



# eTRAP Application

(Electronic Trap Recording & Accounting Program)

## User Guide



## Overview

eTRAP stands for “Electronic Trap Recording & Accounting Program” and is publicly available as a mobile application, a desktop application, and a desktop admin console. The mobile application interfaces with USDA APHIS PPQ's eTRAP system and is used by both internal employees and external cooperators/contractors. eTRAP was originally designed to support mobile data collection for the Florida Fruit Fly Detection program and can be configured to serve similar trapping programs in other states.

This manual will cover the eTRAP application (mobile & desktop version) as well as the eTRAP Admin Console (desktop only).

### *eTRAP application (Mobile and Desktop):*

Data are collected (entered) in the mobile and desktop eTRAP applications. The mobile application, used by surveyors, is the recommended data entry point with a desktop version available as a backup. Data are collected in the field and uploaded daily.

### *eTRAP Admin Console (Desktop):*

This application is a desktop resource for managers and trappers and is configured for program specific activities. This includes mapping and reporting functionalities, activity monitoring, quality assurance/quality control (QA/QC) as well as data editing. Although data entry is possible in the Admin Console, it is limited to data editing and QA/QC efforts by supervisors or eTRAP Admins.

*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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## Staging, User Access, Installation

### eTRAP Development Team Staging (IT Process)

1. Create Program(s)/State
  - a. Create Office(s) (dependent on state needs)
  - b. Create Emergency Programs when necessary
2. Create at least one "Admin"
3. Load grid (if requested)
4. For new states needing eTRAP access: contact an eTRAP Subject Matter Expert  
[Getting Help](#)

### User Access (HR Process)

A minimum of **eAuthentication (eAuth) Level 1** must be in place to use either the eTRAP desktop console or mobile application.

A request for Level 1 Access can be initiated here:

<https://identitymanager.eems.usda.gov/registration/index.aspx>. (Figure 1)

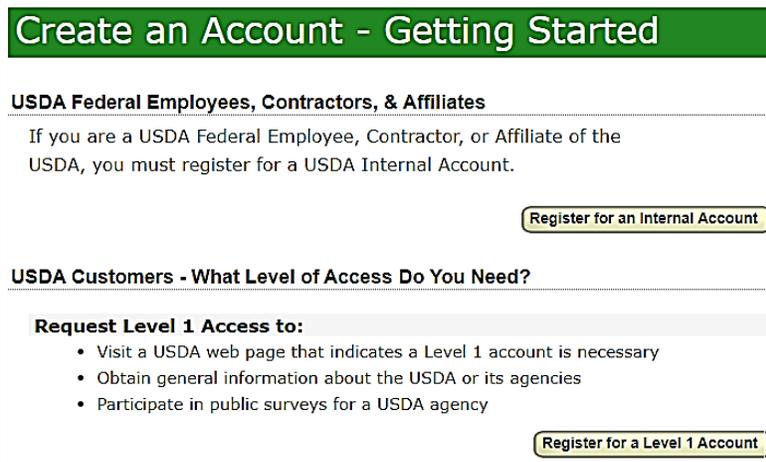


Figure 1 Request eAuth Level 1

Reach out to your local **PPQ Human Resources Representative** or contact [eauthhelp@usda.gov](mailto:eauthhelp@usda.gov) for support.

### Recover Forgotten eAuth User ID or Password

**IMPORTANT! Your eAuth User ID and Password are your log in for eTRAP.**

To recover User ID and/or Password:

1. Go to <https://www.eauth.usda.gov>
2. Click on Manage Account
3. Choose "Forgot Password" or "Forgot User ID" as needed and follow the prompts. (Figure 2)

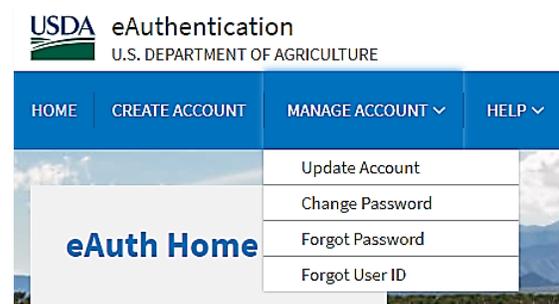


Figure 2. Recover eAuth User ID or Password

## eTRAP Application Installation (Mobile and Desktop)

### eTRAP Application Installation (Mobile)

#### App Store

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

#### Apps@Work

eTRAP is automatically installed to all APHIS PPQ iPads. If the icon is not visible, the application can be located within the Apps@Work application and re-installed.

Ensure that you are connected to Wi-Fi, then open the “Apps@Work” application on your iPad (**Figure 3**).

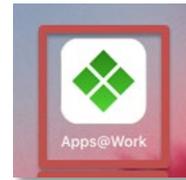


Figure 3. Apps@Work icon

Locate “eTRAP” from the list. (**Figure 4**)

Select by tapping the eTRAP icon and select “Install” to install.

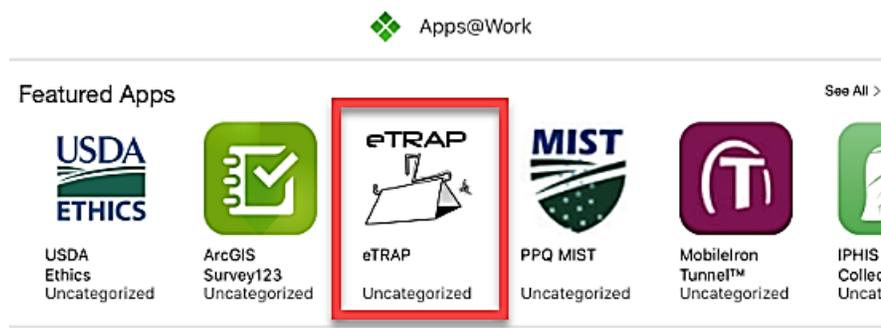


Figure 4. Apps@Work application list view

#### Log In

Log in using your eAuth User ID and Password. (**Figure 5**) To recover if forgotten, see the previous section [Recover Forgotten eAuth User ID or Password](#).



The image shows the eTRAP login form. At the top, there is the eTRAP logo, which is a stylized drawing of a scale of justice. Below the logo, there are two input fields: "Username" and "Password". The "Username" field has a placeholder text "Enter your eAuthentication User ID here." and the "Password" field has a placeholder text "Enter your eAuthentication Password here." To the right of the "Password" field, there is a "Login" button.

Figure 5. eTRAP log in

## eTRAP Application Installation (Desktop)

This process is under review for simpler workflow and may find a more permanent solution in the future.

To allow individual machine (PC) access to the Microsoft Store, supervisors should contact CEC IT. This access may take a few days and several PC shutdowns to complete.

Once access to the Microsoft Store is attained, the eTRAP application is available in the Microsoft Store for free.

Open a web browser and navigate to: [www.microsoft.com](http://www.microsoft.com)

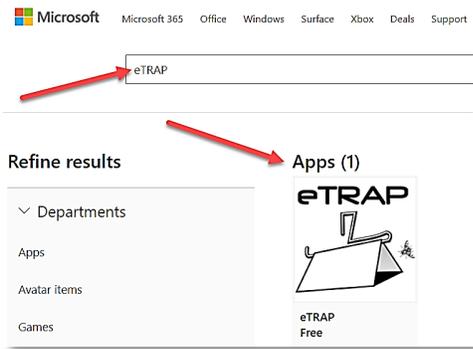
Select the search option at the top right (**Figure 6**) and type “eTRAP” in the search bar.



**Figure 6.** Microsoft Store - Search

Select the eTRAP icon and select “Get” to download.

(**Figure 7**)



**Figure 7.** Microsoft Store - eTRAP download

## eTRAP Admin Console Installation (Desktop)

This application is a desktop resource for managers and trappers and is configured for program specific activities. This includes mapping and reporting functionalities, activity monitoring, quality assurance/quality control (QA/QC) as well as data editing. Although data entry is possible in the Admin Console, it is limited to data editing and QA/QC efforts by supervisors or eTRAP Admins.



Figure 8. Admin Console desktop icon

For more information, see the section detailing use of the eTRAP [Admin Console](#). See **Figure 8** for desktop icon.

### *Install the eTRAP Admin Console*

Open a web browser and navigate to: <https://etrap.aphis.usda.gov>

Click on 'Install eTRAP Admin Console' button and click 'Run' on the pop-up at the bottom of the screen.

The program will launch, and an eAuth login screen will appear. If you have a LincPass you should automatically be logged in. If you do not have a LincPass, you will use your eAuth username and password to login to eTRAP on the desktop. The eTRAP user will need to indicate their supervisor's name.

For future use, double-click the shortcut on the desktop.

**NOTE:** The Admin Console will need to be reinstalled after any operating system changes. The Admin Console will automatically update without any intervention although the application may need to be closed and reopened to apply an update.

## eTRAP User Roles (Admin Console)

Each state should consider appropriate hierarchy for eTRAP supervision and management.

At least one Admin is assigned per state/territory by the eTRAP Development team. An Admin has authority to assign and promote user roles and assign users to other offices(s). Consult the [User Role Matrix](#) to determine appropriate user role on the next page. (**Table 1**)

The Admin role has the most permissions. Assign this role carefully. Generally, there are only a few Admin roles assigned per state or territory.

For more information, see the section detailing use of the eTRAP [Admin Console](#).

eTRAP User Role Matrix

**View Restriction Legend**

**X = No restricted view**

**A = If Assigned**

**E = Employees**

**O = By Office**

**P = If Performed**

**S = For Self**

**T = For Trapper**

Permitted Activity	Trapper	Power Trapper	Supervisor QA	Power Supervisor QA	Admin	QA/QC	Screeener	Identifier	EP Generator
View Servicings	P	O	All	All	X				
Add Servicing Record			X	X	X				
Alter Servicing Info			X	X	X				
Edit Servicings			All	All	X				
Delete Servicings				X	X				
Back In Time Feature			X	X	X				
Delete Criteria			X	X	X				
Reorder TrapSites	A	O	All	All	X				
Edit TrapSites	A	O	All	All	X				
Initiate Emergency Program					X				X
View TrapBooks	O	O	All	All	X				
Merge TrapBooks		O	All	All	X				
Move TrapBook Office			X	X	X				
View TrapSites	O	O	All	All	X				
Place QA Files					X	X			
View/Edit QA Records					X	X			
Reports	T	T	All	All	X				
Manage Subscriptions	S	S	S & E	S & E	X				
Subscribe to Reports	S	S	All	All	X				
Enter Lab Specimens					X		X	X	
View Lab Specimens					X		S	X	
Edit/Delete Specimens					X		S	X	
Enter Lab Specimens					X	X			

Table 1. eTRAP User Role Matrix

## Training Prerequisites & Tips

eTRAP users are expected to have a grasp of the following:

- Property Survey Record (PSR)
- Basic map skills – read and draw simple map
- Identification of local Fruit Fly hosts
- Trapping protocols
- Fruit Fly Identification (if field identification is required)

### Data Collection Rules of Thumb:

*What* - Understand what is being collected: survey protocol, training on app

*Where* to record - Do no harm. Beware of PII and when it can/should be collected

*How* - Be consistent with how you collect data. i.e. “ST” versus “Street”

(See “[Address Data Entry Standards](#)” Appendix)

*Submit* - Do not hold onto data. Submit daily. Upload/sync your data by returning the TrapBook.

*Report* - Get help and communicate issues immediately.

### Common Error Messages

“Error”, “Unable to login. To see why, please log into the eTRAP Website. Go there now?”, “Yes”, “No”

Log in to view details on the error.

Most commonly, you will be prompted to update/change eAuthentication password.

“No eTRAP Account”, “You do not have a valid eTRAP account, or your account is inactive.”, “OK”

Contact your supervisor to activate your eTRAP account. You must login that day or eTRAP will automatically deactivate your account that night and you will have to contact your supervisor for reinstatement.

## eTRAP Setup Guide

The following standards are provided as a guide and recommendation to support surveillance programs using the eTRAP application. Some operational deviations may occur due to state specific requirements. If possible, eTRAP users should review and conform to the below standards.

### Routine Trapping Program

A routine trapping program is implemented to survey for economically important pests and is based on standard protocols and approved detection guidelines.

See [Mapping](#) Section for information on creating routine programs.

### Emergency Program (EP)

Emergency Programs are triggered when pests of regulatory importance are detected. Identify pest and refer to the species-specific Action Plan for your state. Emergency delimitation programs involve the increased trapping densities in 81 square miles around detections to monitor pest populations.

See [Mapping](#) Section for information on creating emergency programs.

### Year-round trapping

Year-round trapping occurs in areas that are suitable for fruit fly establishment if left unchecked due to host availability, climate, and open pathways.

### Seasonal Trapping

Seasonal trapping is performed specifically during a time frame, or season, where condition(s) are suitable for fruit flies (if introduced) because host varieties, climate, or pathways are present during that time. Follow the trapping methods for “routine trapping” or “emergency program” trapping.

At the end of the season, traps are marked as “serviced/discarded.” This will retire the trap until the start of the following season, when it can be unretired in the eTRAP application.

### Preventive Release Program (PRP)

Only a few states are currently part of a PRP program using sterile Mediterranean or Mexican fruit flies. Please refer to [Appendix E: State Specifics](#) for trapping guidelines to set up new PRP trapping programs.

### Grid systems

Applying a grid system aids in establishing trap densities within a defined area and assists in navigation and orientation while performing trapping activities. Any survey program should use a standardized grid system. The most consistent grid is an in-house generated one-mile square for the state.

Where available, the Public Land Survey System (PLSS) may also be employed. PLSS, often referred to as Township and Range, divides an area into 36 square mile survey *townships* subdivided into one-mile square *sections*. For those states who do not have a statewide PLSS, creation of a statewide one-mile square grid is recommended.

## Risk Criteria

Evaluating risk is an important aspect for any survey program. Risk assessment is conducted based on established criteria as well as host availability. Trap density is dependent on the risk level of each trapping grid, as well as the percent of the grid trappable.

Evaluating risk and focusing resources should be strategic and proactive to maximize program surveillance capabilities. Trap density is established by state and program trapping guidelines and driven by documented risk criteria.

Criteria guidelines below are found in the [National Exotic Fruit Fly Detection Trapping Guidelines](#) but varies from state to state.

See [Appendix E: State Specifics](#) for examples.

**Criteria 1 - (High Risk)** – Based on identified risk points that are considered in proximity to host production areas or potential primary pathways that could be introduced through means of conveyance. \*

**Criteria 2 - (Medium Risk)** – Based on identified risk points that are considered distant to host production areas or potential secondary pathways and probability for movement is moderate. \*

**Criteria 3 - (Low Risk)** – Based on identified risk points considered to have limited known hosts that are not near host production areas or potential tertiary pathways and probability for movement is low. \*

**Criteria 4 - (Marginal Risk)** – Based on identified risk points that are considered very distant to host production areas or any potential pathways with limited to no movement, accessibility, host material, and/or not suitable to sustain the pest. \*

**\*Supervisors should evaluate risk criteria as it relates specifically to their state and program trapping guidelines. Similar environments may have varying levels of risk depending on the local evaluation of variables.**

## Trap Numbering (ID)

Assigning trap numbers is important for identification of traps and insect samples. Trap numbers, also referred to as the “Trap ID”, match insect identification in the ID Laboratory results back to a specified location and trap type. Below are general guidelines for numbering traps in eTRAP depending on the program type.

Depending on climate, host availability and life cycle of the fly (one or more generations per year), a routine or emergency trapping program may be either seasonal or year-round.

See [Appendix E: State Specifics](#) for sample trap numbering standards and the specifics for each state.

### **Routine Trapping Programs**

Traps are numbered consecutively in each grid section to facilitate program consistency. The eTRAP application does not allow duplicate numbers within the same grid for routine or emergency trapping programs.

Letter designation (A-D) after the trap number indicates alternate site locations for trap(s) relocations, if applicable.

### **Emergency Programs (EP)**

Trap *numbering* for emergency programs are state-specific. eTRAP automatically starts trap numbers at 50 or 200 depending on the trap used. This can be manually adjusted to another number. Refer to [Appendix E: State Specifics](#)

## Trap Placement and Rotation

Consult with program management and program documentation available such as [National Exotic Fruit Fly Detection Trapping Guidelines](#) or [IAEA Trapping Guidelines for area-wide fruit fly programs](#). See [Appendix E: State Specifics](#) for examples of trapping protocols.

Trap sites are created in the field using the mobile application and device. For workflow, see [Place a Trap](#).

## Property Survey Record(s)

Property Survey Records (PSR) are used to identify and describe the physical location of hosts and traps and all associated activities such as servicing, baiting or relocations for that trap site. The eTRAP application records Property Survey Records as “TrapSites”. There may be multiple trap types at one trap site.

Property Survey Records are organized within their corresponding trapping grids in the TrapBook. Be sure to protect [Personally Identifiable Information \(PII\)](#).

To view example Property Survey Record cards, see [Appendix E: State Specifics](#)

### **What is *important* to document on a Property Survey Record?**

The Property Survey Record should document all information relating to that property. Refer to state specific protocols for final guidance. Below are some data to consider recording:

1. *TrapBook related records:* Trap(s) rotation schedule and location, grid identifier, host used for trapping at each site, type of trap(s), physical address for each site used, a map for each site being used, trapping grid, GPS, county, landmarks and notes pertinent to location of traps or property hazards.
2. Trap relocations, if applicable:  
*Trap Relocations:* Show up to 4 alternate sites (properties), designated A-D within the trapping grid. These are used for quarterly relocations based on host availability and seasonality. If trap site was established as a permanent site, only one site will be shown on property survey record. Locations within a grid section identified for a trap rotation. This may be just 1 site (Permanent) or up to 4.

### **Updating the Property Survey Record**

The property survey record is to be updated for each site visit with activities performed by the trapper. The PSR should be compared to eTRAP data to identify discrepancies. This should be completed in pencil and include the date, site and host where the trap(s) is currently located, action completed (servicing, baited, skipped, missing/replaced, relocated), number of fruit fly specimens collected, and the initials of the Trapper.

It is important to update data on the Property Survey Records and in eTRAP so that the two are identical.

## Generate & Print a Property Survey Record

Property Survey Forms can be manually generated or downloaded and printed from eTRAP, depending on the level of detail necessary and state-specific requirements.

### Generate a Property Survey Record Manually

See [Appendix E: State Specifics](#) for examples.

### Generate a Property Survey Record Using an Existing eTRAP TrapBook

**Step 1:** Open the eTRAP Admin Console from a desktop PC.  
(Figure 9)



Figure 9. eTRAP Admin Console icon

**Step 2:** Choose “TrapSites” from the eTRAP Admin Console home screen.  
(Figure 10)

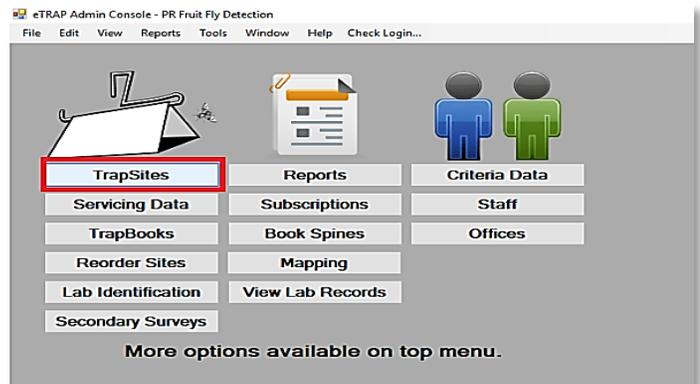


Figure 10. eTRAP Admin Console home screen

**Step 3:** Select “Book” and click apply. (Figure 11)

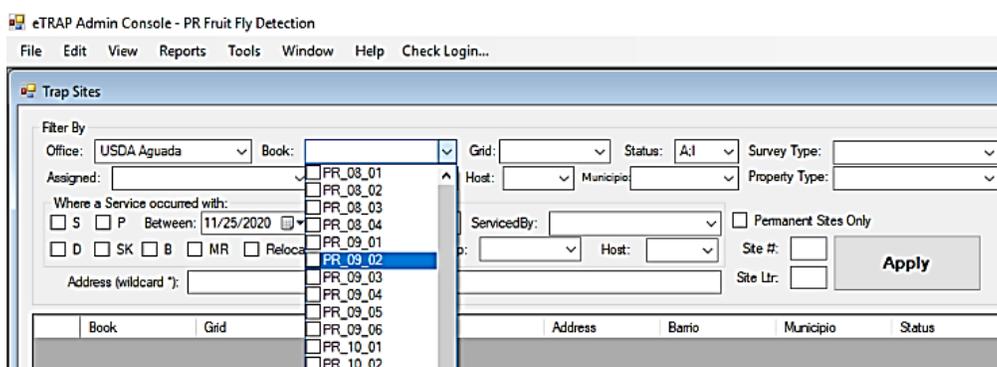


Figure 11. Book Dropdown Selection

**Step 4:** Put the trap sites in ascending order by selecting the # sign. (Figure 12)

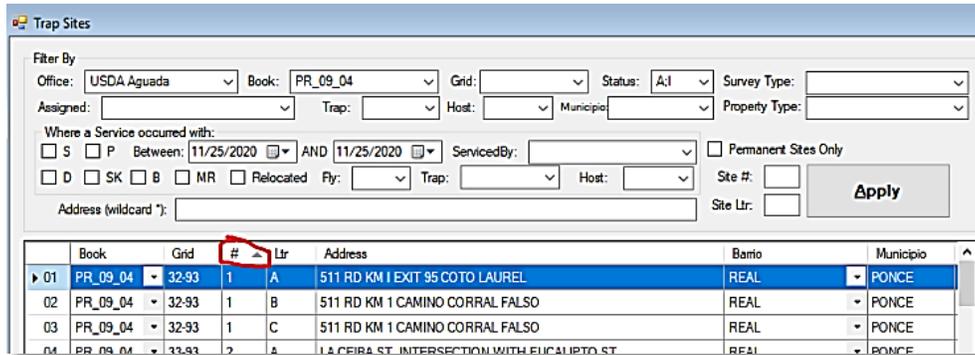


Figure 12. Sort Trap Sites

**Step 5:** Select all the sites with the same number, right click and select “Print FFD-2 Pages...”. (\*\* Check printer tray for paper color, if FFD-2 is color-coded.)

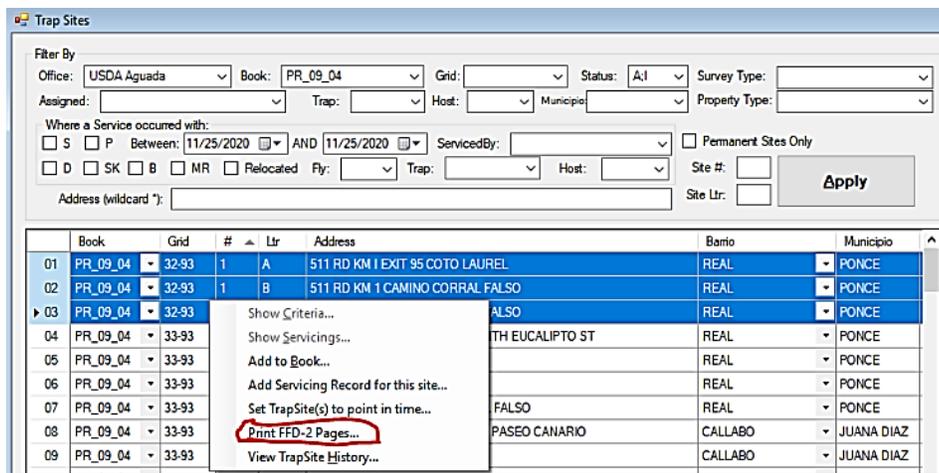


Figure 13. Print FFD-2 selection

**Step 6:** Adjust the map scale and choose the basemap. Click OK. (Figure 14)

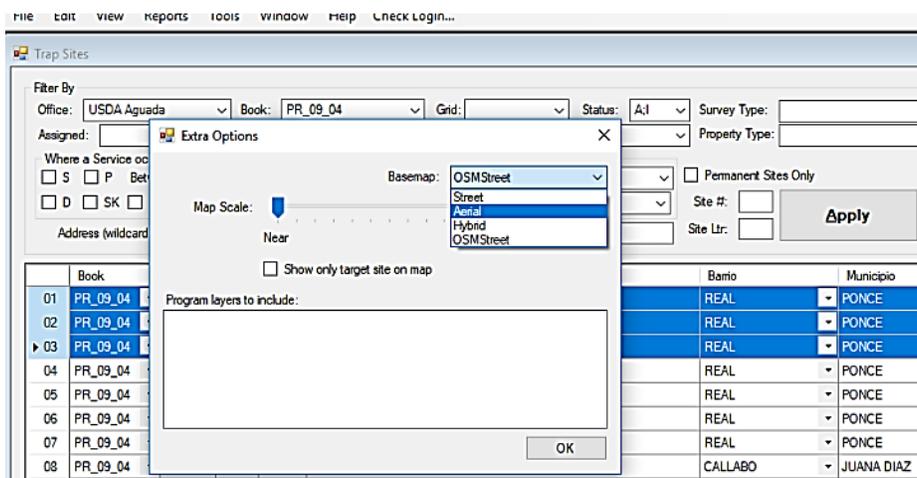


Figure 14. Set Map Scale and Basemap type

**Step 7: An .xlsx spreadsheet opens and images can be adjusted. (Figure 15)**

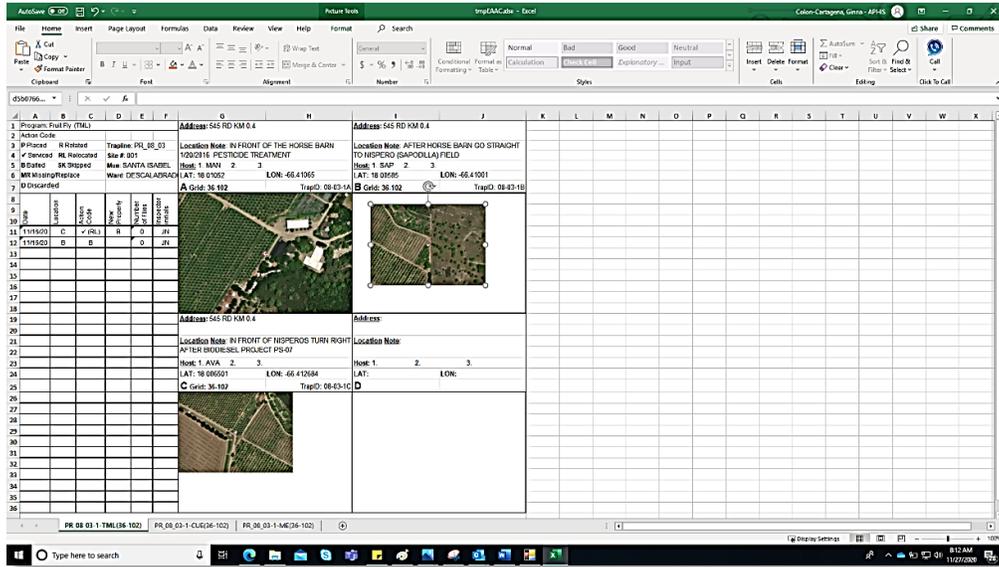


Figure 15. Editable FFD-2 Records

**Step 8: Edit heading information, if needed. The host often needs correction.**

***THINGS TO KEEP IN MIND:***

1. For quick results, it is best to print property records in the morning when less users are entering data.
2. The last two services are automatically pulled into this FFD-2. (See **Figure 32**: Lines 11 and 12) This is a good time to record the date for the next relocation.

## Reports

eTRAP has a robust reporting feature to aid monitoring and decision making for eTRAP users. Reports can be filtered to provide detailed views and are exported to an excel spreadsheet for analysis and review. Further analysis using additional software is then possible to fulfill operational reporting needs.

eTRAP users should consider the reports available within eTRAP and subscribe to those providing the information necessary for program monitoring and decision-making.

By default, the “Weekly Report” is sent to all trappers. This report shows the individual trapper’s weekly program activities as well as the number of traps assigned to them. Additional report subscriptions may be recommended by management.

To view the full list of available reports, see [Appendix B: Reports](#).

### Steps to Subscribe

1. Login to eTRAP **Admin Console** from your desktop.
2. Select the **Reports** tab. (Figure 16)



Figure 16. Admin Console menu

3. Select the report name from the list. To view the full list of available reports, see [Appendix B: Reports](#).

4. To subscribe to a report, select name(s) from either the Staff or Office drop-down lists. This is automatically generated with your login and multiple staff selections can be made. (Figure 17)

Figure 17. Staff or Office selection

*Optional filtering:* The report generated can be further filtered by county, host(s), trapbook(s) or a specific grid by selecting from the drop-down lists (see upper right section of Figure 17).

5. Select a frequency and time frame for the report. There is a dropdown for a number and time frame. (Figure 18)

Figure 18. Report frequency setting

7. Select a starting date using the calendar dropdown option. (Figure 19)

Figure 19. Calendar option

8. Reports will be emailed only to the person specified here. (Figure 20)

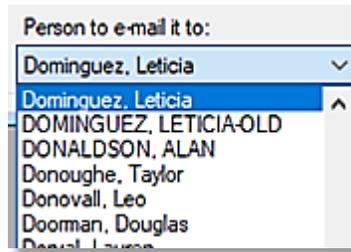


Figure 20. Additional report recipients

9. Select the “Subscribe” button and then select “Ok”. (Figures 21 and 22)

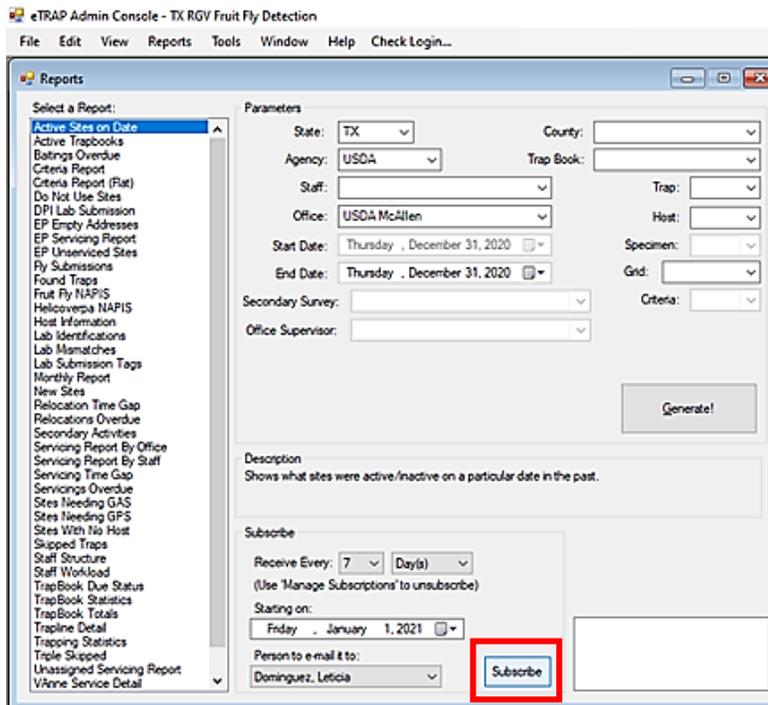


Figure 21. Subscribe button



Figure 22. Final step

## Using eTRAP

### *eTRAP application (Mobile and Desktop):*

Data is collected (entered) in the mobile and desktop eTRAP applications. The mobile application, used by surveyors, is the recommended data entry point with a desktop version available as a backup. Data are collected in the field and uploaded daily.

### *eTRAP Admin Console (Desktop):*

This application is a desktop resource for managers and trappers and is configured for program specific activities. This includes mapping and reporting functionalities, activity monitoring, quality assurance/quality control (QA/QC) as well as data editing. Although data entry is possible in the Admin Console, it is limited to data editing and QA/QC efforts by supervisors or eTRAP Admins.

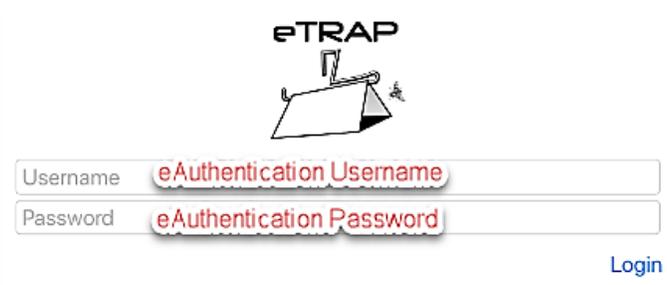
## eTRAP Application Workflow

The eTRAP mobile application is accessed from a mobile device (iPhone, iPad, other) while the desktop application is accessed from your PC. The mobile and desktop applications are exact copies of each other.

Property survey records (trap sites) are organized into TrapBooks, each designed to contain one day's work. For this, it is required to login to eTRAP application and download the assigned TrapBook.

### Check out a TrapBook

Ensure strong Wi-Fi connection. Open eTRAP from the device. Log in using your eAuth Username and Password. **(Figure 23)**



The image shows the eTRAP login interface. At the top center is the eTRAP logo, which consists of the text 'eTRAP' above a stylized drawing of a trap. Below the logo are two input fields: 'Username' and 'Password'. The 'Username' field contains the text 'eAuthentication Username' and the 'Password' field contains 'eAuthentication Password'. To the right of the password field is a blue 'Login' button.

Figure 23. eTRAP Login

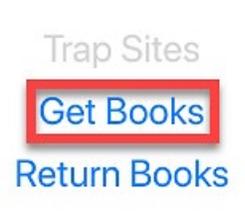


Figure 24. eTRAP start menu

Select **Get Books** and download the assigned trap book. **(Figure 24)**

Choose from **Choose an office or EP.** (Figure 25)

Your office should be listed at the top. If performing for another office, scroll down the list to locate it.

Tap the office name to see the associated book list.

**OR**

Choose from the list of **Books assigned to you:** (Figure 25)

Select the book by tapping in the checkbox to the left of the book name and adding a check mark.

You may select more than one TrapBook at a time.

Finally, select **Download** at the bottom of the screen. (See **red** box on Figure 25)

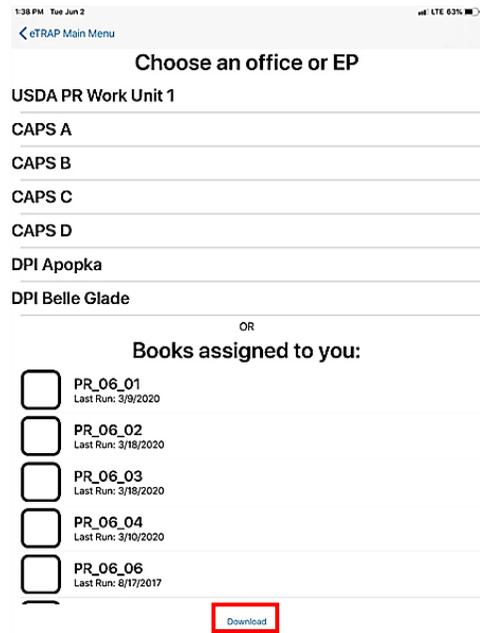


Figure 25. Office or Books assigned

You will be prompted to confirm your selection. Tap "OK".

(Figure 26)

Depending on your Wi-Fi connection, it may take some time for the TrapBook(s) to download.



Figure 26. "Ok" to confirm

**Check to make sure book is downloaded before leaving office.**

Within the eTRAP mobile application, select **Trap Sites** to confirm TrapBook download success.

Most states operate in offline mode with special cases operating with cellular data use in the field.

## Servicing a downloaded TrapBook

Once TrapBook(s) are downloaded in the office, the trapper should:

- Evaluate and review Property Survey Records for the TrapBook assigned.
- Consider route and re-order Property Survey Records (if necessary).

Once arrived at the trap site, open the eTRAP mobile application on your mobile device. Then select “Trap Sites”. (Figure 27)

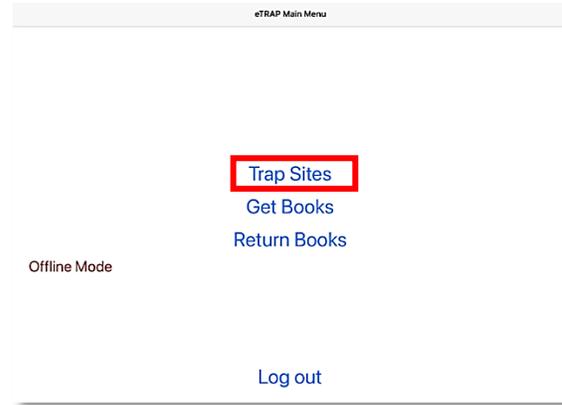


Figure 27. eTRAP Main Menu

## Trap Sites Screen

Understanding the **Trap Sites** main screen is crucial. There are many activities that can be performed on the Trap Sites screen. (See **Figure 28** on the next page)

A color code symbolizes the status of tasks:

**RED** colored text means that an action must be taken.

**GREEN** colored text signals that all seems to be OK.

**BLUE** text is used for descriptive information. Text in **BLUE** contains links to other eTRAP interfaces.

## Trap Sites Diagram

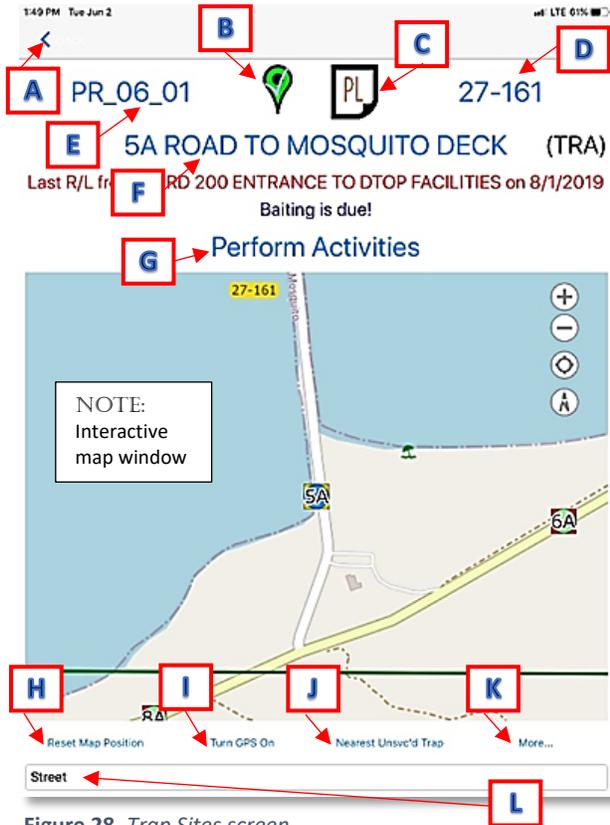


Figure 28. Trap Sites screen

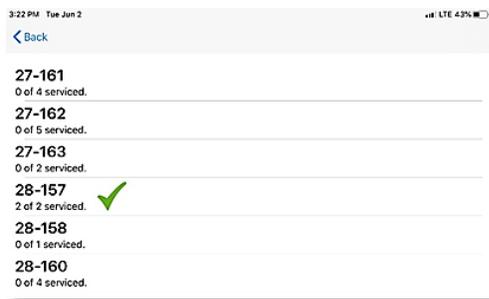


Figure 29. Grid sections (STRs) within selected TrapBook

### NOTE: NEXT TO EACH GRID SECTION

NO checkmark = No service yet.

Green checkmarks = All traps have been serviced.

Purple checkmarks = Partially serviced.

**A** Back button...Use it once finished and ready to "Return" TrapBook.

**B** Tap this location icon to make GPS Coordinate Changes.  
If **GREEN**, coordinates are already recorded for the selected Trap Site.  
If **RED**, coordinates are missing.  
See [GPS Coordinate Collection](#) section to correct this error.

**C** Tap this icon to make notes related to the site.

**D** Tap here to access all grid sections (STRs) contained within the selected TrapBook. (Figure 29)

**E** Tap the TrapBook name to switch between downloaded TrapBooks.

**NOTE:**  
*Be sure of the correct TrapBook while working.*

**F** Tap here to see a list of all the traps contained within the active grid section (STR). Checkmarks indicate completion as in option D above.

**G** Tap here to enter updates on activities related to the active trap site.

**H** Tap here to reset map view centered on your current position.

**I** Turning GPS on displays your current location on the map symbolized by a blue dot.

**J** Tap here to identify the nearest non-serviced trap to your current location.

**K** Place, create Inactive, or Retire trap sites and more.

**L** Tap here to toggle between street and aerial imagery basemap views.

## Place a Trap

Site selection and trap placement are determined by survey protocol and rely on fruit fly host availability and other state-specific risk factors. Trap sites are established at the beginning a detection program.

A trap may be placed at any time for a variety of reasons, based on risk assessment by program management.

### To place a trap:

Select the “More...” option from the bottom right of the Trap Sites screen. (Figure 30)



Figure 30. More... option to place a trap

Select “Place Trap(s)”. (Figure 31)

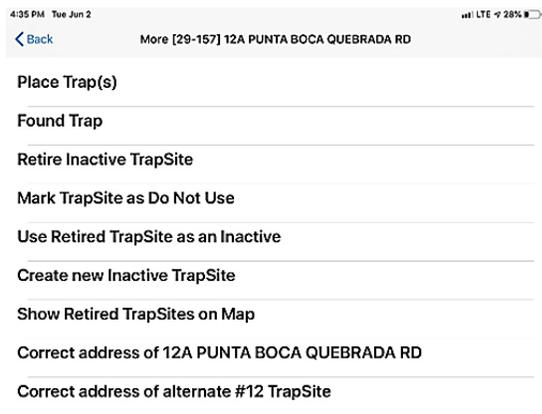


Figure 31. Place Trap(s)

Then choose between a “New Site” or “Existing Site”. (Figure 32)



Figure 32. New or Existing site

Complete the data form on the site including the site number, grid section, and complete site address (including city and county). If criteria were set for this grid in the eTRAP Admin Console, the trap goals will be displayed while placing traps. For each trap, tap “Add Trap”. Once all traps are added, tap “Place” to be returned to the Trap Sites screen to view newly placed traps.

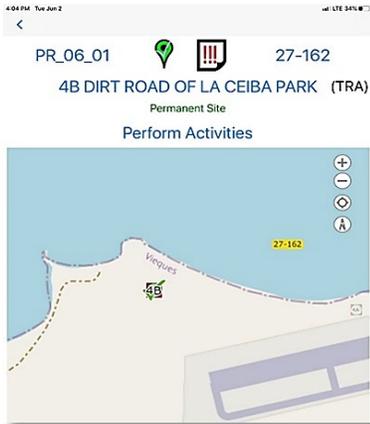


Figure 33. Trap Sites Map Zoom IN

Use the interactive map window to zoom in (Figure 33) or out (Figure 34) to check location and review the entire section.

If desired, the basemap can be toggled between Street and Aerial views using the drop down below the map.



Figure 34. Trap Sites Map Zoom OUT

### Perform Activities

The “Perform Activities” option from the Trap Site screen produces an interface for data entry related to the selected trap site. (See red box Figure 35)

Host, Action and Spec # data can be updated here. Along the bottom of the Perform Activities screen, the ten most recent data entries for the selected trap site are listed in table form. (Figure 36)

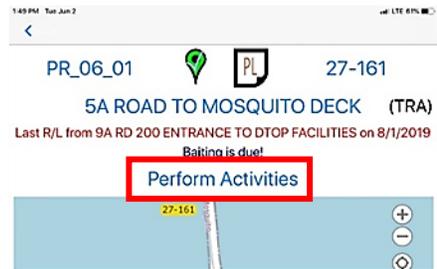


Figure 35. “Perform Activities” option

**\*\*Always ensure the property survey records match the servicing history in eTRAP.**

Trap	Host	Action	Spec #
TML Routine	TRA tropical almond/ Terminalia spp.	Select	0
ME Routine	TRA tropical almond/ Terminalia spp.	Select	0

R/L to Existing		R/L to New		Sketch			
Date	Site	Trap	Host	Action	ReloTo	# Spec	Trapper
6/2/2020	6A	ME		?		0	Rodrigue z-Ruiz, M
6/2/2020	6A	TML		?		0	Rodrigue z-Ruiz, M
3/9/2020	6A	ME	TRA	S		0	Rodrigue

Figure 36. Perform Activities – Data fields

### Add or Update Host

If placing new traps in a host, select "???" in host column to choose from a list of hosts. (Figure 37)

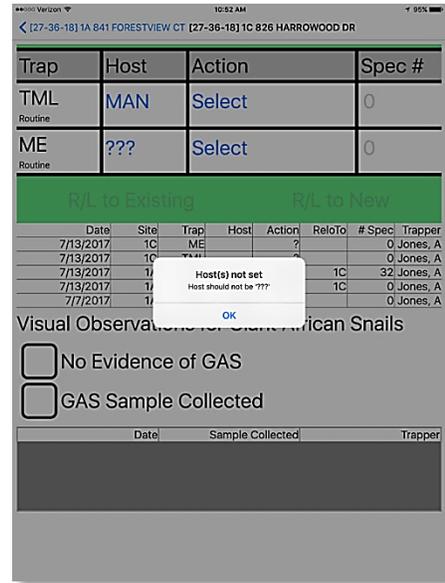


Figure 37. Enter host species prompt

To update host, select the existing host abbreviation in the host column for a drop-down menu. Select host used from the list provided. (Figure 38)

If using a host not listed, select HOS. Document type of host on property survey record.

If using a non-host, select NON.

See [Appendix D: eTRAP Host List](#)



Figure 38. Host list

### Update Specimen Number

To update the specimen number, select the blue text in the “Spec #” column, and enter the new number of specimens. (See previous **Figure 36**)

### Action

To record activities or edit entries at a selected trap site, tap the blue text under the Action column. If no previous action is recorded, “Select” in blue is shown. (See previous **Figure 36**)

Notes can be recorded for each action by selecting the notes icon. (See previous **Figure 36**)

Select the type of action performed from the list. (**Figure 39**)

Selecting “None” will record no change and display “Select” on the main Perform Activities screen.

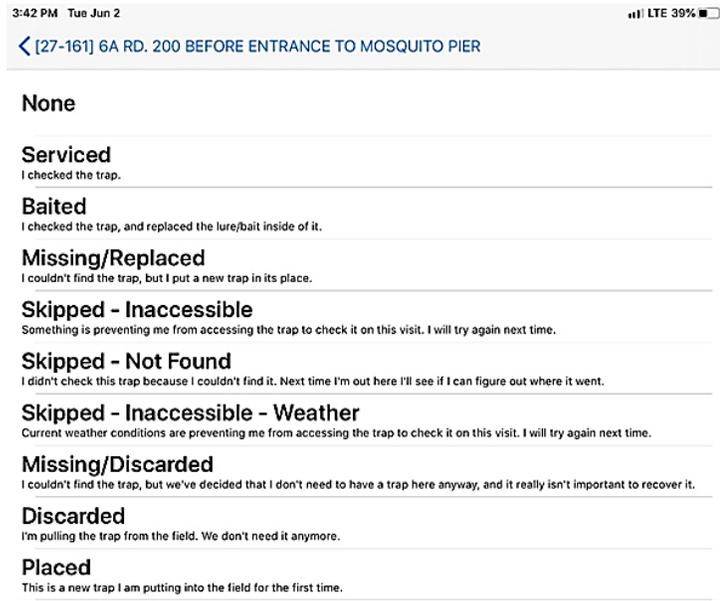


Figure 39. Action/trap service list

### Relocate a trap

An existing trap can be relocated to a new site or rotated to an existing site. “R/L to Existing” or “R/L to New” options are found as blue links on the Perform Activities screen for the site selected. (**Figure 40**)

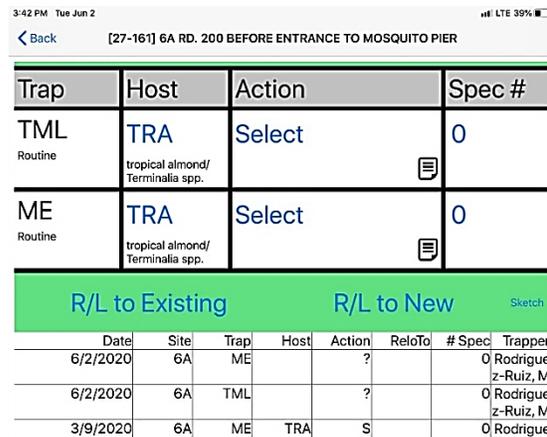


Figure 40. Perform Activities: Relocate options in blue

If relocating to an existing site, a list of inactive sites (oldest to newest) is presented. Select the desired location from this list (**Figure 41**) or from the list of retired sites below (**Figure 42**).

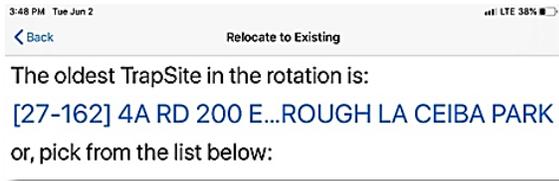


Figure 41. Inactive sites



Figure 42. Retired sites

If relocating to a new site, you will be required to input site information (**Figure 43**) including grid name, address, GPS coordinate capture, and go to Perform Activities to enter host name. (**Figure 44**)

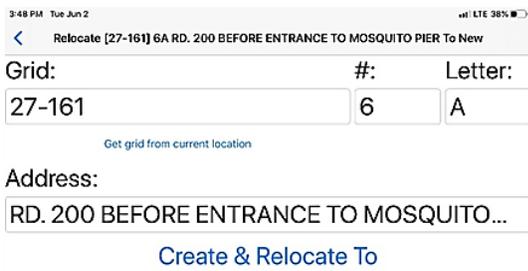


Figure 43. Enter new site data

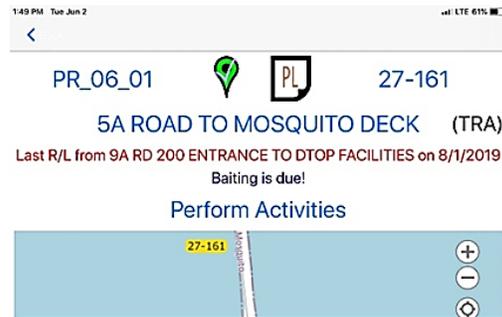


Figure 44. Enter new site GPS coordinates and notes.

## Retire a trap

If discarding a trap (i.e. seasonal, after an emergency delimitation program, host tree removed, property owner no longer wants trap on site, etc.), select “Discarded”. (See red box in **Figure 45**) Upon returning the TrapBook, those discarded traps will be labelled as “retired”.

## Reactivate (Unretire) a Retired Trap Site

First, confirm the trap(s) to reactivate.

From the Trap Sites screen, select “More” at the bottom right of the screen. (**Figure 46**)

Then select “Show Retired TrapSites on Map”. (**Figure 47**)

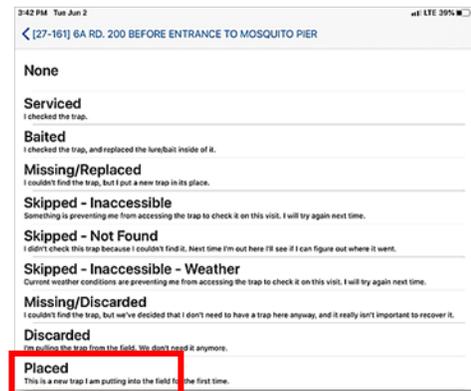


Figure 45. Perform Activities - Discarded

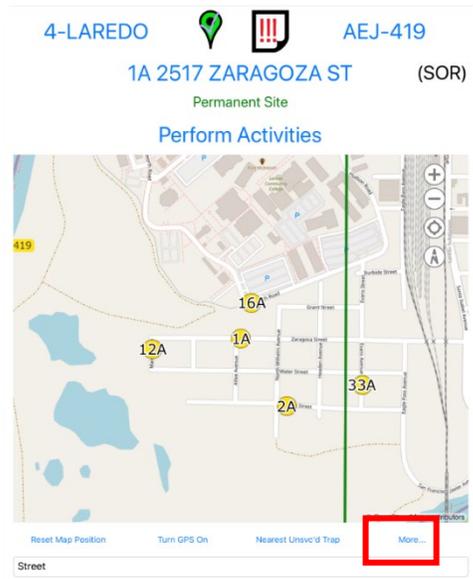


Figure 46. Trap Sites screen - More

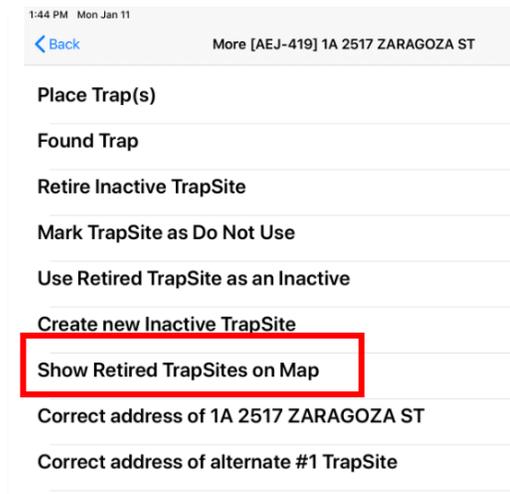


Figure 47. Show Retired TrapSites on Map

The retired trap sites will appear on the map as right facing grey triangle(s) with the trap site number over it. (**Figure 48**)



Figure 48. Grey triangles representing retired sites

Once the trap that is going to be unretired is determined, click “More” once again, but this time select “Place Trap(s)”.

Then select “Existing Site”. (Figure 49)

A list of all the active and retired sites will appear in the downloaded book. The active sites are listed first, followed by the retired traps. The active sites are noted as “(A)” and the retired sites as “(R)”. (Figure 50) Select the retired site you wish to activate from this list.



Figure 49. Place Trap - Existing Site

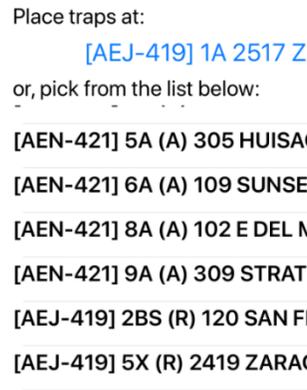


Figure 50. TrapSites - Active (A) and Retired (R)

Enter the trap information in the screen that appears next. Select “Add Trap”. Select the appropriate data for Type, Host and Survey Type. Finally, select “Place”, complete the fields, and then choose “OK”.

(Figures 51 through 53)



Figure 51. Add Trap and Place

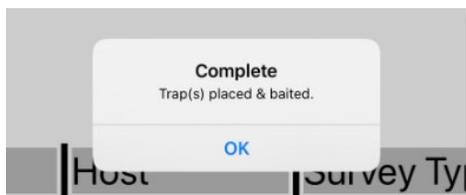


Figure 53. Complete trap placement - Ok

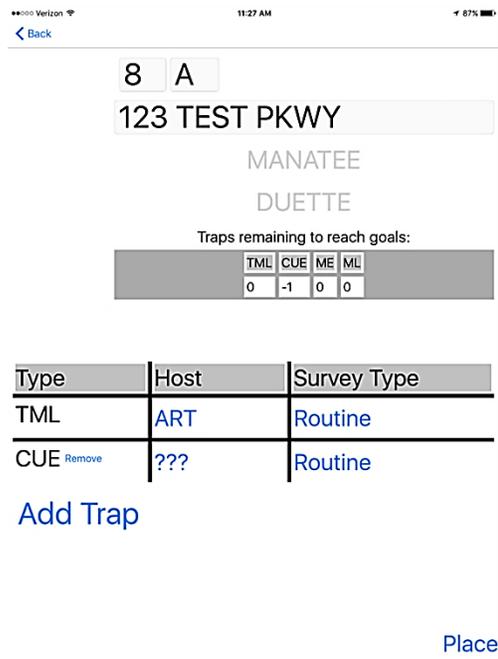


Figure 52. Add Trap data fields

## Entering Specimen Number(s)

If suspect/target pests are captured, select the blue zero under Spec #. (Figure 54)

Trap	Host	Action	Spec #
ML Routine	SOR sour orange/ Citrus aurantium	Select	0

Figure 54. Suspect specimen captured

In the following screen, select "Tap to select" and select the suspected pest from the list. This specimen list will vary depending on Office/Program. (Figures 55 and 56)

Next select the zero next to the specimen just entered. A minimum of 1 must be selected so the trap record will indicate that a specimen was submitted for identification. (Figure 57)

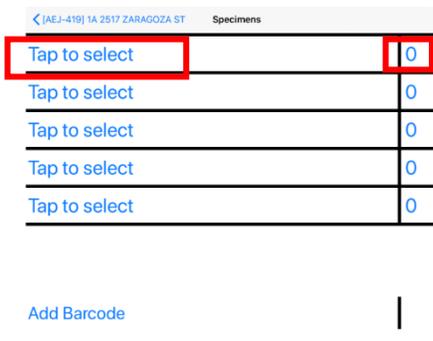


Figure 55. Tap to select to enter suspected specimen



Figure 56. Specimens list



Figure 57. Specimens count

If barcodes are used, refer to [Appendix C: Record a Barcode](#).

Refer to state protocol for additional directions on completing sample collections and submission activities.

## Review Completed TrapBook

Once all traps have been serviced within your assigned TrapBook, always review *before returning to the office* to be sure it is complete. From the Trap Sites screen, select the TrapBook name to see a list of all the traps contained within the active grid section (STR). Be sure each trap site is marked with a **GREEN** checkmark to indicate completion. (Figure 58) To review these options, see the [Trap Sites Diagram](#).

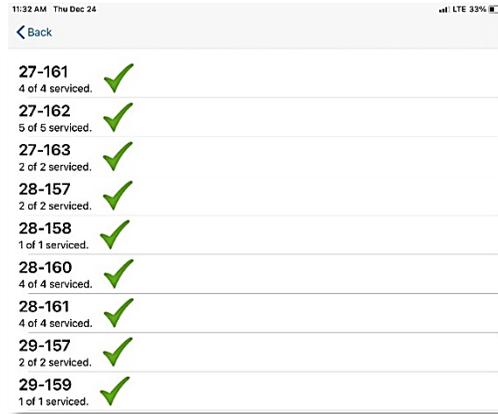


Figure 58. Green checks indicating completion

## Return a TrapBook

Once you have fully reviewed the TrapBook to confirm completion, you can return the updated TrapBook to the main database. This requires a strong Wi-Fi connection and a little time to complete.

To return the TrapBook:

From the Trap Sites screen, tap the back arrow and select “Yes” to return to the main eTRAP menu. (Figure 59)

From the main eTRAP menu, select “Return Books”. (Figure 60)

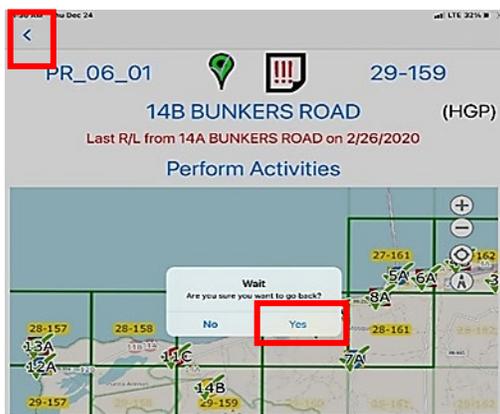
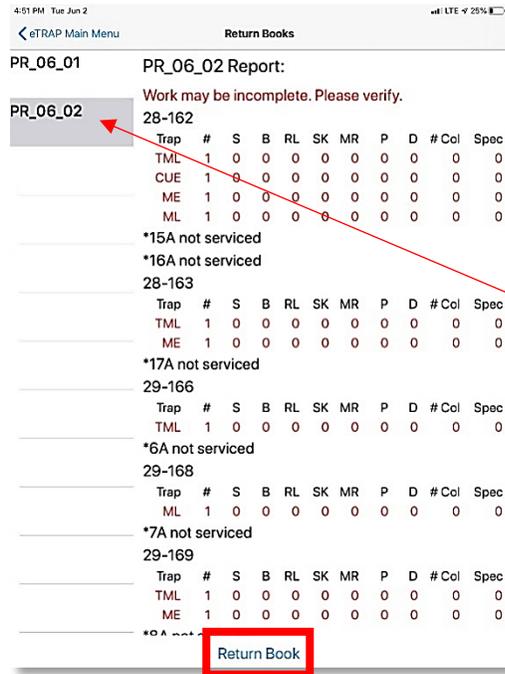


Figure 59. Back to eTRAP main menu



Figure 60. eTRAP main menu

Select the TrapBook to upload (return) and allow a few moments for the summary of activities to display. Any RED text indicates incomplete items. (Figure 61)



The displayed summary corresponds to the selected TrapBook.

Select the TrapBook to view the appropriate summary of activities.

Figure 61. TrapBook Report

Review to be sure all information displayed is accurate.

Tap "Return Book" at the bottom of the screen (see red box in Figure 61) and tap "Yes" to confirm.

Depending on Wi-Fi bandwidth and number of TrapBooks returned, this could take a little time. Once complete, tap "< eTRAP Main Menu" to begin another task or choose "Log out" and close the application (double tap the Home button; swipe up and away).

## Collecting GPS Coordinates

Best use tips:

1. Be sure Location Services are **ON** (iPad Settings App > Privacy menu)
  - a. Give the integrated GPS receiver **time** to locate itself
  - b. If using an external GPS receiver, be sure it is **ON** and give **time** for calibration.
2. Do your best to locate the device in a clear area. Look up. Step away from tree canopy or other cover.
3. Orient to the sky. Hold the device up and flat with the screen oriented to the sky.
4. Once in place, open the Apple native Maps application first and allow the GPS receiver to locate you. Then return to the eTRAP application.
5. "Let the GPS settle". Give it time to locate.
6. Moving slowly can help the receiver fix your location. Get to your location and give it time to readjust/connect.
7. Since most land mass is in the northern hemisphere, **facing south** increases the likelihood of the highest number of satellites in range.
8. As a last resort, or if from a more trusted GPS source, enter coordinates manually from another device.

### Correct Missing GPS on selected Trap Site

It is important to ensure that GPS coordinates match the actual site's location.

There are two ways to change or capture site coordinates:

1. Manually  
(using an external GPS receiver)  
Tap the GPS icon (See **red box** in **Figure 62**)  
Select "Manual" (See **red box** **Figure 63**)  
Enter the Latitude and Longitude
2. Automatically  
(using the device integrated receiver)  
Tap the GPS icon (See **red box** in **Figure 62**)  
Select "Yes" (See **red box** **Figure 63**)  
Tap "Capture" to record (**Figure 64**)  
Confirm by tapping "Ok" (**Figure 64**)



Figure 62. GPS icon

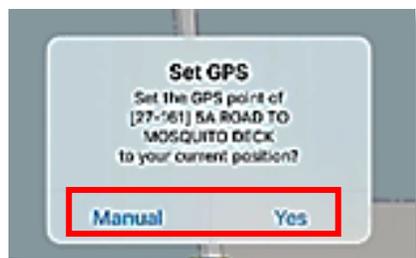


Figure 63. Set GPS options

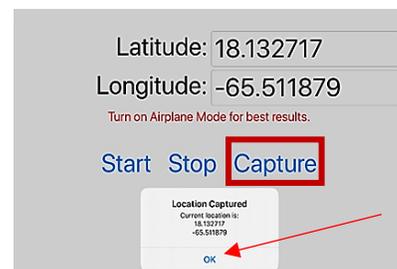


Figure 64. Capture GPS Coordinates

### Collect GPS ONLY

A GPS point, the latitude and longitude of your current location, can be collected on its own with no trap site selected and for any reason. From the main eTRAP, before signing in, the option “GPS Only” is available.

Select “GPS Only”. **(Figure 65)**

Then tap “Start” to initiate the integrated GPS receiver attempting to locate satellites within range.

Finally, tap “Stop” to lock the coordinates. **(Figure 66)**



**Figure 65.** GPS Only option



**Figure 66.** Lock GPS coordinates

## Admin Console

This application is a desktop resource for managers and trappers and is configured for program specific activities. This includes mapping and reporting functionalities, activity monitoring, quality assurance/quality control (QA/QC) as well as data editing. Although data entry is possible in the Admin Console, it is limited to data editing and QA/QC efforts by supervisors or eTRAP Admins.

Consult the Admin Console [eTRAP User Role Matrix](#) for activity permissions by assigned role.

The main Admin Console menu contains buttons which access the functions listed above. **(Figure 67)** Descriptions of each option are to follow.

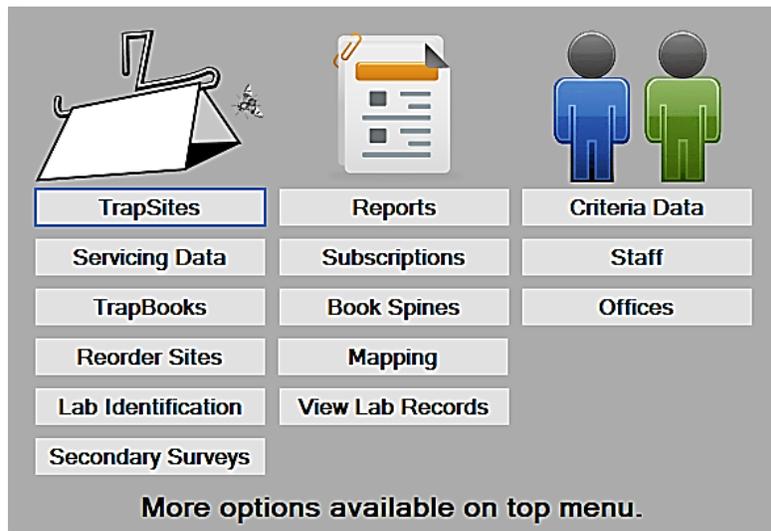


Figure 67. Admin Console home screen

## TrapSites

Creating and editing TrapSites may be conducted in the Admin Console as described below. TrapSites may also be created in the field using the mobile application on your mobile device. This function allows for creation of new and editing existing TrapSites.

To place a new trap, complete the following steps. (Figure 68)

The screenshot shows the 'Trap Sites' form with the following components:

- Filter Section:** Includes dropdowns for Office (USDA Aguada), Book, Grid, Status (A,I), Survey Type, and Property Type. It also has checkboxes for 'Where a Service occurred with' (S, P, D, SK, B, MR, Relocated) and 'Permanent Sites Only'.
- Table:** A table with columns: Book, Grid, #, Ltr, Address, Barrio, Municipio, Status.
- Selected Site Form:** Fields for Site #, Site Ltr, Status, Latitude, Longitude, Address, Municipio (FL - ALACHUA), Barrio (ARCHER), Property Type, Notes, Traps, Host, and Survey Type. It includes buttons for 'Add New', 'Delete Current', 'Save Record', and 'Print to Excel'. A red 'Unsaved Changes!' warning is present.
- Map:** A map showing a grid of trap sites with labels like '09-50', '10-48', '11-47', etc.
- Annotations:** Green callouts describe filter options: 'Office Name', 'List of Office TrapBooks', 'Grid (STR) list within Office', 'Active, Inactive, Do Not Use or Retired Traps', 'Click Apply to conduct the query', and 'Map displays grids'. Red boxes labeled 'Step 1' through 'Step 12' point to specific fields in the form.

Figure 68. Trap Sites form

1. Select "Add New" to view the all fields ready to be completed.
2. Add the "Site #" and "Site Letter"
3. Status: From the dropdown list, select Active.
4. Enter "Latitude" & "Longitude"
5. Add the "Address" for the location of the trap(s) installed
6. Enter the "Grid" where the trap is located.
7. Select the appropriate "Municipio/County"
8. Select the appropriate "City/Barrio"
9. Add "Notes" that will specify host location to guide the trapper to the trap site.
10. Add the "Traps" & "Host" at this location. Survey type is either Routine, PRP, or EP.
11. Select your "Office" and the "Book" where the trap(s) will be included
12. Verify all the boxes for any errors and click "SAVE RECORD"

## Servicing Data

This feature supports quality assessment and quality control efforts and aids daily workload review and management. It provides filtering to pull servicing information on TrapBooks. This includes trapper routes being serviced and timestamps on activities completed. Adjustments to service data entries are enabled here as well and can be corrected, by an authorized user, based on communication between the supervisor and trapper.

Filter the data needed. Then review visually, populate further, or export to Excel for further analysis. (Figure 69)

The screenshot shows the 'Servicing Data' application window. At the top, there is a 'Filter By' section with several dropdown menus: 'Start Date' (set to Wednesday, January 29, 2020), 'End Date' (set to Wednesday, January 29, 2020), 'Serviced By', 'Book', 'Grid', 'Office', 'Ry', 'Host', 'Trap', and 'Survey Type'. There are also checkboxes for 'S', 'P', 'B', 'Relocated', 'SK', 'MR', and 'D'. An 'Apply' button is highlighted with a red box. Below the filter section is a table with columns: Service Stamp, Trap Book, Survey Type, Grid, #, Ltr, Trap, and Host. The table is currently empty. At the bottom, there is a 'Selected Servicing' section with a 'Date/Time Serviced' field (set to 01/29/2020 3:17:14 PM), a 'Files' table with 'Type' and 'Count' columns, and buttons for 'Change Relocation', 'Delete Servicing', 'Save Record', 'Print to Excel', and 'Copy GUID to Clipboard'.

- Enter Start Date
- Enter End Date
- Enter Grid Number
- Click Apply

Figure 69. Servicing Data - Request

Admins may also adjust a relocation data entry error by selecting "Change Relocation". (Figure 70)

Note: When relocations are corrected in servicing data, the TrapSite status (active/inactive) must also be changed in the TrapSite screen.

The screenshot shows the 'Servicing Data' application window with the 'Filter By' section at the top. The 'Start Date' is set to Sunday, November 17, 2019, and the 'End Date' is set to Wednesday, January 29, 2020. The 'Grid' field is set to 6624. The 'Apply' button is highlighted with a blue box. Below the filter section is a table with columns: Service Stamp, Trap Book, Survey Type, Grid, #, Ltr, Trap, Host, Staff, and Address. The table contains 13 rows of data. The first row is highlighted in blue. Below the table is a 'Selected Servicing' section with a 'Date/Time Serviced' field (set to 11/22/2019 10:42:43 AM), a 'Files' table with 'Type' and 'Count' columns, and buttons for 'Change Relocation', 'Delete Servicing', 'Save Record', 'Print to Excel', and 'Copy GUID to Clipboard'.

Service Stamp	Trap Book	Survey Type	Grid	#	Ltr	Trap	Host	Staff	Address
11/22/2019 10:42 AM	4444-2	Routine	6624	4	A	TML	SWO	Passamertr, Pedro	FROM FM
11/22/2019 10:42 AM	4444-2	Routine	6624	4	A	ML	SWO	Passamertr, Pedro	FROM FM
11/22/2019 10:47 AM	4444-2	Routine	6624	5	A	TML	GFT	Passamertr, Pedro	7/10 MILE
11/22/2019 10:47 AM	4444-2	Routine	6624	5	A	ML	GFT	Passamertr, Pedro	7/10 MILE
12/4/2019 12:12 PM	4444-2	Routine	6624	5	A	TML	GFT	Passamertr, Pedro	7/10 MILE
12/4/2019 12:12 PM	4444-2	Routine	6624	5	A	ML	GFT	Passamertr, Pedro	7/10 MILE
12/4/2019 12:17 PM	4444-2	Routine	6624	4	A	TML	SWO	Passamertr, Pedro	FROM FM
12/4/2019 12:17 PM	4444-2	Routine	6624	4	A	ML	SWO	Passamertr, Pedro	FROM FM
12/13/2019 10:49 AM	4444-2	Routine	6624	4	A	TML	SWO	Passamertr, Pedro	FROM FM
12/13/2019 10:49 AM	4444-2	Routine	6624	4	A	ML	SWO	Passamertr, Pedro	FROM FM
12/13/2019 11:04 AM	4444-2	Routine	6624	5	A	ML	GFT	Passamertr, Pedro	7/10 MILE
12/13/2019 11:04 AM	4444-2	Routine	6624	5	A	TML	GFT	Passamertr, Pedro	7/10 MILE
11/22/2019 11:12 AM	4444-2	Routine	6624	4	A	TML	SWO	Passamertr, Pedro	FROM FM

Figure 70. Servicing Data - Results

## TrapBooks

This feature allows supervisors to assign TrapBooks to individual trappers and set the frequency of servicing and baiting.

A trap book should contain a workload that can be completed in one day by a trapper.

Travel distance from office, traffic congestion, number of TrapSites, and routing order, and complexity of the lures/trap replacement scheduled within the book area all considerations. Even the most well thought out trap books should be reviewed routinely and realigned to be sure each contain a day's work.

TrapBook approvals are dependent on individual state program management.

TrapBooks are typically made using a 3-ring binder. Binders are easy to find, user-friendly, and allow for easy additions of maps, Property Survey Records, and other program information.

### **TrapBooks for Emergency Programs**

eTRAP automatically creates one TrapBook per square mile grid. For more information and detailed steps, see the section under eTRAP Setup Guide called [Emergency Program \(EP\)](#).

## Reorder Sites

A tool used to quickly convert TrapSite ID based on program objectives.

## Lab Identification

Used by the lab to finalize and/or confirm the specimens submitted to lab, this feature also enables correction on a service and entry of data on larval finds.

Lab submission sheet requests the user input the grid number and then select corresponding service specimen submission to finalize ID.

## Secondary Surveys

This function filters by date range, user, grid, TrapBook, office, site number and letter, and the survey type. Currently, in Florida, Secondary Surveys are conducted for Giant African Snail and Lychee Mite.

The data can also be exported to an Excel file.

## Reports

A wide range of standard reports allow the user to filter data to monitor, review, and manage eTRAP data collection.

See description of reports offered in [Appendix B: Reports](#).

## Subscription

Users can subscribe to Reports, receiving Reports by email at set prescribed frequencies.

See [Steps to Subscribe](#) for details.

## Book Spines

This function enables printing of book spines for TrapBooks made with 3-ring binders. The spine displays detailed information about the TrapBook: name, trapping grids, survey type, trapper, county, trap types and numbers.

## Mapping

\*\*Requires ideal internet/network connectivity to use.

This function allows access to many mapping components, including view, edit, print maps, edit map layers, create staff assignment maps, create and view emergency program delimitation areas, and view PRP flight paths

Among many options, this function supports a map view of:

- trapping area
- trap placement
- wild flies
- Routine Trapping or Emergency Programs (EP)
- flight paths in PRP release blocks (if applicable)
- buffers set
- daily activities.

### Mapping: Top Row of Tools

#### Adding External Data



Figure 71. Mapping function: Import data

External data may be imported (and exported) for further analysis. (Figure 71)

“Open Shapefile” allows a user to load an .shp file from their computer into the mapping section. Shapefiles can also be added under Tools -> Manage Program Spatial Data on the main top bar.

“Add XY Data” allows a user to load GPS coordinates from an Excel file.

“Add ArcGIS Online” allows a user to log into their ArcGIS Online account from which data can be directly loaded into eTRAP.

#### Printing Functions



Figure 72. Mapping function: Print options

Print functions include: Page Setup, Print Preview and Print tools

**Page Setup** allows the user to select the size, source, orientation, and custom margins of the map to print.

**Print Preview** allows the user to see what the map will look like printed. When printing oversized jobs, such as those printed on a plotter, the label display may vary slightly from this view.

**Print** opens the printer menu.

Select the correct printer first and then choose “Apply”. Then close the window and choose the print icon again as the page setup limits the options available to the printer selected. (Figure 73)

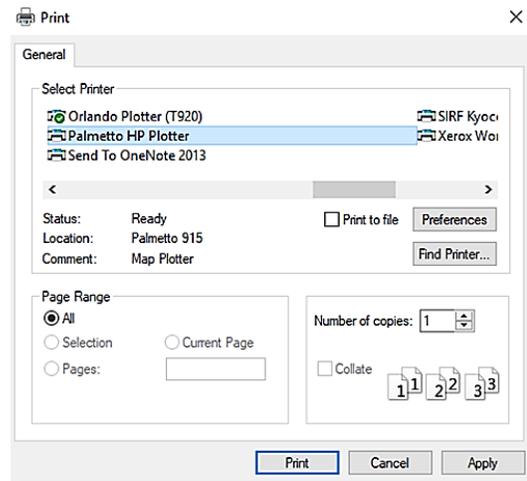


Figure 73. Print menu

## Map Display Navigation



Figure 74. Admin Console Mapping tool ribbon



Figure 75. Map display tools numbered

1. Back: Shows previously used map view(s).
2. Forward: Skips ahead one map view (when applicable).
3. Refresh: Reloads the map view.
4. Select: Click to select a feature.
5. Identify: Pulls up the TrapSite Results or Criteria Results screens when a site is selected.
6. Pan: Moves/drags the map view.
7. Zoom In: Zooms the map view in.
8. Zoom Out: Zooms the map view out.
9. Measure Distance: Allows one to measure the distance between two points.
10. Drop-down menu allowing the user to change the basemap from the default Street map to Aerial, Hybrid, or OSMStreet.

## Mapping: Second Row - Tabs

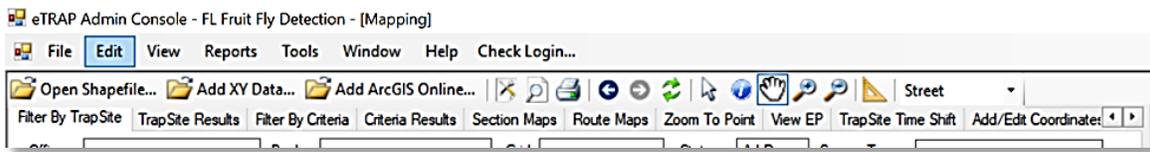


Figure 76. Admin Console > Mapping 2nd Row Tabs

### By TrapSite and TrapSite Results

Select from the “Filter by TrapSite” or “TrapSite Results” tabs and then click “Zoom to Filter Extents” to filter the map display.

Filters can be applied to show TrapSites visited, activity performed within a date range, where a specific activity occurred, type of fly collected, trapper performing the activity, or locate a specific trap or host using “Where a service occurred with:”.

**Filter by Criteria** applies a filter to the map display by specific criteria and goal determining factors, and specifically within an office, county, grid, TrapBook, or staff assignment if needed.

**Criteria Results** shows the criteria data of the traps visualized in tabular form.

**Section Maps** allows a user to generate and print an individual grid map for placement in a physical TrapBook binder by typing the grid number into the box.

**Route Maps** allows a user to print a map showing the grids within a TrapBook and maps can be used in the cover of the physical TrapBook binder. By enabling the checkbox, the office location relative to the book grids is symbolized on the map with a green star icon.

### Identify the grid

To identify the grid, select “Zoom to Point” Task Bar within the “Mapping” button from the Admin Console main menu. Enter the Latitude and Longitude and click “Apply”.

**View EP** allows the user to view details on an emergency program. First, select the emergency program from the drop-down menu. On the sidebar, be sure the “View EP” layer is checked. The grid numbers and corresponding TrapBook names populate on the map.

**TrapSite Time Shift** allows for viewing trap sites by their previous status (active, inactive, retired, and Do Not Use) on a particular date.

**Add/Edit Coordinates** displays TrapSites according to what parameters are set under Filter By TrapSite. Select a record and then click on the map where you wish to place the coordinate.

**Flight Paths** allows a user to view the flight path of each individual Preventive Release Program sterile insect release flight, including the trip from the airport to the PRP release area. The pilot’s path over the release area can be viewed using the zoom tool.

### Create Routine Trapping Program

A routine trapping program is implemented to survey for economically important pests and is based on standard protocols and approved detection guidelines.

To set up trapping for a routine program, go to the “TrapBooks” tab from the Admin Console main menu. (Figure 77)



Figure 77. Admin Console > TrapBooks

Next, select your office, create trap books, and assign them as appropriate. (Figure 78)

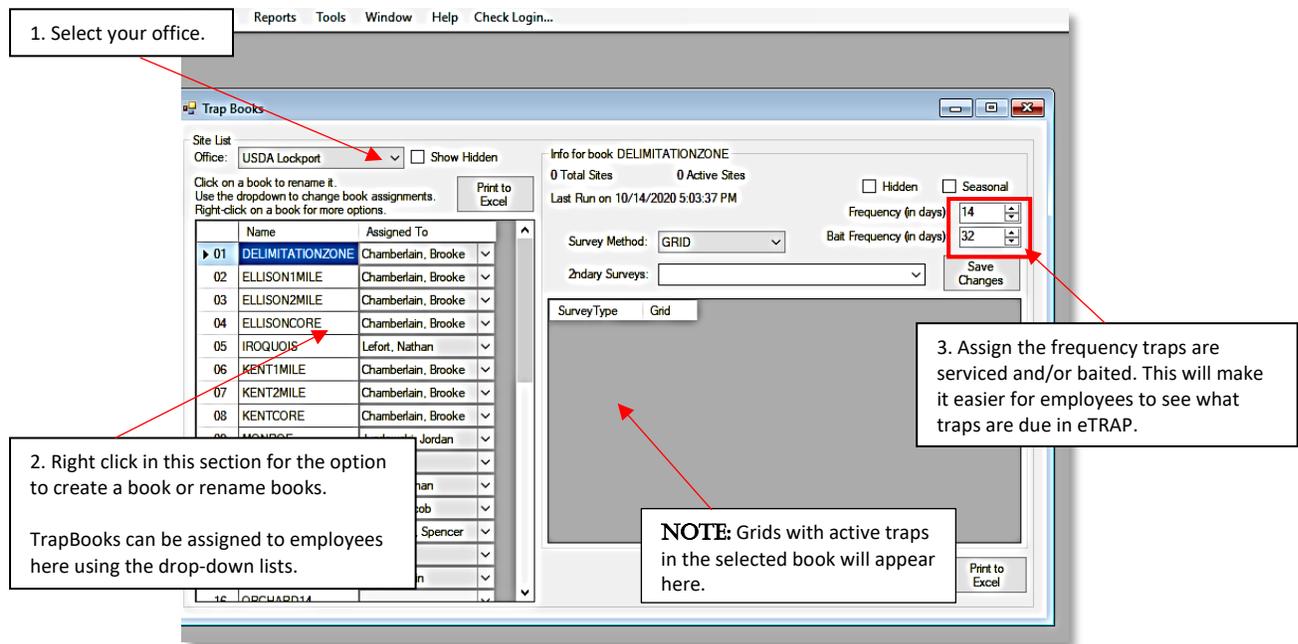


Figure 78. TrapBooks form

## Adding Mapping Elements

To add mapping layers, go to the “Tools” tab on the main Admin Console menu, select “Manage Program Spatial Data...”. (Figure 79)



Figure 79. Manage Program Spatial Data...

The Manage Program Spatial Data form opens, and layers exported from ArcGIS as shapefiles may be uploaded and then added to the map. (Figures 80 and 81)

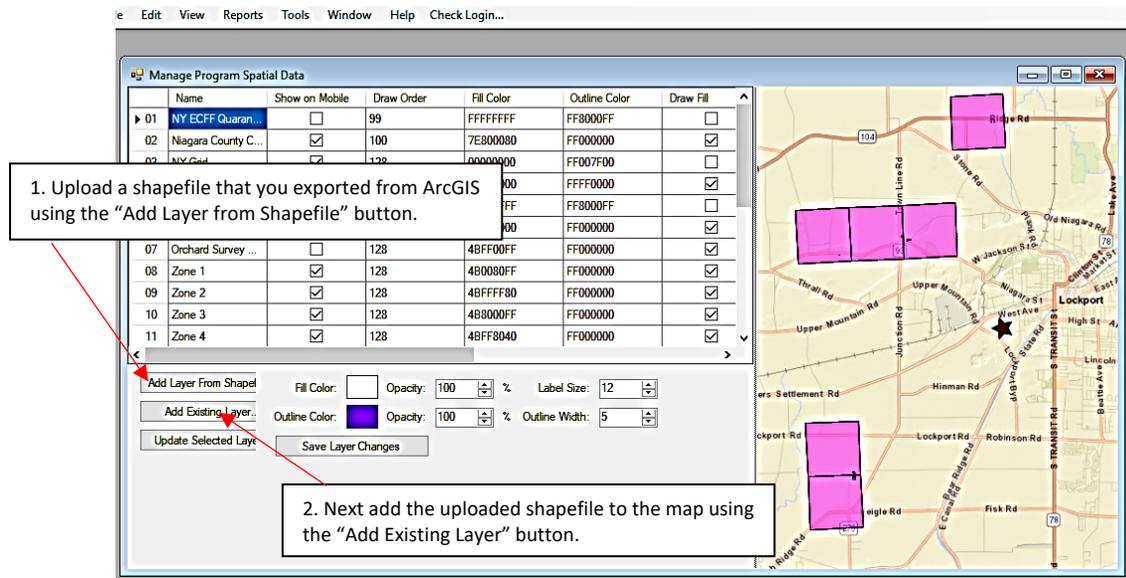


Figure 80. Manage Program Spatial Data form

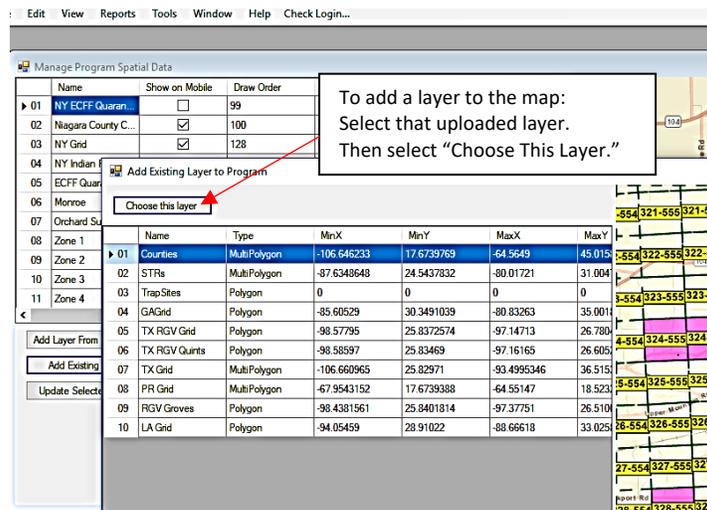


Figure 81. Select; Add to the map view

Visuals can be edited from this screen after all map layers have been added. (Figure 82)

The screenshot shows a software interface for managing spatial data. On the left is a table with columns: Name, Show on Mobile, Draw Order, Fill Color, Outline Color, and Draw Fill. On the right is a map of Lockport, NY, with several pink rectangular overlays. Callout boxes with red arrows point to specific elements: 'Check to show or hide the map layer.' points to the 'Show on Mobile' checkbox for 'Zone 1'; 'Change the layer's opacity.' points to the 'Opacity' dropdown for 'Zone 1'; 'Rename the map layer by selecting the cell and editing the entry.' points to the 'Name' cell for 'Zone 1'; 'Change the layer's color and save the changes.' points to the 'Fill Color' dropdown and the 'Save Layer Changes' button.

Name	Show on Mobile	Draw Order	Fill Color	Outline Color	Draw Fill
01 NY ECFE Quarani...	<input type="checkbox"/>	99	FFFFFF	FF8000FF	<input type="checkbox"/>
02 Niagara County C...	<input checked="" type="checkbox"/>	100	7E800080	FF000000	<input checked="" type="checkbox"/>
03 NY Grid	<input checked="" type="checkbox"/>	128	00000000	FF007F00	<input type="checkbox"/>
04 NY Indian Reser...	<input type="checkbox"/>	128	7BFF0000	FFFF0000	<input checked="" type="checkbox"/>
05 ECFE Quarantine...	<input checked="" type="checkbox"/>	128	7EFFFFFF	FF8000FF	<input type="checkbox"/>
06 Monroe	<input checked="" type="checkbox"/>	128	4BFF0000	FF000000	<input checked="" type="checkbox"/>
07 Orchard Survey ...	<input type="checkbox"/>	128	4BFF00FF	FF000000	<input checked="" type="checkbox"/>
08 Zone 1	<input checked="" type="checkbox"/>	128	4BFF0000	FF000000	<input checked="" type="checkbox"/>
09 Zone 2	<input checked="" type="checkbox"/>	128	4BFF0000	FF000000	<input checked="" type="checkbox"/>
10 Zone 3	<input checked="" type="checkbox"/>	128	4BFF0000	FF000000	<input checked="" type="checkbox"/>
11 Zone 4	<input checked="" type="checkbox"/>	128	4BFF8040	FF000000	<input checked="" type="checkbox"/>

Figure 82. Edit map layer visuals

### Create Emergency Program

Open the eTRAP Admin Console and select “Mapping”.  
(Figure 83)

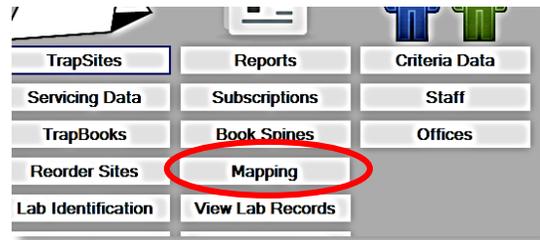


Figure 83. Mapping button on Admin Console main

Next select the “Create EP” tab. (Figure 84)

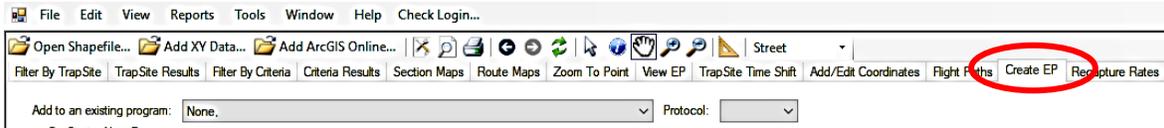


Figure 84. Create EP tab

Complete steps 1-7 below to set up the emergency program. (Figures 85 and 86)

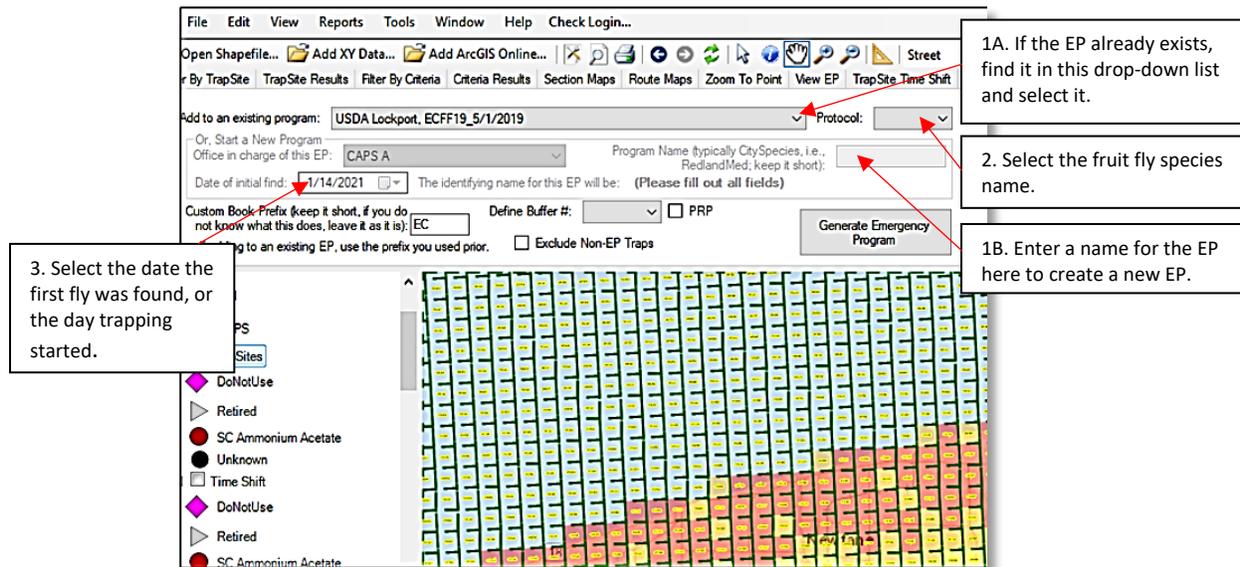


Figure 85. Emergency Program generation form

The screenshot shows a software interface for generating an emergency program. The form includes the following fields and options:

- File Edit View Reports Tools Window Help Check Login...** (Menu bar)
- Open Shapefile... Add XY Data... Add ArcGIS Online...** (Toolbar)
- By TrapSite | TrapSite Results | Filter By Criteria | Criteria Results | Section Maps | Route Maps | Zoom To Point | View EP | TrapSite Time Shift | Add/Edit Coord** (Navigation tabs)
- Add to an existing program:**  **Protocol:**
- Or, Start a New Program**
- Office in charge of this EP:**  **Program Name (typically City/Species - Location):**
- Date of initial find:**  **The identifying name for this EP will be:**
- Custom Book Prefix (keep it short, if you do not know what this does, leave it as it is):**  **Define Buffer #:**   **PRP**
- Exclude Non-EP Traps**  **Generate Emergency Program** (button)

Callout boxes provide the following instructions:

4. Enter the book prefix for the book spine.
5. Define the buffer level from the drop-down list. Then select the grids in the map to include.
6. If the EP area occurs within a Sterile Insect Technique or Preventive Release Program release area, check this box.
7. Once you have the buffer selected correctly, confirm all entries. T and then select "Generate Emergency Program." This process will take a few minutes.

The map area shows a grid of traps with various symbols and colors (purple, red, black, grey) indicating different statuses or types. A legend on the left side of the map includes:

- DoNotUse
- Retired
- SC Ammonium Acetate
- Unknown
- Time Shift
- DoNotUse
- Retired
- SC Ammonium Acetate

Figure 86. Emergency Program generation form (cont.)

### Setting EP Trapping Goals

Criteria and goals can be set after the EP is created. The EP criteria and goal information is viewable in the eTRAP application (mobile and desktop) to guide users in the field.

To modify an EP, select the “Tools” option from the Admin Console ribbon and then “EP Tools” to select the process to modify. (Figure 87)

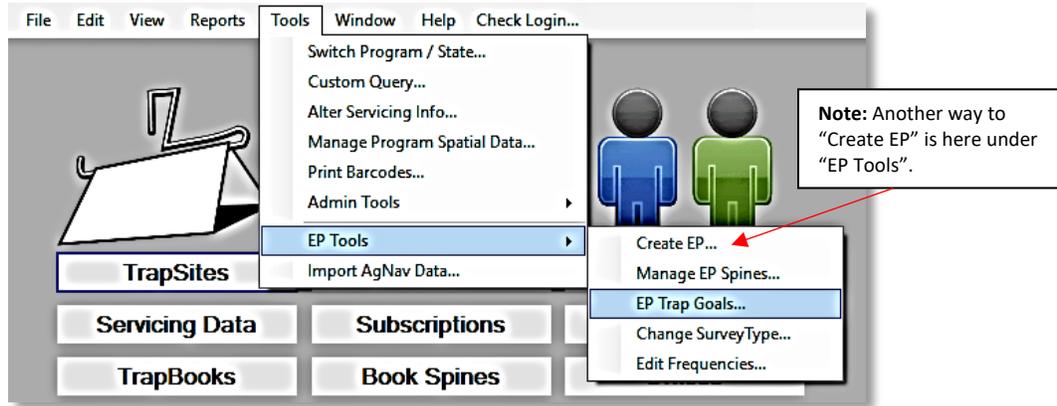


Figure 87. Modify EP

**Select Emergency Program:** Select your EP from the drop-down list. (Figure 88)

**Goal Column:** The trap goal for the grid can be adjusted by selecting the cell and editing the number. (i.e. inaccessible, specific trap type preference, or lower/higher number preference) (Figure 88)

Trap goals are automatically set by eTRAP when the EP is generated. McPhail traps start at 200 and ME, CUE, TML and 2C/3C traps start at 50. (Figure 88)

The screenshot shows the 'Edit Emergency Program Trap Goals' window. The 'Select Emergency Program' dropdown is set to 'DPI Clearwater, GuavaStPete\_12/19/2017'. The table below shows the following data:

	Book	Grid	Trap	Goal	StartCount
001	EP_19-31-17...	19-31-17	McP	25	200
002	EP_19-31-17	19-31-17	ME	25	50
003	EP_18-31-17...	18-31-17	McP	5	200
004	EP_18-31-17	18-31-17	ME	5	50
005	EP_18-31-17	18-31-17	TML	0	50
006	EP_18-31-17	18-31-17	CUE	0	50
007	EP_18-31-17	18-31-17	ML	0	50
008	EP_13-31-16...	13-31-16	McP	5	200
009	EP_13-31-16	13-31-16	ME	5	50
010	EP_13-31-16	13-31-16	TML	0	50
011	EP_13-31-16	13-31-16	CUE	0	50
012	EP_13-31-16	13-31-16	ML	0	50
013	EP_24-31-16...	24-31-16	McP	5	200
014	EP_24-31-16	24-31-16	ME	5	50

Figure 88. Edit EP Trap Goals

## Managing EP Spines

Creating TrapBook spines groups several trapping grids into one TrapBook for a single download. TrapBooks can be managed after the Emergency Program is created. eTRAP automatically creates one TrapBook per square mile grid.

To create or edit books, go to the “Tools” tab on the main Admin Console menu, select “EP Tools”, and then select “Manage EP Spines...”. (Figure 89)

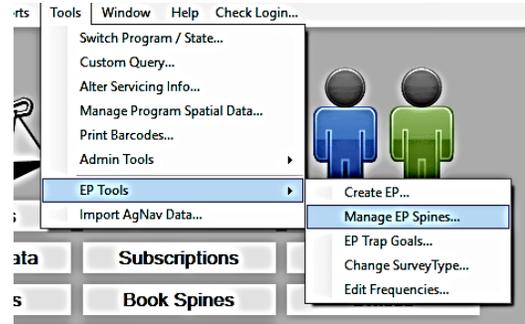


Figure 89. EP Tools > Manage EP Spines

A window opens allowing creation of TrapBook spines. Assign trapping grids and name TrapBooks to when assembling spines. (Figure 90)

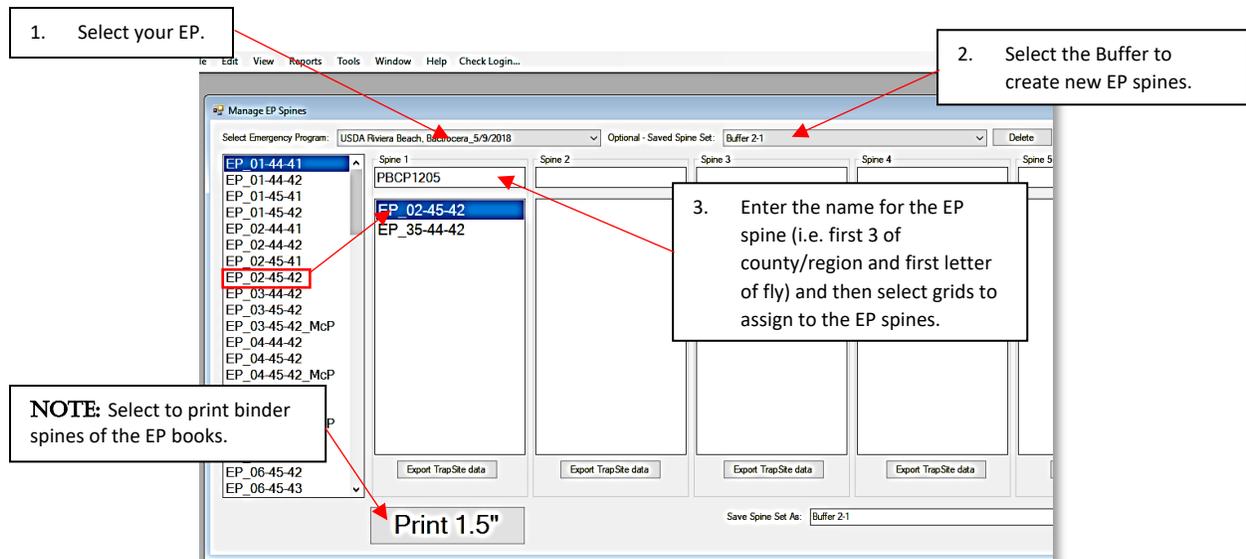


Figure 90. Manage EP Spines form

### Editing EP Trapping Frequency

To update the frequency in which the trappers will bait or service traps, go to the “Tools” tab on the main Admin Console menu, select “EP Tools”, and then “Edit Frequencies...”. (Figure 91)

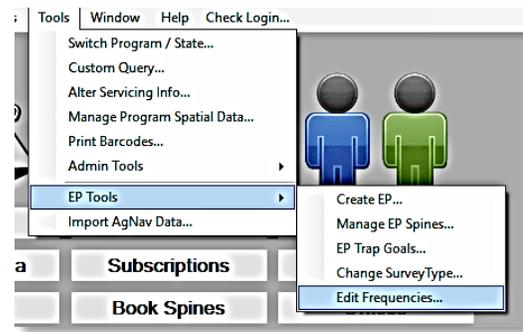


Figure 91. EP Tools > Edit Frequencies

A new window will open. Select your EP from the drop-down list. (Figure 92)

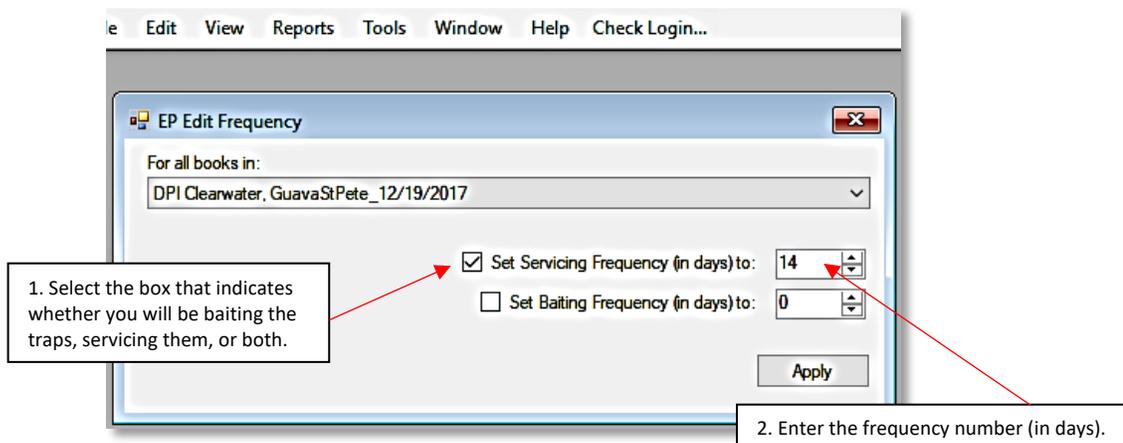


Figure 92. Edit Frequencies form

TrapBook servicing and baiting frequencies can also be adjusted individually via the TrapBooks screen.

### View Lab Records

This function allows for viewing specimens submitted to and confirmed by the Fruit Fly Identification Laboratory. This data is used to document and confirm specimen samples from the field, generate sterile fly release and recovery reports, and to analyze over-flooding ratios for sterile wild flies in Preventive Release Programs.

### QA/QC Records

This feature is currently under development.

## Criteria Data

For initial set up information, see the section on [Risk Criteria](#).

Information entered in the eTRAP Admin Console under Criteria Data and the program auto-generates trap densities accordingly.

Use the top panel to search for criteria data using various filters. (Figure 93)

The screenshot shows the 'Criteria/Staffing Data' application window. The top panel, highlighted with a red border, contains the 'Filter By' section with the following fields: Office (dropdown), County (dropdown), Grid (dropdown), Book (dropdown), Has Books Assigned To (dropdown), Criteria # (dropdown), Has GDFs (dropdown), and a checkbox for 'Traps Shared With Another STR'. An 'Apply Filter' button is located to the right of these fields. Below the filter panel is a large empty table area. At the bottom of the window, there is a 'Selected STR' section with fields for Grid, County (ALACHUA), Trap (CUE), Criteria (0), Office (CAPS A), Trappable (0) %, and Risk Level (Normal). There are also checkboxes for 'Goal Determining Factors' (Water, Pasture, Golf Course, Inaccessible, Industrial Park, Staffing, Want To Trap, Agriculture, Seasonal, Park, Risk Site, Unfinished, Temp Staffing, Safety) and buttons for 'Add New Record', 'Save Record', 'Delete Record', and 'Print to Excel'.

Figure 93. Criteria Data filters

Based upon filters applied, data are displayed in the middle panel. (Figure 94)

The screenshot shows the 'Criteria/Staffing Data' application window with the results table displayed. The table has the following columns: County, Grid, Trap, Criteria, Risk Level, Trappable %, Goal, In Field, Deficit, Surplus, Traps Shared, Staffing, and Want T. The table contains 12 rows of data for MIAMI-DADE county. The filter panel at the top shows Office: USDA Miami, County: MIAMI-DADE, Trap: CUE, Criteria: 3, and Risk Level: High. The 'Selected STR' section shows Grid: 01-55-38, County: MIAMI-DADE, Trap: CUE, Criteria: 3, Office: USDA Miami, Trappable: 20 %, and Risk Level: High. The 'Books belonging to this STR' field contains 'DAD035'. Buttons for 'Add New Record', 'Save Record', 'Delete Record', and 'Print to Excel' are visible at the bottom.

	County	Grid	Trap	Criteria	Risk Level	Trappable %	Goal	In Field	Deficit	Surplus	Traps Shared	Staffing	Want T
▶ 001	MIAMI-DADE	01-55-38	CUE	3	High	20	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
002	MIAMI-DADE	01-55-38	ME	3	High	20	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
003	MIAMI-DADE	01-55-38	ML	3	High	20	0	1	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
004	MIAMI-DADE	01-55-38	TML	3	High	20	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
005	MIAMI-DADE	01-55-39	CUE	2	High	100	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
006	MIAMI-DADE	01-55-39	ME	2	High	100	3	3	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
007	MIAMI-DADE	01-55-39	ML	2	High	100	2	2	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
008	MIAMI-DADE	01-55-39	TML	2	High	100	10	10	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
009	MIAMI-DADE	01-56-38	CUE	2	High	50	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
010	MIAMI-DADE	01-56-38	ME	2	High	50	2	3	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
011	MIAMI-DADE	01-56-38	ML	2	High	50	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
012	MIAMI-DADE	01-56-38	TML	2	High	50	5	3	2	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Figure 94. Criteria filter results displayed

Criteria are entered for each trap within the section so that goals can be determined for each trap type. (Figure 95)

Criteria, risk level, % trap-ability, and goal determining factors should be the same for each trap within the trapping grid (section).

Criteria/Staffing Data

Filter By

Office:  County:  Grid:

Book:  Has Books Assigned To:

Criteria #:  Has GDFs:   Traps Shared With Another STR

	County	Grid	Trap	Criteria	Risk Level	Trappable %	Goal	In Field	Deficit	Surplus	Traps Shared	Staffing	Want T
▶ 001	MIAMI-DADE	01-55-38	CUE	3	High	20	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
002	MIAMI-DADE	01-55-38	ME	3	High	20	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
003	MIAMI-DADE	01-55-38	ML	3	High	20	0	1	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
004	MIAMI-DADE	01-55-38	TML	3	High	20	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
005	MIAMI-DADE	01-55-39	CUE	2	High	100	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
006	MIAMI-DADE	01-55-39	ME	2	High	100	3	3	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
007	MIAMI-DADE	01-55-39	ML	2	High	100	2	2	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
008	MIAMI-DADE	01-55-39	TML	2	High	100	10	10	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
009	MIAMI-DADE	01-56-38	CUE	2	High	50	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
010	MIAMI-DADE	01-56-38	ME	2	High	50	2	3	0	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
011	MIAMI-DADE	01-56-38	ML	2	High	50	1	1	0	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
◀ 012	MIAMI-DADE	01-56-38	TML	2	High	50	5	3	2	0	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Selected STR

Grid:  County:  Trap:  Criteria:

Office:  Trappable:  % Risk Level:

Goal Determining Factors

Water  Pasture  Golf Course  Inaccessible  Industrial Park

Staffing  Want To Trap  Agriculture  Seasonal  Park

Risk Site  Unfinished  Temp Staffing  Safety

Traps Relo'd With:

Goal Adjustment:  Goal:

Books belonging to this STR:

Figure 95. Criteria risk factors

Trap goals, traps in field, deficits and surplus are displayed by trap type. (Figure 96)

The screenshot shows the 'Criteria/Staffing Data' application window. At the top, there are filter options for Office (USDA Miami), County, Grid, Book, Has Books Assigned To, Criteria #, Has GDFs, and a checkbox for 'Traps Shared With Another STR'. Below the filters is a table with columns: County, Grid, Trap, Criteria, Risk Level, Trappable %, Goal, In Field, Deficit, Surplus, Traps Shared, Staffing, and Want T. A red box highlights the columns for Goal, In Field, Deficit, and Surplus. Below the table, there are sections for 'Selected STR' (Grid: 01-55-38, County: MIAMI-DADE, Trap: CUE, Criteria: 3), 'Goal Determining Factors' (checkboxes for Water, Pasture, Golf Course, Inaccessible, Industrial Park, Staffing, Want To Trap, Agriculture, Seasonal, Park, Risk Site, Unfinished, Temp Staffing, Safety), 'Traps Relo'd With', 'Goal Adjustment' (0), 'Goal' (1), and 'Books belonging to this STR' (DAD035). Buttons for 'Add New Record', 'Save Record', 'Delete Record', and 'Print to Excel' are at the bottom right.

Figure 96. Criteria Risk - Trap information displayed

Hover over each goal determining factor for a description. (Figure 97)

This screenshot is identical to Figure 96, but with a red box highlighting the 'Goal Determining Factors' section. The factors listed are: Water, Pasture (checked), Golf Course, Inaccessible, Industrial Park, Staffing, Want To Trap, Agriculture, Seasonal, Park, Risk Site, Unfinished, Temp Staffing, and Safety.

Figure 97. Criteria Risk - Goal Determining Factors

Goal adjustment serves to set the trap goal in sections designated "Risk Assessed". (Figure 98)

The screenshot displays the 'Criteria/Staffing Data' application. At the top, there is a 'Filter By' section with dropdowns for Office (USDA Miami), County, Grid, Book, Has Books Assigned To, Criteria #, and Has GDFs, along with an 'Apply Filter' button. Below this is a table with 13 columns: County, Grid, Trap, Criteria, Risk Level, Trappable %, Goal, In Field, Deficit, Surplus, Traps Shared, Staffing, and Want T. The table contains 12 rows of data for various traps in MIAMI-DADE county. Below the table is a 'Selected STR' section with dropdowns for Grid (01-55-38), County (MIAMI-DADE), Trap (CUE), and Criteria (3), along with fields for Office (USDA Miami), Trappable (20%), and Risk Level (High). There is also a 'Goal Determining Factors' section with checkboxes for Water, Pasture, Golf Course, Inaccessible, Industrial Park, Staffing, Want To Trap, Agriculture, Seasonal, Park, Risk Site, Unfinished, Temp Staffing, and Safety. A red box highlights the 'Traps Relo'd With' section, which includes a 'Goal Adjustment' field set to 0, a 'Goal' field set to 1, a list of books with 'DAD035' selected, and buttons for 'Add New Record', 'Save Record', 'Delete Record', and 'Print to Excel'.

Figure 98. Criteria Risk - "Risk Assessed"

### Staff

This function is helpful to activate new employees and assign roles, manage existing employees, and move TDY employees from one office to another.

### Offices

This function allows set up and editing of office information.

## Ribbon Menu

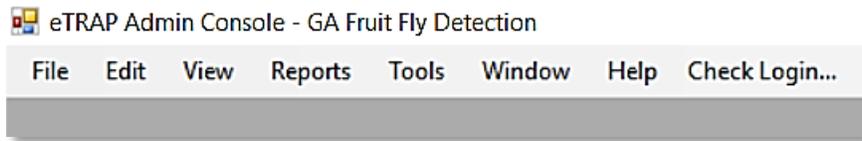


Figure 99. eTRAP Admin Console Ribbon

### View tab

All menu items correspond to main screen buttons, except for the following:

*TrapBook Return Logs* - Used to review which books are checked out and have been returned.

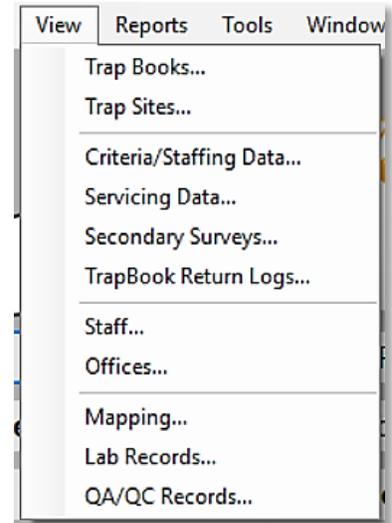


Figure 100. eTRAP Admin Console View tab drop-down

### Reports tab

*Generate Reports* – Corresponds to the Reports Macro Tab

*Manage Subscriptions* - Corresponds to the Subscriptions Macro Tab

*Print Book Spines* – Corresponds to Book Spines Tab

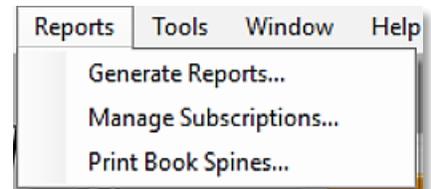


Figure 101. eTRAP Admin Console Reports tab drop-down

## Tools tab

*Switch Program /State* – This submenu is important to ensure that you are working with data from the correct program office and state. You can switch from state to state and programs within those states if the user has been granted access to states and offices.

*Custom Query* – This menu allows those with custom SQL queries to generate custom reports.

*Alter Servicing Info* – This function allows the user to filter "Servicing Data" records requiring edits.

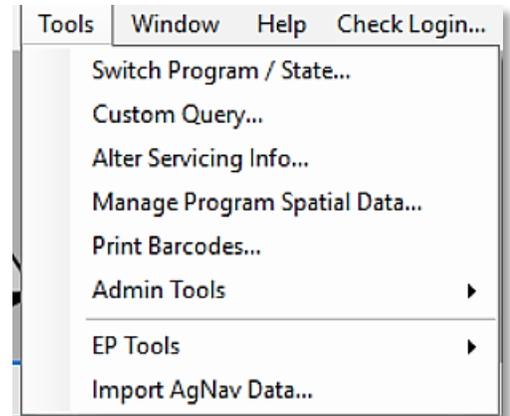


Figure 102. eTRAP Admin Console Tools tab drop-down

*Manage Program Spatial Data* – Shapefiles can be uploaded using this application. Shapefiles can be used to identify production areas or other points of interest in trapping grids.

*Print Barcodes* – This menu function generates barcodes for samples submitted for identification. On an emergency program, barcode color can be modified to distinguish specimen submissions caught in traps that fall within the program delimitation area from those that come from routine trapping.

For step by step instruction on scanning barcode data into eTRAP, see [Appendix C: Record a Barcode](#)

To print a barcode, select the "Type" from the drop-down menu to specify which adhesive label type used or which style of vial slip used for wet traps and print. (Figures 103 and 104)

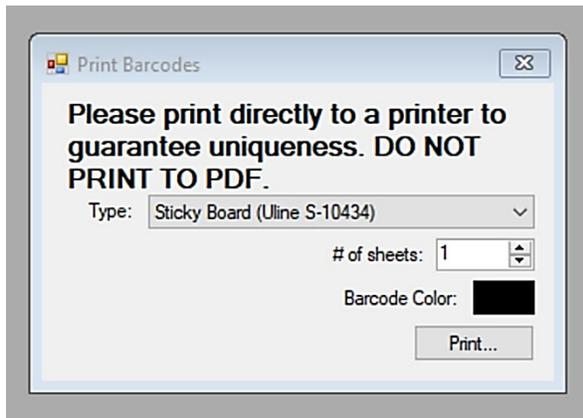


Figure 103. Barcode type: Sticky Board (Uline S-

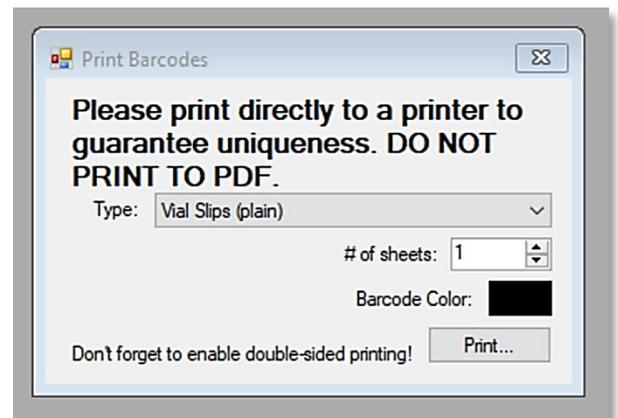


Figure 104. Barcode type: Vial Slips (plain)

To print double-sided vial slips: After clicking "Print...", go into printer properties and ensure 2-sided printing is enabled. Use 65# or higher cardstock to ensure that any pencil-written information on the slips is visible even when submerged in isopropyl alcohol within the vial.

## Admin Tools tab

**\*\*Only available for those with the Admin user role.**

*Edit Program Defaults* – This feature produces a menu allowing changes to the program defaults. (Figure 105)

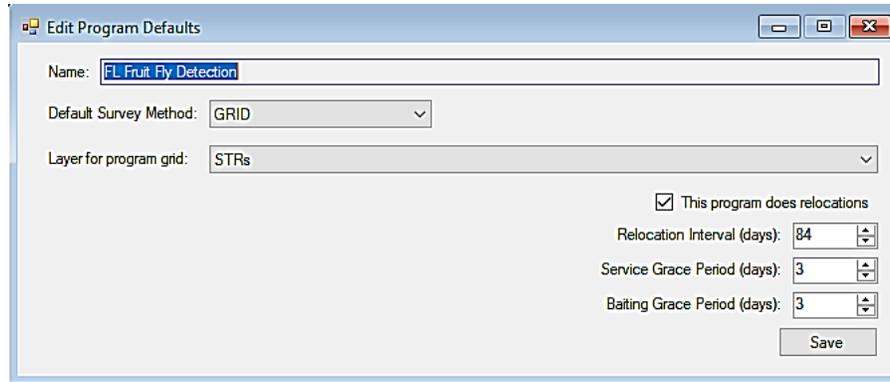


Figure 105. *Edit Program Defaults* menu

*Add Cities* – This feature allows addition of cities to a county. These additions are viewed by anyone working in that county across all programs.

*View Errors* – Certain types of Admin Console errors are logged here.

*View Login Log...* - Produces a report of all user logins.

*Checked out Books* – Produces a report of all books checked out in the country.

*Merge Books* – Allows the merging of one book into another book.

*Upload Binary File* – Function used by internal eTRAP developer team only.

*Send Mail to All Active Users* – This feature allows an email to be sent to all active eTRAP users.

## **EP Tools tab** (Emergency Program (EP) Tools)

**\*\*Only available for those with the Admin user role.**

\*\*For more details on Emergency Program set up, see the eTRAP Setup Guide > [Emergency Programs](#) section.

*Create EP* – Used to generate Emergency Delimitation Program using species-specific action plans or response guidelines.

*Manage EP Spines* – Creates TrapBook spines for Emergency Programs.

*EP Trap Goals* – This function allows adjustments on existing EP Trap Goals.

*Change Survey Type* – This function allows survey types (routine, PRP or EP) to be changed. This change can be applied to a TrapBook, Program or grid.

*EP Edit Frequency* – This function is used to change the trap servicing and baiting frequency per TrapBook for TrapBooks in an Emergency Program.

*Import AgNav Data* – Import of aircraft flight data for Sterile Insect Release (SIT) and/or other aerial treatment applications. This imported data can then be viewed in the Mapping function.

## **Window tab**

It serves the same purpose as in most common Windows applications.

## **Check Login tab**

Click on this menu to log back into the system after your session is timed out.

## Getting Help

### By State

This should be the starting point for all training, support issues, bugs, or requests for enhancements to eTRAP. Only after conference with your state eTRAP point of contact should a ticket be opened with MRP IT or a request made to the Control Change Board.

#### **FLORIDA**

Fox, Abbie J – APHIS, Director, Fruit Fly Exclusion and Detection (FFED) Program, Palmetto  
Keene, Georgia R – APHIS, Plant Health Safeguarding Specialist, Fruit Fly Exclusion and Detection (FFED)

#### **LOUISIANA**

Williams, Kevin M – APHIS, Pest Survey Specialist, Baton Rouge

#### **NEW YORK**

Chamberlain, Brooke – APHIS, Plant Health Safeguarding Specialist, European Cherry Fruit Fly Program

#### **PUERTO RICO**

Colon-Cartagena, Ginna – APHIS, Supervisory PPQ Officer, Ponce, Puerto Rico  
Diaz, Hector E – APHIS, PPQ Technician, Carolina Work Unit  
Rodriguez Ruiz, Marcos – APHIS, PPQ Tech, Carolina Work Unit  
Roldan, Daniel R – APHIS, Plant Protection Technician, Aguada Office, Plant Pest Survey

#### **TEXAS**

Dominguez, Leticia R, Plant Protection Technician  
Garcia, Erik S – APHIS, Cartographic Technician, Edinburg, TX  
Guerra, Ruben R – APHIS, Texas Assistant State Plant Health Director, Austin, TX  
Salinas, Eduardo J – APHIS, Plant Health Safeguarding Specialist, Laredo TX Work Unit  
Saenz, Velma – Export Certification Specialist, McAllen, TX Work Unit  
Stuart, Noah A – APHIS, Data Analyst, Austin SPHD Office

#### *Reporting an issue or requesting an enhancement*

If an issue or “bug” is found while using eTRAP, this should be reported up to collaborate with the SME group listed above. If no solution is found, the eTRAP SME group will submit the issue to Wendolyn Beltz, eTRAP Change Control Board Lead and April Crosland, Branch Chief (PPQ/IT Liaison). The same process is followed for enhancement requests.

#### *eTRAP Control Change Board (CCB)*

An eTRAP Control Change Board was formed in July 2020 to establish workflows for the growing use and varied configuration of the eTRAP application. An issue or “bug” should be reported and solved through the MRP IT ticketing process. Changes or enhancements to the eTRAP application are submitted to the CCB for approval before enlisting the applications developer group for support.

# Appendices

## Appendix A: Address Data Entry Standards

Standardized address guidelines are intended to direct consistent, searchable, and useful address entries into the eTRAP database.

### Intersections

Use the direction abbreviation + “C/O” (corner of) + street name + ampersand (&) + street name.

*Correct:* NE C/O 16TH ST W & CORTEZ RD

*Incorrect:* 16TH ST W @ CORTEZ RD

### Special Characters

The following special characters should ***not*** be used in the address field.

~ ` ! @ \$ % ^ \* \_ + = { } [ ] \ , < > . : ; “ ’

### Number Suffixes

Use ST, ND, RD, and TH as ordinal suffixes after street numbers.

*Correct:* 403 23RD AVE W

*Incorrect:* 403 23 AVE W

### Street Direction

Unless displayed otherwise on posted street signs, the direction abbreviation should be included after street abbreviation.

*Correct:* 915 10TH ST E

*Incorrect:* 915 E 10TH ST

### Street Numbers

Use numeral and suffix, instead of spelling out the number.

*Correct:* 2341 5TH ST

*Incorrect:* 2341 FIFTH ST

### Place Names

The place name can be included in parenthesis for clarification after an address.

*Correct:* 505 10TH ST E (WALMART)

*Incorrect:* WALMART

### Mobile Home Parks (MHP)

Use pound symbol (#) instead of the word “lot”. For trailer addresses, the park name can be included in parenthesis. Use abbreviation “MHP” for Mobile Home Park.

*Correct:* JOURNEY MHP #5 or 812 ADAMS LN (COLONIAL MHP)

*Incorrect:* LOT #5 JOURNEY MHP

### Street Type Abbreviations

Use these standard abbreviations to abbreviate street types (i.e. Road, Street, Boulevard, etc.).

Note these abbreviations should ***not*** be used for street names, only for street types. See **Table 1** below.

*Correct:* 819 CAUSEWAY BLVD

*Incorrect:* 819 CSWY BLVD (street names should be spelled out)

Street Type	Abbreviation
Alley	ALY
Avenue	AVE
Boulevard	BLVD
Causeway	CSWY
Center	CTR
Circle	CIR
Court	CT
Cove	COVE
Crossing	XING
Drive	DR
Expressway	EXPY
Extension	EXT
Heights	HTS
Highway	HWY
Landing	LNDG
Lane	LN
Loop	LOOP
Parkway	PKWY
Pike	PIKE
Place	PL
Plaza	PLZ
Point	PT
Road	RD
Run	RUN
Square	SQ
State Road	SR
Street	ST
Terrace	TER
Trace	TRCE
Trail	TRL
Turnpike	TPKE
Way	WAY

**Table 2.** *Street Type Abbreviations*

### Street Directional Abbreviations

Use these standard abbreviations to abbreviate the street direction (North, South, etc.). Note these abbreviations should **not** be used for street names, only for street direction. See **Table 2** below.

*Correct:* 170 SOUTH BLVD or 455 EDISON AVE S

*Incorrect:* 170 S BLVD (street names should be spelled out)

Direction	Abbreviation
East	E
North	N
South	S
West	W

*Table 3. Street Direction Abbreviations*

### Building Type Abbreviations

Use these standard abbreviations to abbreviate the location type.

Building Type	Abbreviation
Apartment	APT
Building	BLDG
Park	PARK
Suite	STE

*Table 4. Building Type Abbreviations*

## Appendix B: Reports

Report Title	Available to...	Description
Active Sites on Date	Supervisor Only	Shows what sites were active/inactive on a particular date in the past.
Active TrapBooks	Supervisor Only	Displays the Trap Books assigned to each trapper and total traps and sites for the book.
EP Servicing Report	Supervisor Only	Shows servicing report for the specified Emergency Program, grouped by TrapBook.
EP Unserviced Sites	Supervisor Only	Shows sites that were not serviced in the given date range.
Found Traps	Supervisor Only	Displays trap(s) previously reported as missing/replaced or skipped that were located upon return to the site(s).
Helicoverpa NAPIS	Supervisor Only	Generates NAPIS spreadsheets for Helicoverpa Armigera.
Host Information	Supervisor Only	Displays host information from traps, tallied by type of host.
Lab Identifications	Supervisor Only	Shows lab identifications grouped by Survey Type and Trap Type.
Lab Mismatches	Supervisor Only	Shows instances where the lab has not received a specimen that was entered in eTRAP, services with specimen whose field and lab identifications differ, lab identifications without a corresponding service, and lab identifications with low dye (marked sterile flies).
Monthly Report	Supervisor Only	Shows the number of traps of each type in the field, number serviced and relocated, and relocation percentages for the specified date range.
Relocation Time Gaps	Supervisor Only	Shows the time gaps between relocations.
Secondary Activities	Supervisor Only	Breakdown of Secondary Survey observations/collections by County and Office.
Servicing Report By Office	Supervisor Only	Shows servicing report for the specified office, grouped by Office, Book, Staff, County, and Survey Type.
Servicing Time Gaps	Supervisor Only	Shows the time gaps between servicings.
Sites with Missing Address	Supervisor Only	Shows new site locations that haven't had their addresses entered yet.
Skipped Traps	Supervisor Only	Displays traps marked "SK" or "M/R" in eTRAP.
Staff Service Detail	Supervisor Only	Shows the number of each trap type serviced, the total number of relocations and placements, and the number of sites visited.
Staff Structure	Supervisor Only	Shows the staff structure within work units.
Staff Workload	Supervisor Only	Displays the number of sites and traps assigned to each trapper.

<b>Report Title</b>	<b>Available to...</b>	<b>Description</b>
TrapBook Due Status	Supervisor Only	Lists TrapBooks and their next due dates.
TrapBook Statistics	Supervisor Only	Simple listing of TrapBook statistics.
TrapBook Totals	Supervisor Only	Simple listing of TrapBook totals.
Trapping Statistics	Supervisor Only	Displays total site visits, total relocations, and total fly submittals for the specified timeframe.
Triple Skipped	Supervisor Only	Shows traps that have been skipped 3 or more times in a row.
Wild Fly	Supervisor Only	Used for reporting wild flies entered in the Access database in Texas.
Baitings Overdue	Trapper and Supervisor	Displays traps that are overdue for baiting.
Criteria Report	Trapper and Supervisor	Shows risk criteria and trap density goal determining factors in the selected field office(s).
Criteria Report (Flat)	Trapper and Supervisor	A flat, table version of the Criteria Report for data processing needs.
Do Not Use Sites	Trapper and Supervisor	Lists sites that should not be used.
Fly Submissions	Trapper and Supervisor	Displays all flies submitted within a date range.
New Sites	Trapper and Supervisor	Shows the number of new sites (R/L to New, or completely new) created.
Print Book Spines	Trapper and Supervisor	Generates TrapBook spine documents, with parameters to select width.
Relocations Overdue	Trapper and Supervisor	Shows active sites that are overdue for their relocation, following the typical 12-week schedule.
Servicing Report By Staff	Trapper and Supervisor	Shows servicing report for the specified office, grouped by Office, Staff, SurveyType, and County. (Will only show employees assigned to the respective office.)
Servicings Overdue	Trapper and Supervisor	Shows active sites that are overdue for servicing, following the office survey schedules.
Sites Needing GAS	Trapper and Supervisor	Shows sites that are lacking a Giant African Snail survey.
Sites Needing GPS	Trapper and Supervisor	Shows sites that are lacking GPS coordinates.
Sites Without Host Tree Specified	Trapper and Supervisor	Shows Active and Inactive sites with traps at UNK/??? host trees.
Trapline Detail	Trapper and Supervisor	Displays information about a particular Trap Book.
Unassigned Servicing Report	Trapper and Supervisor	Shows servicings performed by trappers on books that are not assigned to them.
Weekly Report	Trapper and Supervisor	Weekly report that trappers receive by e-mail.

## Appendix C: Record a Barcode

If barcodes are attributed to specimen submissions in the field, the lab can match this recorded barcode to identify the specimen received.

When the specimen is processed in the lab using a reader, the bar or QR code scan will confirm that code in the Admin Console and all trap information is auto populated.

### Scan a barcode/QR code in the field:

*Note:* A QR code may be scanned within this “Add Barcode” feature.

1. Log into eTRAP as usual and check out your book.

When you find a specimen, enter it in eTRAP as usual under “Perform Activities.”

Select the action performed on the trap and then **tap the 0** under “Spec #.”

(Figure C1)

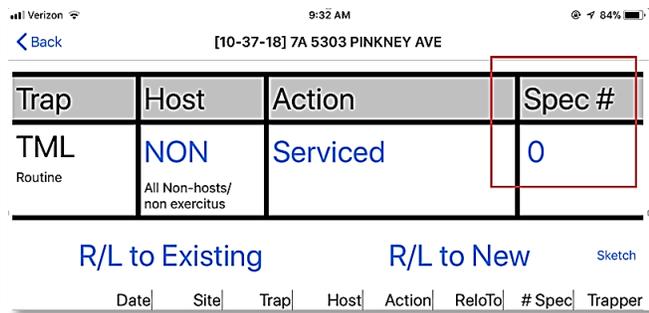


Figure C1. Perform Activities > Spec # > '0'

2. After selecting the specimen type and quantity, under the specimen selection rows, tap “Add Barcode”. (Figure C2)

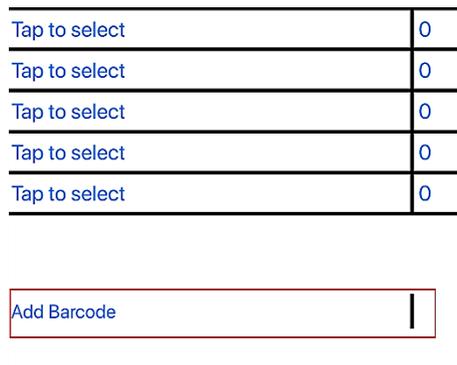


Figure C2. "Add Barcode"

On the first attempt to scan a barcode or QR code eTRAP will prompt you to give it camera access. (Figure C3) Tap “OK.”

In subsequent uses, tapping “Add Barcode” will launch the camera automatically.

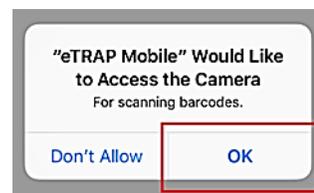


Figure C3. Access Camera

3. The camera scans very quickly. The barcode, once captured, will show as associated with that trap after the book is returned. (Figure C4)

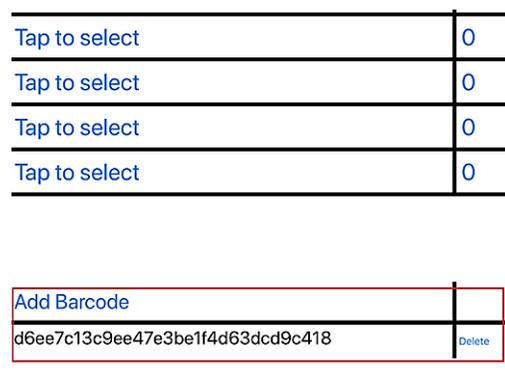


Figure C4. Barcode Collected

## Appendix D: eTRAP Host List

(Varies by state in use)

eTRAP ID	Common Name	Scientific Name
???	Not Set	Not Set
AKE	akee	<i>Blighia sapida</i>
ALM	Almond (husk)	<i>Prunus dulcis</i>
APP	apple	<i>Malus domestica</i>
APR	apricot	<i>Prunus sp.</i>
ARG	Argan tree	<i>Argania spinosa</i>
ART	breadfruit	<i>Artocarpus altilis</i>
AVA	avocado	<i>Persea americana</i>
BAP	balsam apple	<i>Momordica balsamina</i>
BAR	barbados cherry	<i>Malpighia emarginata</i>
BCH	grumichama; brazilian cherry	<i>Eugenia brasiliensis</i>
BIG	balsam pear; bitter gourd	<i>Momordica charantia</i>
BLO	Black olive	<i>Bucida buceras</i>
BOR	bourbon orange	<i>Ochrosia elliptica</i>
BRB	Barberry	<i>Berberis spp.</i>
BSP	black sapote	<i>Diospyros digyna</i>
BTL	beauty leaf	<i>Calophyllum inophyllum</i>
CAI	caimito; star apple	<i>Chrysophyllum cainito</i>
CAL	calamondin	<i>Citrofortunella mitis</i>
CAN	canistel; egg fruit	<i>Pouteria campechiana</i>
CAR	carambola; starfruit	<i>Averrhoa carambola</i>
CAS	cashew apple	<i>Anacardium occidentale</i>
CAT	cattley guava	<i>Psidium cattleianum</i>
CCP	Coccolplum	<i>Chrysobalanus icaco</i>
CHM	cherimoya	<i>Annona cherimola</i>
CHN	Chanar	<i>Geoffroea decorticans</i>
CHY	Cherry (sweet & sour)	<i>Prunus avium</i>
CIT	citron	<i>Citrus medica</i>
CLG	ceylon gooseberry	<i>Dovyalis hebecarpa</i>
COF	coffee	<i>Coffea arabica</i>
COR	Coralberry	<i>Symphoricarpos orbiculatus</i>
CSP	Citrus (unknown)	<i>Citrus spp.</i>
CUC	cucumber	<i>Cucumis sativus</i>
CUS	custard apple	<i>Annona reticulata</i>
DAT	Date	<i>Phoenix dactylifera</i>
DOG	Common dogwood	<i>Cornus sanguinea</i>
DWP	Dwarf papaya	<i>Carica quercifolia</i>

eTRAP ID	Common Name	Scientific Name
FIG	fig	<i>Ficus carica</i>
GFT	grapefruit	<i>Citrus x paradisi</i>
GRK	gourka	<i>Garcinia xanthochymus</i>
GRP	grape	<i>Vitis spp</i>
GVA	guava	<i>Psidium guajava</i>
HAW	hawthorne	<i>Crataegus spp</i>
HGP	hog plum	<i>Spondias mombin</i>
HOS	Other Host	Hostia alia
JAB	jaboticaba	<i>Myrciaria cauliflora</i>
JAC	jackfruit	<i>Artocarpus heterophyllus</i>
JAP	Japanese plum	<i>Prunus salicina</i>
JAV	java plum	<i>Syzygium cumini</i>
JOC	jocote	<i>Spondias purpurea</i>
JPM	Japanese persimmon	<i>Diospyros kaki</i>
KAP	kaffir plum	<i>Harpephyllum caffrum</i>
KFL	kaffir lime	<i>Citrus hystrix</i>
KIA	kei apple	<i>Dovyalis caffra</i>
KLM	key lime; mexican lime	<i>Citrus aurantiifolia</i>
KMQ	kumquat	<i>Fortunella japonica</i>
KWI	kiwi	<i>Actinidia chinensis</i>
LBE	Bell's honeysuckle	<i>Lonicera x bella</i>
LCA	fly honeysuckle	<i>Lonicera canadensis</i>
LCP	Italian woodbine	<i>Lonicera caprifolium</i>
LDI	limber honeysuckle	<i>Lonicera dioica</i>
LFR	fragrant honeysuckle	<i>Lonicera fragrantissima</i>
LHI	hairy honeysuckle	<i>Lonicera hirsuta</i>
LIN	twinberry honeysuckle	<i>Lonicera involucrata</i>
LIT	litchi (lychi)	<i>Litchi chinensis</i>
LJA	Japanese honeysuckle	<i>Lonicera japonica</i>
LMA	Amur honeysuckle	<i>Lonicera maackii</i>
LMN	lemon	<i>Citrus limon</i>
LMO	Morrow's honeysuckle	<i>Lonicera morrowii</i>
LOB	swamp fly honeysuckle	<i>Lonicera oblongifolia</i>
LOG	longan	<i>Dimocarpus longan</i>
LOQ	loquat	<i>Eriobotrya japonica</i>
LRE	grape honeysuckle	<i>Lonicera reticulata</i>
LSE	coral honeysuckle	<i>Lonicera sempervirens</i>
LST	Standish's honeysuckle	<i>Lonicera standishii</i>
LTA	sweet Lime	<i>Citrus limetta</i>
LTA (NY)	Tatarian honeysuckle	<i>Lonicera tatarica</i>

eTRAP ID	Common Name	Scientific Name
LVI	mountain fly honeysuckle	<i>Lonicera villosa</i>
LXY	European fly honeysuckle	<i>Lonicera xylosteum</i>
MAG	mangosteen	<i>Garcinia mangostana</i>
MAM	mamey sapote	<i>Pouteria sapota</i>
MAN	mango	<i>Mangifera indica</i>
MAP	mountain apple	<i>Syzygium malaccense</i>
MAR	Santa Maria	<i>Calophyllum antillanum</i>
MAY	mamey, mammee apple	<i>Mammea americana</i>
MUL	white mulberry	<i>Morus spp.</i>
MYR	myrobalan	<i>Terminalia chebula</i>
NAP	natal plum	<i>Carissa macrocarpa</i>
NEC	nectarine	<i>Prunus persica</i>
NON	All Non-hosts	non exercitus
OLV	olive	<i>Olea europaea</i>
ORJ	orange jasmine	<i>Murraya paniculata</i>
PAS	passion fruit	<i>Passiflora spp</i>
PAV	sweet cherry	<i>Prunus avium</i>
PAY	papaya	<i>Carica papaya</i>
PCE	sour cherry	<i>Prunus cerasus</i>
PCH	peach	<i>Prunus persica</i>
PEP	bell pepper	<i>Capsicum annum</i>
PER	pear	<i>Pyrus communis</i>
PGU	pineapple guava; feijoa	<i>Acca sellowiana</i>
PLM	plum	<i>Prunus sp.</i>
POA	pond apple	<i>Annona glabra</i>
POM	pomegranate	<i>Punica granatum</i>
PRL	persian lime	<i>Citrus latifolia</i>
PSM	persimmon	<i>Diospyros kaki/virginiana</i>
PUM	pummelo	<i>Citrus grandis</i>
RAM	rambutan	<i>Nephelium lappaceum</i>
RAP	rose apple	<i>Syzygium jambos</i>
SAP	sapodilla	<i>Manilkara zapota</i>
SAS	Satsuma	<i>Citrus unshiu</i>
SAT	satinleaf	<i>Chrysophyllum oliviforme</i>
SCH	surinam cherry	<i>Eugenia uniflora</i>
SEA	seagrape	<i>Coccoloba uvifera</i>
SGA	sugar apple	<i>Annona squamosa</i>
SNO	Snowberry	<i>Symphoricarpos albus L.</i>
SOR	sour orange	<i>Citrus aurantium</i>
SOS	soursop	<i>Annona muricata</i>

eTRAP ID	Common Name	Scientific Name
SPC	spanish cherry	<i>Mimusops elengi</i>
SPO	golden apple	<i>Spondias dulcis</i>
SQH	squash	<i>Cucurbita</i>
SWO	sweet orange	<i>Citrus sinensis</i>
TAN	tangerine	<i>Citrus reticulata</i>
TGL	tangelo	<i>Citrus x tangelo</i>
TOM	tomato	<i>Solanum lycopersicum</i>
TRA	tropical almond	<i>Terminalia spp.</i>
TTO	tree tomato	<i>Cyphomandra betacea</i>
UNK	Unknown Host	<i>Unknown</i>
WAL	walnut	<i>Juglans spp</i>
WSP	white sapote	<i>Casimiroa edulis</i>
YLG	ylang-ylang	<i>Cananga odorata</i>
YOL	yellow oleander	<i>Thevetia peruviana</i>

For confirmation on state specific hosts, contact your state eTRAP point of contact. See section: [Getting Help State Specifics](#).

## Appendix E: State Specifics

### Florida

For additional information, consult the [Florida Cooperative Fruit Fly Exclusion and Detection Manual](#).

#### Trap/Lure Types and eTRAP Abbreviations

ML: 3C-baited Multilure trap

TML: Trimedlure-baited Jackson trap

ME: Methyl Eugenol-baited Jackson trap

CUE: Cuelure-baited Jackson trap

McP: Torula yeast-baited McPhail trap (used on emergency programs)

EX1: Experimental traps that may be placed at the same sites as other traps

#### Target Flies and eTRAP Abbreviations

ANA: *Anastrepha suspensa*, Caribbean fruit fly (wild flies established in Florida that are collected and submitted to the laboratory)

MED: *Ceratitis capitata*, Mediterranean fruit fly (dyed Medflies are released in PRP areas)

QAG: *Bactrocera correcta*, Guava fruit fly (used for Quality Assurance (QA) placement)

QAL: *Bactrocera cucurbitae*, Melon fly (used for QA placement)

QAM: *Ceratitis capitata*, Mediterranean fruit fly (used for QA placement in routine trapping areas)

QAO: *Bactrocera dorsalis*, oriental fruit fly (used for QA placement)

QAX: *Anastrepha ludens*, Mexican fruit fly (used for QA placement)

SUS: A suspect target fly of any species. Note this should not be used unless the fly is confirmed with the Supervisor to not be a QA fly.

#### Risk Criteria Definitions

##### Criteria I

International ports of entry plus one-mile surrounding ports.

##### Criteria II

Areas presenting high risk of illegal fruit introduction that may contain larvae: including all densely populated areas of the state, with coverage at local airports, private marinas, migrant labor camps and at fruit vendors known to handle international shipments.

##### Criteria III

Commercial fruit and vegetable production areas, home sites on primary and secondary roads in rural areas where hosts are located. Consider businesses such as truck stops, markets, gas stations and other places people may congregate in rural areas, if hosts are available.

##### Criteria IV

Section of land not accessible for trapping: including lakes, airports runways and heavily forested areas, etc.

## *Appendix E: State Specifics*

### *Florida (continued)*

#### **Trap Relocation**

Traps should be relocated 4 times each year to improve detection of exotic fruit flies. Trap relocation should be based on host availability and seasonality. The only exception to this would be a trap placed at a high-risk permanent site (see next section).

All traps should have 4 locations and be relocated quarterly. eTRAP prompts the user to relocate.

- Routine or seasonal traps – traps serviced on 3-week cycle (21 days) should be relocated every 12 weeks for a total of 4 relocations per year. This can be accomplished by relocating 24% of traps each servicing.
- High risk and/or PRP – traps serviced on a 2-week cycle (14 days) should be relocated every 12 weeks for a total of 4 relocations per year. This can be accomplished by relocating 16% of traps each servicing.

#### **Permanent Sites Definition**

A permanent site (trap) is one that is never relocated. It remains, usually in a high risk area where the trapper and supervisor believe there is a need for it. These sites are not at the discretion of the trapper.

Supervisors must always approve these sites.

Justifications for a permanent site include:

- Safety issues
- Limited hosts/non hosts on or near dangerous highways/roads/areas
- Ethnic produce markets
- Ethnic growers
- Migrant camps
- Religious sites likely to have ethnic gardens
- Ethnic restaurants
- Dumpsites or landfills
- International ports, marinas and waterways
- National and state parks (restaurant and picnic areas)
- Wholesale produce centers and packinghouses

#### **County Trapping Designation\***

High-Risk: Hillsborough\*\*, Pinellas, Manatee, Sarasota, Orange, Palm Beach\*\*, Broward\*\*, Miami-Dade\*\*

Seasonal: Alachua, Bay, Clay, Duval, Escambia, Flagler, Nassau, Okaloosa, Putnam, Santa Rosa, St. Johns, and part of Volusia

Routine: Brevard, Charlotte, Citrus, Collier, DeSoto, Glades, Hardee, Hendry, Hernando, Highlands, Indian River, Lake, Lee, Marion, Martin, Monroe, Okeechobee, Osceola, Pasco, Polk, Seminole, St. Lucie, Sumter, and part of Volusia

\*Subject to change with demographic changes and risk assessment

\*\*Preventive Release Program (PRP) county

*Appendix E: State Specifics  
Florida (continued)*

Trap Densities

**In High-Risk Counties:**

Criteria I:

Trimedlure Traps	16 per sq. mi.
Methyl Eugenol Traps	5 per sq. mi.
Cuelure Traps	2 per sq. mi.
MultiLure Traps	5 per sq. mi.

Criteria II:

Trimedlure Traps	10 per sq. mi.
Methyl Eugenol Traps	3 per sq. mi.
Cuelure Traps	1 per sq. mi.
MultiLure Traps	2 per sq. mi.

Criteria III:

Trimedlure Traps	2 per sq. mi.
Methyl Eugenol Traps	1 per sq. mi.
Cuelure Traps	1 per sq. mi.
MultiLure Traps	Risk-Assessed

**In Other Counties Conducting Year-Round Trapping:**

Criteria I:

Trimedlure Traps	10 per sq. mi.
Methyl Eugenol Traps	3 per sq. mi.
Cuelure Traps	1 per sq. mi.
MultiLure Traps	3 per sq. mi.

Criteria II:

Trimedlure Traps	5 per sq. mi.
Methyl Eugenol Traps	1 per sq. mi.
Cuelure Traps	1 per sq. mi.
MultiLure/McPhail Traps	1 per sq. mi.

Criteria III:

Trimedlure Traps	1 per 2 linear mi.
Methyl Eugenol Traps	1 per 3rd TML site
Cuelure Traps	1 per 3rd TML site
MultiLure Traps	Risk-Assessed

**In Seasonal Trapping Areas  
(Trapped March-November):**

Criteria I:

Trimedlure Traps	5 per sq. mi.
Methyl Eugenol Traps	1 per sq. mi.
Cuelure Traps	1 per sq. mi.
MultiLure Traps	1 per sq. mi.

Criteria II:

Trimedlure Traps	1 per sq. mi.
Methyl Eugenol Traps	1 per sq. mi.
Cuelure Traps	1 per sq. mi.
MultiLure Traps	1 per sq. mi.

Criteria III:

Trimedlure Traps	Risk-Assessed
Methyl Eugenol Traps	Risk-Assessed
Cuelure Traps	Risk-Assessed
MultiLure Traps	Risk-Assessed

**In Preventive Release Program**

**Release Blocks and Buffer Areas:**

MultiLure Traps	5 per square mile
Trimedlure Traps	1 per square mile
Cuelure Traps	As per Criteria designation
Methyl Eugenol Traps	As per Criteria designation

## *Appendix E: State Specifics*

### *Florida (continued)*

#### **Trap Numbering**

##### **In High-Risk Counties:**

Criteria 1 – Jackson traps are numbered 1-16; ML traps are numbered 17-21

Criteria 2 – Jackson traps are numbered 1-10; ML traps are numbered 11-12

Criteria 3 – Jackson traps are numbered 1-2; ML traps (risk-assessed for placement) are numbered 3-4

##### **In Other Counties (year-round trapping):**

Criteria 1 – Jackson traps are numbered 1-10; ML traps are numbered 11-13

Criteria 2 – Jackson traps are numbered 1-5; ML is numbered 6

Criteria 3 – Jackson traps are numbered beginning with 1 and continues consecutively per assigned criteria (1 per 2 linear mi.); ML traps (risk-assessed) would be assigned a number as required (other than a number assigned to a Jackson trap)

##### **In Seasonal Trapping Areas:**

Criteria 1 – Jackson traps are numbered 1-5; ML is numbered 6

Criteria 2 – Jackson trap is numbered 1; ML is numbered 2

Criteria 3 - Follow same guidelines as noted in Other Counties (year-round trapping)

##### **In Preventive Release Program Release and Trap Protocol Areas:**

TML is numbered 1; MLs are numbered 11, 12, 13, 14, 15

##### **On an Emergency Program:**

All existing traps incorporated into EP trap lines retain their original numbers

EP Jackson traps start at 50 and increase

McPhail traps start at 200 and increase

##### **TrapBook Naming**

Trapping protocols differ depending on survey type: routine, PRP, or emergency program trapping. A TrapBook should include only one survey type and should not be mixed.

Both routine and PRP books are named with three standardized letters denoting the county the book is in (do not mix sections in different counties within a book) followed by three digits.

Ex. Sarasota County book #3 is called “SAR003”; Palm Beach County book #10 is called “PBC010”

For emergency programs, consult the Florida Cooperative FFED Manual and the [genus-specific action plan](#) to determine the correct naming convention and trap array for the target fly detected.





## Louisiana

No state specific data has been submitted at this point. Direct inquiries to the point of contact listed under [Getting Help by State](#).

## New York

### **Risk Criteria Definitions**

#### **Criteria I**

Grids containing 1 or more cherry orchards of any size, or a survey grid containing at least one (1) ECFF find.

#### **Criteria II**

Area containing ECFF host material and that follow a predicted dispersion trend for ECFF.

#### **Criteria III**

Area containing ECFF host material but does not follow a predicted dispersion trend.

#### **Criteria IV**

Section of land not accessible for trapping: including lakes, airports runways, farmland and heavily forested areas, etc.



## Puerto Rico

The Puerto Rico and US Virgin Island Fruit Fly Trapping Manual revised in 2016 is the approved Manual covering all requirements for Fruit Fly Trapping.

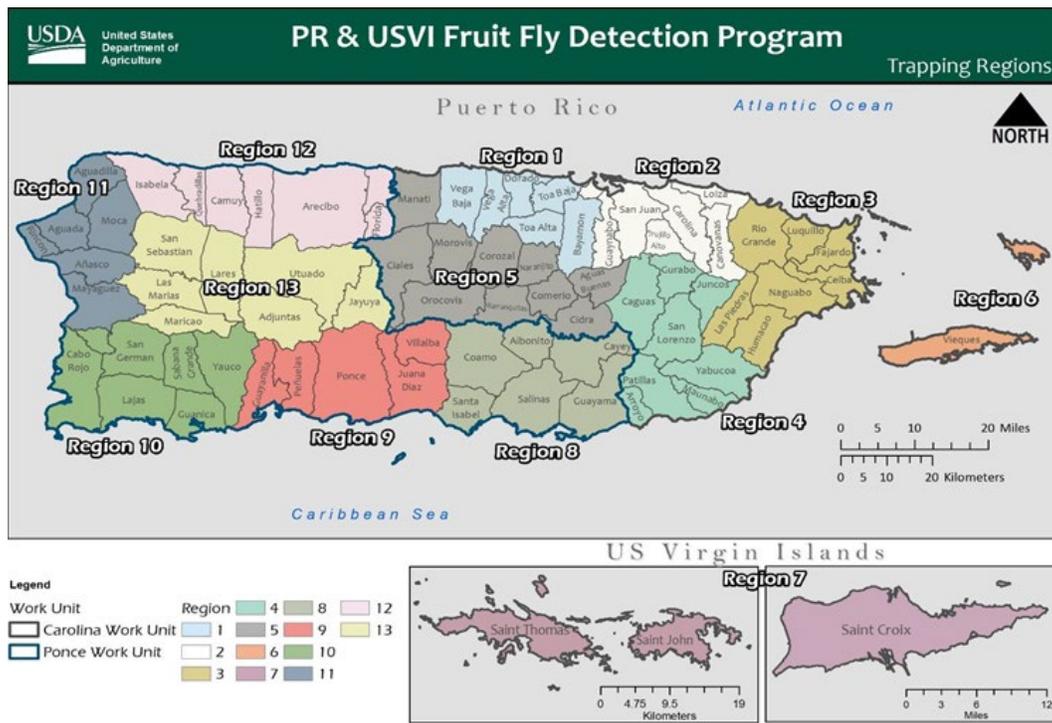
There are two Plant Pest Survey Offices located in the Cargo Area of the Luis Muñoz Marin Airport: (Carolina Work Unit) and Aguada Pest Survey Office (Ponce Work Unit)

### Risk Criteria

Designated Ports for Criteria 1 (5 TML – 1 ME- 1 CUE- 5 ML)

- Cataño Piers
- San Juan Piers
- Carolina Luis Muñoz Marin Airport (SJU)
- Fajardo Marina
- Yabucoa Piers
- Cabo Rojo, Boqueron Sector (DRNA)
- Cabo Rojo, Boqueron Sector (FURA)
- Guayanilla Piers
- Guayanilla Fishing Village
- Ponce Pier
- Aguadilla Rafael Hernandez Airport (BQN)

Criteria 2 (5 TML – 1 ME- 1 CUE- 1 ML)







## Appendix E: State Specifics Texas (continued)

The screenshot shows an Excel spreadsheet with a form for a Texas Property Survey Card. The form is organized into several sections:

- Trap Information:** TRAP TYPE: McPHAIL, FLY: MEX-FLY, LURE: 2-Component Medfly Cone/ Torula Yeast
- Status:** STATUS: 0-Serviced, 5-Rebaited, 1-Dry, 7-New, 2-Broken, 8-Removed, 3-Missing/Relocated, 9-Relocated, 4-Not Serviced
- Location:** Trapline: 3424-3, Grid & Quad: 1328-4, City: PALMVIEW, County: HIDALGO
- Address:** Address: 2805 VALLE BELLA DR. ( BOTH TRAPS ARE ON THE SAME TREE) 7 HOUSES E OF ABRAM ON VALLE BELLA, SOUTH SIDE
- Coordinates:** Loc on Prop. EY Host SWQ Property 2 Lat: 26.2302618 Long: -98.9394735
- Mapping:** A property diagram showing streets like 'Palmview Dr', 'Alexander Dr', and 'Valle Bella Dr'. The mapping area is filled with a yellow background.

The spreadsheet has columns labeled A through AG and rows numbered 1 through 25. The form is located in the top portion of the spreadsheet, with the mapping area below it.

Figure TX2. Texas Property Survey Card in

Open a Property Survey Record card in an Excel sheet. Information is typed into the Excel sheet. The mapping area is filled in by copying the portion from a mapping source using snipping tool and pasted to the mapping area on the card. Then it is printed. (Figure TX2)

*Appendix E: State Specifics  
Texas (continued)*

Print a Property Survey Record card **from eTRAP**. Select TrapSites on eTRAP Admin Console main screen. (**Figure TX3**)

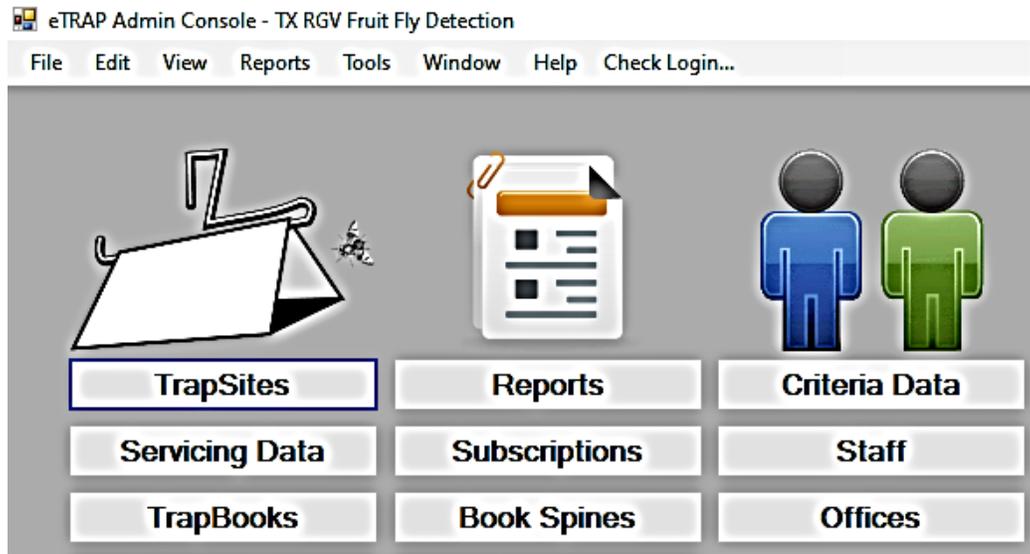


Figure TX3. Admin Console main

Select the office, book or grid, survey type. Then click Apply. (**Figure TX4**)

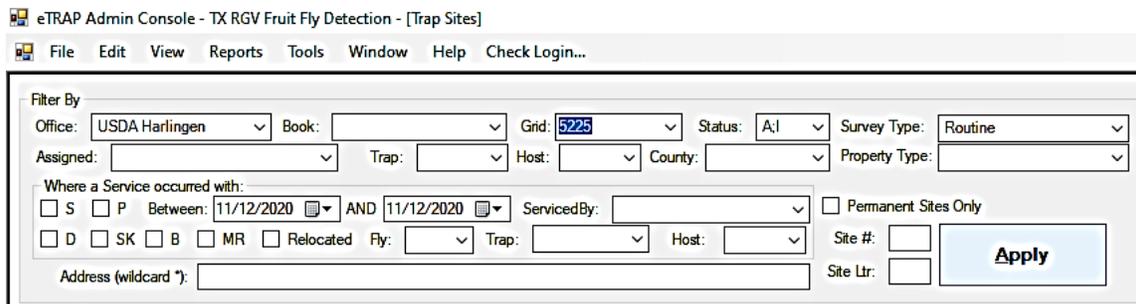
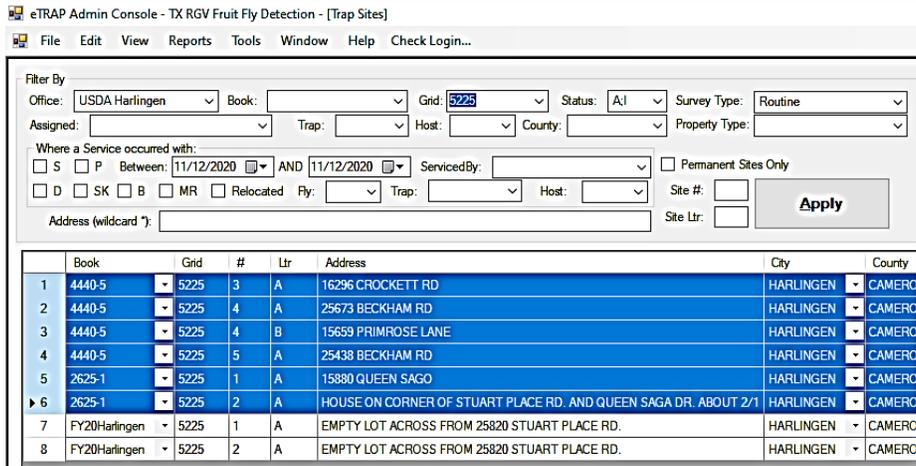


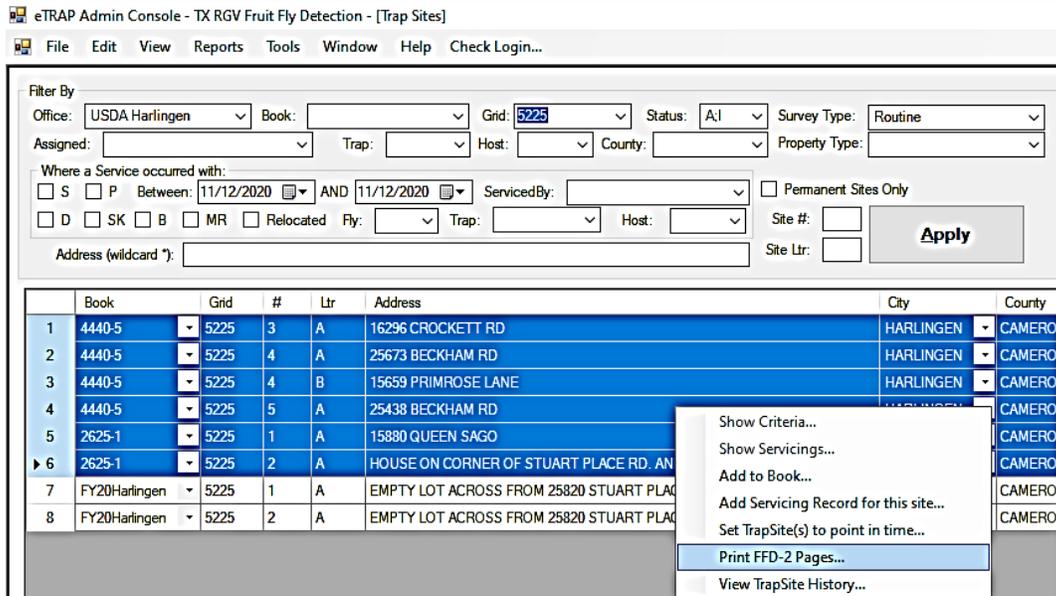
Figure TX4. TrapSites data

Select all the locations that need Property Survey Record Cards. (multiple cards can be selected to be generated at the same time). (**Figure TX5**)

Appendix E: State Specifics  
Texas (continued)



Right click **Figure TX6. Select locations** and select Print FFD-2 Pages. (**Figure TX6**)

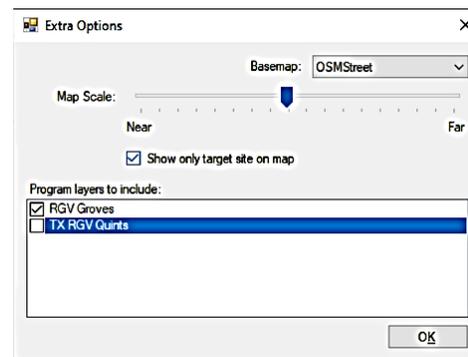


**Figure TX6. Print FFD-2**

In the next pop up, the basemap (Street, Aerial, Hybrid, or OSM Street) can be changed to your preference and the map scale can be moved as well. (**Figure TX7**)

The TX RGV Quints layer can be unchecked, so that the grid line does not show on the map portion. There is also the option of showing all sites on the map or just the only site by checking the box. Click OK.

The Property Survey Record Cards are exported to Excel and can then be printed.



**Figure TX7. Extra options pop up**

## Glossary of Terms

TERM	DEFINITION
Admin Console	This desktop resource for managers and trappers is configured for program specific activities, such as setting up and organizing programs, mapping, activity monitoring and QA/QC.
Book Spine	Printed on cardstock and placed in the spine of the physical trap-book binder. Shows the book name, county, grids, and trap counts.
Emergency Program (EP)	Initiated when an actionable pest is detected. A delimitation program involves increased survey effort to determine the size and spread of a population (if it exists). If a trigger is met, an eradication program is initiated, in which control tactics are used to wipe out the population, and regulatory efforts may be stood up to keep entities producing host material in compliance.
eTRAP	Electronic Trap Recording & Accounting Program
GPS	Global Positioning System. An accurate worldwide navigational and surveying facility based on the reception of signals from an array of orbiting satellites. In short, the GPS tells you where you are on Earth.
Inactive (site)	An alternate site used in states/territories that relocate traps within a trap site between 4 locations. Only 1 of the locations will be active at any given time; the other 3 will be inactive.
Personally Identifiable Information (PII)	Any representation of information that permits the identity of an individual to whom the information applies to be reasonably inferred by either direct or indirect means. ... It is the responsibility of the individual user to protect data to which they have access.
Property Survey Record	A form containing either hand-drawn or eTRAP-generated site map(s), location of trap(s) within a site, host information, GPS coordinates, applicable notes, and servicing history at that site. These are placed in a physical TrapBook.
Preventative Release Program (PRP)	A program utilizing Sterile Insect Technique (SIT) to overflood an area with sterile insects to prevent establishment of any potential wild fly incursions. Among states that use eTRAP, only Texas and Florida have PRP.
Retired (site)	A site where traps have been discarded that will not continue to be used in routine trapping. Retired sites can be “un-retired” if need be.
R/L...Relocated	eTRAP shorthand for the term “relocated”.
Routine	Regular surveillance for actionable insects.

TERM	DEFINITION
Sterile Insect Technique (SIT)	A biological birth control method wherein sterile insects are released in great numbers to overflow any potential wild flies in the area in the hopes that any wild female will mate with a sterile male and lay infertile eggs. For tephritid fruit flies, the target sterile wild fly overflooding ratio is 100:1.
TrapBook	In eTRAP, a day's work of trapping, usually comprised of multiple adjacent grids. TrapBooks can also refer to the physical binders that contain route maps, section maps, and property survey forms.
TrapSite	A site where a trap or traps are placed in the field.