

2017 Pennsylvania State Report

PA Department of Environmental
Protection

2018 MAMCA/NCMVCA Annual Meeting
Carolina Beach, NC
February 14, 2018

Mosquito Surveillance

(Team Effort: DEP and County Partners)

32,604 Surveillance Events

- 18,000 gravid traps
- 5,596 BG sentinel traps
- 8,684 dipping
- 145 CO₂-baited light traps

Mosquito Species Collected

- Identified 1.3 million adults specimens and 103K larvae
- 40 species identified

Species	Adults collected
<i>Culex restuans</i>	335,262
<i>Culex pipiens-restuans</i>	330,624
<i>Culex pipiens</i>	319,271
<i>Aedes albopictus</i>	147,418
<i>Aedes japonicus</i>	42,129
<i>Aedes vexans</i>	21,787
<i>Culex salinarius</i>	13,214
<i>Aedes trivittatus</i>	13,053
<i>Aedes triseriatus</i>	10,013
<i>Psorophora ferox</i>	9,547

West Nile Virus Mosquito Testing

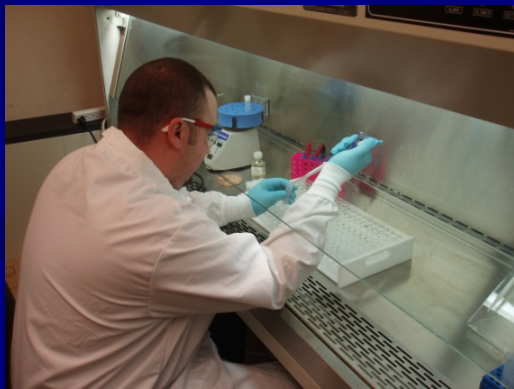
- Tested 1,027,989 specimens in 21,682 pools
- 3,204 positive pools (2nd highest)
- 14.8% of pools were positive; MIR of 3.1
- *Culex spp.* represented 91% of specimens



Species	MIR	# positive	# tested
<i>Culex pipiens</i>	4.7	1,374	292,159
<i>Culex restuans</i>	3.0	915	305,659
<i>Culex pipiens-restuans</i>	2.8	877	315,628
<i>Culex spp.</i>	2.4	19	7,764
<i>Culex salinarius</i>	1.2	10	8,070
<i>Aedes albopictus</i>	0.1	9	81,774

WNV Non-Mosquito Testing Results

- 20 human cases (7th highest)
- 15 positive horses (4th highest)
- 42 positive dead birds (16 in 2016)



Other Arbovirus Testing Results

- La Crosse
 - 50 pools (*Ae. triseriatus*)- negative
- Zika
 - 41 Pools (2,293 *Ae. albopictus*)- negative



Lyme Disease

- No. 1 State in U.S. (Human Cases)
- Education and Awareness Campaign
(Department of Health)

DEP Surveillance and Testing

Prevalence Rates

- *Borrelia burgdorferi*- 47%
- *Anaplasma phagocytophilum*- 3%
- *Babesia microti*- 3%



Powassan Virus

- Four Human Cases in 2017
- Northeastern PA



Powassan Virus Surveillance and Testing

Northeastern PA

- Collected 1,200 *Ixodes scapularis* from 15 Northeastern PA counties
- Test results are pending



Black Fly Suppression Program

- *Simulium jenningsi*
Malloch
- *Simulium luggeri*
Nicholson & Mickel
- *Simulium fibrinflatum*
Twinn
- *Simulium anchistinum*
Moulton & Adler

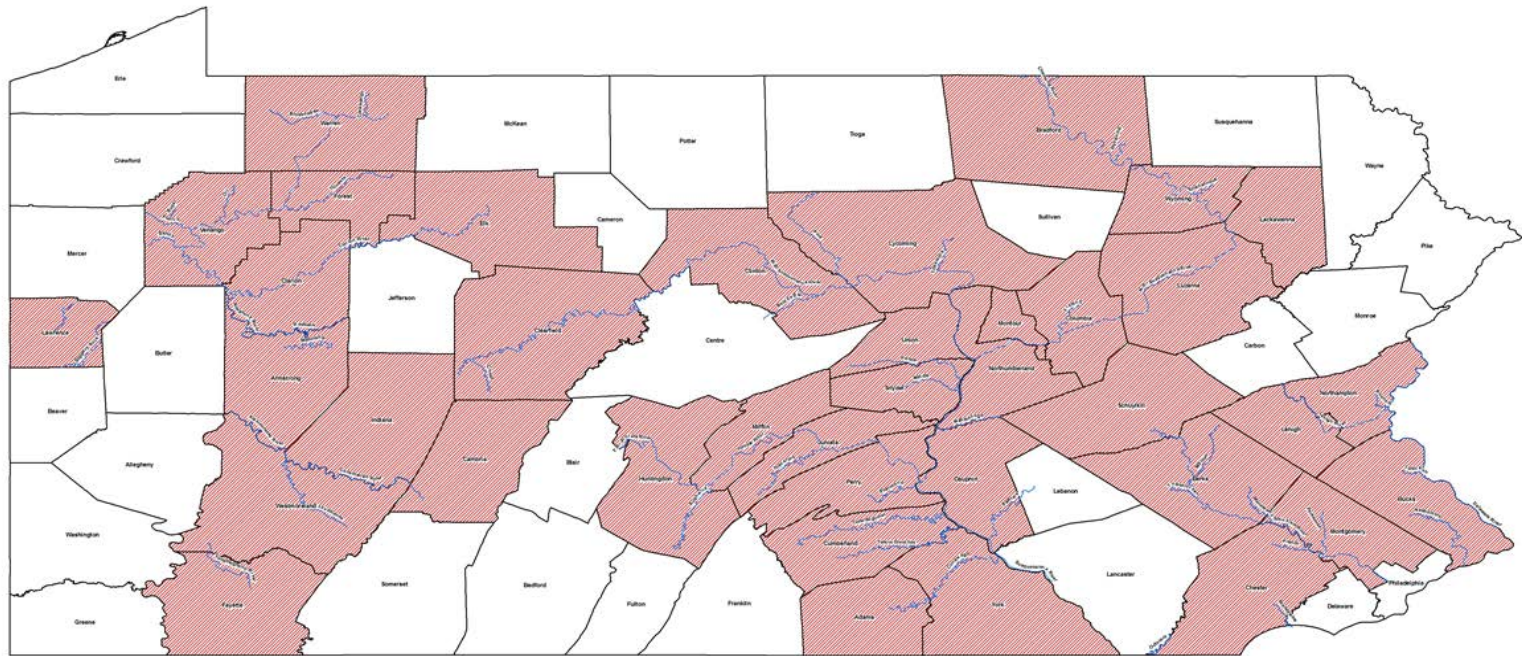


Black Fly Suppression Program

- 38 County Participation (three major river basins)
- New Jersey Participation (cost sharing of Delaware River)



2017 Black Fly Suppression Program Participating Counties and Treated Streams



Legend

- Treated Stream
- Participating County
- Non-Participating County



Questions/Comments



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION