

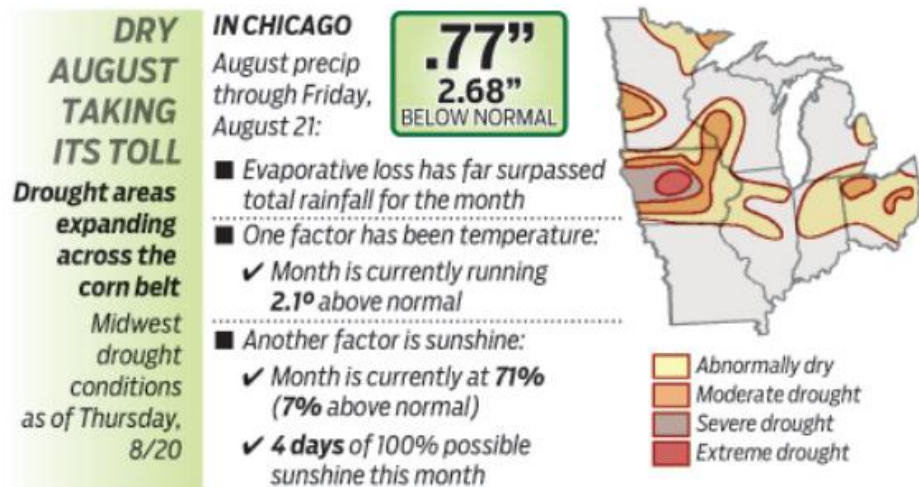


Plainfield Township August 2020 - Status Report

SEASON PERSPECTIVE

Introduction. 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 other target species is the northern house mosquito (*Culex pipiens*), the primary vector of West Nile virus (WNV) that flourishes under stagnant water and drought conditions.

The extremely hot and dry weather conditions have curtailed the seasonal floodwater mosquito population. 2020 has been the hottest summer on record, since 1955. Overall, August 2020 was 4.6° above normal and the 6th warmest August on record. The following August weather information (through 8/21) summarizes the expanding drought conditions across northern Illinois, according to the WGN TV Weather Center:



Since the start of the 2020 mosquito season, there have been a total of 13 floodwater mosquito brood hatches at O'Hare. The one August brood likely dried-up. As a result, adult mosquito trap counts have been low, and only thirty (30) citizen reports of mosquito annoyance conditions have been received across the entire Chicagoland area on the Clarke hotline & portal since August 1st. In a normal season, hundreds of mosquito annoyance reports would have been received in August.

While the floodwater mosquitoes have been absent, "the stealth-like" *Culex* population has flourished. As of August 25th, the Illinois Department of Public Health database reported 916 statewide WNV-positive mosquito samples, of which, 89% were collected from Cook



County. **Significantly, 90.2% of the statewide samples (826 of 916) have been reported between July 27th and August 24th as summarized by the following chart:**

	WNV+ Mosquitoes
County	7/27 - 8/24
Cook	744
DuPage	26
Kane	16
Kendall	2
Lake	27
McHenry	5
Ogle	2
Will	4
TOTAL	826

The major August surge of WNV activity in the northern Illinois mosquito population is an indication of the increased potential for human cases.

Late July through mid-September is the critical time to protect the public health from WNV. Due to the dryer weather pattern, Clarke operations has shifted from a focus on floodwater mosquito larval development to *Culex* habitats, including completion of catch basin applications and monitoring of wastewater treatment plants, and stagnant water areas. Truck ULV adulticide applications will very likely be recommended, as warranted by surveillance data, to proactively suppress the potential of WNV transmission to the human population.

Floodwater Mosquito Brood Prediction – O’Hare International Airport

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
Will Co.	06/20/2020	0.45	07/06/2020
Will Co.	06/22/2020	1.15	07/08/2020
Will Co.	06/26/2020	1.54	07/12/2020
Will Co.	07/09/2020	0.86	07/24/2020
Will Co.	07/11/2020	0.62	07/27/2020
Will Co.	07/15/2020	0.62	07/30/2020
Will Co.	07/19/2020	1.31	08/06/2020
Will Co.	08/10/2020	0.45	08/27/2020

MOSQUITO-BORNE DISEASE UPDATE

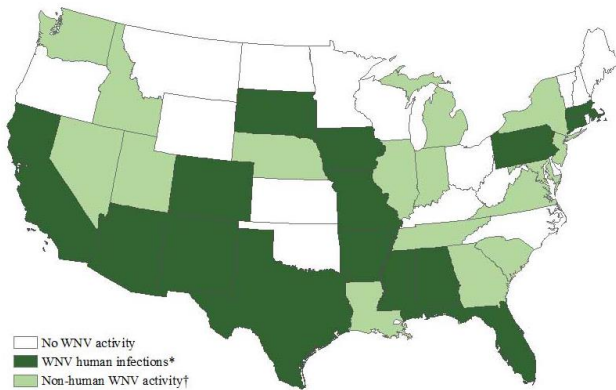
West Nile Virus (WNV)

2020 – USA. As of August 25, 2020, a total of 31 states have reported West Nile virus infections in people, birds, or mosquitoes in 2020. Overall, 63 cases of

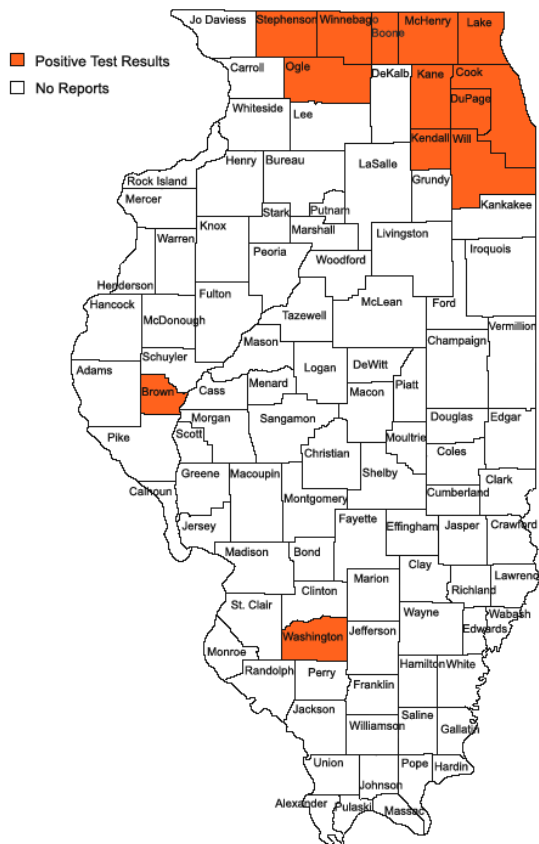


West Nile virus disease in people have been reported to CDC. Of these, 47 (75%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 16 (25%) were classified as non-neuroinvasive disease.

West Nile Virus Activity by State – United States, 2020 (as of August 25, 2020)



2020 – Illinois. In 2020, the State of Illinois recorded zero human WNV cases, and 946 WNV+ mosquito samples and five birds, as shown by the following map and chart:





County	American Crow	Blue Jay	Other Birds	Mosquito Batches	Horse	Other Mammals
BOONE	0	0	0	1	0	0
BROWN	0	0	1	0	0	0
COOK	1	0	0	845	0	0
DUPAGE	0	0	0	30	0	0
KANE	0	0	0	16	0	0
KENDALL	0	0	0	2	0	0
LAKE	0	0	0	36	0	0
MCHENRY	0	0	1	5	0	0
OGLE	0	0	0	4	0	0
STEPHENSON	0	1	0	0	0	0
WASHINGTON	0	0	0	1	0	0
WILL	0	0	0	5	0	0
WINNEBAGO	1	0	0	1	0	0
TOTAL	2	1	2	946	0	0

OPERATIONS UPDATE

Services Performed August 2020

Service Item	Start Date
ROS1302 - Targeted Site Larval Insp Serv	08/10/2020
ROS1302 - Targeted Site Larval Insp Serv	08/24/2020
ROS2888 - Biomist 3+15 Truck ULV	08/30/2020

Upcoming September 2020 Operations

Work Type	Number of Treatments
Targeted Site Larval Insp Serv	1