



Bloomington Township

August 2013 - Status Report

Season Perspective

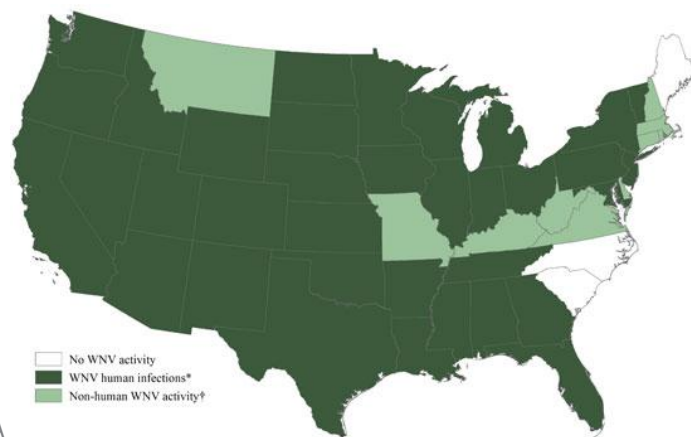
Weather conditions critically affect the seasonal mosquito population. Excessive rainfall periods trigger hatches of floodwater mosquitoes (*Aedes vexans*), the dominant annoyance species in northern Illinois that has a flight range of 15 to 20 miles.

An unusual distribution of temperature over North America this August has resulted in the month running about 3 degrees below normal in Chicago. In addition, there has been a significant lack of precipitation since July 1st through August. During this period less than 50% of normal rainfall has been recorded at O'Hare (approximately 3.0 inches versus the normal amount of 6.3 inches). As a result, the floodwater mosquito population has been curtailed, while the *Culex* population has been steadily building during this dry spell. In recent weeks, the number of West Nile virus (WNV) positive *Culex* mosquito samples has been spiking. The warming trend during the week of August 19th in combination with the lack of rainfall is setting-up the classic pattern for the increased risk of WNV transmission as September approaches.

August is prime time for WNV activity. Periodic rainfalls fill artificial containers and cause small pocket flooding around homes leading to *Culex* breeding and transmission of WNV. Inspection and larviciding operations have been intensified and truck adult mosquito control sprayings should be timed to hit brood peaks, as well as, positive reports of WNV in the *Culex* population.

Mosquito-Borne Disease Update

As of August 27, 2013, the Centers of Disease Control and Prevention (CDC) reports forty-five (45) states have reported West Nile virus infections in people, birds, or mosquitoes. A total of 421 cases of West Nile virus disease: Neuroinvasive-197 cases and Non-Neuroinvasive-224 cases, including thirteen deaths, have been reported to CDC.





According to the Illinois Department of Public Health, there have been 1,274 WNV-positive mosquito samples. The first human case was reported on August 21st in Fox River Grove, southeast McHenry County. Since then, there has been a human case in Tazewell County.

Illinois Department of Public Health West Nile virus data summary (as of 8-28-2013)

County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Human Cases
Cook	2	1	5	885	0	0
DeKalb	0	0	0	2	0	0
DuPage	0	0	0	81	0	0
Kane	2	0	1	9	0	0
Kendall	0	0	0	3	0	0
Lake	1	0	1	7	0	0
McHenry	4	1	4	9	0	1
Stephenson	1	0	0	0	0	0
Will	0	0	0	20	0	0
Winnebago	1	0	0	4	0	0
TOTAL (50 Counties)	26	4	16	1274*	1	2

***410% increase since the July report**

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	Brood Prediction Date
Du Page Co.	07/18/2013	0.60	08/07/2013
Du Page Co.	07/19/2013	0.42	08/07/2013
Du Page Co.	07/20/2013	0.74	08/08/2013
Du Page Co.	07/26/2013	0.48	08/13/2013
Du Page Co.	08/22/2013	0.68	09/05/2013
Du Page Co.	08/31/2013	0.94	09/14/2013
Du Page Co.	09/01/2013	0.86	09/15/2013

Upcoming September Operations

- 1 Catch Basin Treatment
- 2 Culex Treatments



August 2013 New Jersey Light Trap Counts

(*Red numbers indicate an annoyance level)

Trap Location	Aug 02	Aug 05	Aug 07	Aug 09	Aug 12	Aug 14	Aug 16	Aug 19	Aug 21	Aug 23	Aug 26	Aug 28	Aug 30
Rush St	13	22	16	18	39	13	7	26	9	7	7	11	7

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:

- **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.*
- **1752 Backpack Larviciding:** *Backpack larviciding for biological control of mosquito larvae sites.*
- **1754 Hand Larviciding:** *Hand equipment larviciding for biological control of mosquito larvae.*
- **2002 Catch Basin Trmt:** *Catch Basin treatment for larval control.*
- **2006 Natular G30 Helicopter Prehatch:** *Helicopter prehatch application for larval control.*
- **2015 150-day Altosid Briq Street CB:** *Catch Basin treatment for larval control.*
- **2019 Altosid XR CB Bike:** *Catch Basin treatment for larval control.*
- **2021 Altosid CB Bike – 30 day:** *Catch Basin treatment for larval control.*
- **2202 5% Abate Heli Prehatch:** *Helicopter prehatch application pellets for larval control.*
- **2402 Helicopter Larviciding:** *Helicopter larvicide application for biological control of mosquito larvae.*
- **2712 Biomist ATV/ULV Appl. Nights:** *ATV/ULV application for adult mosquito control.*
- **2802 Anvil Truck ULV Application:** *Truck ULV application for adult mosquito control*
- **2808 Anvil Truck ULV Streets/Drives:** *Truck ULV application for adult mosquito control*
- **2888 Truck ULV:** *ULV application for adult mosquito control.*



Services Performed August 2013:

Service Item	Start Date
ROS2786 - Anvil ULV Festival Touch-Up	08/01/2013
ROS2786 - Anvil ULV Festival Touch-Up	08/02/2013
ROS2202 - 5% Abate Heli Prehatch	08/05/2013
ROS2786 - Anvil ULV Festival Touch-Up	08/05/2013
ROS2786 - Anvil ULV Festival Touch-Up	08/05/2013
ROS2786 - Anvil ULV Festival Touch-Up	08/05/2013
ROS2786 - Anvil ULV Festival Touch-Up	08/05/2013
ROS2786 - Anvil ULV Festival Touch-Up	08/07/2013
ROS1302 - Targeted Site Larval Insp Serv	08/12/2013
ROS1754 – Hand Larviciding	08/12/2013
ROS2752 - Anvil Truck ULV Service Call	08/13/2013
ROS1352 - Larval Site Service Call	08/13/2013
ROS2786 - Anvil ULV Festival Touch-Up	08/14/2013
ROS2888 - Biomist 3+15 Truck ULV	08/19/2013
ROS2888 - Biomist 3+15 Truck ULV	08/26/2013
ROS1754 – Hand Larviciding	08/28/2013