REFERENCE GUIDE FOR ARIZONASURV USERS

Contents

QUICK STARTING GUIDE FOR ARIZONASURV USERS........................................................................ 1
1. Logging into the system.................................................................................................................................. 2
2. User Management (Settings Tab).................................................................................................................. 3
3. Entering Trapping Sites Manually (Sites Tab).............................................................................................. 6
4. Entering Trapping Sites through Data Import (Tools Tab) ........................................................................... 7
5. Entering Testing Information (Arthropod Tab).............................................................................................. 8
6. Submitting Pools to ASPHL for testing ......................................................................................................... 15
VectorSurv Online Map...................................................................................................................................... 18
Documentation.................................................................................................................................................. 18
Training videos .................................................................................................................................................. 19

Last modified: 5/18/2023
1. **Logging into the system**

Go to the **ArizonaSurv** production site: [https://az.vectorsurv.org](https://az.vectorsurv.org) to enter your real data. For training purposes only (data is cleared weekly) you can use the testing environment: [https://sandbox.vectorsurv.org](https://sandbox.vectorsurv.org).

The VectorSurv home page is [https://vectorsurv.org](https://vectorsurv.org) where you can access some online documentation ([https://vectorsurv.org/docs/site/](https://vectorsurv.org/docs/site/)), as well as the map ([https://maps.vectorsurv.org/arbo](https://maps.vectorsurv.org/arbo)).

Enter your Username and Password (It is the same for both production and testing sites)

**Forgot your username or password?**
No problem! Go to the Login Help and click on forgot username or password. You will need to provide the email address of your account.
2. User Management (Settings Tab)

Under the Settings tab, click on My Agency and then on User Management.

Under **Active Users**, if you are an agency’s manager, you can see the list of users within your agency and you can edit/activate/deactivate them.

Under **Edit**, you can change their user information and their level of access (Manager/User/View only/Diagnostic).
You can also add new users under **Add New User**:

For adding a new user you will need:

- Username (usually first and last name)
- Password (you can pick one, send it to the new user and have him reset it (going into Login Help))
- Email address

Under **Inactive Users** you can see any inactive user in your agency (for Agency Managers only).
Under **Non-Agency Users** you can see users from other agencies.

Their name, agency and email address is listed and under Actions, you can grant that user view-only access to your data if you need.
3. Entering Trapping Sites Manually (Sites Tab)

There are two options for entering data in the system, manual entry for each trap (covered below) or entry of multiple traps at the same time through Data Import (see ). For manual entry click on the Sites tab and to enter a new site, click on New Site.

The Site Addition page will open, then follow these online instructions (https://vectorsurv.org/docs/site/) on how to fill enter a site.

- Site Code
- Site Name
- Coordinates
  - Latitude
  - Longitude
- Coordinate Precision
- Elevation (m)
- Address
- City
- Region
  - Country
  - State
  - County
- Postal Code
- Surroundings
  - Agriculture
  - Commercial/Industrial/Transportation
  - Forest
  - Marsh/Swamp
  - Park/Cemetery/Golf Course
- Population
- Classification
- Comments

Add New Site | Go To Sites Menu
4. Entering Trapping Sites through Data Import (Tools Tab)

To enter multiple sites at the same time you will need to format the data in the appropriate way required by the system. To find out more about the format allowed for upload go into the Tools tab/Data Import.

Then click in the green box ‘Import Rules’ which will download an Excel spreadsheet called ImportDataSpecification.xlsx. The tab SAMPLE Surveillance Sites contains the list of fields needed to upload trapping site data. The tab Specifications has the list of variables and their descriptions.

Once your data is formatted in the correct way, you can upload it by choosing the Import Type (Surveillance Sites, for example) and then choosing the file to upload. Please note that the system will not give you any warning if you try to upload duplicate sites through file upload (whereas manual entry of sites does give you a warning when the site code has already been taken.)
5. Entering Testing Information (Arthropod Tab)

a. Configuration

Under the Arthropod tab/Configuration the type of species trapped, the trap type used by your agency can be selected so that they will appear as drop down choices when you enter the collection and testing data (see brief description in https://vector surv.org/docs/arthropod/trap-types/). If none of the species or traps are selected, they will all appear as drop down choices. If your agency only uses certain trap types and/or finds only certain species, it is convenient to select those types in the configuration settings so that your drop down options are not too many when entering collection and testing data.

Under Lab Preferences you can select ADHS lab (state lab) if that is the lab you use for mosquito testing, or you should be able to select if the testing will be conducted in-house.

b. Abundance

This tab is to enter and manage collections and link to tools relating to arthropod abundance. Under New Collection you can enter trapping results.
Select and enter information for trap type, lure type, collection date, number of traps, number of trap nights, site, etc. and enter the count and gender of the mosquitoes collected by species. If the collection you are entering will be sent for testing, then enter pool information. When done click on ‘Add Collection’.

Once a collection has been entered, a summary is displayed in green boxes on the right-hand side indicating the last collection and the used and open pool numbers.
Collection Management tab you can see a summary of the trapping data by week. Select the week in the first drop down menu and year in the second, then click on ‘Change Disease Week/Year’ to view that data. You edit the record clicking on edit, under the column Actions. The link option allow you to link a pool to that collection. You can also search for numbers or text within the data using the Search box at the bottom of the table.
On the right-hand side green boxes summarize the number of traps for that week by type, species and pool.

Under Arthropod/ Abundance, the Worksheet tab automatically generate sheets to fill in arthropod counts for selected trap type/s, site/s and species. You can create your desired sheet under New Worksheet.
Under **Worksheet Management** you can view, edit, delete or print the worksheet.

**Collection Worksheets**

![Worksheet Management](image)

The **Abundance Anomaly Calculator** estimates the percent change in arthropod abundance for a target year compared to the previous 5-year average abundance for the same time period. Select the desired conditions and click on Calculate at the bottom. A green table will appear containing the calculation under the column % change, this can be downloaded and the data can also be displayed with a graph. The calculation will be blank if not enough data is present in the system (read more about the calculator here: [https://vectorsurv.org/docs/tools/calculators/anomaly/](https://vectorsurv.org/docs/tools/calculators/anomaly/)).

The **Collection Reports** tab allows you to create a summary for your entire agency by week or date range, for selected trap type (read more about this tab here: [https://vectorsurv.org/docs/arthropod/collection-reports/](https://vectorsurv.org/docs/arthropod/collection-reports/)). Two types of reports are available:

- **Arthropod Collection Report (ACR)**: a summary of all arthropod species collected at each selected agency in each selected trap type during the specified time period.
- **Arthropod Occurrence Report (AOR)**: summarizes major vector species and genera based on the total number of females collected per trap-night in Urban, Suburban, and Rural settings.

The generated file will appear in a green box at the top.
c. Pools

Pool submissions are records of groups of mosquitoes sent to be tested for arboviruses. Under New Pools, enter the information for the number of mosquitoes in the pool, the species, date, trap and site information, then click Add Pools.
Under **Pool Management** you can see a summary by month. To change month or year, select the month/year then click Change Month/Year. The info can be edited and deleted.

Under **Testing** you can create and manage new pool test results.

- If you are using ASPHL for testing, then submit your pool using the **New Submission** tab. You can manage those submissions under **Submission Management**.
- If you are testing in-house, then use the **New Test Results** tab. You can manage those test results under **Test Result Management**.
6. Submitting Pools to ASPHL for testing

If you are using ASPHL for testing, then submit your pool using the New Submission tab.

Select the type of testing requested:

• CDZ= Chikungunya, Dengue, Zika
• WS: West Nile, SLE

Under Submission Management you can edit the pools you are submitting for ASPHL testing by clicking on edit.

You can also print pool information and labels to be included with your shipment to ASPHL by clicking on print and labels, respectively.
When ASPHL receives a submission an automated email is sent to them, so they are aware of the incoming pools. When ASPHL testing is completed and entered in ArizonaSurv, you will receive an email and the data will be updated in the system under Arthropod/Pools/Testing/Manage Test Results.

If you use in-house testing, under **New Test Results** you can enter the pool test result, then click on Add Test Results. Read more about this tab here: [https://vectorsurv.org/docs/arthropod/test-results/](https://vectorsurv.org/docs/arthropod/test-results/).

Under **Test Result Management** you can view a summary by month of your test results and of your ASPHL submissions (if any). Read more about this tab here: [https://vectorsurv.org/docs/arthropod/results-manage/](https://vectorsurv.org/docs/arthropod/results-manage/).
Under **Infection Rate Calculator** you can estimate the arbovirus infection rate based on testing pools of mosquitoes. This calculator is based on the CDC/DVBID MLE/MIR Microsoft Excel add-in.

At the county level or below, weekly tracking of mosquito infection rate (IR) can provide important predictive indicators of transmission activity levels associated with elevated human risk. IR is calculated as:

\[
\text{IR} = \left( \frac{\text{number of positive pools}}{\text{total specimens tested}} \right) \times 1000
\]

with the data representing a single species or species group collected over a time period and geographic area relevant to the goals of the surveillance program. Read more about this tab.

VectorSurv Online Map

The VectorSurv online map can be accessed from the VectorSurv home page https://vectorsurv.org or directly at https://maps.vectorsurv.org/arbo. This map is automatically updated every day with the data entered into VectorSurv, including ArizonaSurv.

Documentation

Documentation on how to use the system is available here: https://vectorsurv.org/docs/
Training videos
https://www.youtube.com/playlist?list=PLbSUoxtSzuqTAKqdFzBaUfmmO6izf-kDU (a recent collection of short training videos)

https://www.youtube.com/watch?v=CnjDToSYC7E  (CalSurv Gateway Training 1:47)
https://www.youtube.com/watch?v=dgBs0_bgl_g  (NJ Webinar 59 min)

VectorSurv Gateway: Basic Configuration, Data Entry, and Mapping
https://www.youtube.com/watch?v=LySv9DiE340
Target audience: All interested CalSurv Gateway users, especially those involved with surveillance programs
Material to be covered:
* User preferences and configuration options
* Data management for surveillance programs
* Surveillance sites, Arthropod collections, Arthropod pools, Sentinel chickens, Bottle bioassays
* Overview of online maps

VectorSurv Gateway: Data Analysis, Geospatial Tools, and Import/Export
https://www.youtube.com/watch?v=eBRm-An894g
Target audience: Data analysts (e.g., lab supervisors, vector ecologists)
Material to be covered:
* Online calculators for decision-making
* Geospatial capabilities (geocoding and spatial features)
* Data management (defining site groups, arthropod worksheets and reports)
* Bulk data import/export
Using the Visual Gateway for Custom Data Visualization
https://www.youtube.com/watch?v=-Xb23ODrOmY
Target audience: Data analysts (e.g., lab supervisors, vector ecologists, control supervisors)
Material to be covered:
* Licensing, costs, and how it works
* How to connect to the server
* The Tableau interface & user-generated dashboards
* Integrating external data
* Can I use other BI software?

CalSurv Gateway: Documenting Control Operations
https://www.youtube.com/watch?v=8ekBQG6iPmY
Target audience: Control operations personnel
Material to be covered:
* Initial Configuration
* Defining Sources
* Recording Pesticide Applications
* Pesticide Use Reporting