



Plainfield Township September 2014- Status Report

Season Perspective

After the ninth wettest summer on record, late September turned dry with no significant rainfalls since September 10th. There were three floodwater mosquito brood hatches in the first half of September, but the temperature pattern diminished their impact. High mosquito trap counts and biting activity were concentrated in wooded area with harboring vegetation. Adult mosquito activity will cease with the first major frost that typically occurs by October 9th in northern Illinois.

Mosquito-Borne Disease Update

According to the Centers for Disease Control (CDC), *“as of September 23, a total of 46 states and the District of Columbia have reported West Nile virus (WNV) infections in people, birds, or mosquitoes. Overall, 979 cases of West Nile virus disease in people have been reported to CDC. Of these, 544 (56%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 435 (44%) were classified as non-neuroinvasive disease.”* For a perspective, in 2013 there were a national total of 2,469 WNV human cases, and 5,674 in 2012.

As of October 1st, the Illinois Department of Public Health reported twenty-eight (28) human WNV cases in Cook, DuPage, Kane, Lake, LaSalle and McHenry Counties in the northern part of the state. For a perspective, in 2013 there were an Illinois total of 117 WNV human cases, and 290 in 2012.

Surveillance efforts within Illinois have confirmed 1,227 WNV-positive mosquito samples, of which, 83% occurred in northern Illinois where the human cases were diagnosed. The following chart summarizes 2014 WNV activity in Illinois counties, as of October 1st:

County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Human Cases
COOK	7	0	2	875	0	9
DUPAGE	0	1	0	92	0	0
KANE	2	0	0	23	0	1
LAKE	1	0	0	28	0	1
MCHENRY	0	0	0	11	0	1
WILL	0	0	1	26	0	0
TOTAL (48 Counties)	22	1	12	1,227	0	28



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	Inch Date	Rain Amount	Brood Prediction Date
Will Co.	08/20/2014	0.86	09/04/2014
Will Co.	08/21/2014	0.94	09/06/2014
Will Co.	08/23/2014	0.52	09/08/2014
Will Co.	08/25/2014	0.40	09/12/2014
Will Co.	08/26/2014	0.54	09/13/2014
Will Co.	09/09/2014	1.26	10/03/2014
Will Co.	09/10/2014	0.65	10/05/2014

Recommendations

The CDC currently shows a risk category 1/2. 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 emphasizing personal protection measures, particularly among the elderly.

September 2014 New Jersey Light Trap Counts

(*Red numbers indicate an annoyance level)

Trap Location	Sep 01	Sep 03	Sep 05	Sep 08	Sep 10	Sep 12
24711 Easy St	46	41	67	28	79	23

Operation and Surveillance Reports

Below is a report outlining all services performed in the month of September. 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.*



Operation and Surveillance Reports (continued)

- **1754 Hand Larviciding:** *Hand equipment larviciding for biological control of mosquito larvae.*
- **2002 Catch Basin Trmt:** *Catch Basin treatment for larval control.*
- **2888 Truck ULV:** *ULV application for adult mosquito control.*

Services Performed September 2014:

Service Item	Start Date
ROS1302 - Targeted Site Larval Insp Serv	09/02/2014