

Item #7:
Village Trustee Borys
Mosquito Abatement/West Nile Virus Update



Village of Long Grove

July 2014 Meeting - Status Report

Season Perspective

June rainfall was 100% above normal for most areas in northern Illinois, and the first half of July was excessively wet too. According to the Illinois State Water Survey, "the highest moisture levels were in northern and east-central Illinois . . . These areas saw up to 4.5 inches of rain on July 12th and 13th." As a result, the Chicagoland area was impacted by four (4) to seven (7) floodwater mosquito (*Aedes vexans*) broods, the dominant annoyance species in northern Illinois with a flight range of 15 to 20 miles.

Clarke operates a network of 100 New Jersey light traps to monitor the seasonal annoyance level conditions throughout the metropolitan area. Through July of 2014, compared to 2013, the impact of the wet season has been an overall increase in the total trap catch for all species by 31%, and a 62% increase in the floodwater mosquito population.

Since mid-July at O'Hare International Airport, conditions have been relatively dry with the monthly total rainfall about 1.0 inch below normal. This dryer weather pattern is conducive to the development of *Culex pipiens*, the northern house mosquito and primary transmitter of West Nile virus (WNV). Therefore, larval site inspections and larviciding efforts have been focused on *Culex* habitats to prevent the development of within the community boundaries. Adulticiding sprayings will be performed, not only for peak floodwater mosquito annoyance periods, but also if the potential of WNV increases.

Mosquito-Borne Disease Update

According to the CDC, "As of July 22, a total of 30 states have reported West Nile virus infections in people, birds, or mosquitoes. Thirty-five cases of West Nile virus disease in people have been reported to CDC. Of these, 16 (46%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 19 (54%) were classified as non-neuroinvasive disease."

Illinois has reported ninety-nine (99) WNV-positive mosquito samples, forty-five (45) of which are in Cook County, eight (8) in DuPage, seven (7) Will County and one (1) in Lake County. The thirty-eight (38) other positives have been reported in downstate counties. In addition, seven (7) WNV-positive birds have been identified in six (6) Illinois counties.



County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Human Cases
COOK	0	0	0	45	0	0
DUPAGE	0	0	0	8	0	0
KANE	1	0	0	0	0	0
LAKE	0	0	0	1	0	0
WILL	0	0	0	7	0	0
TOTAL (25 Counties)	4	0	3	99	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 (inches)	Brood Prediction Date
South Lake Co.	06/21/2014	1.12	07/09/2014
South Lake Co.	06/24/2014	1.03	07/11/2014
South Lake Co.	06/30/2014	1.96	07/17/2014

Upcoming Operations

1 Completed Inspection

Recommendations

The CDC currently shows a risk category 1. 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 focused on personal protection and residential source reduction.



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.*
- **1719 Vectolex 10#/Acre Backpack Lar:** *Backpack larviciding for biological control of mosquito larvae sites.*
- **2204 5% Abate Heli Prehatch (10#/A):** *Helicopter prehatch application with Abate peelets for Larval control*
- **2810 DUET ATV/ULV Application:** *ATV/ULV application for adult mosquito control.*
- **2812 DUET Truck ULV Application:** *Truck ULV application for adult mosquito control*
- **2814 DUET Truck ULV City Wide:** *Truck ULV application for adult mosquito control*
- **2816 DUET Truck ULV Special Event:** *Truck ULV application for adult mosquito control*
- **2888 Biomist 3+15 Truck ULV:** *Truck ULV application for adult mosquito control*
- **2902 0.5% FLIT (Permethrin) BP Barr:** *Backpack barrier strip application to reduce adult mosquito reinfestation.*
- **2922 0.5% FLIT (permethrin) BP Barr:** *Backpack barrier strip application to reduce adult mosquito reinfestation.*
- **3314 DUET Heli ULV Application:** *Helicopter Adulticide application using Duet*

Services Performed July 2014:

Service Item	Start Date
ROS2107 - 150-day Altosid Briq BYCB T/U	07/01/2014
ROS1352 - Larval Site Service Call	07/02/2014
ROS1252 - Complete Site Larval Insp Serv	07/07/2014
ROS1752 - Vectobac (B.T.I.) BP Larv	07/10/2014
ROS1252 - Complete Site Larval Insp Serv	07/21/2014

David Lothspeich

From: Clarke Customer Service [service@clarke.com]
Sent: Thursday, August 07, 2014 2:20 PM
To: David Lothspeich
Subject: Backpack Larviciding Service Completed



Property Name: VILLAGE OF LONG GROVE

This is a message from Clarke. This email is to notify you that your backpack larvicide application to mosquito breeding sites was performed on 08/04/2014 ,08/05/2014 ,08/06/2014.

If you have any questions please feel free to contact your control consultant:

George Balis (630) 671-3112 gbalis@clarke.com

Providing integrated environmental aquatic service and mosquito control.

1-800-323-5727

www.clarke.com

For Internal Office Use Only:
Service Order: 1005310555
Job No: 1
Job Suffix: 0