

**Item #13:**  
**Village Trustee Underwood**  
Mosquito Abatement Update – May 2011



## Village of Long Grove May 2011 Status Report

### Surveillance & Weather:

The rainfall total for May (7.27 inches at ORD) is 3.89 inches above the average (3.38 in.). The month of May was ranked the 3<sup>rd</sup> wettest on record.

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. Temperature predictions for the beginning of June are in the upper 70's and low to mid 80's with a slight chance of rain. With the rebound to more normal temperatures, we expect an increase in mosquito annoyance conditions.

### Mosquito-Borne Disease Update:

In 2010, 981 human cases of West Nile virus (WNV), including 45 deaths, occurred in the United States. Illinois reported 61 human cases and 3 deaths in 2010. The following is the latest information for 2011:

- No human WNV cases have been reported in the United States, so far.
- CA – 7 dead birds and 4 WNV+ positive mosquito pools (sample)
- AZ – 1 WNV+ mosquito pool
- GA – 1 WNV+ horse case – a month earlier for a positive horse case being reported.

### 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
South Lake Co.	05/11/2011	0.80	05/25/2011
South Lake Co.	05/22/2011	0.65	06/05/2011
South Lake Co.	05/25/2011	2.00	06/08/2011
South Lake Co.	05/29/2011	1.42	06/12/2011



## Upcoming June Operations:

- 2 Complete Inspections
- 1 Backpack 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 May. 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 May 2011:

<b>Service Item</b>	<b>Start Date</b>
ROS1252 – Complete Site Larval Insp Serv	05/16/2011
ROS1754 – Hand Larviciding	05/16/2011
ROS1752 – Vectobac (B.T.I.) BP Larv	05/18/2011
ROS1352 – Larval Site Service Call	05/24/2011
ROS1252 – Complete Site Larval Insp Serv	05/31/2011
ROS1754 – Hand Larviciding	05/31/2011