 5**) located in the bottom left.

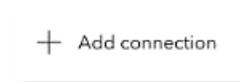
Figure 4. *Manage ArcGIS connections*

Figure 5. *Add connection*

Manually type in the URL for the APHIS ArcGIS Enterprise Portal. (**Figure 6**)

And select "Add".

It may take a moment or two for the connection to be established.

Figure 6. *Type in URL*

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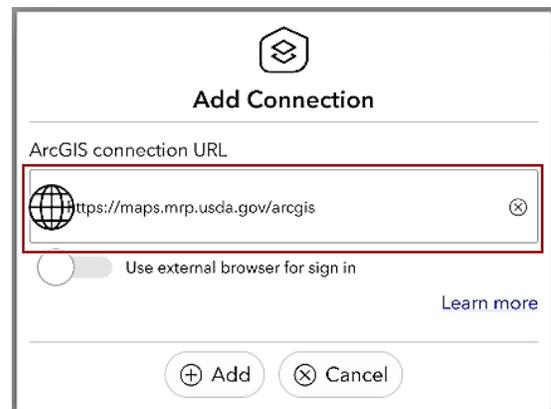*Last Updated: 21 March 2023 15:23*   4

**If you have done this previously, tapping Settings (gear in the top right corner) will show you a list of ArcGIS connections. Be sure the above URL is selected.

Once the ArcGIS Enterprise (Portal) URL is listed, tap back in the upper left and tap the blue "eAuth Account" button. (**Figure 7**)
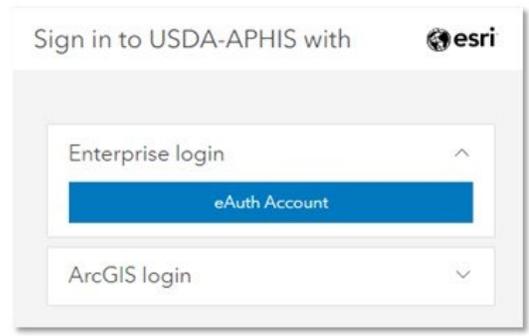
Figure 7. *APHIS Enterprise login option*

Select MobileLinc. (**Figure 8**)

Enter your User ID (eAuthentication user name) using the keyboard. Tap Log In with MobileLinc. (**Figure 9**)
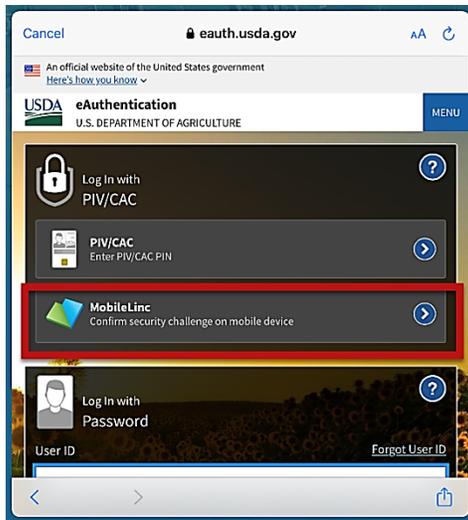
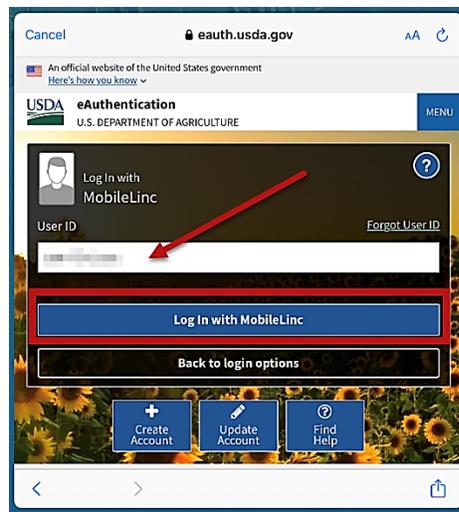**Figure 8**. *eAuthentication options*

Figure 9. *MobileLinc User ID & Log In*

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Entrust Application Security Challenge

A "New Security Challenge" message should drop down along the top of the screen. Tap this message to open Entrust. (**Figure 10**)

If you lose track of the message, tap Home button, locate and open the Entrust application. You may need to tap to open the Challenges menu along the bottom of the Entrust application screen.
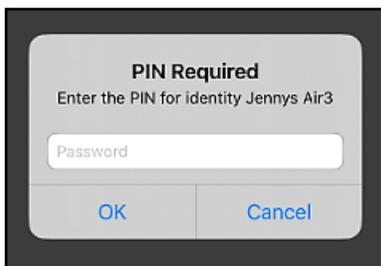
Enter your PIN. (**Figure 11**)
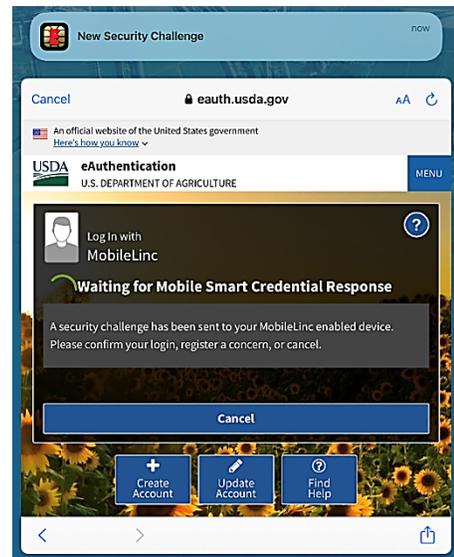
Figure 10. *New Security Challenge*

Figure 11. *Entrust PIN*

Tap Confirm (**Figure 12**) and Yes to allow this action (**Figure 13**).
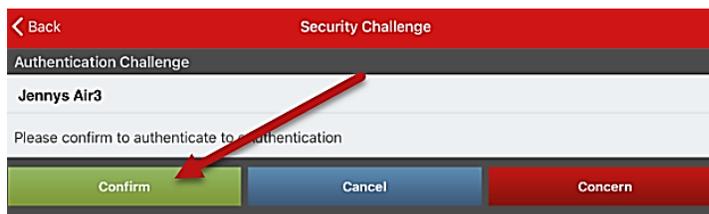
Figure 12. *Confirm Authentication*

Figure 13. *"Yes" to proceed*

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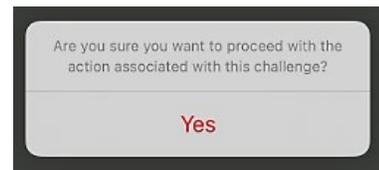
Return to ArcGIS Field Maps. If shown, tap Accept at the U.S. Government information warning message. (**Figure 14**)
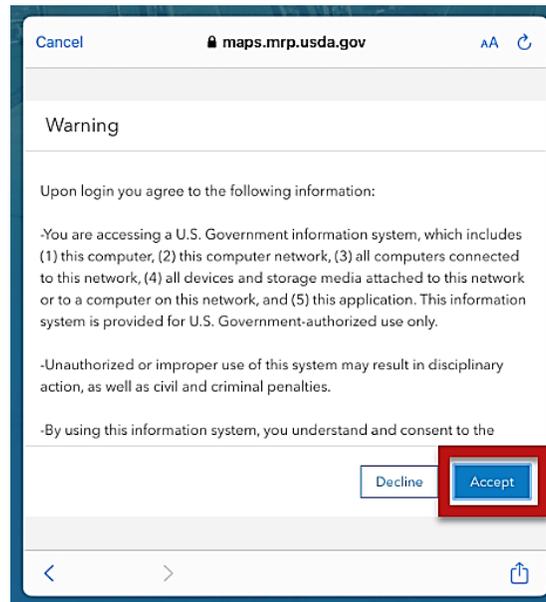
Figure 14. *US Government warning*

Locate your map or survey and begin field data collection!

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Download Survey (All devices)

To locate and download surveys. You can find the options to "Download Surveys" either by tapping the profile icon in the top right corner or the button offering the same along the bottom middle of the screen. (**Figure 15**) Either option is acceptable.
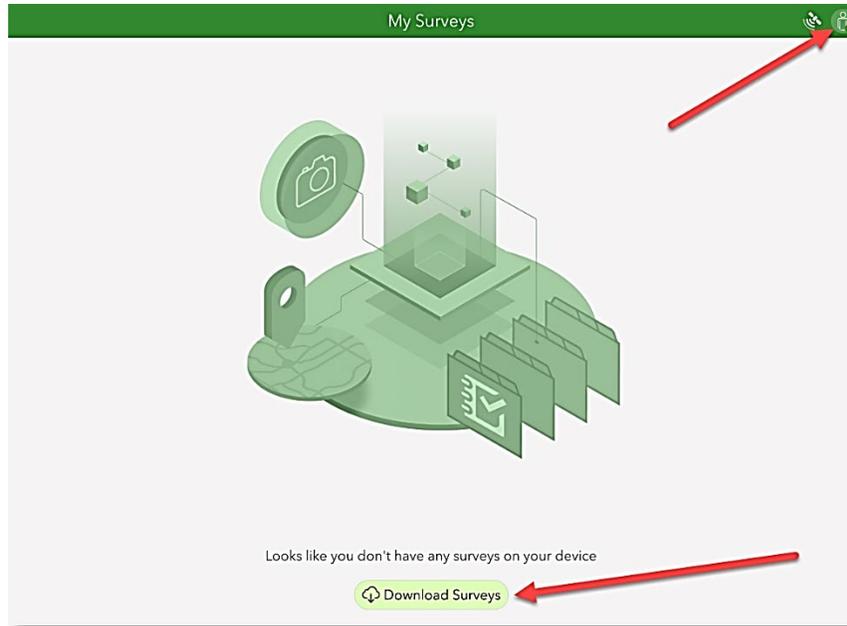

Figure 15. *Download Surveys options*

All surveys shared with you will be listed for download. Choose the cloud icon to the right of the title and the survey download will start. (**Figure 16**)
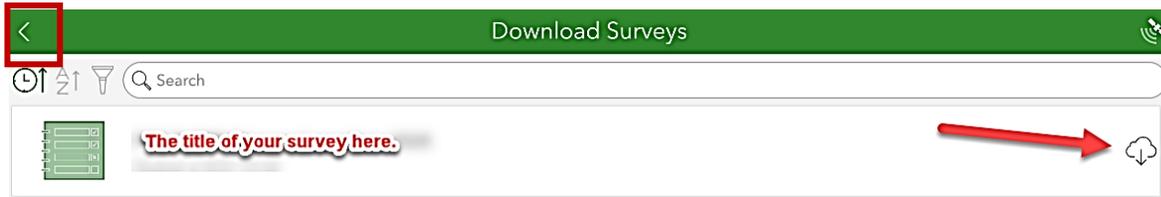

Figure 16. *Download - Cloud icon*

Once downloaded, click the back button (See red box in the upper left corner in **Figure 16**) to return to your list of "**My Surveys**".

Open the survey by clicking on its icon. (**Figure 17**)

Figure 17. *Survey icon*

Follow steps to complete a survey as described in the Complete a Survey section of this document.

Delete Survey (if desired)

You may need to free memory on your device or simply clean out old unused surveys. These can be deleted easily.

Tap the survey icon to open it and then the menu at the top right. (**Figure 18**)

Figure 18. *Menu icon*

Then select "Delete Survey". You will be asked to confirm your choice and the survey is deleted. (**Figure 19**)

Figure 19. *Delete Survey*

Complete a Survey (All devices)

Follow directions previously outlined under the Install the Application section to install Survey123 and Download Survey (All devices) to download your survey.

Be Prepared
You will need the following:
1. Device – mobile or desktop
2. Fully charged battery or possibly access to a power supply
3. Wi-Fi **OFF** (for mobile devices) / Wi-Fi **ON** (if desktop)
4. GPS enabled (iPad HINT: Settings app > Privacy > Location Services **ON**)

The Data Form
Open the survey.

To begin a survey, tap or select anywhere on the "Collect" bar. If there are surveys assigned to you, you will locate these in the Inbox. (**Figure 20**)

Figure 20. *Collect and Inbox bars*

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Map

IMPORTANT! Survey123 has a geospatial (mapping) component that requires your confirmation. This map may or may not be enabled in your data form.

The map shows your GPS location (found by your device's internal GPS receiver).

Tap or click on the map to review this location. Be sure this is correct. (**Figure 21**)
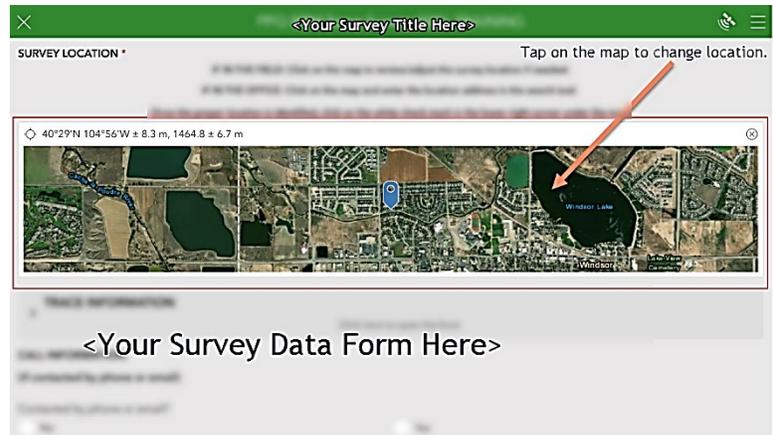

Figure 21. *Sample survey data form with map question*

If the location does <u>not</u> look correct, update it by either selecting the point on the map OR typing location information into the search bar. Once the location appears correct to you, select the check mark in the lower right corner to confirm and return to the survey form. (**Figure 22**)
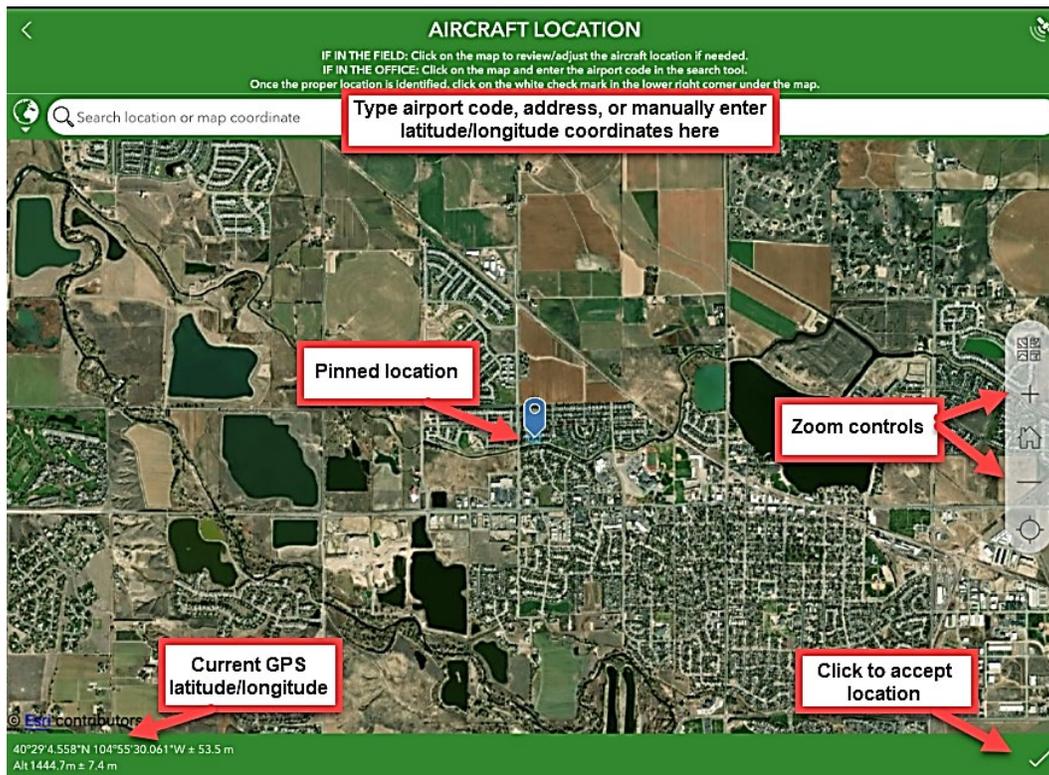

Figure 22. *Sample map view after selecting from the data form*

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Required Fields

All Fields followed by a red asterisk * indicate required fields. These must be completed in order to submit the survey. **(Figure 23)**

Be sure that you understand the input required by reading the "hints". For instance, *Street Address* should be entered as the "Street address, not a P.O. Box". (**Figure 23**)
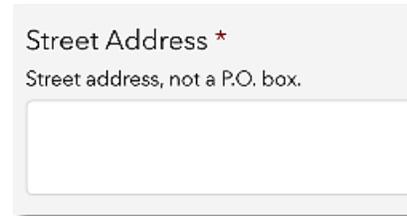
Street Address *
Street address, not a P.O. box.

Figure 23. *Example required field and hint.*

Repeated Related Tables

Some surveys are created with related tables which allow the user to repeat a group of questions as many times as needed. For instance, in one location, one or many samples may be collected. First questions on the location itself appear. Next a table, or group of questions, on the sample appears. If another sample is collected, the user has the option to add information on another sample.

Usually a hint such as: "*Use the + below to add another sample…*" is included to help the user along.

The bar at the end of the table group of questions provides the option to delete, toggle through to review multiple entries, add another entry, or complete the survey. (**Figure 24**)

Once finished with all entries, select the check mark in the lower right corner to complete your survey and proceed to the Send or Save Completed Surveys section on next page. (**Figure 24**)
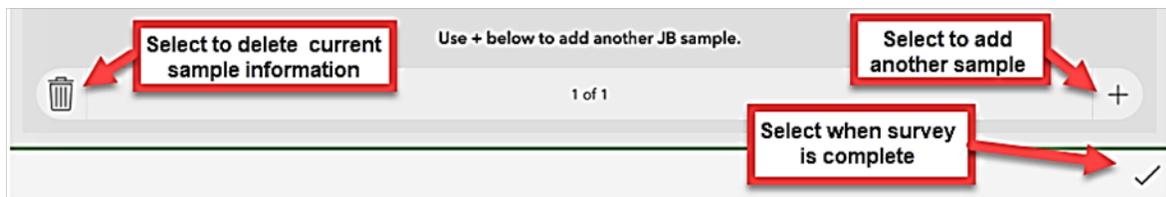

Figure 24. *Sample repeating relating table options*

Send or Save Completed Surveys

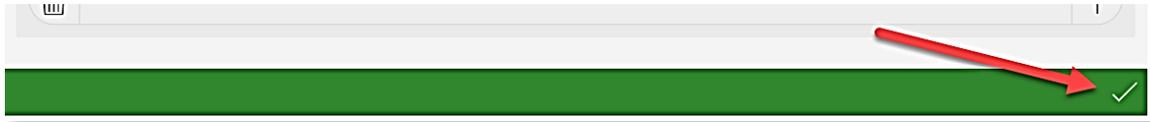If you have completed data form and all applicable tables, select the check mark at the bottom right. (**Figure 25**)

Figure 25. *Survey complete checkmark*

The "Survey Completed" box that appears next offers a few options (**Figure 26**):

- *Send now* – If Wi-Fi is connected, choose "Send Now".
- *Continue this survey* – If the check mark was pressed in error or you realize there is something more to add to the survey, choose this option to return to the survey.
- *Save this survey in the Outbox* – If not connected to Wi-Fi, choose this option and refer to the section to follow on the Outbox. This saves the survey to your device until Wi-Fi connection is obtained and you are ready to submit the survey to the online database.

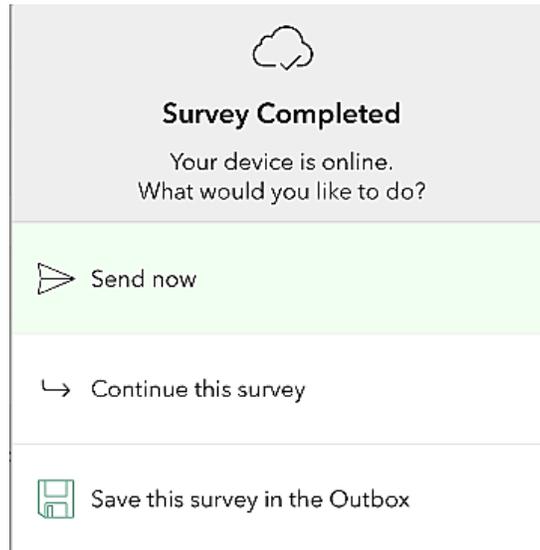**Figure 26.** *Survey Completed options*

Outbox

If you collected data while offline or disconnected from Wi-Fi, your surveys were saved to the Outbox (on your device waiting for upload).

When surveys are being held in the Outbox, it appears just beneath the Collect bar with a number indicating how many surveys are waiting to be submitted. (**Figure 27**)

Figure 27. *Outbox bar*

Once returned to a strong Wi-Fi connection, tap the Outbox bar. All collected surveys will be listed and the option to "Send" is located at the bottom right corner. (red box in **Figure 28**)

In the List view, each survey can be reviewed and edited by selection, if desired. To edit a survey, select it and choose "Yes" when asked if you want to "edit this survey".

You can also choose to view all your surveys in a map view by tapping "Map" along the bottom.

When ready, select "Send" (red box in **Figure 28**) to submit all surveys waiting in the Outbox to the cloud.
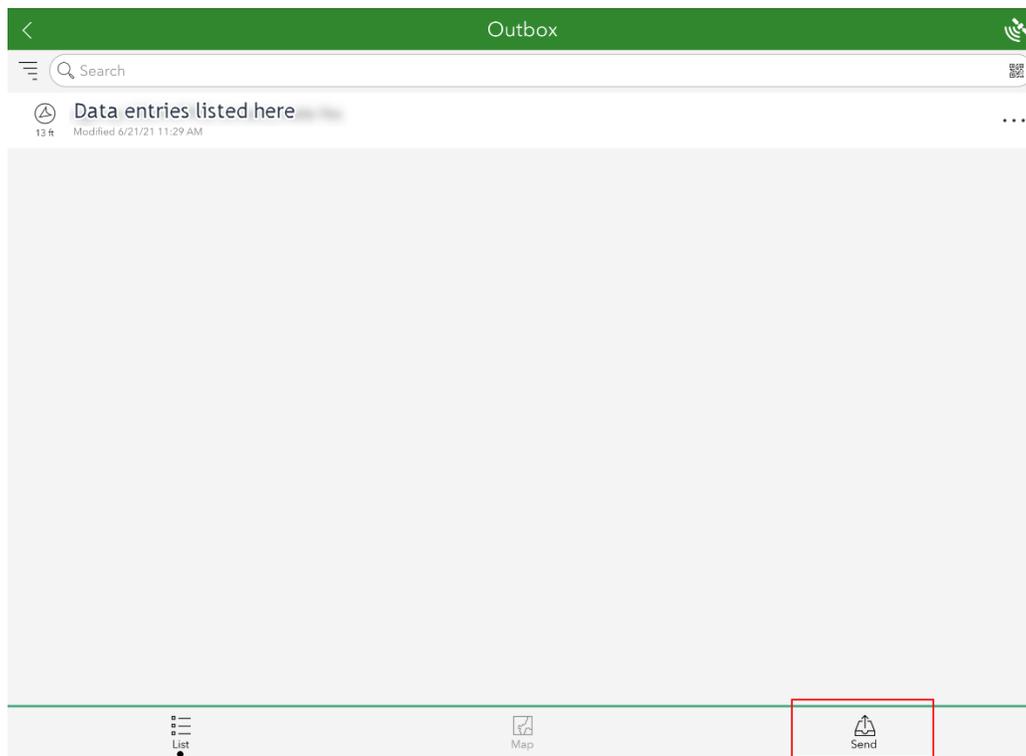

Figure 28. *Outbox with surveys saved to send*

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Sent

Once the survey is sent, you are presented with the option to start another survey (Collect) or review your sent surveys (Sent). (**Figure 29**)

Figure 29. *Collect or Sent menu bars*

Selecting the "Sent" bar presents options to view your sent surveys in a **list**, on a **map**, or to **delete** the contents of this folder altogether. The list or map view allow the user to select individual surveys, perform edits, and resend, if desired. (**Figure 30**)

Figure 30. *Sent folder options*

Edits may be restricted to the main data form. Repeated related table edits must be edited from the desktop using a web app.

Getting Help

APHIS PPQ

Be as specific as possible. Include screenshots, error messaging, any troubleshooting you have performed, and indicate the type of <u>device</u> (i.e. iPad, laptop, phone, etc.).

For APHIS PPQ users, if you are having issues with the iPad, laptop, Wi-Fi settings, or issues dealing with installing software, open a ticket with **CEC IT**. CECHelpDesk@usda.gov or **877-873-0783**

If you need *technical support* or help using the ESRI Survey123 application, follow this hierarchy:
1. Your supervisor
2. Local GIS Specialist that supports your area
3. Email WebGIS.Connect@usda.gov

Cooperators & Other Nonfederal Users

Contact your State Plant Health Director's office for assistance.

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