



## Village of Long Grove

### September 2012 - Status Report

#### Season Perspective

The 2012 meteorological summer season, June through August, was the 3rd warmest in the past 142 years behind only 1995 and 1955. This extreme temperature weather pattern led to an increased prevalence of West Nile Virus. At the beginning August, nearly 60 percent of mosquito pools in Cook County and 71 percent of mosquito pools in DuPage County tested positive for West Nile virus (WNV). By the beginning of September, the prevalence of WNV diminished. WNV positive pools for Cook and DuPage Counties dropped to 32 and 30 percent, respectively. During the last half of September, the weather pattern shifted due to a surge of Canadian air that ushered-in the coolest temperatures in 5 months.

In 2012, the floodwater mosquito (*Aedes vexans*) never became a significant factor even after several late season significant rainfalls. Entrenched drought conditions and lack of soil moisture prevented development of this typical and dominant species.

Periodic rainfalls and fall temperatures will continue to keep container habitats such as street catch basins, bird baths, and roof gutters charged with water to produce *Culex* mosquitoes. The threat of WNV will continue into October until a widespread and hard frost occurs, historically around October 12<sup>th</sup> at O'Hare.

#### Mosquito-Borne Disease Update

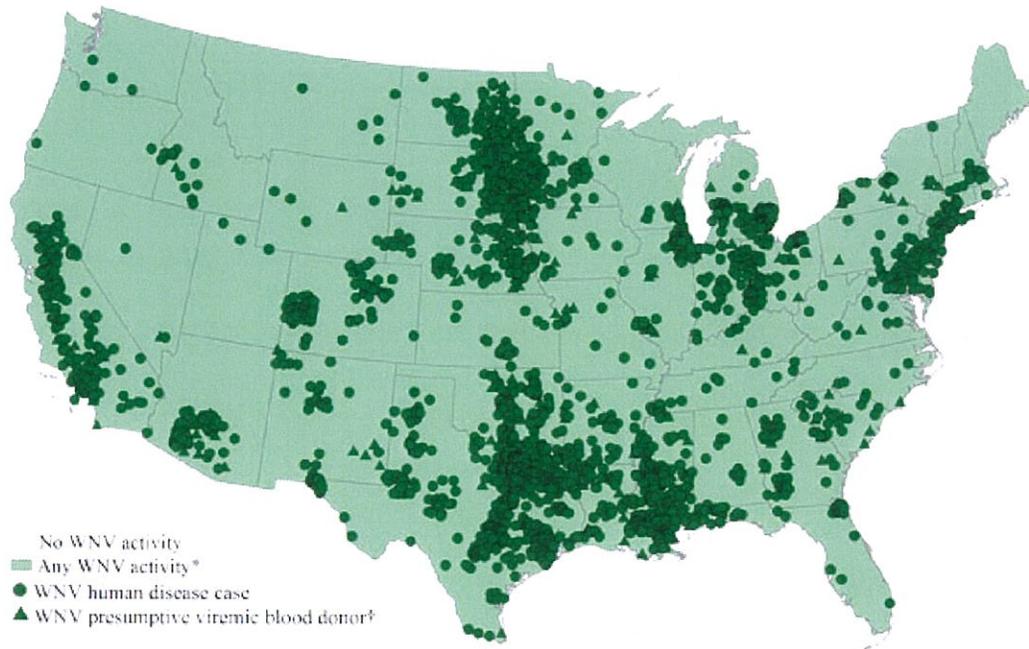
Since the arrival of WNV in the United States in 1999, most human disease outbreaks have been associated with hot, dry drought conditions. As of September 25<sup>th</sup>, the Centers for Disease Control have reported 3,942 human WNV cases, including 147 fatalities in the United States. Except for Alaska and Hawaii, every state has found evidence of the virus in mosquitoes, birds or people. The State of Texas has suffered a massive WNV epidemic with 39 percent of the national cases count (1,225) occurring there. In addition, the following states have reported more than 100 WNV cases so far this year: CA-IL-LA-MI-MS-OK-SD-TX.

Through September 27<sup>th</sup>, the Illinois Department of Public Health has reported 138 human cases, 5 fatalities and 3,852 WNV-positive mosquito samples. The current level of activity is equal to or above WNV-positive mosquito sample levels reported in 2002, 2005 and 2006. These years combined for over 1,300 human WNV cases, including 89 fatalities in Illinois. WNV activity will continue into October and until the first widespread frost. The public should be diligent and continue to use of repellent personal protection when enjoying outdoor fall activities. Larval control efforts should remain focused on the *Culex* population.

**Based on the Centers for Disease Control & Prevention West Nile Virus guidelines, communities under moderate/high risk should implement truck ultra-low volume (ULV) applications, if not already in progress, to interrupt West Nile Virus amplification. See recommendations below for complete list of control activities.**



As of September 25<sup>th</sup>, 3,942 human WNV infections have been reported to CDC from 48 states, as shown by the following map:



As of September 27<sup>th</sup>, the Illinois Department of Public Health has reported 98 birds and 3,852 mosquito samples positive for WNV, as well as 129 human cases in Cook, DeKalb, DuPage, Kane, Lake, McHenry and Will. There have been four deaths in DuPage and one in Kane County.

Illinois Department of Public Health West Nile virus data summary (as of 9-27-2012)

County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Human Cases
Cook	10	1	1	2722	1	81
DeKalb	2	0	0	8	0	1
DuPage	8	1	9	447	0	28
Kane	1	1	3	110	0	5
Kendall	0	0	0	13	0	0
Lake	1	2	0	89	0	6
McHenry	5	2	5	44	0	1
Stephenson	2	0	0	0	0	0
Will	2	1	2	124	0	7
Winnebago	3	0	0	11	0	0
<b>TOTAL (48 Counties)</b>	<b>59</b>	<b>15</b>	<b>24</b>	<b>3852</b>	<b>5</b>	<b>138</b>



**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
South Lake Co.	08/26/2012	0.45	09/15/2012

**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 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.
- **1305 Culex Site Inspection Service:** Inspection of culex mosquito larval development sites for the prevention of West Nile Virus and other mosquito-borne diseases.
- **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 with a sustained-release biological insecticide for larval control.
- **2402 Helicopter Larviciding:** Helicopter larvicide application for biological control of mosquito larvae.
- **2752 Truck ULV Service Call:** ULV “touch-up” application for control of mosquito annoyance per citizen hotline request.
- **2888 Truck ULV:** *ULV application insecticide for adult mosquito control.*

**Services Performed September 2012:**

Service Item	Start Date
ROS1252 - Complete Site Larval Insp Serv	09/06/2012
ROS1252 - Complete Site Larval Insp Serv	09/12/2012