

# Final Arbovirus Surveillance Report

2018

## Mosquito Surveillance

- 157 mosquito pools<sup>+</sup> tested positive for West Nile virus (WNV) this season
- No mosquito pools<sup>+</sup> tested positive for Eastern equine encephalitis (EEE) virus

	# of Mosquito Pools Tested	# of EEE Positive Pools	# of WNV Positive Pools	% WNV Positive Pools
Season (June 3–October 20)	2,997	0	157	5.2%

## Animal Surveillance

- Two horses tested positive for WNV: one in Windham county and one in Lamoille county
- Two birds tested positive for WNV, both in Windsor county
- No animals in Vermont tested positive for EEE

## Human Surveillance

- One human neuroinvasive case of WNV was reported in Bennington County
- No human cases of EEE were reported

## *Aedes albopictus* Surveillance

- The estimated geographic range of the *Aedes albopictus* mosquito, a competent vector for the Zika virus, includes southern Vermont
- No *Aedes albopictus* have been found at two trapping sites in Southern Vermont

## Risk Assessment

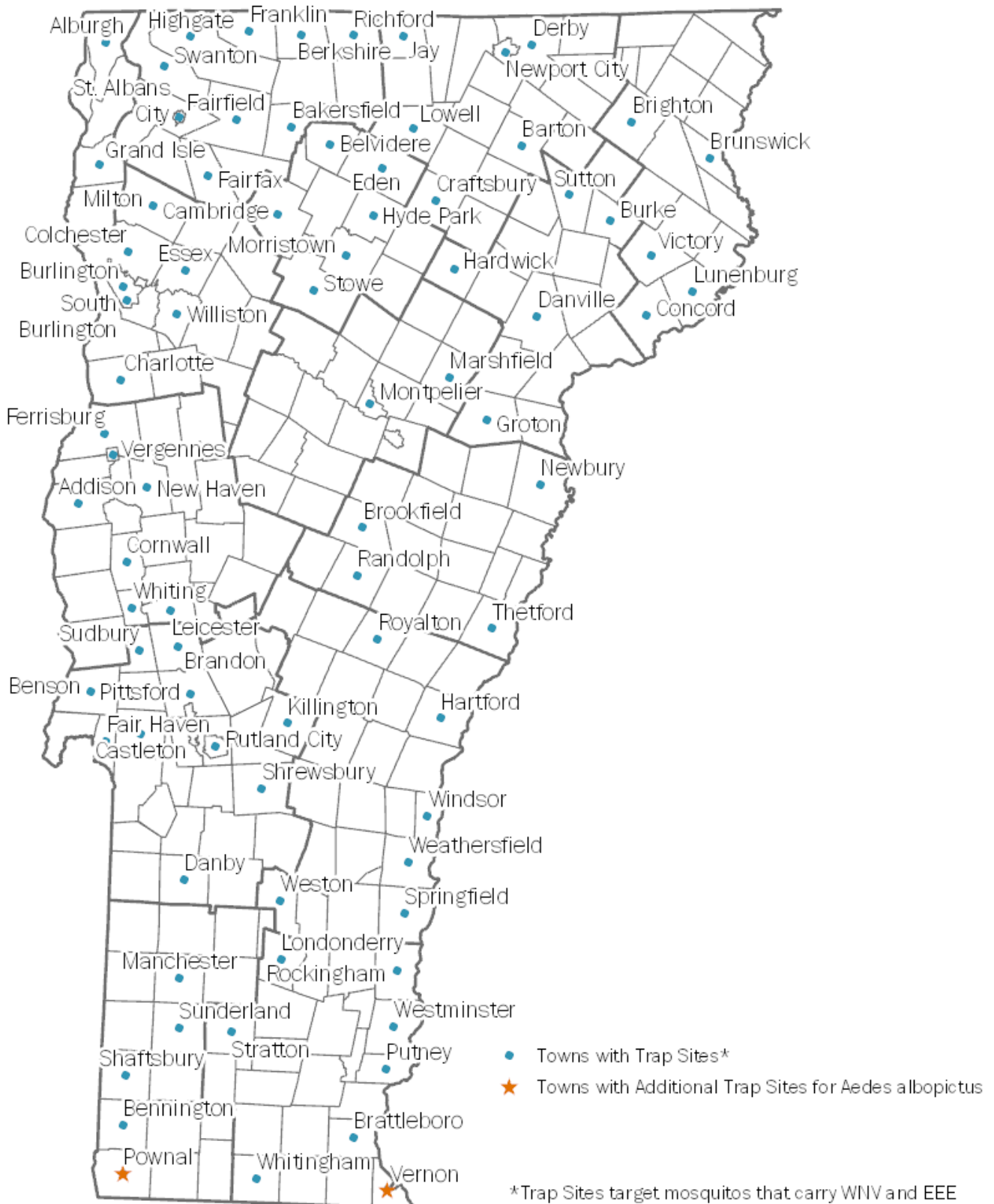
West Nile virus: From 2002 to 2017, WNV has been detected in birds, mosquitoes, people and/or animals in all counties of Vermont. Currently, the risk for WNV appears to be widespread in the state.

Eastern equine encephalitis: Two areas of the state are at low risk based on detections of the EEE virus in the past ten years. The rest of the state is at no risk. These areas are western Franklin county and northern Rutland/southern Addison counties.

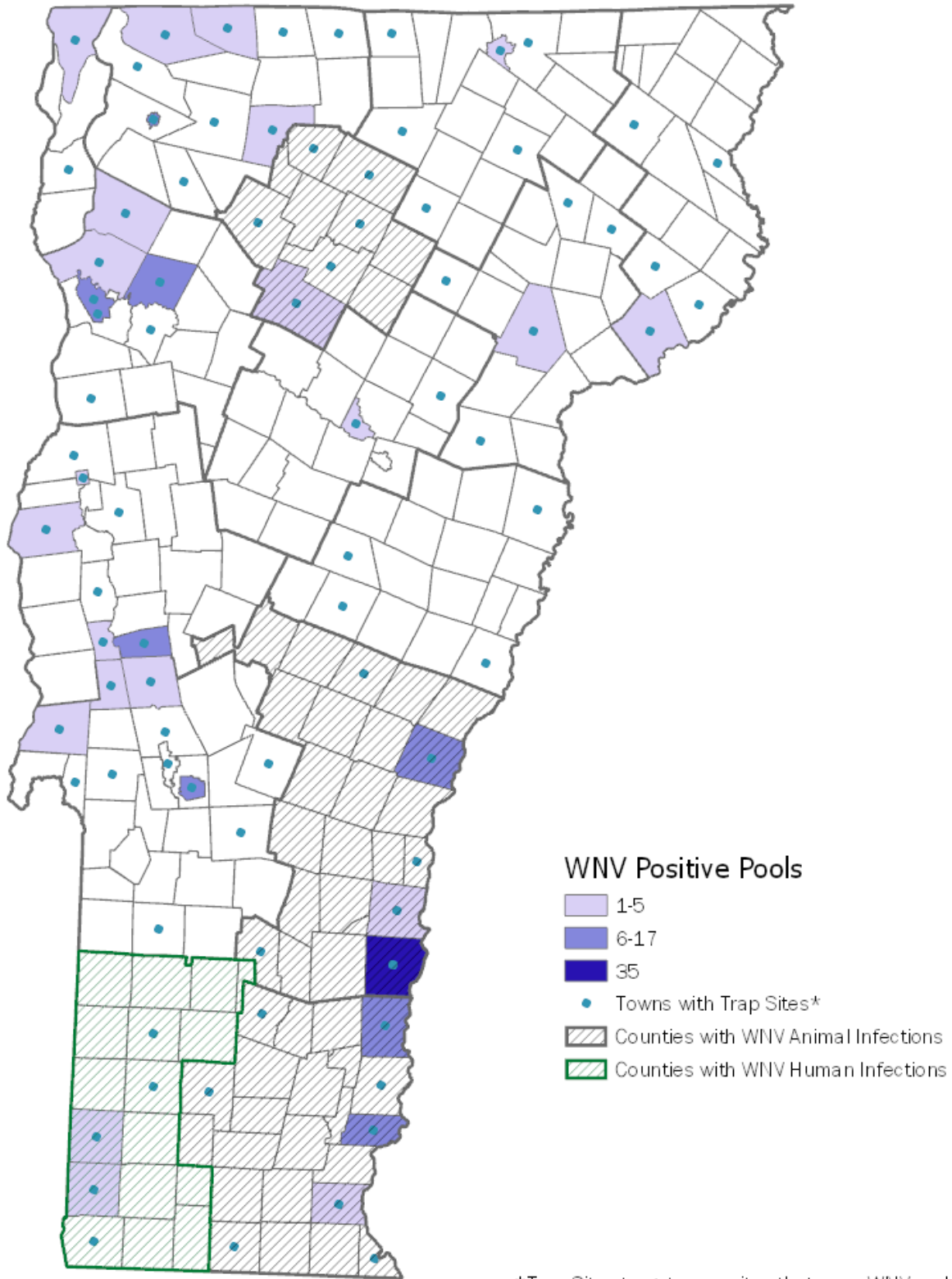
EEE virus was found in one mosquito pool in 2015, eight mosquito pools in 2014 and twenty-two mosquito pools in 2013. EEE virus has only caused human or animal illnesses in Franklin, Rutland and Addison counties. The last human cases were reported in 2012.

<sup>+</sup>A mosquito pool is a group of 1-50 mosquitoes of the same species, collected at the same trap location, on the same date.

**Figure 1: Towns with Mosquito Trap Sites  
2018**



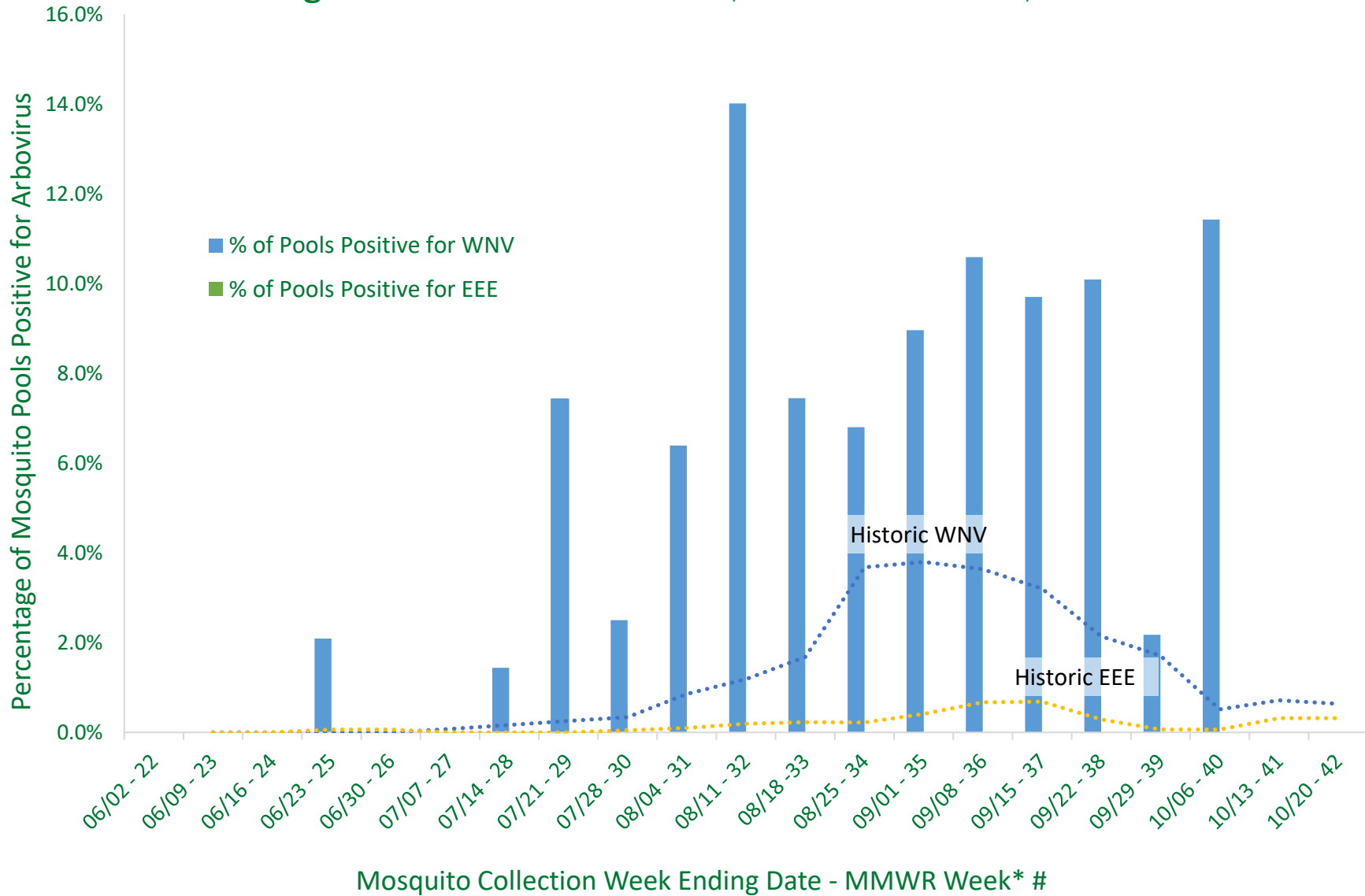
**Figure 2: Arboviral Surveillance Map 2018**



\*Trap Sites target mosquitoes that carry WNV and EEE

WNV positive pools have been detected in Addison, Alburgh, Bakersfield, Bennington, Benson, Brandon, Brattleboro, Burlington, Colchester, Concord, Danville, Essex, Franklin, Hartford, Highgate, Leicester, Milton, Montpelier, Newport City, Putney, Rockingham, Rutland City, Shaftsbury, Springfield, St. Albans City, Stowe, Sudbury, Vergennes, Weathersfield and Whiting. No EEE positive pools were detected

**Figure 3. Arbovirus Surveillance, June 3–October 20, 2018**



Dotted lines represent a moving average for the percentage of mosquito pools that have been positive for WNV (blue) or EEE (yellow) since 2002. Historically, the percentage of mosquito pools positive for an arbovirus increases in late August and peaks in mid-September.  
\*MMWR week refers to a standardized national reporting calendar set forth by the CDC.