

# NC State Report

**NCMVCA/MAMCA joint meeting**

**February 12-14, 2018**

**Courtyard Marriott**

Joe Andrews

## 2017 Preliminary North Carolina Vector-borne Disease Counts

Human Disease Cases	Preliminary TOTAL**	Preliminary PROBABLE**	Preliminary CONFIRMED**
Chikungunya	2	0	2
Dengue	2	2	0
Eastern Equine Enceph.*	0	0	0
LaCrosse Enceph.	20	4	16
West Nile Virus (Neuro.)	7	6	1***
Other Arboviral Enceph.	1	0	1
Malaria	49	0	49
Yellow Fever	0	0	0
Zika	15	2	13

\*Cases in RED are considered to have been transmitted within North Carolina.

\*\*Many disease events that occurred in 2017 (especially in November and December) are still being investigated, so are not included as of 1/30/2018.

\*\*\*This death was also a "confirmed" WNV case.

LACE is a little higher than the 9-year-average of 17.2 (again, preliminary)

## 2017 Preliminary North Carolina Vector-borne Disease Counts

Veterinary Disease Cases	Preliminary TOTAL**	Preliminary PROBABLE**	Preliminary CONFIRMED**
Eastern Equine Enceph.*	7	2	5
West Nile Virus	2	2	0

\*Cases in RED are considered to have been transmitted within North Carolina.

\*\*Many disease events that occurred in 2017 (especially in November and December) are still being investigated, so are not included as of 1/30/2018.

## 2017 Preliminary North Carolina Vector-borne Disease Counts

Mosquito Pools	TOTAL	Brunswick	Forsyth	New Hanover
Eastern Equine Enceph.*	1	1**	0	0
West Nile Virus	5	0	4***	1#

\*Pools in RED are considered to have been infected within North Carolina.

\*\*Culiseta melanura

\*\*\*Culex pipiens complex

#Culex nigripalpus

# Season overview

- **Rainfall:** varied widely across the state throughout the season long, resulting in both high and low seasons of activity. As an example, both the Piedmont (central NC) and the coast received considerable spring rains; however, where New Hanover County (Wilmington) had an “average” spring, Forsythe County in the piedmont one of the busiest seasons on record. Rocky Mount (east of Raleigh) reports decreased rainfall resulting in a “light” season as did Beaufort and Pitt Counties that are coastal but well north of Wilmington.
- **Highlights:** Beaufort County reports their first collection of *Culex nigripalpus* while New Hanover County reports that this mosquito was the predominant collected for the first time. Control efforts were down in most areas especially by July, with the exception of Jacksonville in Onslow County and Forsythe County were both quite busy. Several counties (Wake, Mecklenburg, Pitt, New Hanover, Brunswick, Carteret, etc.) participated in year 2 of *Aedes* container pulse survey conducted by the “University Partnership” ECU, NC State and WCU. A single pulse survey of 60 ovitraps per county was conducted in late June. No *Ae. aegypti* were collected as of Sept. 2017.

# Additional news

- UNC-Greensboro has undertaken a tick surveillance project across 9 counties with flagging and deer host collections. Flagging yielded *B. burgdorferi* in three counties with four counties positive for *B. burgdorferi* through deer host collections.
- NC held its first AMCA/CDC train the trainer conference October 9-10. It was well attended with participation from several surrounding states.
- The state health Dept. (NC DHHS) continues to build a new infrastructure. The state has been lacking any real cohesion since the dismantling of NC PHPM in 2011. DHHS hired on additional support Alexis M. Barbarin, PhD, a public health entomologist.
- State funding now provides \$2000-\$20,000 to select counties with trials underway using the BG Sentinel counting traps.
- The state began inputting data onto the new CDC MosquitoNET in November of 17.