

# MOSQUITONET MOSQUITO SURVEILLANCE SPREADSHEET USER'S GUIDE VERSION 1.7



CENTERS FOR DISEASE CONTROL AND PREVENTION  
DIVISION OF VECTOR-BORNE DISEASES



Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives, Protecting People™

*APRIL 20, 2017*

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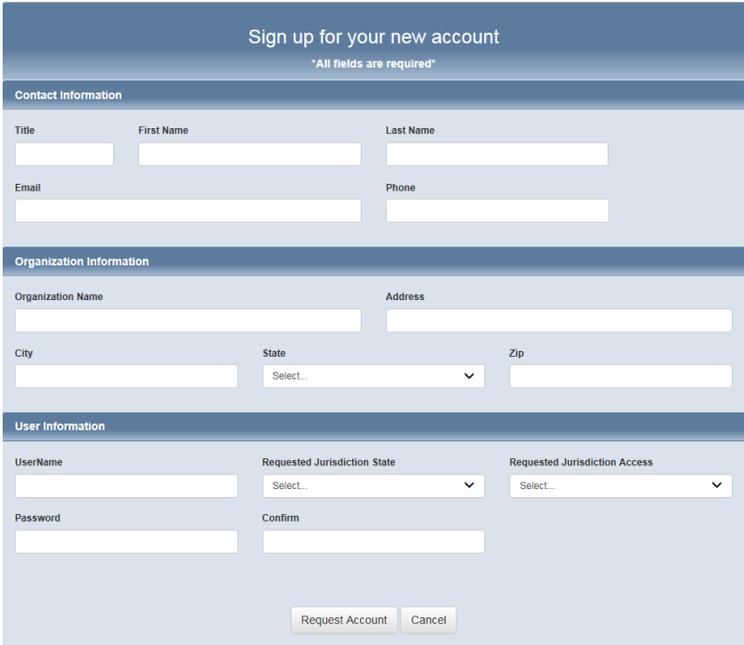
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**If you are having any technical problems or if you have questions about data entry, please contact us by email: [mosquito@cdc.gov](mailto:mosquito@cdc.gov).**

## GETTING STARTED

Set up an account on the MosquitoNET website: <https://wwwn.cdc.gov/Arbonet/MosquitoNET/>. You will be prompted to set up a user name and password, along with contact information and organization information. You will also be prompted for a jurisdiction state and which jurisdiction you want access to. Once you select “Request Account,” your information will be sent to CDC for approval. In order to obtain approval, the requested jurisdiction state must have notified CDC that you will be a user for that particular jurisdiction. When your account has been approved, you will receive an e-mail. After receiving this email, you can access the website using the username and password you created. Note that:

- After three failed login attempts, your account will be locked.
- If you do not remember your password, use the “Reset your password” link on the login screen. You will need your user name to do this. If you do not remember your user name, please contact us at [mosquito@cdc.gov](mailto:mosquito@cdc.gov).



The screenshot shows the 'Sign up for your new account' form on the MosquitoNET website. The form is titled 'Sign up for your new account' and includes a note that 'All fields are required'. It is divided into three main sections: Contact Information, Organization Information, and User Information. The Contact Information section includes fields for Title, First Name, Last Name, Email, and Phone. The Organization Information section includes fields for Organization Name, Address, City, State (a dropdown menu), and Zip. The User Information section includes fields for Username, Requested Jurisdiction State (a dropdown menu), Requested Jurisdiction Access (a dropdown menu), Password, and Confirm. At the bottom of the form are two buttons: 'Request Account' and 'Cancel'. The top of the page shows 'MOSQUITONET ONLINE V1.0.1' and a small mosquito icon.

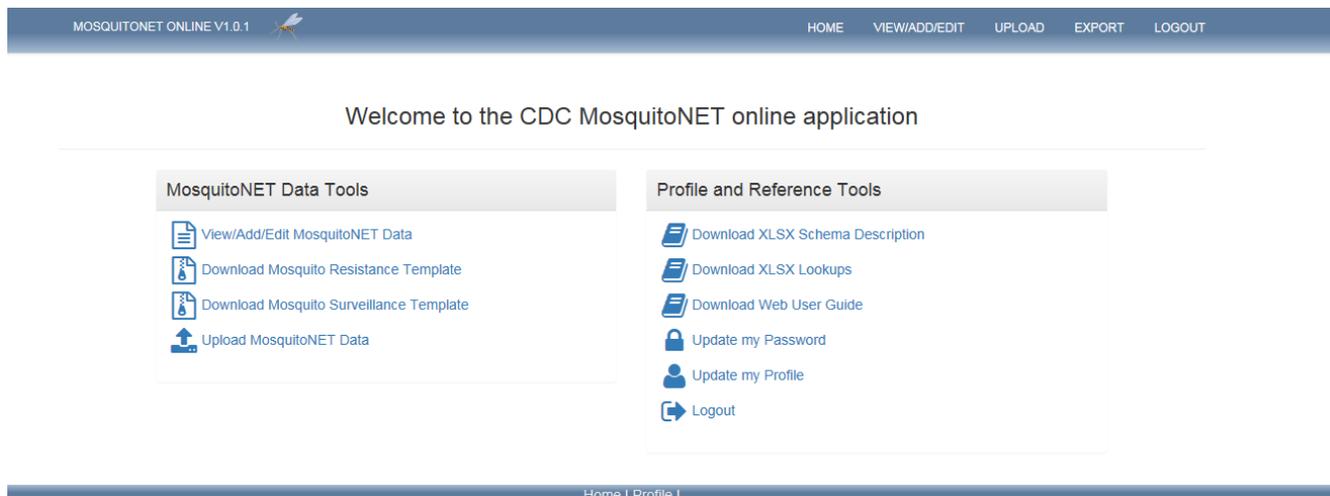
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### Downloading Spreadsheets

The MosquitoNET database allows for you to add, export and edit mosquito surveillance and insecticide resistance records for locations in the United States and its jurisdictions. When you login, you will be taken to the home page. From the home page, a download link for the mosquito surveillance template spreadsheet is

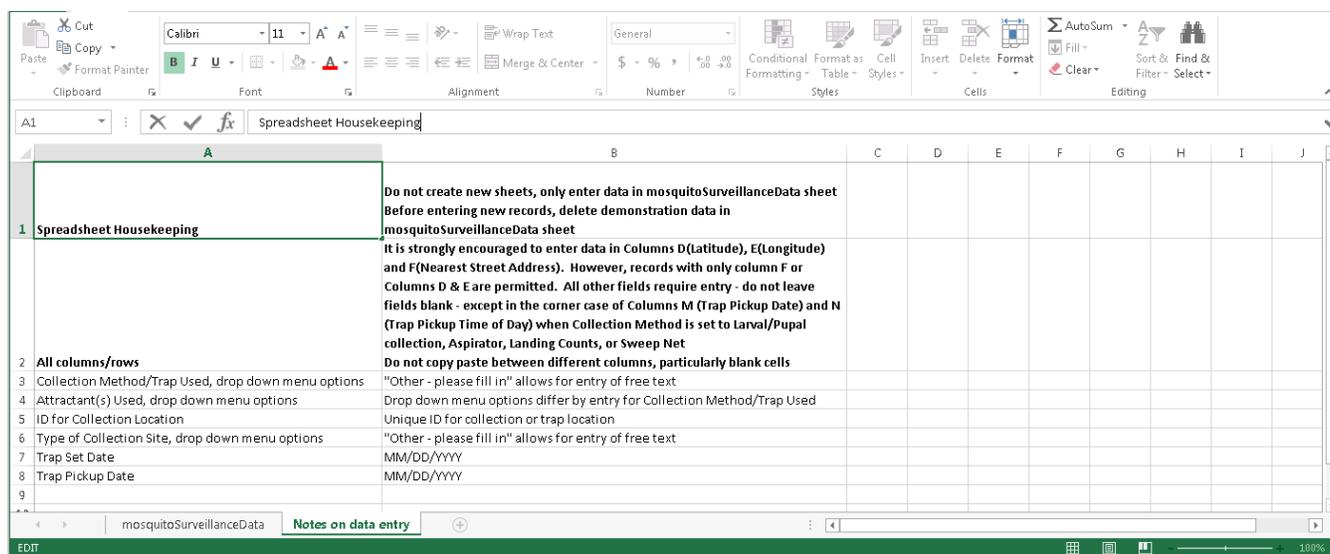
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provided. To download, click “Download Mosquito Surveillance Template,” and select the location in your computer’s file system where you want to save the spreadsheet.



## Entering Data for the First Time

When opening the spreadsheet for the first time, a few quick notes on data entry are displayed.



To get to the data entry sheet, click “mosquitoSurveillanceData” in the bottom left of the spreadsheet. In this sheet, some demonstration data will be pre-populated to illustrate correct data entry. After gaining familiarity with the fields, **PLEASE DELETE THE PRE-POPULATED RECORDS ON THE TOP ROWS BEFORE ENTERING NEW RECORDS.**

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1	Collection Method/Trap Type	Attractant(s) Used	ID for Collection Location	Collection Location Latitude (##.#####)	Collection Location Longitude (###.#####)	Nearest Street Address	City	State	County
2	Light Trap	CO2 With Light	11789457712	26.279521	-86.452934	4729 Maple Way	Orlando	FL	Orange
3	Larval/Pupal Collection	None	11789457713	26.279522	-86.452935	4732 Maple Way	Orlando	FL	Orange
4	BGS Trap	Lure	11789457714	26.279523	-86.452936	4734 Maple Way	Orlando	FL	Orange
5	Ovicup/Ovitrap	Hay or Grass Infusion	11789457715	26.279524	-86.452937	4736 Maple Way	Orlando	FL	Orange
6	Other - please fill in								
7									
8									
9									
10									

The accepted entries for each field are discussed in the field definitions section of this document. Best practices for data entry in the spreadsheet are:

- Enter all data in the mosquitoSurveillanceData sheet, do not create new sheets in the Excel file.
- **DELETE THE PRE-POPULATED RECORDS ON THE TOP ROWS BEFORE ENTERING NEW RECORDS.**
- Fill out columns left to right. Several dropdowns are populated based on data in columns to their left.
- Copy/pasting within the same column, or an entire row for quick data entry is encouraged. However, **DO NOT COPY/PASTE BETWEEN COLUMNS, EVEN BLANK CELLS. THIS WILL BREAK THE SPREADSHEET'S BUILT-IN VALIDATION.**
- **DATA ENTRY IN EACH COLUMN IS REQUIRED.** Entering data in each column also means that a zero should be entered in the appropriate columns if no adult mosquitoes were collected.

Exceptions to this rule are:

1. Trap Pickup Date and Trap Pickup Time of Day should be left blank when the Collection Method/Trap Used is Larval/Pupal Collection, Aspirator, Sweep Net or Landing Count.
2. If it is not possible to provide the Nearest Street Address and the Collection Location Latitude and Longitude, it is permissible to provide either Nearest Street Address, or the Collection Location Latitude and Longitude. If possible, please enter both Nearest Street Address and Collection Location Latitude and Longitude.

- If multiple species are found in the same trap on the same day, each species and day combination is reported on its own row.

For eggs or immature specimens (larvae or pupae), data entry will typically occur after the specimens have been reared to adults and identified to species. However, when the original collection targeted eggs or immatures data should be entered by selecting "Yes" in the appropriate column (example: Yes in Larvae Collected, for larvae). Counts of laboratory reared adults are not relevant when the original collection targeted eggs or immatures, and should be set to zero (Row 3 of the pre-populated demonstration data illustrates this). In

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situations when species identification is not possible, genus should be identified and “sp.” entered for the species.

## FIELD DEFINITIONS

Each row in the spreadsheet should have entries for the 23 columns defined across the header. This section provides the accepted and encouraged data for entry in each of these fields. Several of the fields provide a drop down of available options. The list of options that should be included in these drop downs is given in the MosquitoNET XLSX Schema Description Document.

**Collection Method/ Trap Type** – Accurate description of the means for collecting the mosquitoes. A drop-down list of encouraged values is provided. However, free text entry is accepted when none of the options in the drop-down list accurately represents the collection method or trap type used.

**Attractant(s) Used** – Accurate description of any attractants used for collection. A drop-down list of encouraged values is provided based on the entered Collection Method/Trap Type used, however text entry is accepted when none of the options in the drop-down list accurately represents the attractant(s) used.

**ID for Collection Location** – A unique identifier for the collection location or trap. Free text entry is accepted.

**Collection Location Latitude** – The GPS Latitude of the location where the collection was made. Decimal entries between -14.500000° and 49.500000° with six digits after the decimal point are accepted.

**Collection Location Longitude** – The GPS Longitude of the location where the collection was made. Decimal entries between -64.000000° and -180.000000° or between 144.000000° and 180.000000° with six digits after the decimal point are accepted.

**Nearest Street Address** – The nearest street address to the collection location. Free text entry is accepted.

**City** – The city where the collection site is located. Free text entry is accepted.

**State** – The two character State code for the state where the collection site is located. Must be selected from drop-down list of available options.

**County** – The County where the collection site is located. The drop-down list of permissible counties is based upon the state field. The value for county must be one of the options in the drop-down list.

**Type of Collection Site** – Description of the type of site where the collection occurred. A drop-down list of pre-defined values is provided. However, text entry is accepted when none of these options accurately represents the type of collection site.

**Trap Set Date / Date of Larval and Pupal Collection** – The date that the trap for collection was set or that larval/pupal collection occurred. Accepted entries are in any of the following formats: MM/DD/YYYY, MM/DD/YY, MM-DD-YYYY, MM-DD-YY. Dates must be after the start of 2016 and not in the future.

**Trap Set Time of Day / Larval and Pupal Collection Time of Day** – The time of day that the trap for collection was set or that larval/pupal collection occurred. Must be selected from drop-down list of available options.

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**Trap Pickup Date** – The date that the trap was picked up. Accepted entries are in any of the following formats: MM/DD/YYYY, MM/DD/YY, MM-DD-YYYY, MM-DD-YY. Dates must be no earlier than the trap set date and not in the future. Not required for Collection Method/Trap Types of Aspirator, Landing Counts, Larval/Pupal Collection, and Sweep Net.

**Trap Pickup Time of Day** – The time of day that the trap was picked up. Must be selected from drop-down list of available options. Not required for Collection Method/Trap Types of Aspirator, Landing Counts, Larval/Pupal Collection, and Sweep Net.

**Genus** – The genus of the mosquitoes collected. Must be selected from drop-down list of available options.

**Species** – The species of the mosquitoes collected. A drop-down list is populated based on the selected genus. Must be selected from this drop-down list. Note: If multiple species are collected, enter a new record for each species.

**Life Stage Targeted for Collection** – The life stage that was intended to be collected using this particular collection method. Must be selected from drop-down list of available options.

**Eggs Collected** – An indicator whether eggs of the indicated species were found in this particular collection. Drop-down list provides ability to select Yes or No.

**Larvae Collected** – An indicator whether larvae of the indicated species were found in this particular collection. Drop-down list provides ability to select Yes or No.

**Pupae Collected** – An indicator whether pupae of the indicated species were found in this particular collection. Drop-down list provides ability to select Yes or No.

**# Females Collected** – The number of females of the indicated species that were found in this particular collection. Accepted values are non-negative integers.

**# Males Collected** – The number of males of the indicated species that were found in this particular collection. Accepted values are non-negative integers.

**# Adults of Unknown Sex Collected** – The number of adults of the indicated species whose sex cannot be identified that were found in this particular collection. Accepted values are non-negative integers.

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## UPLOADING DATA

Spreadsheets that have been populated with data can be uploaded to the MosquitoNET database using the same website, username and password from the getting started section of this document. To access the upload page, click on the “UPLOAD” option across the header of the webpage. **UPLOADS ARE NOT CHECKED FOR DUPLICATE RECORDS WITHIN THE DATABASE. PLEASE ONLY UPLOAD DATA ONCE AND THEN REMOVE THOSE RECORDS FROM THE SPREADSHEET BEFORE UPLOADING AGAIN.**

MOSQUITONET ONLINE V1.0.1

HOME VIEW/ADD/EDIT **UPLOAD** EXPORT LOGOUT

Upload Data

Upload XLSX File

Test Run  Email

0.2 MB  
surveillance...  
RESET

Upload Results

9 Rows Successfully Imported

**Test Run:** Upload does not transfer data, only tests XLSX for errors.  
**Email:** Emails results of upload to the current user.

Home | Profile |

To upload, the spreadsheets can either be dragged into the window or an explorer window for selection can be used. After being selected, the spreadsheet undergoes a validation process. During this validation, the selected spreadsheet is double-checked to verify that it adheres to the standards specified in the MosquitoNET XLSX Schema Description Document. If the upload was successful, the green validation box pictured above appears and details how many records were added to the database. If the upload was not successful, a red box detailing the errors in the selected spreadsheet will appear. When errors occur, no data from the spreadsheet is added to the MosquitoNET database. To validate spreadsheets without any records being added to the database, place a check in the test run checkbox. To receive an email with the details of the upload, place a check in the email checkbox. When this checkbox is filled, an email is sent to the email address listed in the user’s profile.

### Viewing and Modifying Records in the Database

After successfully being uploaded, the records stored in the database can be viewed by clicking the “SURVEILLANCE DATA” link beneath “VIEW/ADD/EDIT” in the header of the webpage. In addition to being able to view the records, there is a search box in the upper right of the grid. You can search all records that you have uploaded.

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Surveillance

Resistance

+ Add Record

Show 10 rows

Search: FL

Del	CountyName	TrapType	AttractantsUsed	TrapID	Latitude	Longitude	Address	Town	State	Trap
	Orange County	BGS trap	Lure	11789457714	26.279523	-86.452936	4734 Maple Way	Orlando	FL	Vac:
	Orange County	Ovicup/Ovitrap	Hay or grass infusion	11789457715	26.279524	-86.452937	4736 Maple Way	Orlando	FL	Sch
	Orange County	Light trap	CO2 with light	11789457712	26.279521	-86.452934	4729 Maple Way	Orlando	FL	Res
	Orange County	Larval/Pupal collection	None	11789457713	26.279522	-86.452935	4732 Maple Way	Orlando	FL	Bus
	Orange County	BGS trap	Lure	11789457714	26.279523	-86.452936	4734 Maple Way	Orlando	FL	Vac:
	Orange County	Ovicup/Ovitrap	Hay or grass infusion	11789457715	26.279524	-86.452937	4736 Maple Way	Orlando	FL	Sch
	Orange County	Light trap	CO2 with light	11789457712	26.279521	-86.452934	4729 Maple Way	Orlando	FL	Res
	Orange County	Larval/Pupal collection	None	11789457713	26.279522	-86.452935	4732 Maple Way	Orlando	FL	Bus
	Pinellas County	BGS trap	Lure	VXY452-7795A	29.457483	-90.457121	3125 First Street	Tampa	FL	Urb:
	Pinellas County	BGS trap	Lure	VXY452-7795A	29.457483	-90.457121	3125 First Street	Tampa	FL	Urb:

Showing 1 to 10 of 12 entries

Previous

1

2

Next

To delete a record, click on the trash can icon in the far left column. To edit a record, click on the row corresponding to that record. The record will open in an editing form that undergoes the same validation as the spreadsheet upload.

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## Mosquito Surveillance Data

### Collection Location Information

\*State

Florida



\*Site Type

School

Nearest Address

4736 Maple Way

City

Orlando

\*County

Orange County



\*Latitude

26.279524

\*Longitude

-86.452937

### Collection Information

\*Collection/Trap ID

11789457715

\*Life Stage Targeted

Egg



\*Method/Trap Type

Ovicup/Ovitrap

\*Attractants Used

Hay or grass infusion

### Trap Set / Larval and Pupal Collection Information

\*Set Date

08/09/2016



\*Time of Day

Morning



\*Pickup Date

08/10/2016



\*Time of Day

Morning



### Mosquito Information

\*Genus

Aedes



\*Species

aegypti



### Immature Specimens

\*Eggs

Yes



\*Larvae

No



\*Pupae

No



### Adult Specimen Collection

\*Males

0

\*Females

0

\*Unknown

0

Return

Save Record

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## APPENDIX A: ADDITIONAL MOSQUITONET DOCUMENTATION

- MosquitoNET XLSX Schema Description Document
- MosquitoNET Insecticide Resistance Spreadsheet User's Guide
- MosquitoNET Web Application User's Guide

## DOCUMENT VERSION TRACKING

Version	Date	Action
1.5.1	12/12/2016	Updated document to be 508 compliant.
1.5.2	02/17/2017	<ul style="list-style-type: none"><li>• Added Alt Text for several screenshots.</li><li>• Added Document Version tracking section.</li></ul>
1.7	04/20/2017	<ul style="list-style-type: none"><li>• Updated screenshot for Notes to show that Nearest Street Address, Collection Location Latitude and Collection Location Longitude are no longer required but that the user must provide either Nearest Street Address or the pair of values for Collection Location Latitude and Longitude.</li><li>• Updated Field Definition for Trap Pickup Date and Trap Pickup Time of Day to indicate the field is not required when the Collection Method/Trap Type field is set to Aspirator, Landing Counts, Larval/Pupal Collection or Sweep Net.</li></ul>