

## Final Arbovirus Surveillance Report

2017

### Mosquito Surveillance

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

	# of Mosquito Pools Tested	# of EEE Positive Pools	# of WNV Positive Pools	% WNV Positive Pools
2017	4,306	0	89	2.1%

### Animal Surveillance

- No animals in Vermont were tested for WNV or EEE in 2017

### Human Surveillance

- Three human cases of WNV were reported: one non-neuroinvasive and one neuroinvasive case in Grand Isle county and one neuroinvasive case in Addison county
- One asymptomatic, viremic blood donor (WNV) was identified in Chittenden 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* were found at two trapping sites in Southern Vermont

### Risk Assessment

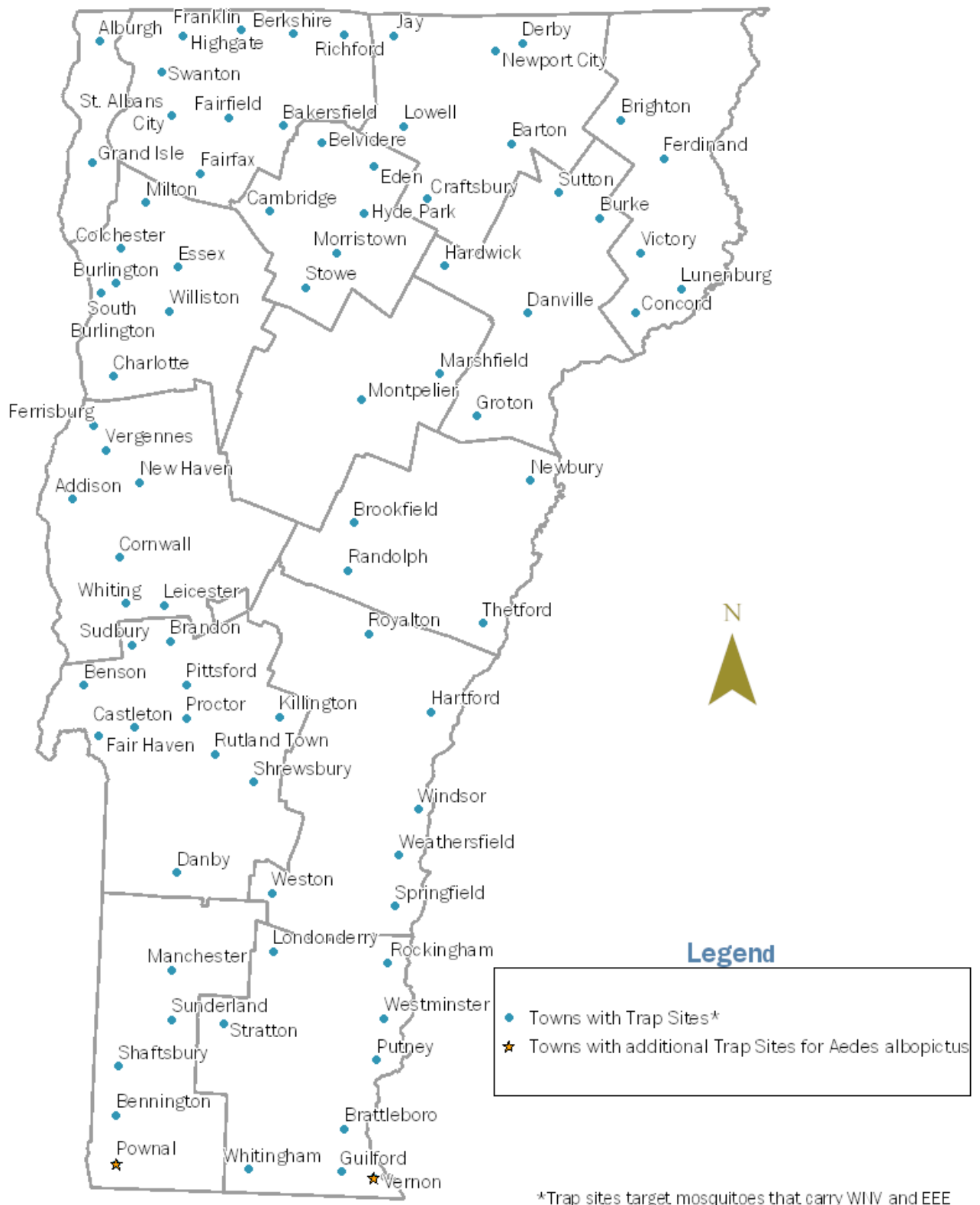
West Nile virus: From 2002 to 2017, WNV has been detected in birds, mosquitoes, people and/or animals in all counties of Vermont. Currently, the risk for WNV appears to be widespread in the state.

Eastern equine encephalitis: Two areas of the state are at low risk based on detections of the EEE virus in the past ten years. These areas are western Franklin county and northern Rutland/southern Addison counties.

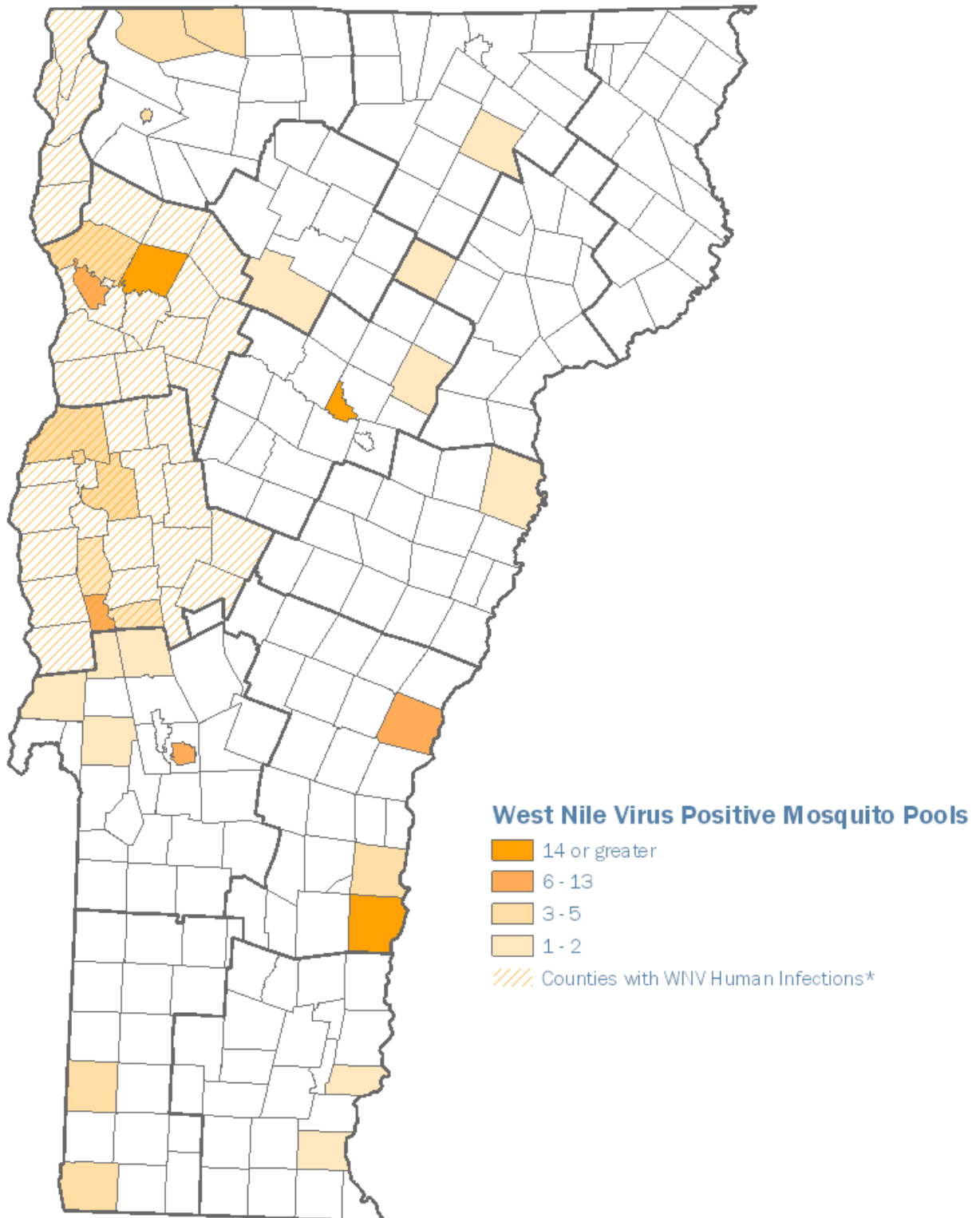
EEE virus was found in one mosquito pool in 2015, 8 mosquito pools in 2014 and one mosquito pool in 2013. EEE virus has only caused human or animal illnesses in Franklin, Rutland and Addison counties. The last human cases were reported in 2012.

<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  
2017**



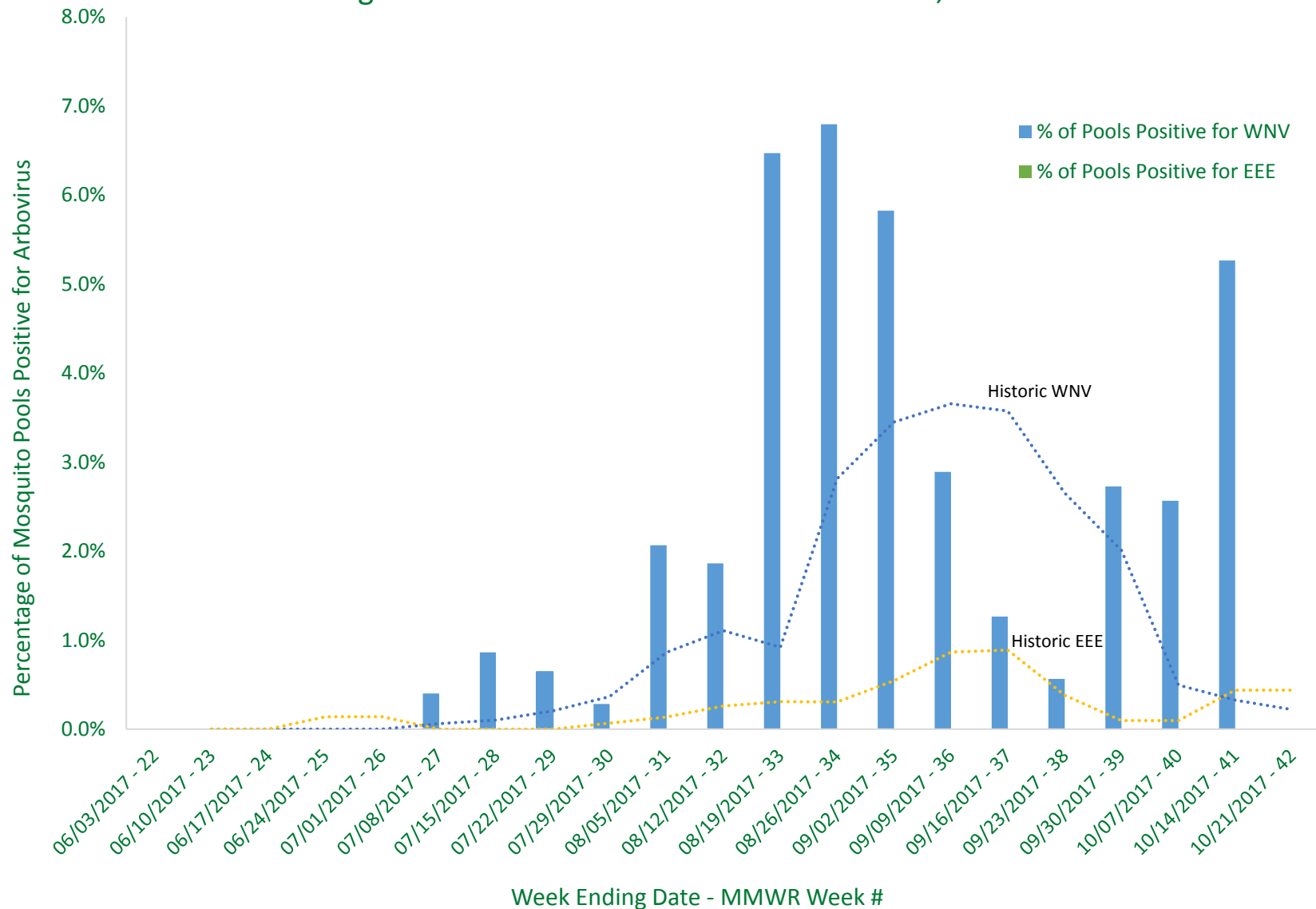
## Arboviral Surveillance Map 2017



\*WNV human infections include human disease cases or presumptive viremic blood donors

Positive West Nile Virus mosquito pools were detected in Barton, Benson, Brandon, Brattleboro, Burlington, Castleton, Colchester, Cornwall, Essex, Ferrisburg, Franklin, Hardwick, Hartford, Highgate, Leicester, Marshfield, Montpelier, New Haven, Newbury, Pownal, Putney, Rutland City, Shaftsbury, Springfield, St. Albans City, Stowe, Sudbury, Vergennes, Weathersfield, and Whiting.

Figure 2. Arbovirus Surveillance — Vermont, 2017



Dotted lines (yellow & blue) represent a moving average for the percentage of mosquito pools that have been positive for WNV or EEE since 2002. The percentage of pools that have been positive for an arbovirus has historically increased in late August and peaked in mid-September.