

Item #14:
Village Trustee Underwood
Mosquito Abatement/West Nile Virus – July 2011



Village of Long Grove July 2011 Status Report

Season Perspective:

The month of July was on pace to be one of the driest on record and the Chicagoland area was entrenched in drought conditions, until July 22nd. Due to a series of heavy rains, July 2011 ended-up becoming the wettest on record. Official rainfall at O'Hare International Airport between July 22nd and 29th totaled 10.45 inches, shattered the 1889 previous record total of 9.56 inches, and broke the drought. As a result, there will be a resurgence of the floodwater mosquito (*Aedes vexans*) in early August, the primary nuisance species in northern Illinois. Three major broods will peak between August 5th and 12th. Annoyance is expected to be similar to the levels experienced back in June.

The hot and dry conditions during the first part of July stimulated the development of the northern house mosquito (*Culex pipiens*). This species flourishes in stagnant water conditions and is the primary transmitter of West Nile virus (WNV) in Illinois. To date, twenty six (26) WNV-positive mosquito batches have been reported in Illinois. In August, not only will larviciding efforts be focused on floodwater mosquito sites, but also *Culex* sites such as street catch basins, sewage treatment lagoons, and other stagnant water areas. Community residents should be advised to eliminate stagnant water habitats around their yard and home, as well as, wear mosquito repellent products to prevent adult mosquito exposure.

Mosquito-Borne Disease Update:

Illinois Department of Public Health West Nile virus data summary (as of 7-28-2011)

County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Other Mammals
Cook	0	0	0	16	0	0
DuPage	0	0	0	3	0	0
Gallatin	0	0	0	2	0	0
Kendall	0	0	0	3	0	0
LaSalle	1	0	1	0	0	0
St. Clair	0	0	0	1	0	0
Tazewell	0	0	0	1	0	0
TOTAL	1	0	1	26	0	0

To date in 2011, there have been 9 human West Nile virus cases, including 1 fatality, reported to the CDC from the following states: AZ, MS, SD, TX and WY. There have been no human WNV cases reported in the State of Illinois so far in 2011.



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	Amount (Inches)	Brood Prediction Date
South Lake Co.	07/22/2011	6.06	08/05/2011
South Lake Co.	07/27/2011	1.06	08/10/2011

Upcoming August Operations:

1 Back Pack Treatment

Recommendations:

The CDC currently shows a risk category 3. 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 July. 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.*
- **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.*



Services Performed July 2011:

Service Item	Start Date
ROS1752 - Vectobac (B.T.I.) BP Larv	07/08/2011
ROS1252 - Complete Site Larval Insp Serv	07/12/2011
ROS1754 – Hand Larviciding	07/12/2011