

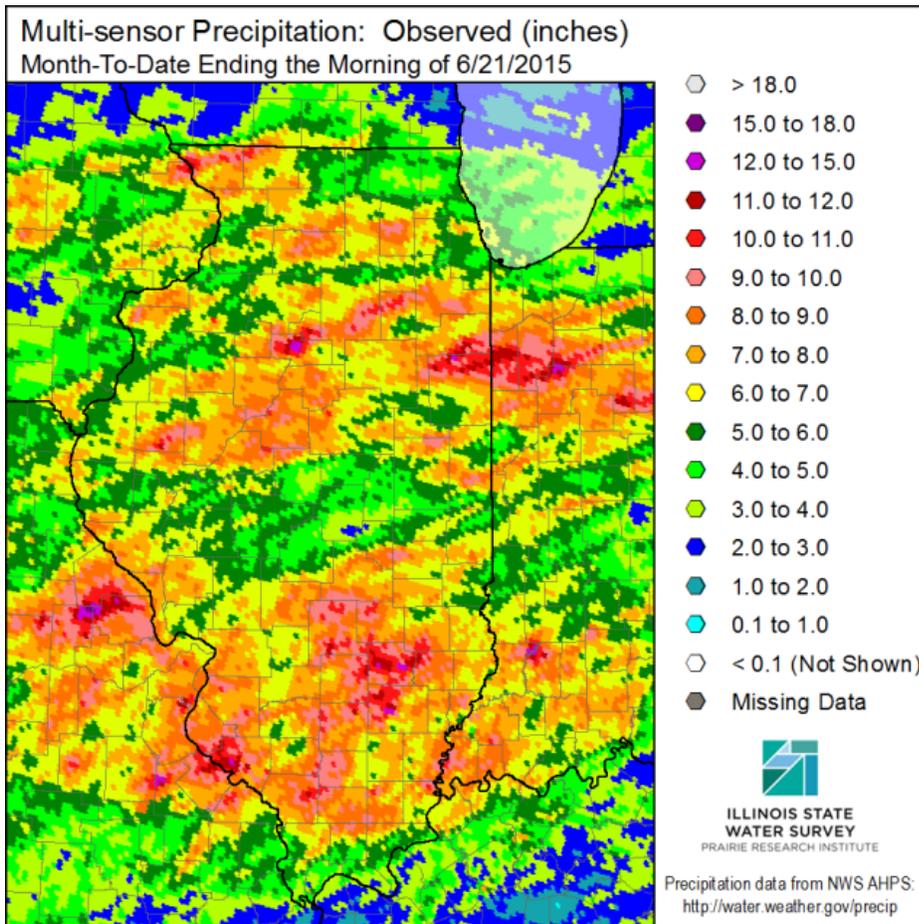


## Lisle Township June 2015 - Status Report

### Season Perspective

Weather conditions critically affect the seasonal mosquito population. Excessive rainfall periods trigger hatches of floodwater mosquitoes (*Aedes vexans*), the dominant annoyance species in northern Illinois that has a flight range of 15 to 20 miles. The other target species is the northern house mosquito (*Culex pipiens*), the primary vector of West Nile virus (WNV) that flourishes under stagnant water drought conditions.

As of June 21<sup>st</sup>, the Illinois State Climatologist, Dr. Jim Angel, reported that June of 2015 is the wettest June on record for Illinois. The remnants of *Tropical Storm Bill* impacted a large portion of Illinois during the third week of June. The following Illinois State Water Survey map shows that many areas of the state received over 10.0 inches of rain during June:





Most of the Chicagoland area received at least 6.0 inches during June. The National Weather Service expects wetter than average conditions to continue for July. The flooding rains and saturated soil conditions have set the stage for a much above normal season for the floodwater mosquito. As a result, larval control efforts in floodwater areas have been intensified, and the extreme mosquito annoyance periods will require frequent adult mosquito applications, timed to hit floodwater mosquito migration brood peaks.

Average June rainfall at O'Hare International Airport is 3.45 inches. Through June 26<sup>th</sup>, 6.17 inches was officially recorded. Since May 1<sup>st</sup>, there have been a series of nine (9) significant rainfalls and associated floodwater mosquito hatches. However, the impact of the some of these projected floodwater broods was diminished because an inconsistent temperature pattern. The first part of July is forecasted to be rainy with cool temperatures. This cooler pattern will continue to diminish the impact of floodwater mosquito brood influxes.

### **Mosquito-Borne Disease Update**

As of June 23, 2015, a total of 15 states have reported West Nile virus infections in people, birds, or mosquitoes in 2015. Overall, five cases of West Nile virus disease in people have been reported to CDC in KS, NM, OK and TX. Of these, two (40%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and three (60%) were classified as non-neuroinvasive disease.

On May 29<sup>th</sup>, the Illinois Department of Public Health reported the first WNV-positive adult mosquito sample in downstate St. Clair County, across from St. Louis. WNV activity is anticipated to increase in July with the return of summerlike temperatures. On June 12<sup>th</sup>, the DuPage County Health Department reported a WNV-positive adult mosquito sample in the northeast corner of the county.

### **Recommendations**

The CDC currently shows a risk category 1. Biting adult mosquitoes activity and limited or sporadic epizootic activity in birds or mosquitoes. Conduct Integrated Vector Management program to monitor and reduce vector mosquito abundance. Conduct environmental surveillance to monitor virus activity (mosquitoes, sentinel chickens, avian mortality, etc.) Initiate community outreach and public education programs focused on personal protection and residential source reduction.



**Brood Prediction**

The floodwater mosquito (*Aedes vexans*) is the key nuisance species in the Chicagoland area. Distinct hatches of floodwater mosquito populations, or broods, are triggered by significant rainfall events. The Clarke Brood Prediction Model calculates peak annoyance periods based on rainfall and temperature data collected from weather stations in your area.

Weather Station Name	Rainfall Date	Rain Amount (inches)	Brood Prediction Date
Du Page Co.	05/08/2015	1.27	06/01/2015
Du Page Co.	05/26/2015	0.53	06/13/2015
Du Page Co.	06/07/2015	0.41	06/26/2015
Du Page Co.	06/11/2015	0.68	07/01/2015
Du Page Co.	06/13/2015	0.88	07/03/2015
Du Page Co.	06/15/2015	2.90	06/29/2015
Du Page Co.	06/18/2015	0.54	07/02/2015
Du Page Co.	06/29/2015	0.89	07/13/2015

**Upcoming Operations:**

- 1 Completed Inspection
- 2 Targeted Inspections
- 2 Catch Basin Treatments

**Operation and Surveillance Reports**

Below is a report outlining all services performed in the month of June. These services could include the following:

- **0952 N. J. Light Trap Seasonal Service:** *Seasonal Light Trap Service for adult mosquito population monitoring.*
- **1252 Complete Site Larval Inspection Service:** *Inspection service of all potential mosquito larvae development sites.*
- **1302 Targeted Site Larval Inspection:** *Inspection of all targeted larval development sites.*
- **1352 Larval Site Service Call:** *Special inspection of standing water for mosquito breeding per hot line request.*
- **1502 Ground Prehatch:** *Ground prehatch for control of mosquito larvae.*
- **1752 Backpack Larviciding:** *Backpack larviciding for biological control of mosquito larvae sites.*
- **1754 Hand Larviciding:** *Hand equipment larviciding for biological control of mosquito larvae.*
- **2006 Natular T30 CB Bike:** *Catch basin treatment for larval control.*
- **2015 Vectorex WSP Catch Basin Trtmt:** *Catch basin treatment for larval control.*
- **2202 5% Abate Heli Prehatch:** *Helicopter application to control adult mosquitoes*
- **2802 Anvil Truck ULV application:** *Truck application to control adult mosquitoes*



**Services Performed June 2015:**

<b>Service Item</b>	<b>Start Date</b>
ROS1252 - Complete Site Larval Insp Serv	06/03/2015
ROS2015 - Vectolex WSP Catch Basin Trtmt	06/11/2015
ROS2202 - 5% Abate Heli Prehatch	06/13/2015
ROS2802 - Anvil Truck ULV Application	06/16/2015
ROS1302 - Targeted Site Larval Insp Serv	06/22/2015