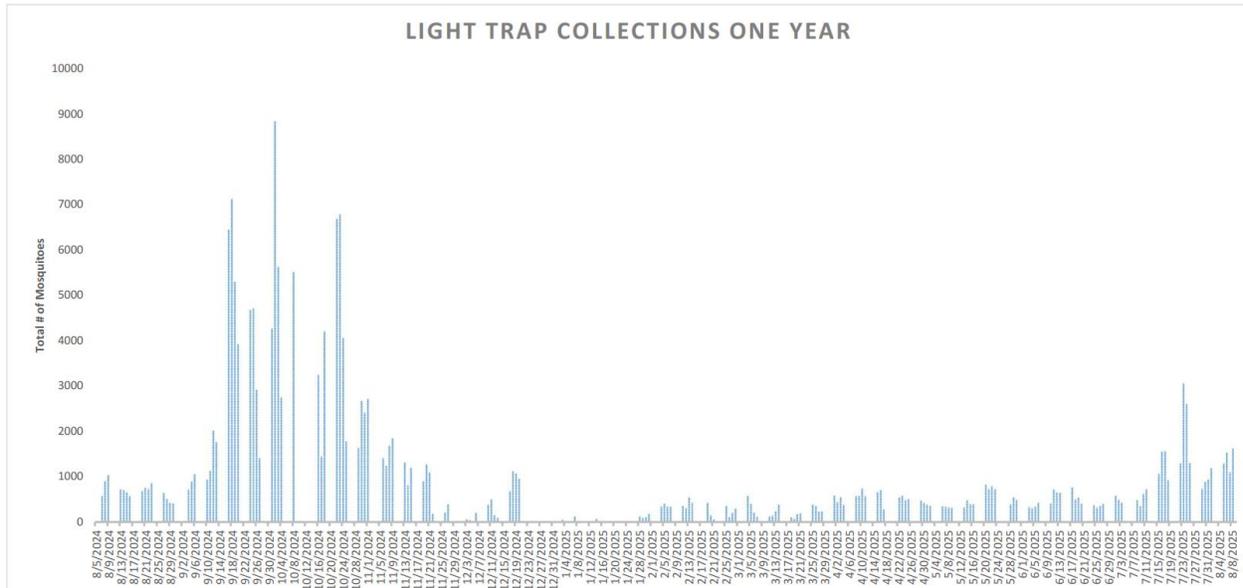


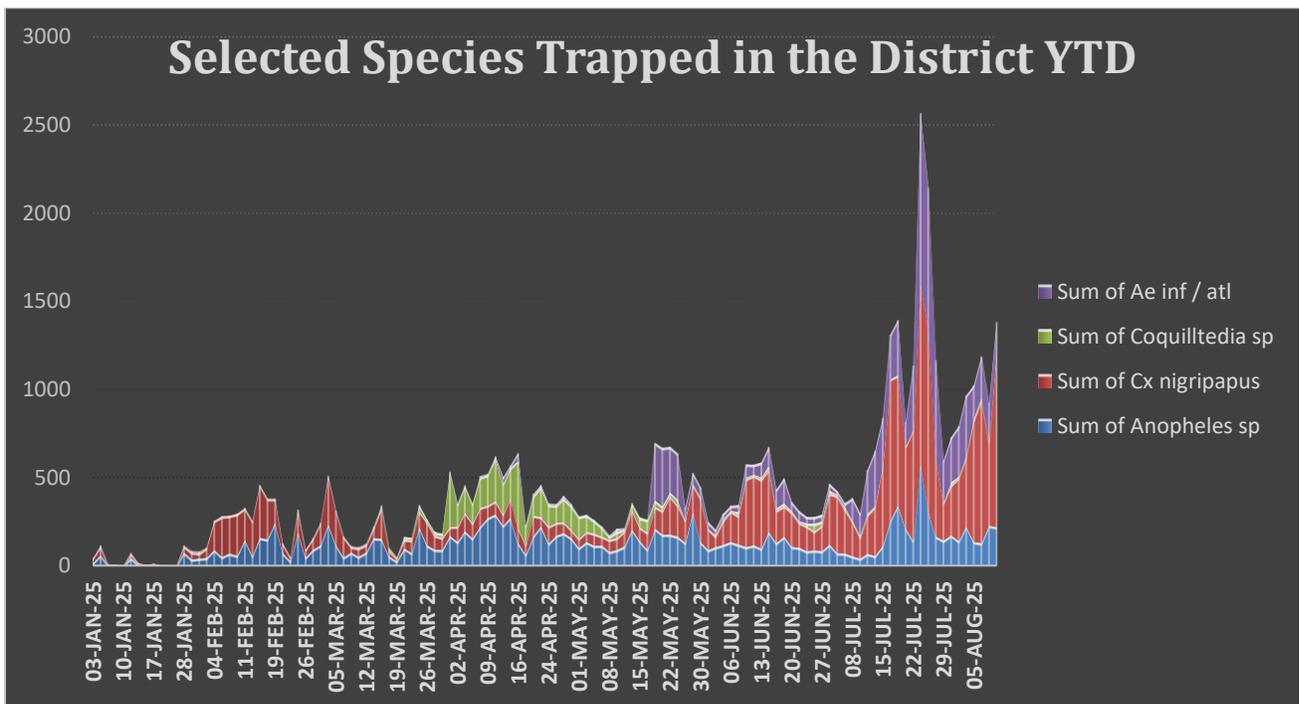


## Week of 8/4/2025 Operations Update (32)

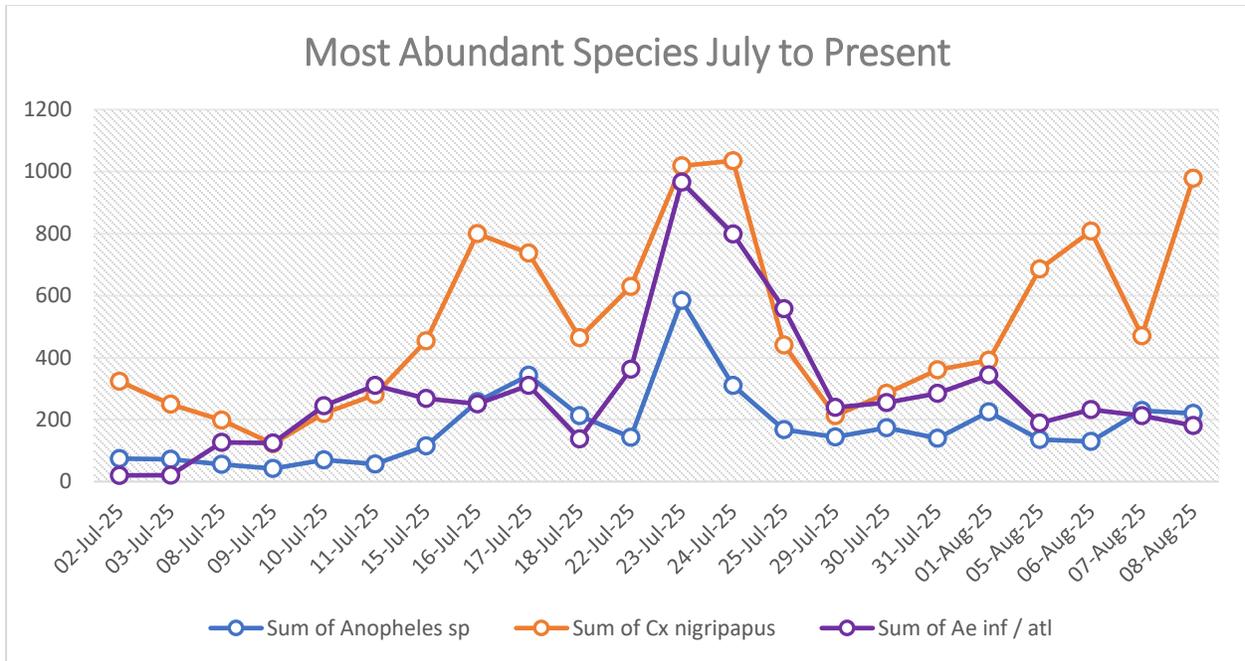
A single species, *Culex nigripalpus*, dominated the trap collections this week, but overall, there was a limited rebound from aerial spraying two weeks previous despite regular rainfall. The bar graph below shows the total number of adult mosquitoes from all traps in the District for the past year (TTM).



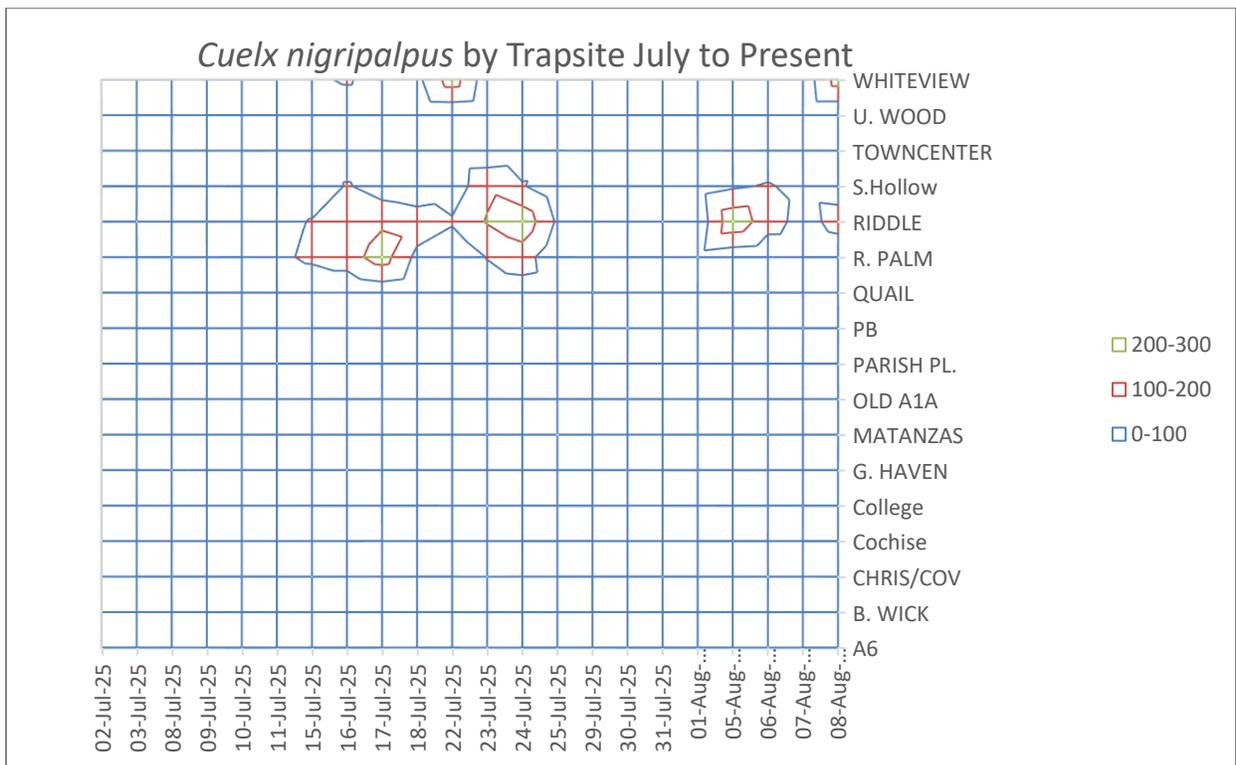
After last week's modest increase in several species, this week saw an increase in only one species.



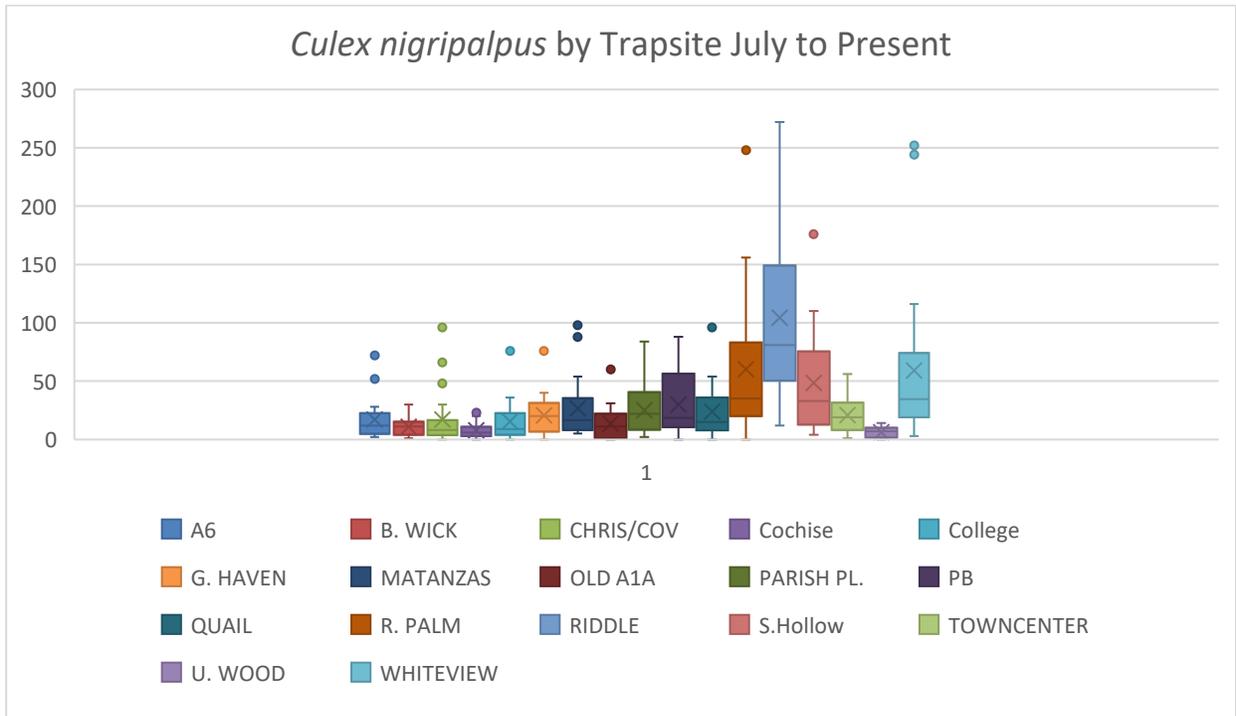
For the week, floodwater species *Aedes infirmatus* declined and permanent-water species of the genus *Anopheles* were largely unchanged. Another permanent-water species, *Culex nigripalpus*, increased. Overall, *Anopheles* numbers remain low and *Culex nigripalpus* numbers are closer to average, a little higher due to regular rainfall.



Most of the population of *Culex nigripalpus* has been limited to a few traps.



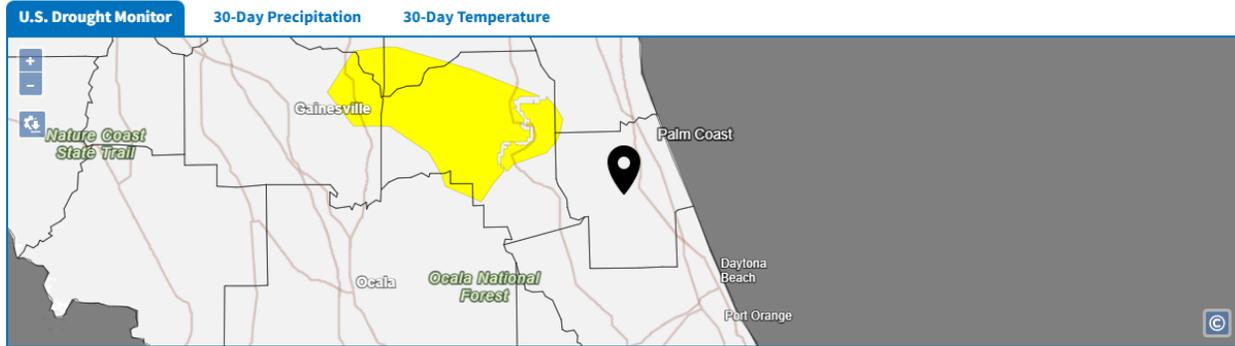
A closer look at the distribution of *Culex nigripalpus* with some basic statistics in the graph below. Putting this into perspective, a trap count of 50 of this species factored across seventeen traps yields an expected count of 850 total per day. Only one day in the past two weeks was this amount surpassed. This is important because keeping the population of mosquitoes low reduces the potential spread of disease where there is a human population.



Temperatures were normal this week as compared to last week when extreme heat warnings were issued for each day the week. Hotter air holds more moisture and reduces relative humidity. Mosquitoes must avoid activity when the humidity is low or succumb to desiccation. This is why mosquitoes stay close to vegetation and the shade and humidity it provides. However, our mosquito traps only measure the active population, so even when the population is growing at a normal rate, it is less active, reducing the counts in the mosquito traps which we use for spray justification. The chart of relative humidity below shows dramatic dips each day as temperatures rise and more normal values this week.



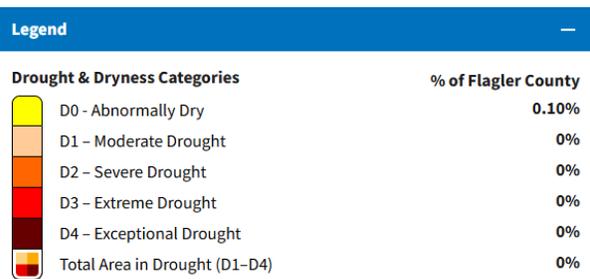
Rainfall in the District ranged from 1.3” to 4.2”. The percentage of Flagler County that is abnormally dry (D0) decreased from 17.57% to 0.1%.



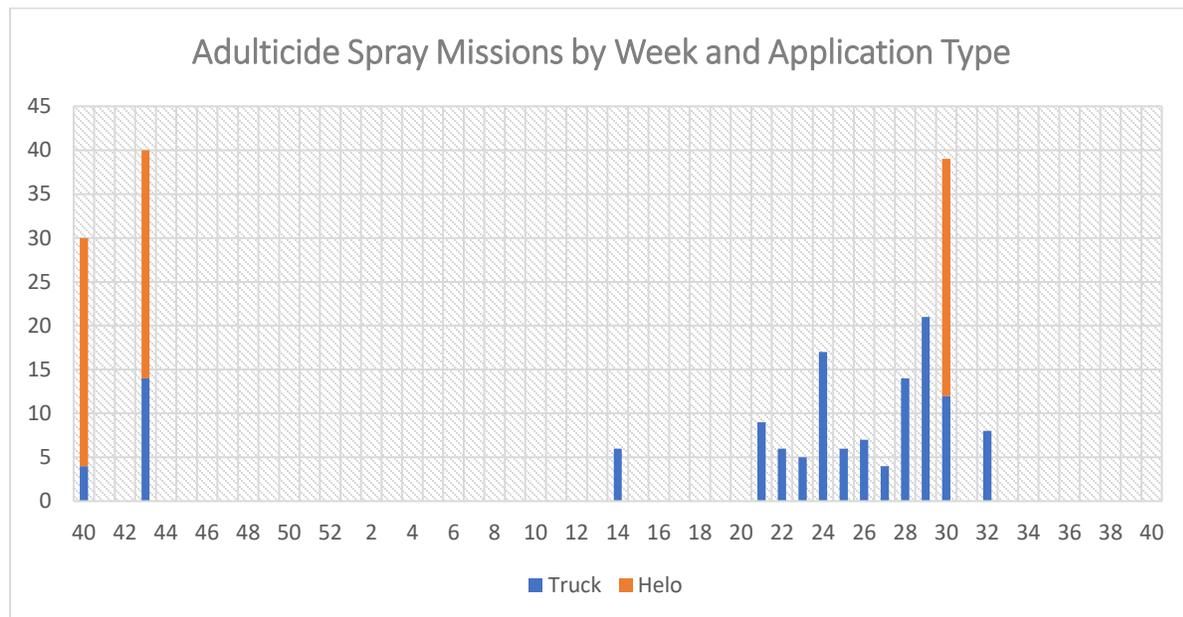
The U.S. Drought Monitor depicts the location and intensity of drought across the country using 5 classifications: Abnormally Dry (D0), showing areas that may be going into or are coming out of drought, and four levels of drought (D1–D4).

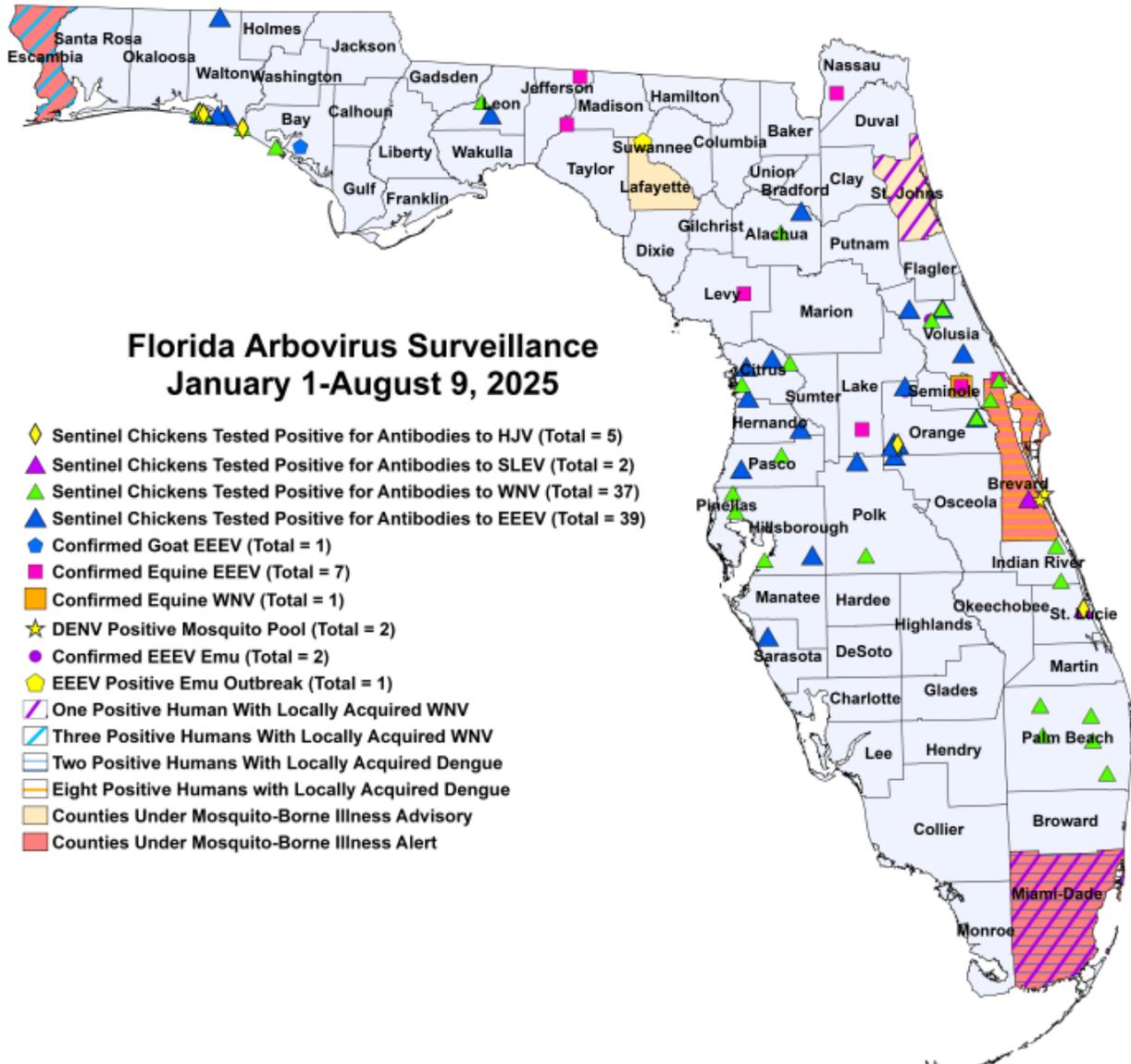
The U.S. Drought Monitor is a joint effort of the National Drought Mitigation Center, U.S. Department of Agriculture, and National Oceanic and Atmospheric Administration.

Source(s): NDMC, NOAA, USDA



Limited spraying by truck this week (see map at the end of the report). Larvicide pretreatments in the saltmarsh were conducted by helicopter.





**Advisories/Alerts:** Lafayette and St. Johns counties are currently under a mosquito-borne illness advisory. Brevard, Escambia, and Miami-Dade counties are currently under a mosquito-borne illness alert. No other counties are currently under a mosquito-borne illness advisory or alert. See the full [DOH Report](#)

\*Explainer- Mosquito-borne diseases are routinely spread by many species of mosquitoes in Florida. Mosquito control programs work to keep the population of mosquitoes at low numbers to minimize disease spread. A higher likelihood of disease transmission exists when mosquito populations are allowed to persist for a long enough time to become infected and spread diseases. The more mosquitoes there are, the greater the chances of encountering an infected mosquito. The strategy is simple: monitor the mosquito population for increases and knock them down quickly, either before they become adults or before they have a chance to spread diseases.

Rainfall totals for the week by manual rain gauge location in blue. No spraying this week.

