

The Vector-Borne Diseases Program tracks and responds to [mosquito-borne viruses](#), or arboviruses, in mosquitoes, animals, and humans. During the summer months, mosquitoes around the state are collected by the [Vermont Agency of Agriculture](#) and tested weekly for evidence of [West Nile virus \(WNV\)](#) and [Eastern equine encephalitis \(EEE\)](#) virus to understand the current risk to Vermonters and certain types of livestock.

## During the 2022 Arbovirus Surveillance season:

- Mosquitoes were collected from 111 trap sites in 91 towns during July 4–October 14 (15 weeks)
- Seven mosquito pools\* tested positive for WNV or EEE in 2022
- Historically, the percentage of mosquito pools that test positive for an arbovirus increases in early August and peaks in late August to mid-September
- No human or animal cases of WNV or EEE were reported

### Mosquito Surveillance by the Numbers

#### Mosquito Pools Tested

2,175

#### WNV Positive Pools

7

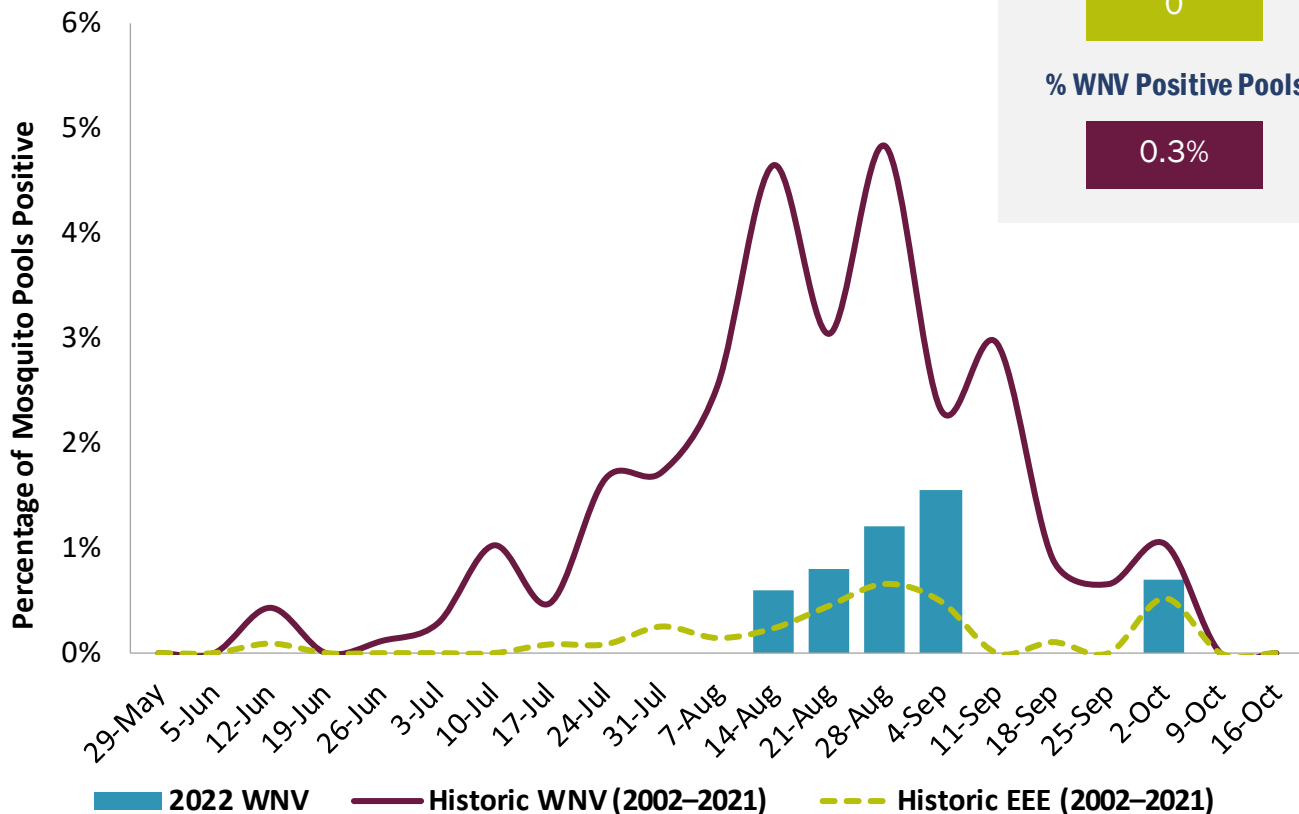
#### EEE Positive Pools

0

#### % WNV Positive Pools

0.3%

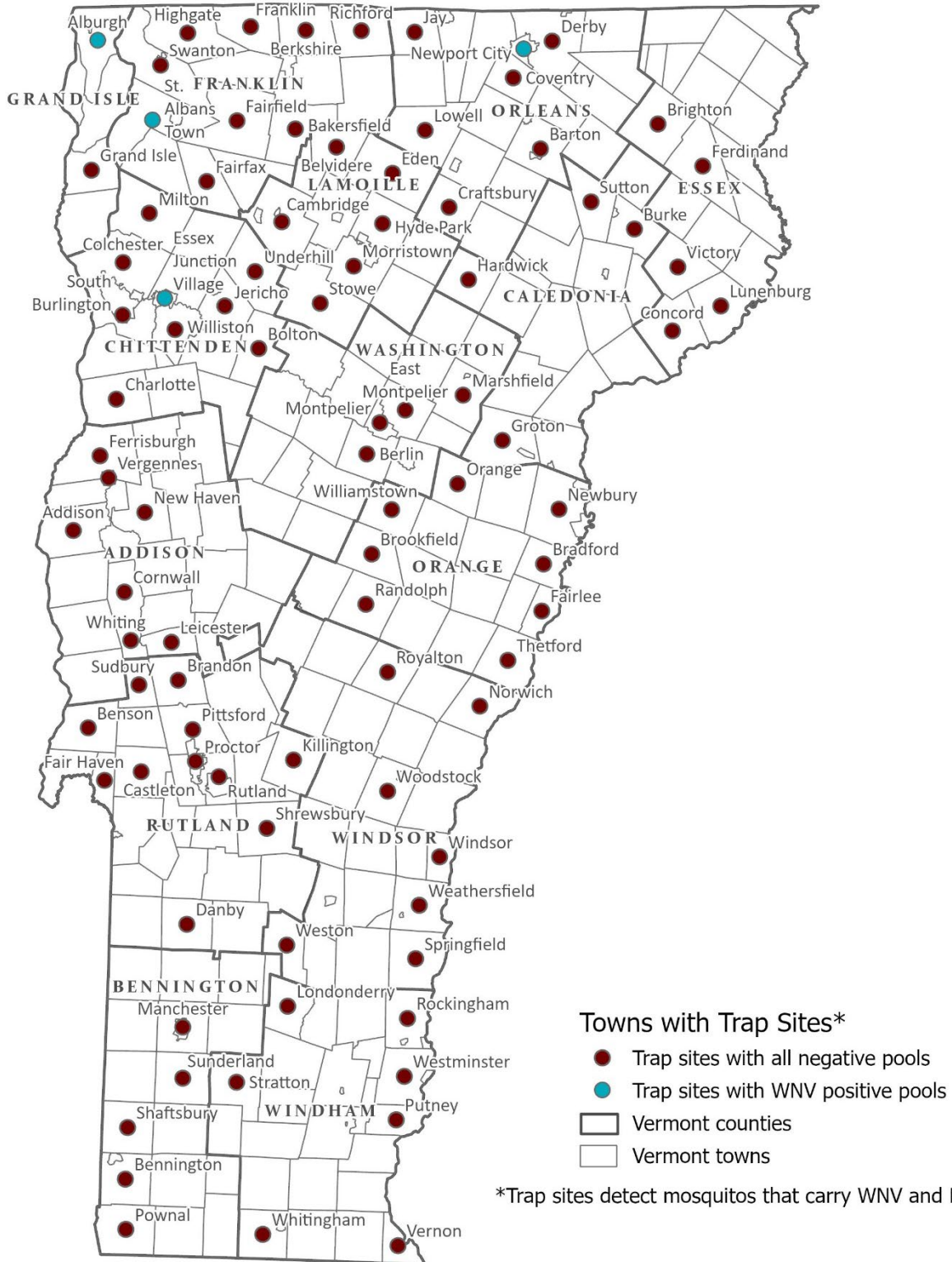
## Seven mosquito pools collected in 2022 tested positive for WNV.



\* A mosquito pool is a group of 1–50 mosquitoes of the same species, collected at the same trap location, on the same date.

# 2022 Arbovirus Surveillance Report

**Seven mosquito pools collected from four towns (Alburgh, Essex Junction, Newport City, and St. Albans) tested positive for WNV in 2022.**



## Assessing the Risk of Arboviral Disease in Vermont

### West Nile Virus

Since 2002, WNV has been detected in birds, mosquitoes, people, or animals in all counties of Vermont. Currently, the risk for WNV is considered widespread in the state. The addition of more gravid traps that target WNV mosquito vectors in 2022 helped detect WNV in mosquitoes.

### Eastern Equine Encephalitis Virus

Since 2020, Vermont has focused more mosquito resources on EEE surveillance. In 2022, resting box traps that target the primary EEE vector, *Culiseta melanura*, were set at 94 wetland locations in 83 towns across the state.

The most recent EEE virus activity in Vermont was detected in one mosquito pool in 2015. Eight positive mosquito pools were detected in 2014 and 22 in 2013.

EEE virus has caused human or animal illnesses in Franklin, Rutland, and Addison counties. The most recent human cases in Vermont were reported in 2012.

## *Aedes albopictus* Surveillance

The *Aedes albopictus* (Asian tiger) mosquito can transmit Zika, dengue, and other non-endemic arboviruses and has an estimated geographic range that includes southern Vermont.

In 2022, 18 trap sites in 14 towns targeted the *A. albopictus* mosquito. *A. albopictus* mosquito eggs were found at collections from Windham County during all 10 weeks of the survey.

After four consecutive years of detections at a single trap site in Windham County, spanning several weeks of detection each year, *A. albopictus* is considered established (locally-reproducing) at this location.

## Key takeaways

- In Vermont, mosquito season begins in the spring, but does not typically pose a health risk until the summer months
- By July, some mosquitoes may be carrying viruses that cause disease in humans and animals
- [Take precautions](#) to prevent mosquito bites and reduce mosquito breeding sites around your home

***Aedes albopictus* mosquitoes were found in Windham County in 2022.**

