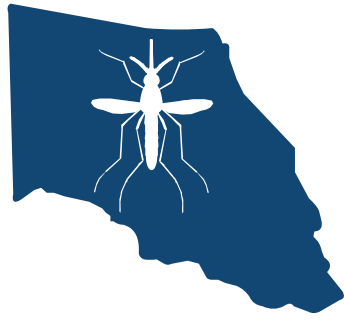




MOSQUITO ABATEMENT

ST. TAMMANY PARISH

SEPTEMBER

monthly report

St. Tammany Parish Mosquito Abatement



Letter from the Director



Executive Director
Kevin Caillouet,
Ph.D., M.S.P.H.

If you are a frequent reader of our monthly mosquito abatement reports, you are likely to know that Louisiana hosts an incredible diversity of mosquito species. Sixty species of mosquito call Louisiana home and nearly 50 of those can be found in St. Tammany due to the abundance of water and unique aquatic habitats. Two mosquito species, *Culex quinquefasciatus* and *Mansonia* spp. (two nearly identical species within this Genus), have made the news lately.

Mansonia spp. (*Ma. titillans* and *Ma. dyari*) are well known to plague the coast of St. Tammany in September and October each year. The dominant species during the fall, *Mansonia* spp. made up 34% of the 57,333 mosquitoes collected in September. Large and dark-bodied, *Mansonia* spp. mosquitoes are fierce biters in the first hour after sunset. As an intriguing adaptation, *Mansonia* spp. larvae burrow their air siphons into the roots of aquatic floating plants such as water hyacinth. In doing

so, they breathe through the plants' air-filled roots, likely avoiding predators because they look like a part of the plant. These mosquitoes emerge en masse in September and October each year after developing over the spring and summer months. Mosquito Abatement Entomologist, **Mollie Davies**, has found that *Mansonia* spp. tend to be found in areas with a variety of invasive aquatic plants including water hyacinth and *Salvinia* spp. As these plants promote the production of this highly pestiferous mosquito and take over waterways, STPMAD focuses on removal of the plants by use of biological control agents and herbicides to reduce the source of production. The plant management program is one that STPMAD hopes to expand in the coming years for better comprehensive management of *Mansonia* spp. mosquitoes.



Mansonia immatures attach and breathe through aquatic plant roots.



The St. Tammany Parish Council has begun debate on an onsite sewage disposal system (septic system) inspection ordinance to address sewage pollution in roadside drainage ditches and our impaired rivers. Partially-treated sewage effluent from non-maintained septic systems creates the ideal larval habitat for *Culex quinquefasciatus*, the primary West Nile virus vector. Mosquito Abatement treats over 600 miles of sewage-polluted roadside ditches weekly to combat this dangerous mosquito. In addition, trucks and aircraft are used to kill adult mosquitoes that may transmit West Nile. In 2022, STPMAD estimated that \$1.2 million is spent mitigating this mosquito in St. Tammany. In July 2025, the STPMAD Board of Commissioners proposed a commitment of \$500,000 a year for three years to offset the cost of septic inspections to reduce the burden of the proposed ordinance on homeowners. The investment of these funds is expected to reduce the cost of mosquito control efforts associated with mitigating sewage pollution.

Sewage polluted roadside drainage ditch with drain pipe from an OSDS.



Mansonia female lays her eggs on the underside of a salvinia leaf.

One hundred twenty-three missions to combat the explosion of our fall mosquitoes covered 78,024 acres in September from truck-mounted ultra-low volume applications. Another 117,747 acres were covered by aircraft application of insecticides in seven missions.

As always, our team conducts weekly surveillance across St. Tammany Parish by setting mosquito traps and responding to resident's requests for service. Mosquitoes are tested for arboviruses like West Nile virus in our laboratory in Slidell on the same day they are collected to insure timely responsive mosquito control. The diversity of water holding habitats in St. Tammany including aquatic plants in permanent water settings and sewage polluted environments means that even during drought periods mosquitoes will be a persistent problem.

Yours in health,

K. A. Caillouet
Kevin A. Caillouet, Ph.D., M.S.P.H.
Director



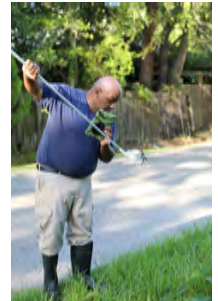
Immature *Culex erraticus* hide underneath plants



Mansonia eggs attached to the underside of aquatic plant leaves



Culex quinquefasciatus egg raft collected from roadside ditch.



Mosquito Biologist David Giron inspects sewage polluted ditch

September Arbovirus Report

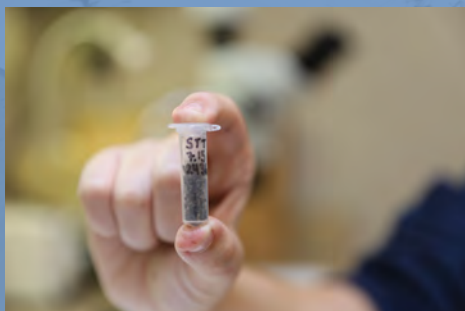


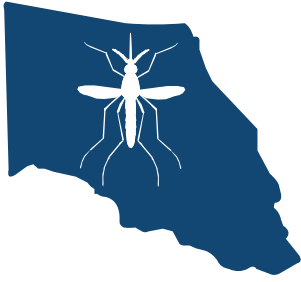
Four of the 669 pools tested (0.6%) were positive for West Nile virus (WNV) in the month of September, and 53 WNV-infected pools out of 3670 pools tested for the year-to-date.

Adult mosquitoes are collected using No Light CO₂-baited CDC traps and tested in pools (or groups) via RT-PCR, here at STPMAD.

A total of 18,203 mosquitoes were collected and tested for WNV during September 2025 across St. Tammany Parish. Populations of *Culex salinarius*, a secondary WNV vector, accounted for 35.2% of mosquitoes submitted for virus testing. *Culex nigripalpus*, another secondary WNV vector, and second most abundant species comprised 31.8% of the mosquitoes collected and tested for WNV.

The Louisiana Department of Health has reported eight cases of WNV Neuroinvasive Disease in St. Tammany Parish, this year-to-date.





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