



Japanese Beetle: Aircraft Inspections User Manual



USDA APHIS PPQ, USDA APHIS PPQ, Bugwood.org

Program: Japanese Beetle

Mobile Application: ArcGIS Survey123

Host: USDA-MRP GIS Enterprise (portal)

Map Title: PPQ JB Aircraft Inspections 2023

CHECK USDA-MRP Portal URL! <https://maps.mrp.usda.gov/arcgis/>

**** Refer to the “[Mobile Data Collection Tools](#)” public webpage for all training support.**

2023 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.

Contents

Overview.....	3
Install ArcGIS Survey123	3
Mobile Device (Android or iOS).....	3
Desktop (Personal Computer)	4
USDA-MRP GIS Enterprise (Portal) (All devices)	5
Sign In.....	5
Sign Out.....	8
Download Survey (All devices)	9
Delete a Survey.....	10
Complete a Survey (All devices).....	10
Aircraft Inspection	10
Sample(s) Collected.....	11
Edit a Survey.....	12
Send or Save Completed Surveys.....	12
Outbox.....	13
Getting Help.....	14
APHIS PPQ.....	14
Cooperators & Other Nonfederal Users.....	14
All Training Resources	14

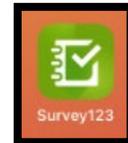
End User Tools Request links: [Support Request \(End User Tools\)](#)
Web GIS Contact: WebGIS.Connect@usda.gov

Overview

This document provides guidelines for conducting electronic data collection for the Japanese Beetle (JB) program on a mobile device (Android or iOS) or desktop using the [ArcGIS Survey123](#) application.

The PPQ JB Aircraft Inspections 2022 application is used to inspect aircraft for presence of both Japanese Beetle and Spotted Lanternfly. If a JB or a SLF suspect is discovered, a sample collection is required.

Both the mobile and desktop applications are cost free, can be installed by the user with no IT support, and allow data entry in a form that looks exactly the same.



ArcGIS Survey123 icon

The application was developed to reflect program specifics and is intended to replace paper surveys.

Install ArcGIS Survey123

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. USDA-MRP GIS Enterprise (Portal) account

****If you already have the ArcGIS Survey123 application, skip to [Sign In to ArcGIS Enterprise](#)****

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.

Desktop (Personal Computer)

You will need to confirm the following in place:

1. A laptop or PC
2. A reliable Internet or Wi-Fi connection
3. eAuthentication ID/Password
4. USDA-MRP GIS Enterprise (portal) account

Navigate to: [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)

The file should only take 1-2 minutes to download. Once the download is complete, click on the caret (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 1. ArcGIS Survey123 desktop download

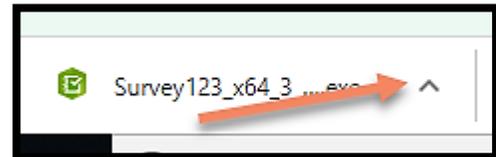


Figure 2. Open download

USDA-MRP GIS Enterprise (Portal) (All devices) Sign In

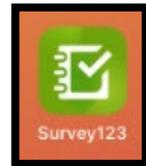
Requires Internet or Wi-Fi connection and eAuthentication Level 2 User ID and Password.

You will need to sign into ArcGIS Enterprise (USDA-MRP GIS Portal) to locate surveys shared with your USDA-MRP GIS Portal user account. Once signed in, ArcGIS Field Maps will retain your sign in for offline data collection.

The MobileLinc authentication option uses an identity established with in the Entrust application to confirm authentication for use of the ArcGIS mobile applications.

Some in PPQ Field Operations are exempt from this option and can enter their eAuthentication user ID and password manually using the Log in with Password option. If your device is managed by Intune, [contact CEC IT](#) for support in creating that Entrust identity to enable sign in with MobileLinc.

Locate the ArcGIS Survey123 application icon and tap to open it. (Figure 3)



Once opened, Survey123 presents a landing screen with sign-in options.

Figure 3. ArcGIS Survey123 application icon



Figure 4. Manage ArcGIS connections

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.

Choose the option "Manage ArcGIS Connections" (Figure 4) and then + Add connection (Figure 5) located in the bottom left.

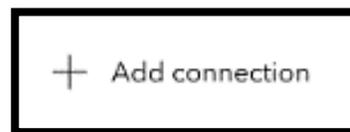


Figure 5. Add connection

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

<https://maps.mrp.usda.gov/arcgis>

And select “Add”.

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

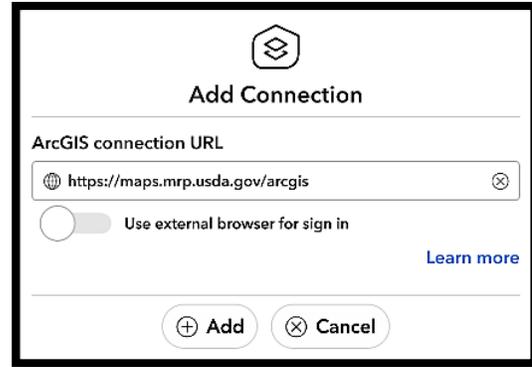


Figure 6. Type in URL

**If you have done this previously, tapping your profile and choosing Settings will let you view and manage 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)

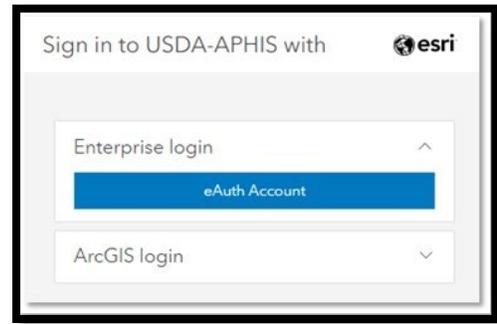


Figure 7. APHIS Enterprise login option

Select MobileLinc. (Figure 8)

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

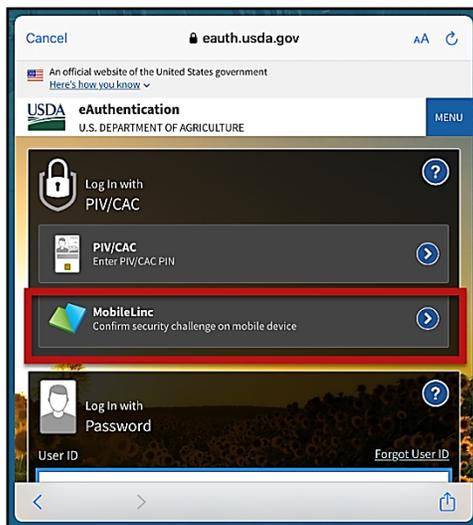


Figure 8. eAuthentication options

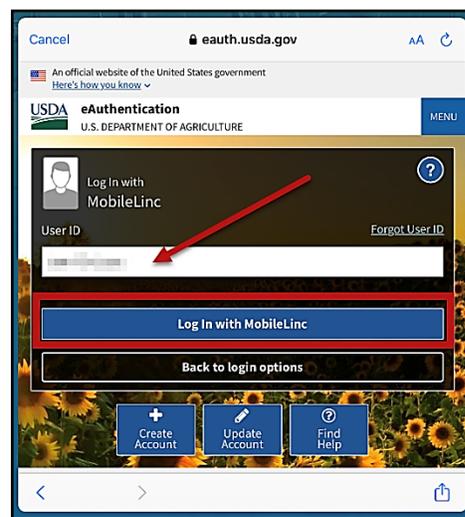


Figure 9. MobileLinc User ID & Log In

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.

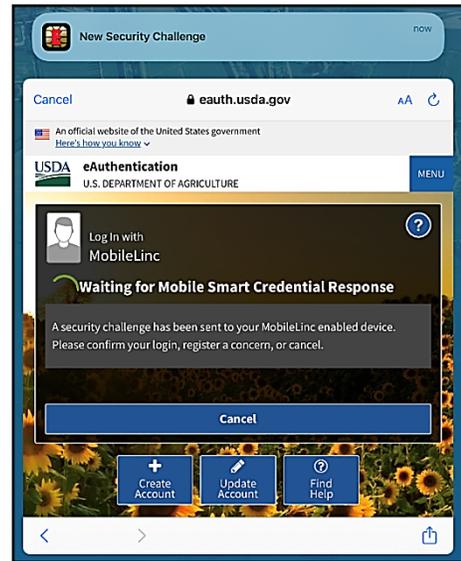


Figure 10. *New Security Challenge*

Enter your PIN. (Figure 11)

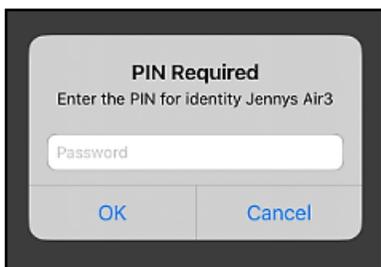


Figure 11. *Entrust PIN*

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

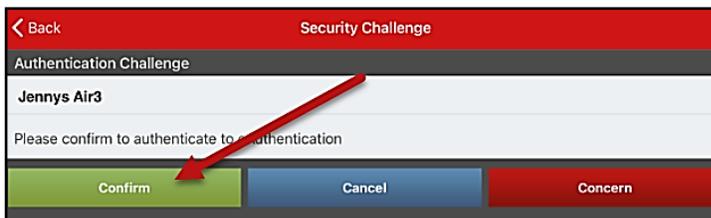


Figure 12. *Confirm Authentication*

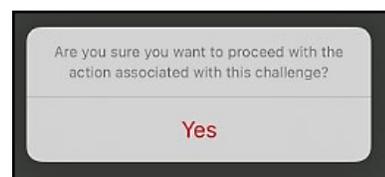


Figure 13. *“Yes” to proceed*

Return to ArcGIS Survey123. If shown, tap Accept at the U.S. Government information warning message. (Figure 14)

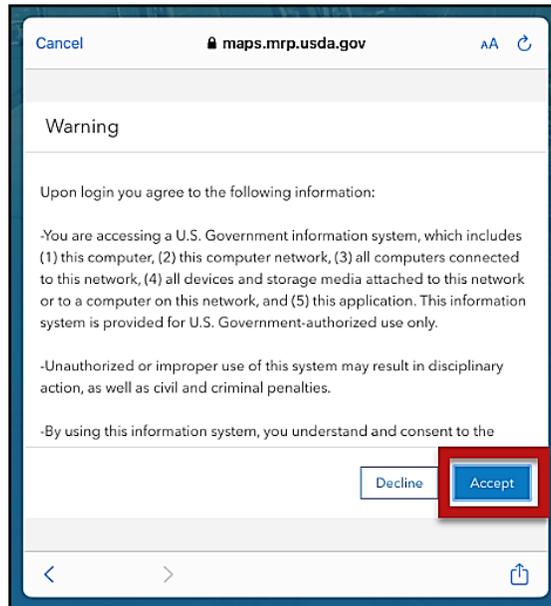


Figure 14. US Government warning

Continue to the [Download Your Survey](#) section.

Sign Out

To sign out of any environment, tap the profile icon  on the My Survey123 page in the upper right and tap "Sign Out". (Figure 15)



Figure 15. Profile Menu

Download Survey (All devices)

Requires Internet or Wi-Fi connection.

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 16)

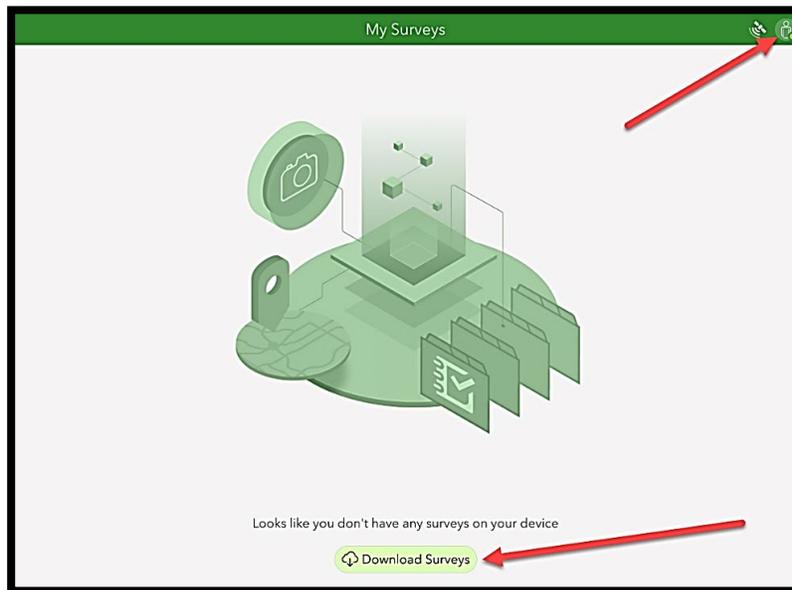


Figure 16. Download Surveys options

All surveys shared with you will be listed for download. Choose the cloud icon to the right of the title “PPQ JB Aircraft Inspections 2023” and the survey download will start. (Figure 17)

Once downloaded, click the back button (arrow in the upper left corner in **Figure 17**) to return to your list of “My Surveys”.



Figure 17. Download - Cloud icon

Open the survey by clicking on its icon. (Figure 18)

Follow steps to complete a survey as described in the [Complete a Survey](#) section of this document.



Figure 18. Survey icon

Delete a Survey

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

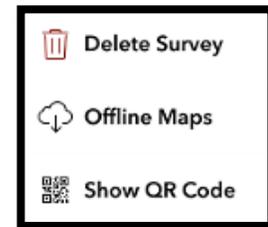


Figure 19. Delete Survey

Complete a Survey (All devices)

Follow directions previously outlined under the [Install ArcGIS Survey123](#) section to install Survey123 to either a mobile device or desktop computer and [Download Survey \(All devices\)](#) to download “PPQ Japanese Beetle Aircraft Inspections 2023”.

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) / Internet or Wi-Fi ON (if desktop)
4. GPS enabled (iPad HINT: Settings app > Privacy > Location Services ON)

Aircraft Inspection

Tap the icon to open the previously downloaded survey: “PPQ JB Aircraft Inspections 2023”

Collect — Opens a new survey response.

Overview — Opens a list of all survey records currently stored on the device.

To start a new aircraft inspection, tap the Collect bar. (Figure 20)



Figure 20. Collect bar

Carefully enter the location and/or check the GPS location in the map.

Answer the questions in the data form carefully.

Be sure that you understand the input required by reading the “hints”.

For instance, *Contact Name* asks the user to enter “First and last name” according to the hint given. (Figure 21)

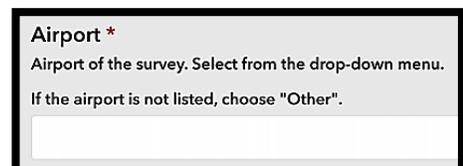
A screenshot of a survey form field. The field is a light grey rectangle with a black border. At the top left, it says 'Airport *'. Below that, it says 'Airport of the survey. Select from the drop-down menu.' and 'If the airport is not listed, choose "Other".' At the bottom of the field, there is a white input area.

Figure 21. Example of a required field and hint

Required fields are marked with an asterisk *.

Sample(s) Collected

One aircraft inspection may have many samples collected.

If responding with “Yes” to “Were any Japanese Beetle suspects discovered?” or “Were any Spotted Lanternfly suspects discovered?”, a sample must be collected and data entry completed.

Responding “Yes” to either of the above will reveal a prompt to:

“Click here to enter a Japanese Beetle sample record”

OR

“Click here to enter a Spotted Lanternfly sample record”

To enter information on a sample collected:

- Tap anywhere along that prompt
- Then select the “+” button to open the sample table form
- Complete all required fields carefully

The bar at the end of the sample group of questions provides the option to delete, toggle through to review multiple entries, add another entry, or complete the survey entirely. (Figure 16)



Figure 22. Options to enter information on multiple samples collected or to complete the survey

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 17)

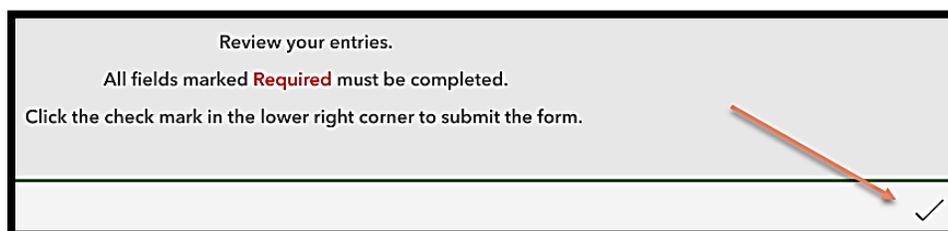


Figure 23. Tap check mark to submit your survey

Edit a Survey

If edits are needed to an existing survey, locate the survey within either the Overview or Sent lists. Complete needed edits and resubmit.

Send or Save Completed Surveys

If you have completed the data form and all applicable extended groups of questions (Samples Collected), select the check mark at the bottom right. (Figure 24)

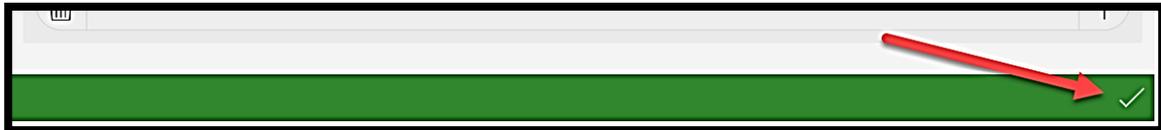


Figure 24. *Survey complete checkmark*

The “Survey Completed” box that appears next offers a few options (Figure 25):

- *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 25. *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 under the Inbox with a number indicating how many surveys are waiting to be submitted. (Figure 26)



Figure 26. 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.

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” to submit all surveys waiting in the Outbox to the USDA-MRP Enterprise GIS portal.

Getting Help

APHIS PPQ

Before requesting technical support, be prepared with detailed information, including the name of the map, and error messaging experienced. Be as specific as possible. Include screenshots, any troubleshooting you have performed, and indicate the type of device (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 ArcGIS Field Maps application, follow this order:

1. Your field 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.

All Training Resources

As new applications and programs are supported, newly created training documents and self-paced training videos are shared on the APHIS public facing website:

[Mobile Data Collection Tools](#)

Bookmark this site. Visit often. Provide feedback and ideas freely to the End User Tools Group.