

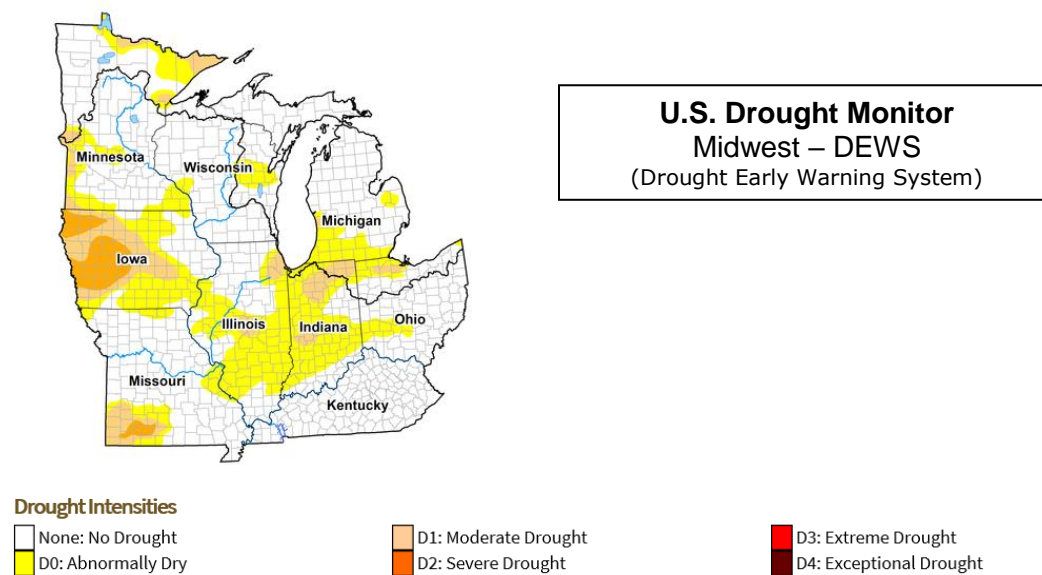


Plainfield Township September 2020 - Status Report

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.

Since 1970, this has been the 4th-driest July through September period for the Chicagoland area. The following map from the National Integrated Drought Information System (NIDIS - <https://www.drought.gov/drought/dews/midwest>) depicts the status of drought conditions in the immediate Chicagoland area and surrounding states, as of September 22nd :



After the wettest May on record, precipitation amounts plummeted, followed by the hottest summer on record since 1955. Accordingly, the extremely hot and dry weather conditions curtailed the seasonal floodwater mosquito population. Since the start of 2020 mosquito season, rainfalls have hatched a total of only 16 floodwater mosquito broods, compared to 30 in 2019. The harsh conditions diminished the impact of the predicted broods, as indicated by very few citizen mosquito annoyance reports on the Clarke Hotline and Portal.

While the floodwater mosquitoes were absent, “the stealth-like” *Culex* population flourished under the drought conditions. As of September 29th, the Illinois Department of Public Health (IDPH) database reported 2,277 statewide WNV-positive mosquito samples, of which, 86.4% and 99.2% were collected from Cook County and all northern Illinois counties, respectively. WNV-positive mosquitoes surged during the hot and dry August and early



September period. IDPH announced the first human case in DuPage County on September 9th. By the end of September, IDPH reported a total of 24 statewide with 22 in Cook County and 2 DuPage County.

Late July through September is the critical time to protect the public health from WNV. Due to the dryer weather pattern, Clarke operations were 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 were recommended, as warranted by surveillance data, to proactively suppress the potential of WNV transmission to the human population.

Floodwater Mosquito Brood Prediction – Will

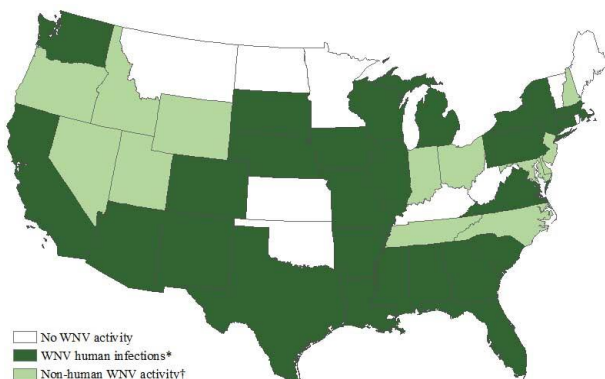
The floodwater mosquito (*Aedes vexans*) is the key nuisance species in the Chicagoland area. Distinct hatches of floodwater mosquito populations, or broods, are triggered by significant rainfall events. The Clarke Brood Prediction Model calculates peak annoyance periods based on rainfall and temperature data collected from weather stations in your area.

Weather Station Name	Rainfall Date	Rain Amount	Brood Prediction Date
Will Co.	07/19/2020	1.31	08/06/2020
Will Co.	08/10/2020	0.45	08/27/2020
Will Co.	09/05/2020	0.48	09/28/2020
Will Co.	09/06/2020	0.64	09/28/2020
Will Co.	09/07/2020	0.50	09/29/2020
Will Co.	09/08/2020	0.65	09/30/2020

MOSQUITO-BORNE DISEASE UPDATE

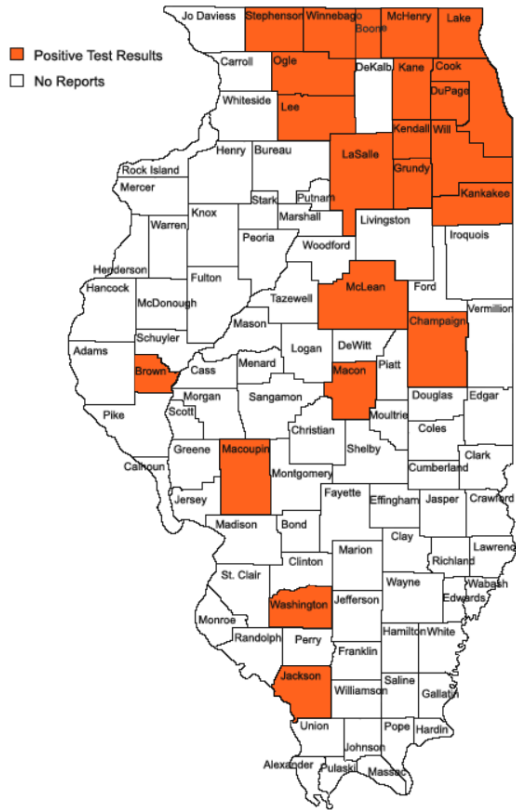
West Nile Virus (WNV)

2020 – USA. As of September 22, 2020, a total of 38 states have reported West Nile virus infections in people, birds, or mosquitoes in 2020. Overall, 174 cases of West Nile virus disease in people have been reported to CDC. Of these, 124 (71%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 50 (29%) were classified as non-neuroinvasive disease.





2020 – Illinois. In 2020 as of September 29th, the State of Illinois has reported 24 human WNV cases, and 2,277 WNV+ mosquito samples and 7 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	2	0	0
BROWN	0	0	1	0	0	0
CHAMPAIGN	0	0	0	6	0	0
COOK	1	0	0	1968	0	0
DUPAGE	1	0	0	101	0	0
GRUNDY	0	0	0	4	0	0
JACKSON	0	0	0	1	0	0
KANE	0	0	0	40	0	0
KANKAKEE	0	0	0	3	0	0
KENDALL	0	0	0	7	0	0
LAKE	0	0	0	91	0	0
LASALLE	0	0	0	1	0	0
LEE	0	0	0	2	0	0
MACON	0	0	0	4	0	0
MACOUPIN	0	0	0	1	0	0
MCHENRY	0	0	1	11	0	0
MCLEAN	1	0	0	2	0	0
OGLE	0	0	0	4	0	0
STEPHENSON	0	1	0	2	0	0
WASHINGTON	0	0	0	4	0	0
WILL	0	0	0	22	0	0
WINNEBAGO	1	0	0	1	0	0
TOTAL	4	1	2	2277	0	0

New Jersey Light Trap Counts

(*Red numbers indicate an annoyance level)

Trap Location	9/2	9/4	9/8	9/9	9/11	9/14	9/16	9/18
24711 Easy St	3	5	2	2	8	2	9	2

*Mal - trap malfunction

OPERATIONS UPDATE

Services Performed September 2020

Service Item	Start Date
ROS1302 - Targeted Site Larval Insp Serv	09/09/2020

Upcoming Operations – All Program Services Are Completed for 2020