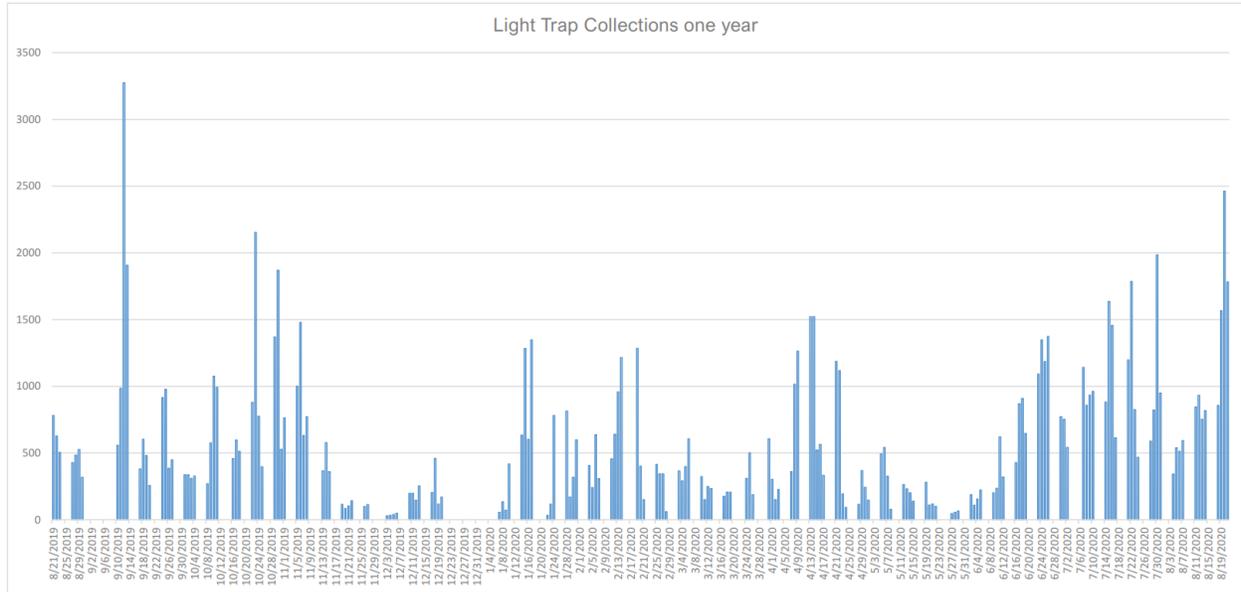


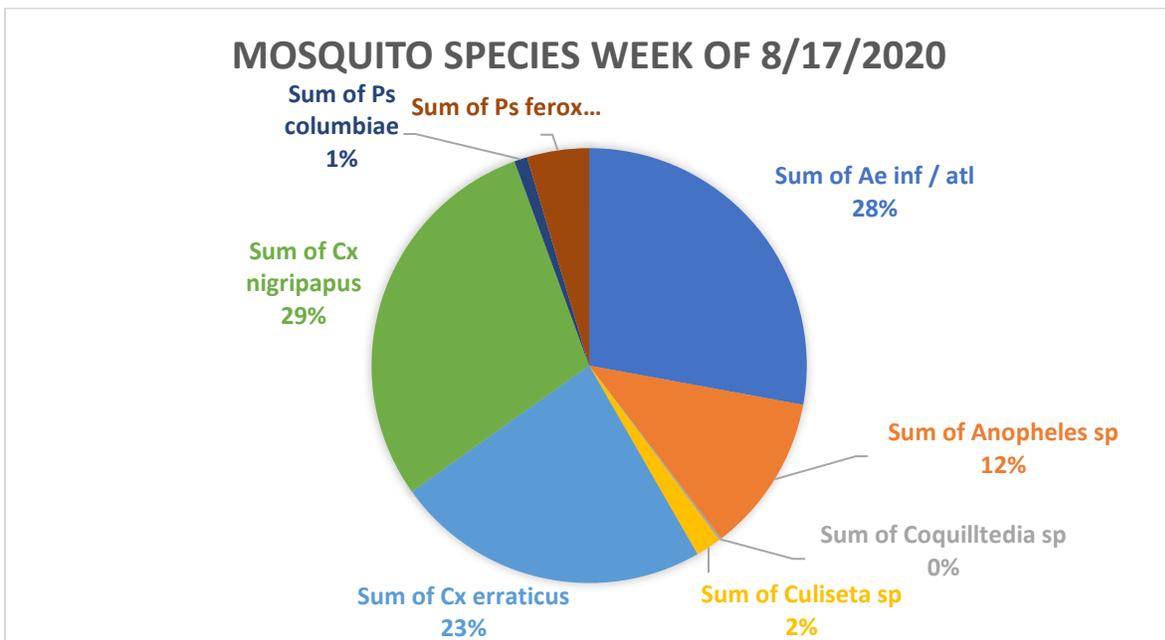
Week of 8/17/2020 Operations Update

Significant rains the week of 8/10 brought the emergence of many mosquitoes this week. The bar graph below shows the total adult mosquitoes from all traps in the District for the past year (TTM).

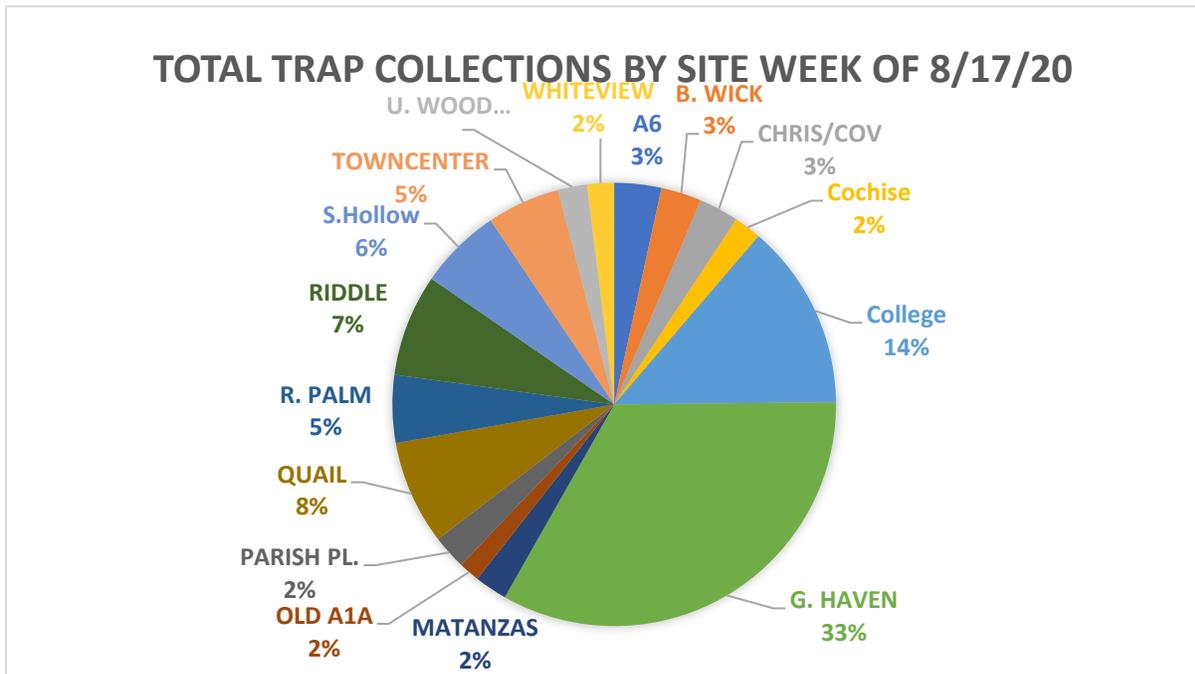


The population continued to build to very high numbers as the week progressed. Approximately 32,000 acres were treated by air this week. One mission had to be rescheduled due to rain on Thursday night/Friday morning, but was completed Friday night/Saturday morning to finish the week’s treatments.

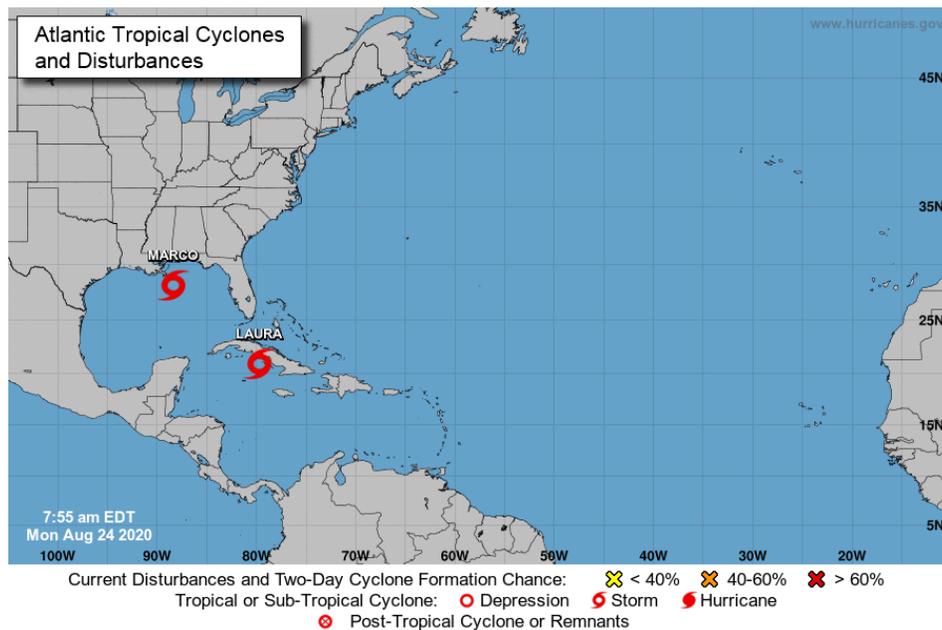
Various mosquito species were trapped in large numbers as shown in the graph below. All other species collected in traps this week combined comprised less than one percent of the total.



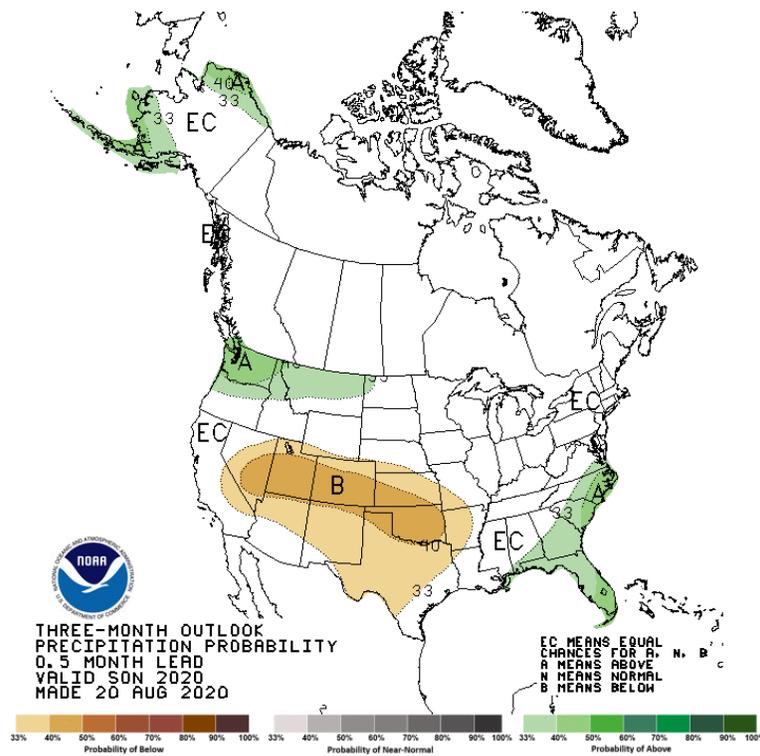
The distribution of trapped mosquitoes was atypical with a center of emergence in the Graham Swamp area which is likely wetter than usual due to the volume of rain received this month. Traps in Grand Haven and College areas collected the most total mosquitoes, as seen in the graph below.



We have an unusual event in the Gulf currently with two Hurricanes active simultaneously. According to the Monthly Atlantic Tropical Weather Summary produced by the National Hurricane Center, “The season has been considerably more active than average so far, as typically only 1 or 2 named storms form prior to August. So far in 2020, nine named storms have formed, including 2 hurricanes -- Hanna and Isaias. In terms of Accumulated Cyclone Energy (ACE), which measures the strength and duration of tropical storms and hurricanes, activity in the basin so far in 2020 has also been above average, about twice the long-term mean.”



We are also forecast for above average precipitation for the remainder of the most active part of the year for mosquitoes.



Finally, the Florida Department of Health in their Florida Arbovirus Surveillance Week 33: August 9-15, 2020 Report indicates five cases of locally acquired dengue fever were reported in Monroe County this week. In 2020, 48 cases of locally acquired dengue fever have been reported. Dengue is transmitted primarily by *Aedes aegypti* between humans and mosquitoes. This mosquito species is best controlled by removing standing water in containers and is not a major concern in the District because of the way our residential communities are designed with most homes on a quarter acre parcel and this species of mosquito having a limited flight range of only 500’.

Nine human cases of WNV illness acquired in Florida have been reported in 2020: seven in Miami-Dade County (June, July) and two in Palm Beach County (July). Twenty-six asymptomatic positive blood donors have been reported in 2020 from Miami-Dade County (May, June, July, and August). Many species of mosquitoes transmit this virus, but humans are “dead end hosts” meaning we do not carry enough of the virus in our blood to further infect mosquitoes as is the case with Dengue. In this case, the solution is to keep competent vectors of this virus at low levels so they cannot amplify and transmit disease. The District accomplishes this by daily monitoring of the mosquito population around the District and applying control measures once there is justification to do so. Keeping the mosquito population from remaining at high levels prevents the virus from being amplified and transmitted to humans.

Zones in yellow treated by truck, blocks in blue treated by helicopter.

