



Frankfort Township

May 2021 - 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.

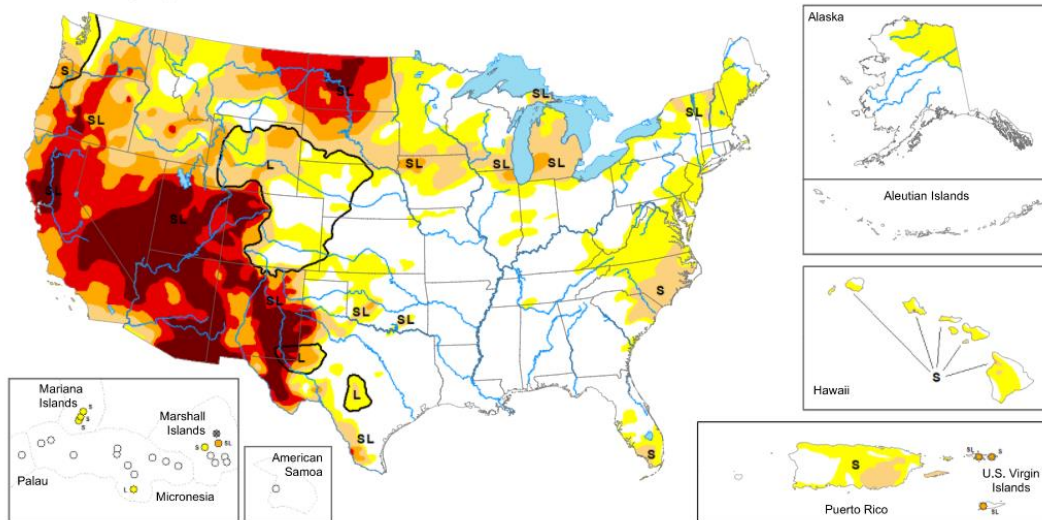
One of the driest springs in the Chicagoland area since 1897!

Period	2021 RAINFALL		Percent of Normal
	Actual	Average	
May	1.79	3.75	-52.3%
Spring (3/1 - 5/31)	4.22	10.42	-59.5%

The following United States Drought Monitor map depicts a moderate to severe drought condition in northeastern Illinois:

Map released: May 27, 2021

Data valid: May 25, 2021



Intensity and Impacts

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data



May of 2021 is quite a contrast to the three previous years, in which, the months were consecutively, the wettest on record, as shown by the following chart:

Year	Record May Rainfall (inches)
2020	9.51
2019	8.25
2018	8.21

Accordingly, during the early part of the 2021 season, floodwater mosquitoes (*Aedes vexans*) are not anticipated to be a major factor. Clarke operations will focus on permanent water larval development habitats for the control of *Culex* species. Truck ULV adulticide applications will be recommended as warranted by surveillance data. Because of the abnormally dry weather pattern, community-wide spraying for significant annoyance before early June is not likely.

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	Rain Date	Rain Amount	Brood Prediction Date
Will Co.	05/08/2021	1.98	05/27/2021
Will Co.	05/25/2021	0.52	06/08/2021
Will Co.	05/27/2021	0.44	06/10/2021

MOSQUITO-BORNE DISEASE UPDATE

West Nile Virus (WNV)

2020 – USA. Since 1999, West Nile virus (WNV) has rapidly spread across the United States causing over 52,275 human cases, including over 2,372 fatalities, during the past 21 years. Because WNV is so widespread in bird and mosquito populations, the virus has become well established as an annual mosquito-borne disease threat. In 2020, there were 557 human cases of WNV across the United States reported by the Centers for Disease Control & Prevention (CDC). The following are the top ten states that recorded the most WNV cases in 20120 in descending order: CA-TX-FL-CO-MI-IL-LA-NE-SD and AZ. These 10 states accounted for 81% of the 2020 human case count.



2020 – Illinois. In 2020, the State of Illinois reported 39 human WNV cases, including 2 fatalities, compared to 28 in 2019, and 176 in 2018.

2020 – DuPage County. In 2020, DuPage County recorded 4 human WNV cases, compared to 6 in 2019, and 17 in 2018.

2021 – DuPage County Personal Protection Index – May 27, 2021.



2021 – USA. As of May 31, 2021, no USA human WNV cases States have been reported to the CDC.
