



Lisle Township

August 2014- Status Report

Season Perspective

The summer of 2014 is one of the coolest on record. “The statewide average temperature for July was 70.3 degrees in Illinois, which ties the record for the coolest July set back in 2009,” according to the Illinois State Climatologist Jim Angel at the Illinois State Water Survey, University of Illinois. The cool temperature pattern continued through the month of August with the exception of a recent warming trend into the upper 80 degree range.

While the summer of 2014 was cool, it was the ninth wettest on record since 1871. Since mid-May there have been ten (10) significant rainfalls and corresponding floodwater mosquito brood hatches. The latest flooding rain of 2.50 inches at O’Hare on August 21st triggered a major brood to hit the Chicagoland area right after the Labor Day weekend.

The last half of July and first part of August at O’Hare International Airport was relatively dry and the July monthly total rainfall about 1.0 inch below normal. This dry weather pattern was conducive to the development of *Culex pipiens*, the northern house mosquito and primary transmitter of West Nile virus (WNV). For example, to date in DuPage County, there have been fifty-five (55) positive WNV mosquito samples with thirty-four (34) (62%) spiking during the month of August. Therefore, larval site inspections and larviciding efforts have been focused on *Culex* habitats to prevent the development of within the community boundaries. Adulticiding sprayings will be performed, not only for peak floodwater mosquito annoyance periods, but also if the potential of WNV increases.

Mosquito-Borne Disease Update

According to the CDC, “as of August 26, a total of 44 states and the District of Columbia have reported West Nile virus infections in people, birds, or mosquitoes. Overall, 297 cases of West Nile virus disease in people have been reported to CDC. Of these, 157 (53%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 140 (47%) were classified as non-neuroinvasive disease.”

On August 18th, the Illinois Department of Public Health reported the first human WNV case in the City of Chicago in a 70 year old woman. The woman became ill in July and is recovering at home. A second human case was announced in downstate, Crawford County in a woman in her 80s. In 2013 for comparison, Illinois incurred 117 WNV human cases, including 11 deaths.



Surveillance efforts within Illinois has confirmed 644 WNV-positive mosquito samples, of which, 451 are in Cook County, 55 in DuPage, 17 in Will County, 9 in Kane County, 8 in Lake County and 7 in McHenry County. The 97 other positives have been reported in downstate counties. In addition, 22 WNV-positive birds have been identified in Illinois counties.

County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Human Cases
COOK	5	0	2	451	0	1
DUPAGE	0	0	0	55	0	0
KANE	1	0	0	9	0	0
LAKE	1	0	0	8	0	0
MCHENRY	0	0	0	7	0	0
WILL	0	0	1	17	0	0
TOTAL (40 Counties)	11	0	11	644	0	2

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.	08/04/2014	0.66	08/22/2014
Du Page Co.	08/10/2014	1.41	08/26/2014
Du Page Co.	08/21/2014	2.83	09/04/2014

Upcoming Operations

1 Catch Basin Treatment

Recommendations

The CDC currently shows a risk category 2. Increase larval control, source reduction, and public education emphasizing personal protection measures, particularly among the elderly. Intensify adult mosquito control in areas where surveillance indicates human risk, initiate adult mosquito control if not already in progress, initiate visible activities in community to increase attention to WNV transmission risk. Work with collaborators to reduce risks to the elderly.



Operation and Surveillance Reports

Below is a report outlining all services performed in the month of August. 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.*
- **1502 5% Abate PG-Ground Prehatch:** *Treatment with 5% Abate for larval control.*
- **1754 Hand Larviciding:** *Hand equipment larviciding for biological control of mosquito larvae.*
- **2006 Natular T30 CB Bike:** *Catch Basin treatment for larval control.*
- **2009 Natular XRT CB Bike:** *Catch Basin treatment for larval control.*
- **2202 5% Abate Heli Prehatch:** *Helicopter prehatch application with Abate pellets for larval control.*
- **2712 Biomist ATV/ULV Appl. Nights:** *ATV/ULV application for adult mosquito control.*
- **2786 Anvil ULV Festival Touch Up:** *Truck ULV “touch-up” application for community festival mosquito control.*
- **2802 Anvil Truck ULV Application:** *Truck ULV application for adult mosquito control*
- **2888 Biomist 3+15 Truck ULV:** *Truck ULV treatment for adult mosquito control.*
- **2922 0.5% FLIT (Permethrin) BP Barr:** *Backpack barrier strip application to reduce adult mosquito reinfestation.*

Services Performed August 2014:

Service Item	Start Date
ROS2015 - Vectolex WSP Catch Basin Trtmt	08/01/2014
ROS1252 - Complete Site Larval Insp Serv	08/06/2014
ROS1852 - Mosquitofish (G. Affinis) Stck	08/14/2014
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ROS1302 - Targeted Site Larval Insp Serv	08/27/2014