Village of Long Grove
May 2013 - Status Report

Season Perspective

The 2012 drought was at maximum intensity last July and August. Precipitation returned to normal by winter, and then surged much above normal by late winter and early spring. April of 2013 was the wettest April on record with 10.68 inches of rain falling at O'Hare. This precipitation pattern officially brought northern Illinois out drought condition, replenished the soil moisture to a saturated level, and has left many areas vulnerable to flooding.

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. The series of five (5) heavy rainfalls beginning on April 18th through late May has set the stage for an above average beginning to the mosquito season. Back-to-back floodwater mosquito hatches are predicted to impact northern Illinois through the middle of June. Following the cool snap over the Memorial Day weekend, the long range forecast into mid-June shows above normal temperatures into mid-June. As temperatures rebound, an increase in mosquito annoyance conditions is expected. Inspection and larviciding operations have been intensified and truck adult mosquito control sprayings should be timed to hit brood peaks.

Mosquito-Borne Disease Update

In 2012, there was a resurgence of West Nile virus (WNV) in the United States with 5,674 human cases including 286 deaths occurring. This activity ranked last year as the second worst going back to 1999 when WNV was first detected in the New York City area. The most human cases (9,862) were reported in 2003.

At this time, no human cases have been reported by the Centers for Disease Control and Prevention (CDC) in the United States.

Illinois Department of Public Health West Nile has not yet updated the virus data summary for 2013. (5-6-2013)

County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Humans
Cook	0	0	0	0	0	0
DeKalb	0	0	0	0	0	0
Du Page	0	0	0	0	0	0
Kane	0	0	0	0	0	0
Kendall	0	0	0	0	0	0
Lake	0	0	0	0	0	0
McHenry	0	0	0	0	0	0
Stephenson	0	0	0	0	0	0
Will	0	0	0	0	0	0
Winnebago	0	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**	**0**

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.	04/15/2013	0.44	05/13/2013
South Lake Co.	05/09/2013	0.44	06/02/2013
South Lake Co.	05/20/2013	1.02	06/03/2013
South Lake Co.	05/21/2013	0.86	06/04/2013
South Lake Co.	05/22/2013	0.48	06/05/2013

Upcoming June Operations

3 Completed Inspections

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 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.*
- **1752 Backpack Larviciding:** *Backpack larviciding for biological control of mosquito larvae sites.*
- **1754 Hand Larviciding:** *Hand equipment larviciding for biological control of mosquito larvae.*
- **2202 Pg-Helicopter Prehatch Appl:** *Helicopter prehatch application pellets for larval control.*

Services Performed May 2013:

Service Item	Start Date
ROS1754 – Hand Larviciding	05/20/2013
ROS1252 - Complete Site Larval Insp Serv	05/20/2013
ROS1752 - Vectobac (B.T.I.) BP Larv	05/29/2013