2023

NOVEMBER
monthly report

St. Tammany Parish Mosquito Abatement

What's Inside?

MOSQUITO ABATEMENT
ST. TAMMANY PARISH

Letter from the Director

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

End of the mosquito season

If the end of the mosquito season begins with the first October cool fronts, November is the definitive end. That is unless unseasonably warm weather arrives again. This November ended with relatively stable cool temperatures. The sweater weather meant that it was time to say thank you and goodbye to our part-time larvicide and night driver staff for the year – we'll see them again soon in March. Also, that it was time to be thankful for our entire amazing team.

The astronomically high *Culex nigripalpus* and *Cx. salinarius* mosquito numbers we were dealing with in late October came crashing down with an early freeze on October 31. Mosquito abundances were relatively low throughout the remainder of November with 41,314 mosquitoes collected in traps during the month. Sixty-nine night adulticide truck treatment missions covered 41,898 acres in November. The STPMAD aerial team covered another 34,030 acres with airplane and helicopter missions.

The STPMAD Outreach program also had a busy November. School STEM nights were conducted at St. Tammany Junior High, Magnolia Trace Elementary, and Mandeville Elementary. A STEM focused day camp at the Children's Museum of St. Tammany featured the STPMAD Outreach team. In addition, outreach booths at the Three Rivers Art Festival gave us an opportunity to speak with thousands of residents.

Every year we celebrate our team with a Thanksgiving meal. Like past celebrations the director's jambalaya was requested and a potluck of sides accompanied the meal. New this year was a dessert competition won by **Lisa Rowley's** delicious tiramisu. This November I was thankful for and proud of our team of mosquito control professionals.

Yours in health,

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

On the cover: Fleld Operations Supervisor Josh Foulon and Field Biologist Haley Marquette explain the mosquito life cycle to a group of students at St. Tammany Junior High in Slidell.

Culex erraticus larvae hiding underneath the roots of Duckweed in STPMAD laboratory.

Taxonomist Lisa Rowley celebrates her dessert competition win!

November by the numbers:

IN THE FIELD

41,314 total mosquitoes trapped

41,898 acres treated by ground

23,050 acres treated by airplane

10,980 acres treated by helicopter

743 miles of ditch treated with larvicide

64 property inspections completed

IN THE LAB

8 adulticide resistance topical bioassays

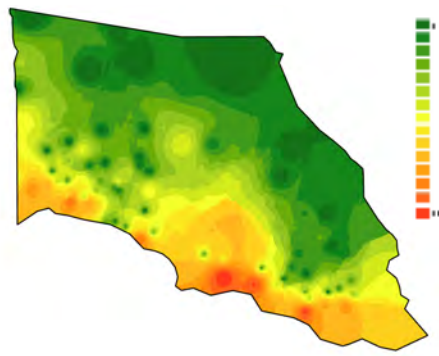
November Arbovirus Report

None of the 421 pools of mosquitoes tested from specimens collected during November 2023 were positive for West Nile virus (WNV). Adult mosquitoes are collected using No Light CO_2-baited CDC traps and tested in pools (or groups) via RT-PCR, by the Louisiana Arbovirus Disease Diagnostic Laboratory (LADDL) in Baton Rouge.

A total of 17,601 mosquitoes were collected and tested for WNV during November 2023 across St. Tammany Parish. Populations of *Culex salinarius*, a secondary WNV vector, accounted for 44.7% of mosquitoes submitted for virus testing. *Culex nigripalpus*, another secondary WNV vector and second most abundant species comprised 36.3% of the mosquitoes collected and tested for WNV.

The Louisiana Department of Health has reported a total of two cases of WNV neuroinvasive disease and one case of WNV fever in St. Tammany Parish, year to date.

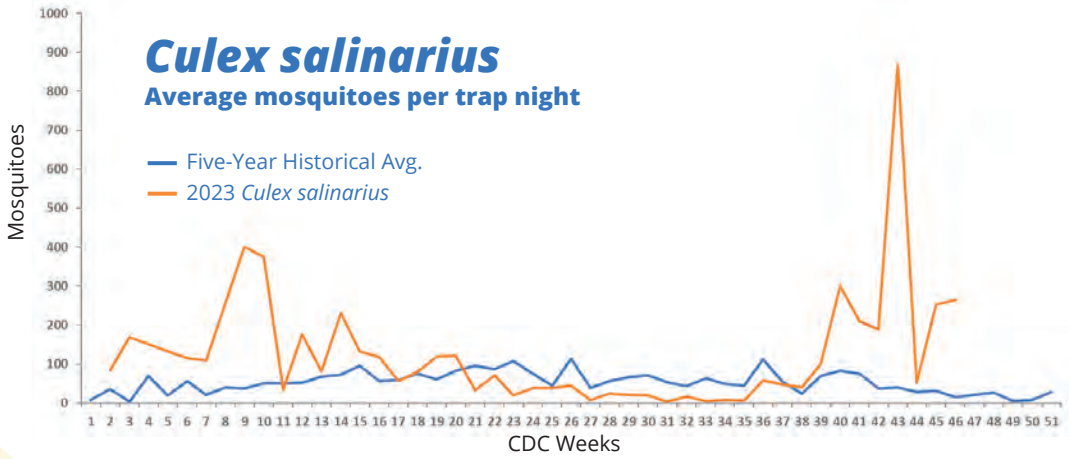
How Bad are the Mosquitoes?



November 2023 heat map for *Culex salinarius*

Culex salinarius

Average mosquitoes per trap night



23,692

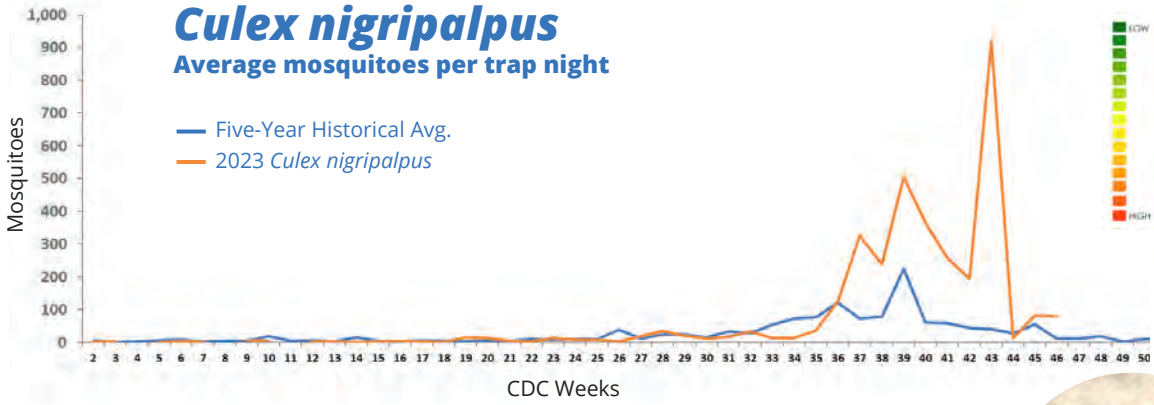
Cx. salinarius trapped in November 2023

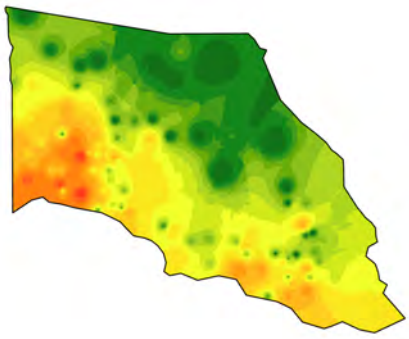
Common name: brackish marsh mosquito

A serious pest that is produced in fresh to brackish marshes. It frequently bites large mammals (including people) and birds. Considered an important secondary WNV vector.

Culex nigripalpus

Average mosquitoes per trap night





November 2023 heat map for *Cx. nigripalpus*

Common name: Florida SLE mosquito

A medium-sized brown mosquito that is produced in relatively clean ground pools and roadside ditches. Abundant in the early fall, *Cx. nigripalpus* is an effective WNV and St. Louis encephalitis (SLE) vector.

10,101

Cx. nigripalpus trapped in November 2023

Top Five Species Trapped in November