



CAPE COD MOSQUITO CONTROL

Herring River Stakeholders Group

May 19, 2020

Mosquito Life Cycle



Most common mosquito species collected at Herring River, 1993-2019.

<u>Species</u>	<u>Larval Habitat</u>	<u>Flight Range</u>
<i>Ochlerotatus cantator</i>	Brackish	5-10 miles
<i>Coquiletridia perturbans</i> *	Freshwater	1-5 miles
<i>Culex salinarius</i> *	Brackish	1-5 miles
<i>Ochlerotatus canadensis</i>	Freshwater	1 mile
<i>Aedes vexans</i> *	Freshwater	2-5 miles
<i>Culex pipiens/restuans</i> *	Freshwater	1 mile
<i>Culesita melanura</i> *	Freshwater	1 mile
<i>Ochlerotatus sollicitans</i>	Salt	5-40 miles

*known disease vector



1955. Looking East
from the road
towards the railroad
bridge.









1981. Between
High Toss and
Bound Brook.

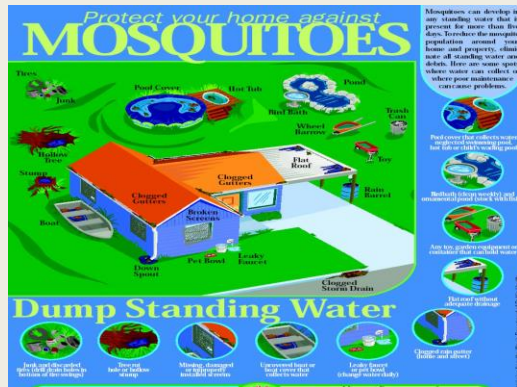






1981

Cape Cod Mosquito Control- Integrated Pest Management



Education
Year round

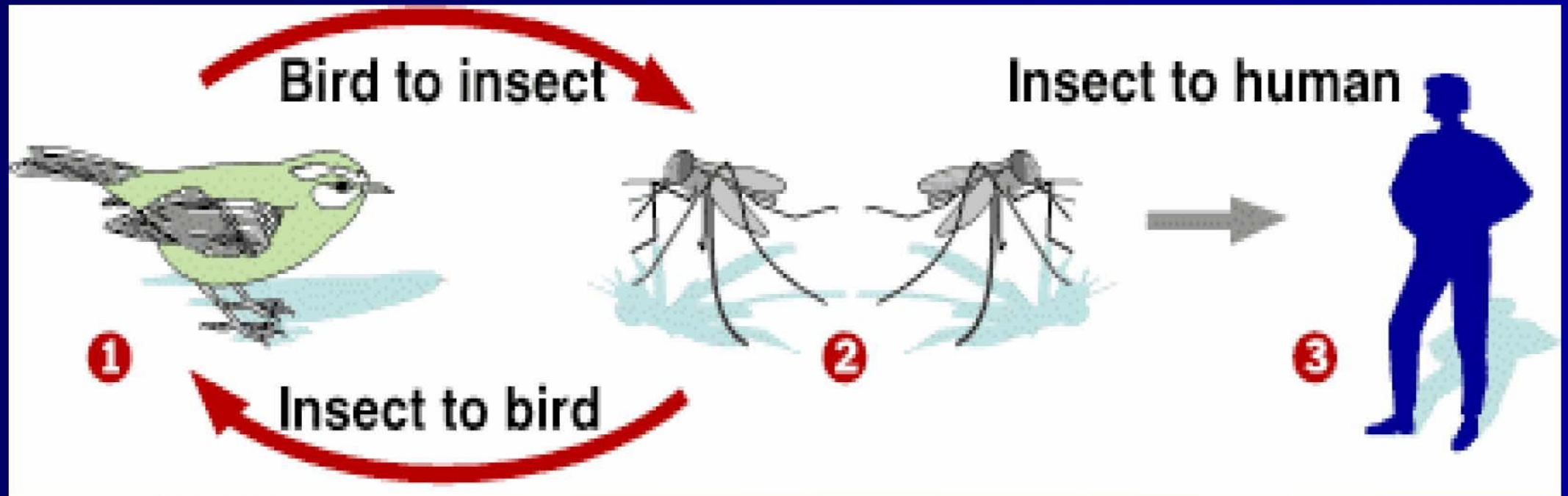


Water Management
October-March

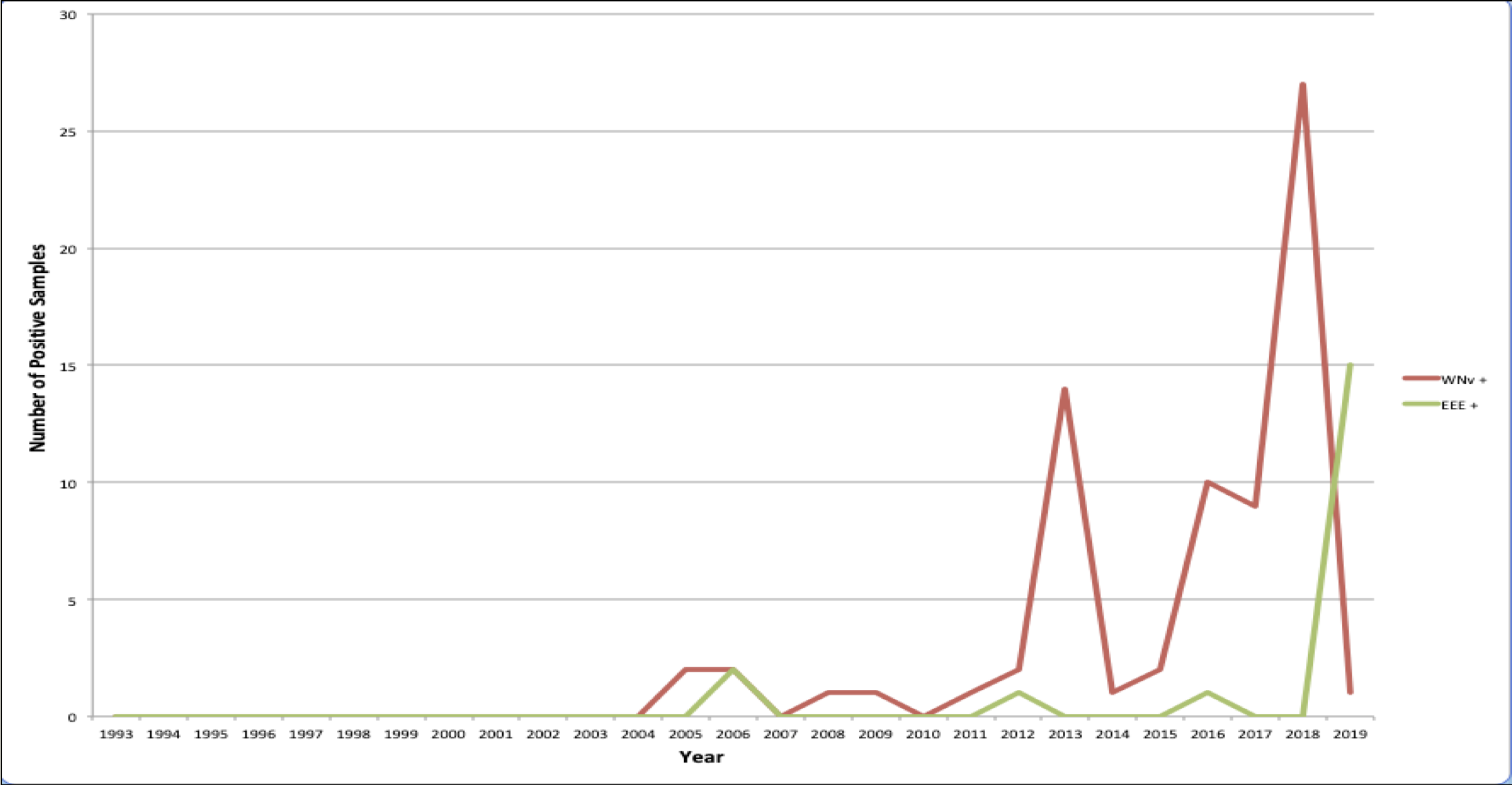


Larvicide
April-September

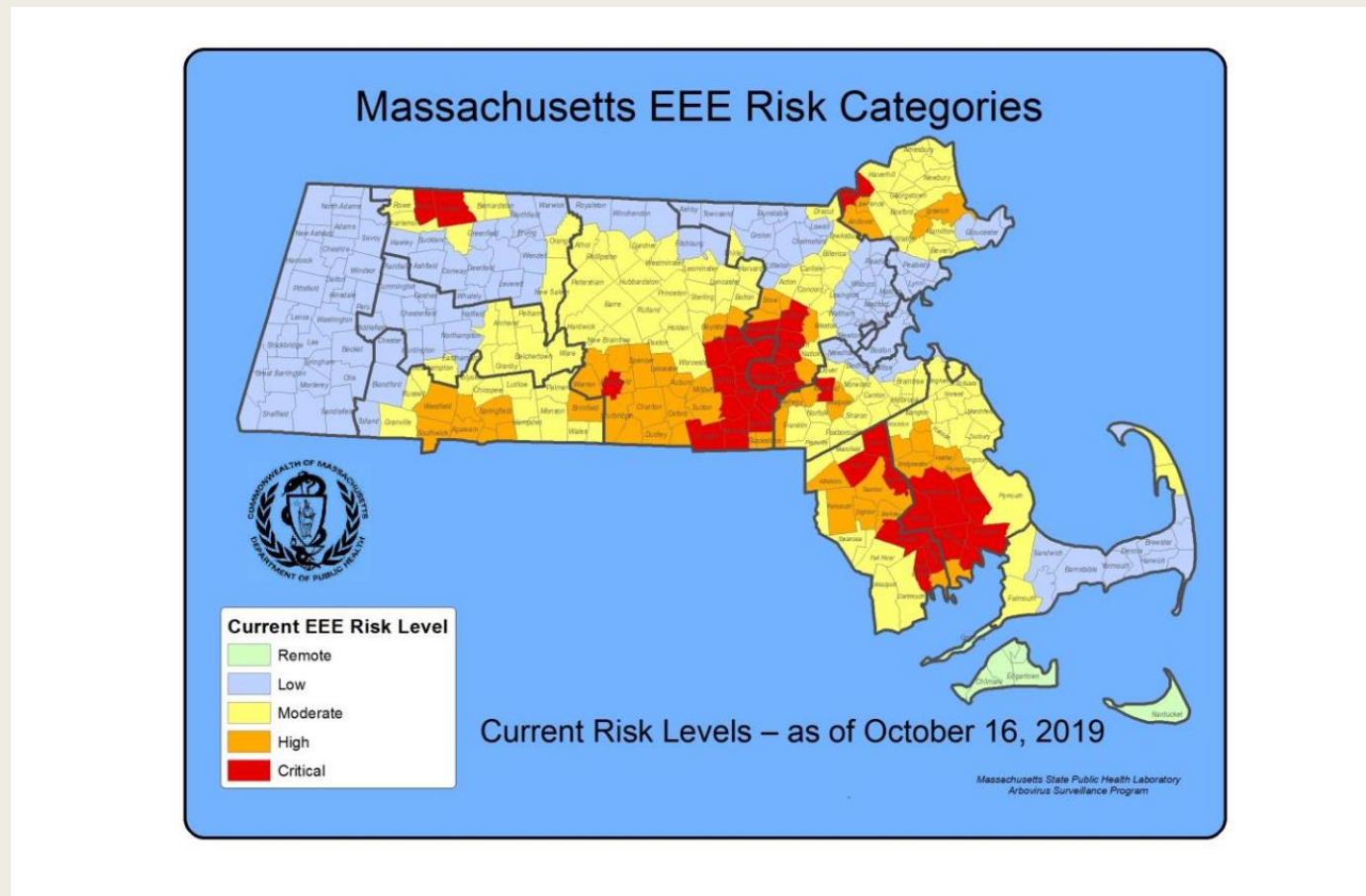
Transmission of Virus



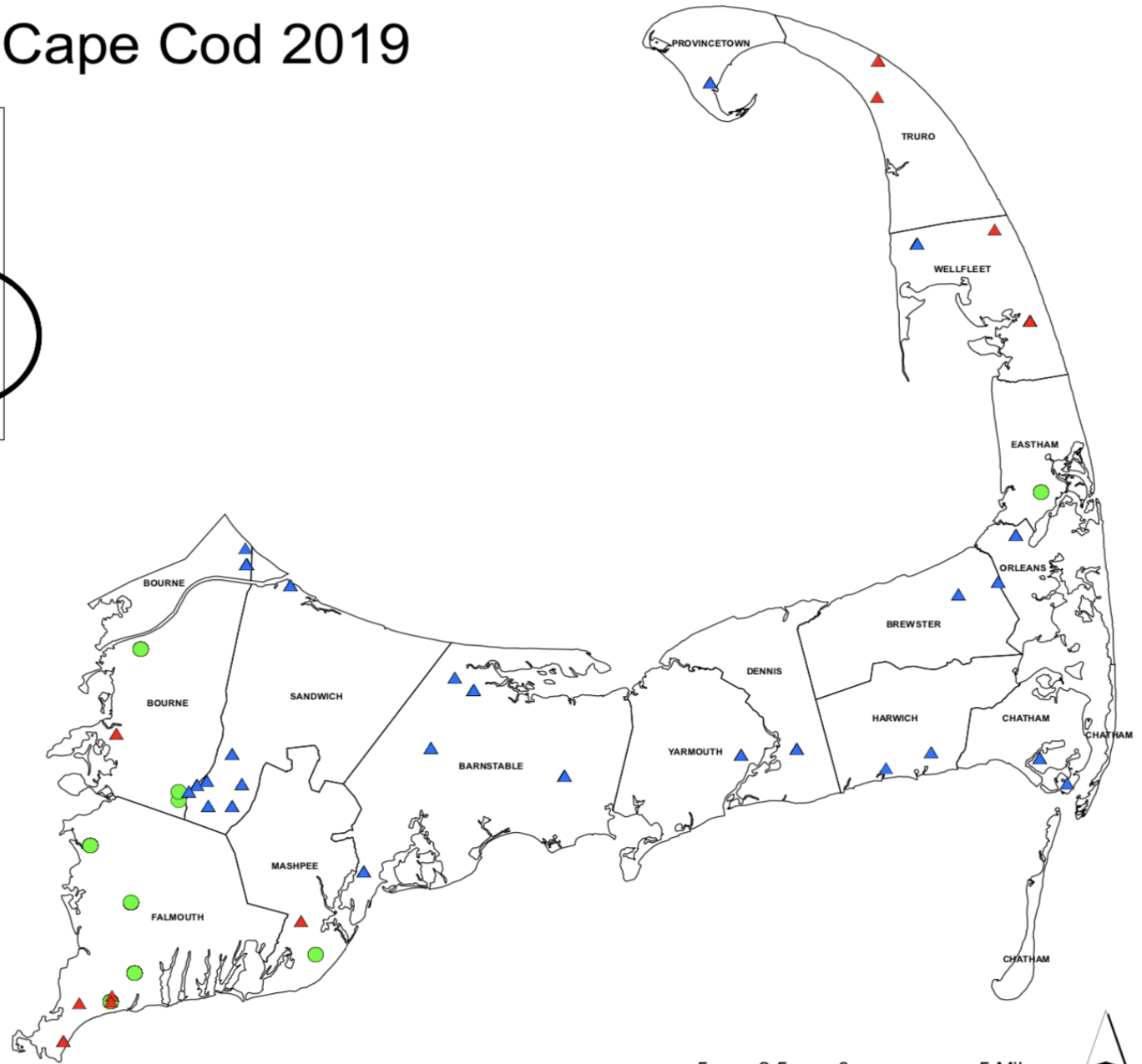
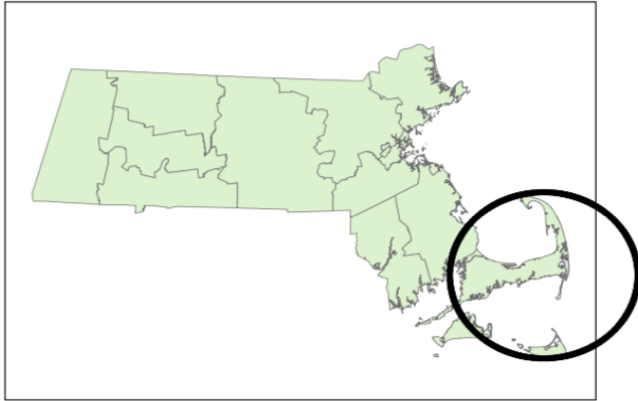
Arbovirus positive mosquito samples collected in Barnstable County, 1993-2019



October 16, 2019*



Surveillance Sites Cape Cod 2019



Trap Sites

- ▲ Positive
- ▲ Negative
- New Trap Sites 2019

Enzootic Vector of EEE : *Culiseta melanura*



General Biology

- Bird biting mosquitoes
- Amplify EEE
- Larval habitat Atlantic White Cedar
and Red Maple Swamps
- Overwinter in larval stage

Potential Bridge Vector: *Coquillettidia perturbans*



General Biology

- Mammal biting mosquitoes
- Vector EEE
- Larval habitat cattail
/buttonbush swamps
- Overwinter in larval stage

Other players: *Culex pipiens/restuans* and *Culex salinarius*

Culex pipiens/restuans

General Biology:

- Bird and mammal biters
- Larval habitat man-made containers
- Known vector for WNV
- Unable to transmit/amplify EEE in lab

Culex salinarius

General Biology:

- Bird and mammal biters
- Larval habitat fresh to salt. Love Phragmites!
- Known bridge vector for WNV and EEE

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*known disease vector



Mosquito spraying in Wayland (Image credit Beth Germano/WBZ)



Gabrielle Sakolsky, Entomologist
Superintendent
Cape Cod Mosquito Control Project
259 Willow Street
Yarmouth Port, MA 02675
ccmcp@ccmcp.net

Office: 508-775-1510
Cell: 774-994-1398

Website: www.ccmcp.net