

***Ochlerotatus  
trivittatus***  
**(Coquillett, 1902)**

Northeast Mosquito Control Association  
December 5, 2018

Todd B Duval, Entomologist  
Bristol County Mosquito Control Project  
36R Forest St. Attleboro, MA 02703  
508-823-5253 • [todd.duval@mass.gov](mailto:todd.duval@mass.gov)



Tribe: Aedini (Latin)

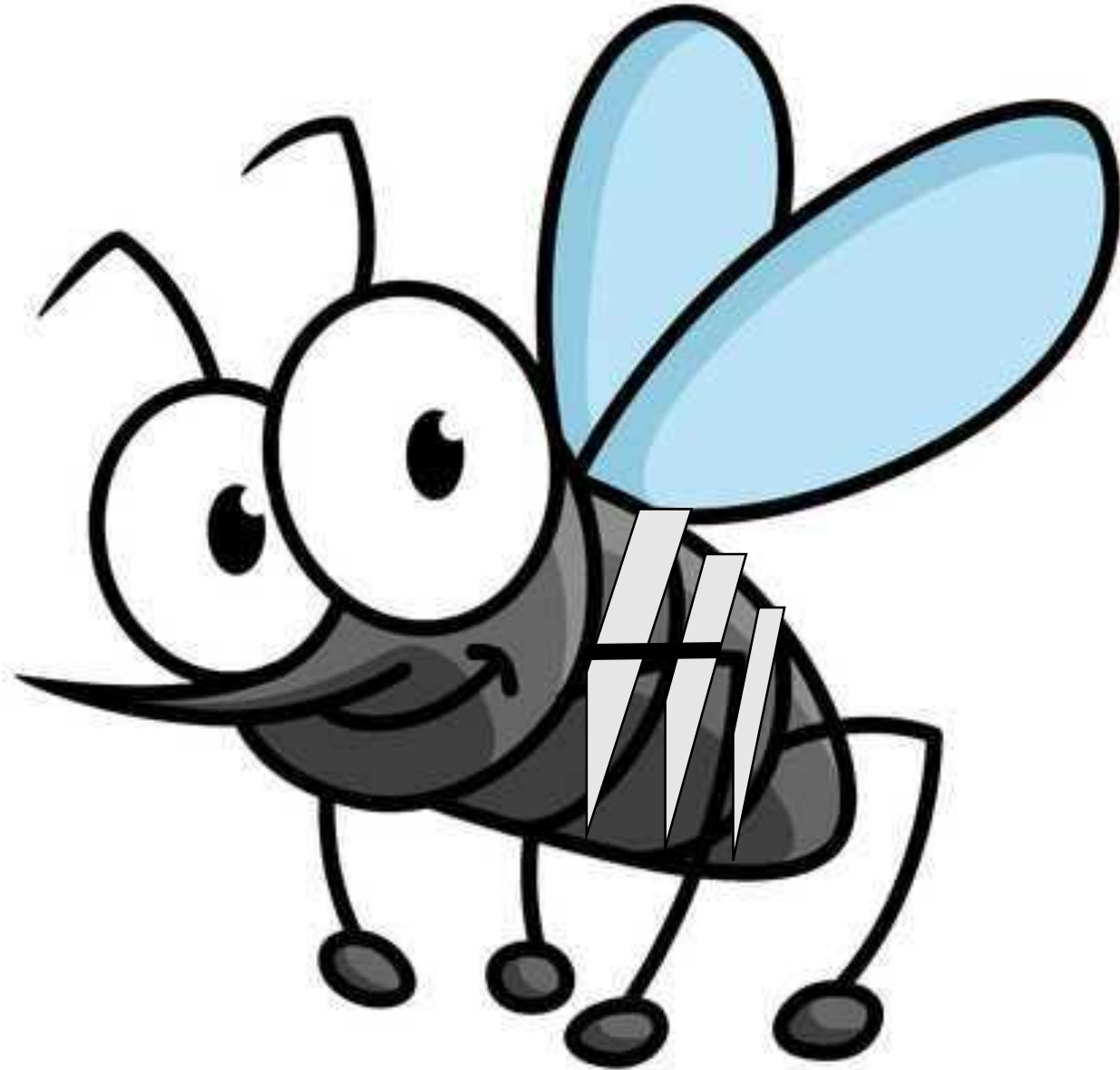
A blue downward-pointing arrow indicating the flow from the tribe level to the genus level.

Genus: Ochlerotatus  
(Greek)

A green downward-pointing arrow indicating the flow from the genus level to the species level.

Species: trivittatus (Latin)

Unpleasant, googly-eyed three-striper



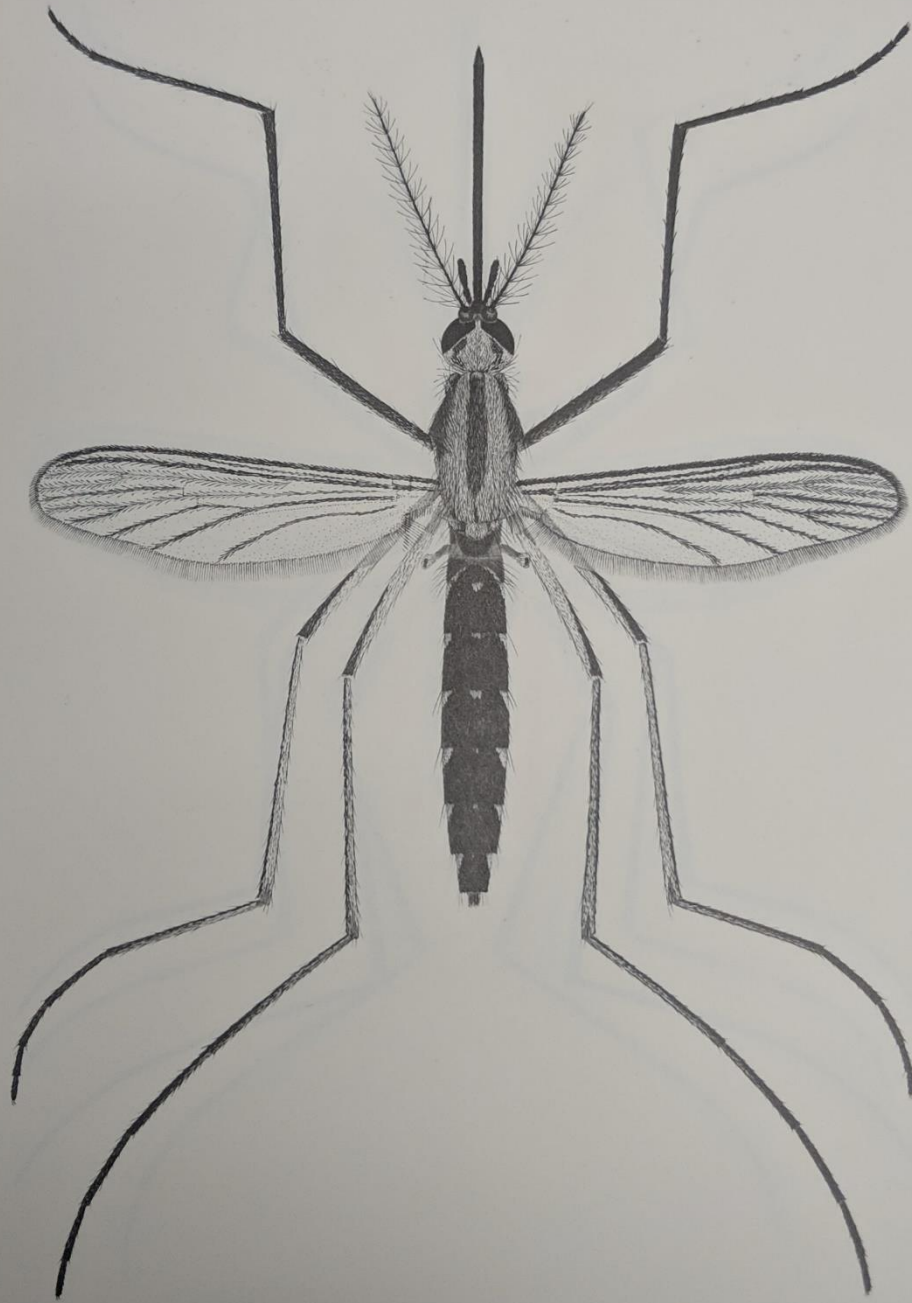


Plate 92. *Aedes trivittatus* (Coquillett), female.

Carpenter and LaCasse 1955

Scu

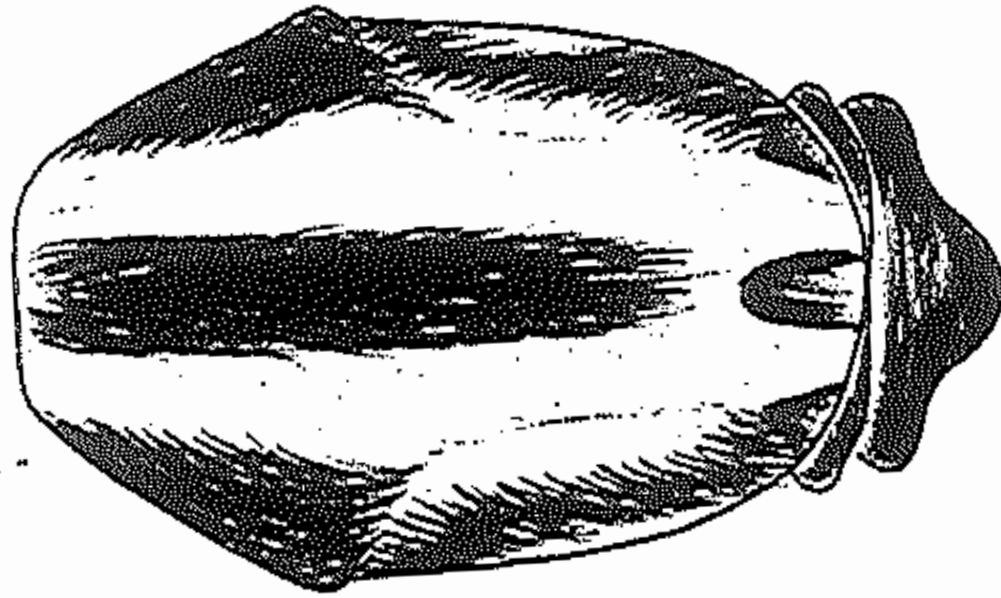


Fig. 202. Dorsal view of scutum: *Oc. trivittatus*

46(43). Scutum with pair of submedian pale-scaled stripes, separated by dark stripe of about same width (fig. 202) ..... *Oc. trivittatus* (plate 23C)

TECHNICAL SERIES, No. 11.

U. S. DEPARTMENT OF AGRICULTURE,  
BUREAU OF ENTOMOLOGY.  
L. O. HOWARD, Entomologist and Chief of Bureau.

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A CLASSIFICATION OF THE MOSQUITOES OF  
NORTH AND MIDDLE AMERICA.

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PREPARED UNDER THE DIRECTION OF THE ENTOMOLOGIST

BY

D. W. COQUILLET, *Assistant Entomologist.*



WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1906.

Coquillett 1906

6. Upper side of the thorax yellow-scaled and with three stripes of brown scales; scales of the wings wholly brown; all the claws of the female toothed.

*trivittatus* Coq.

7

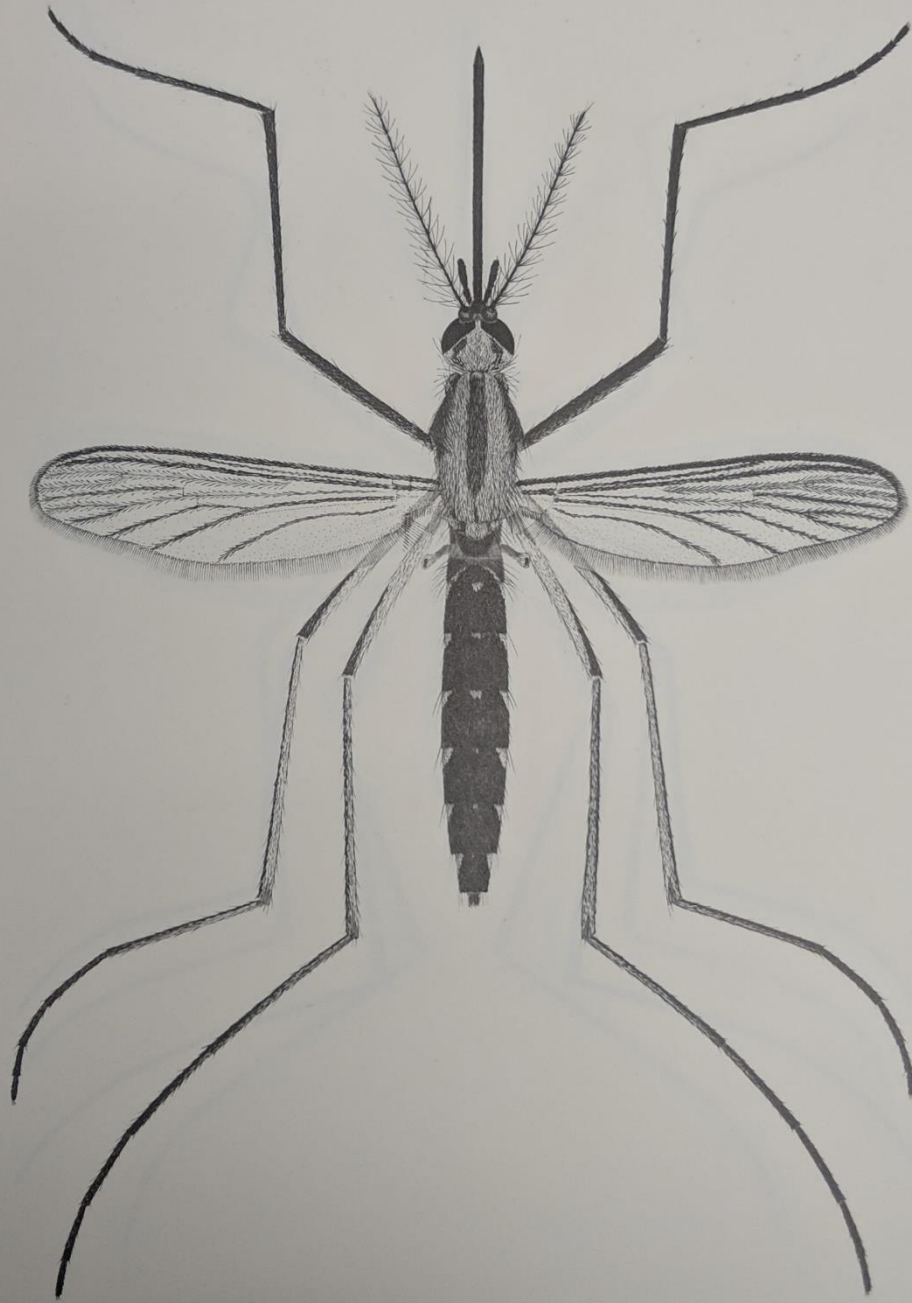


Plate 92. *Aedes trivittatus* (Coquillett), female.

Carpenter and LaCasse 1955







WALTER REED BIOSYSTEMATICS UNIT

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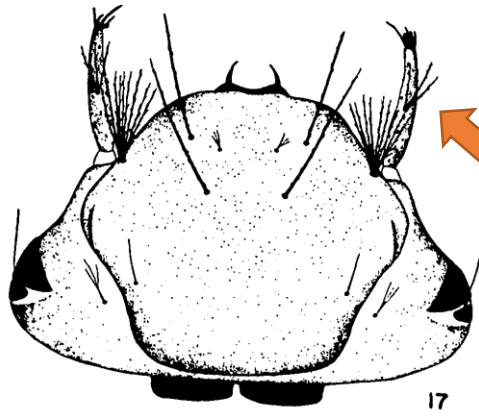


WALTER REED BIOSYSTEMATICS UNIT



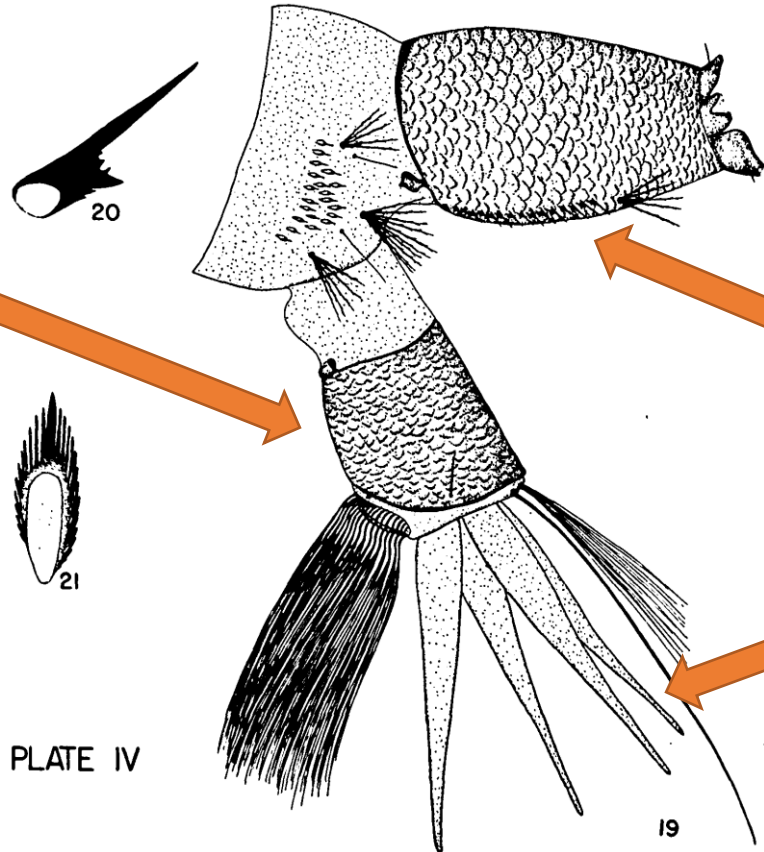


18



17

3 hairs not extending past antenna



20

21

19

Complete saddle

15-17 pecten teeth, uninterrupted

Anal gills conical, 2x saddle length

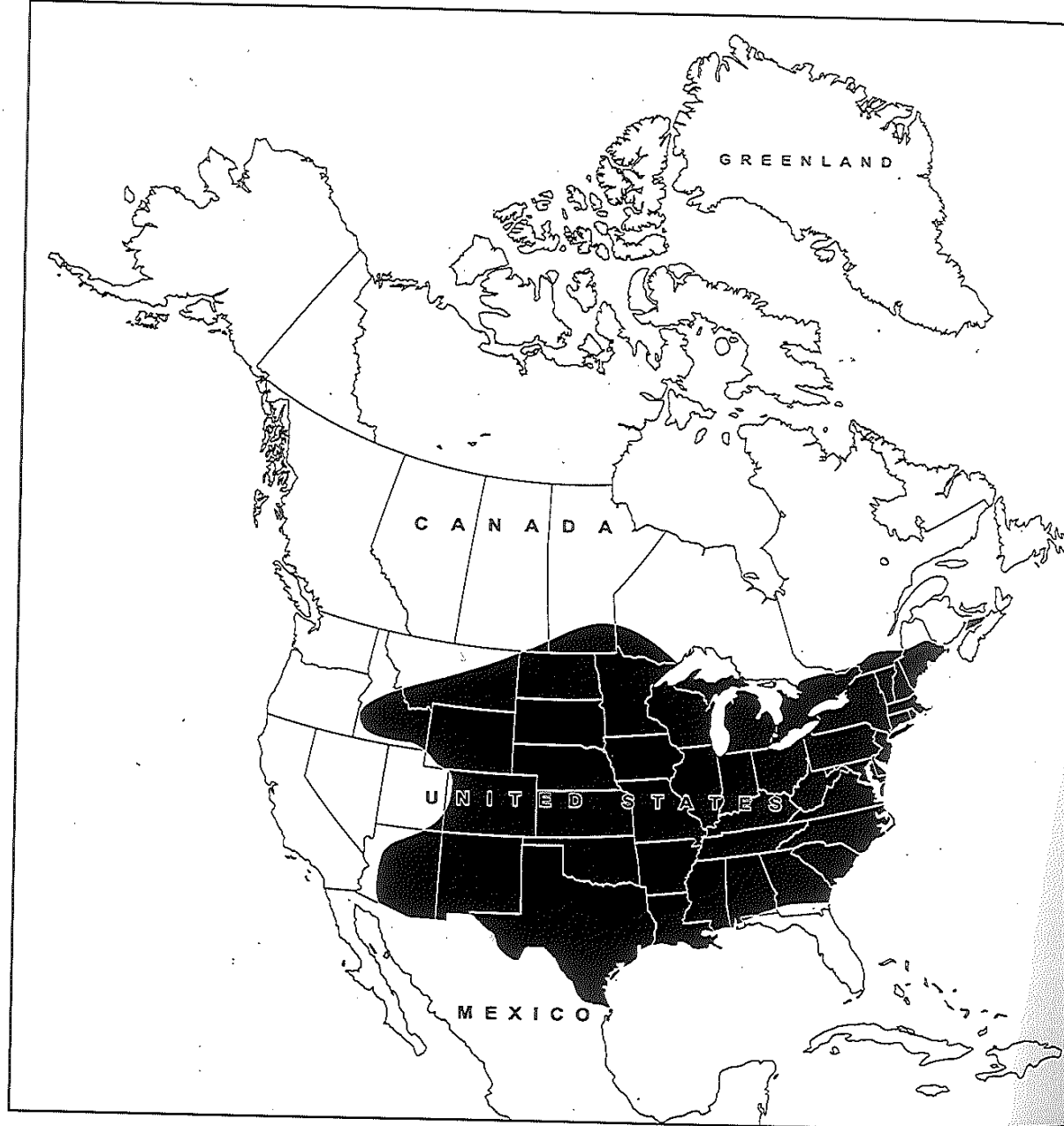


Plate 23 C. Distribution of *Ochlerotatus trivittatus*—USA: AR, CO, CT, DE, DC, GA, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MN, MO, MT, NE, NJ, NM, NY, NC, ND, OH, OK, PA, RI, SC, SD, TN, TX, VA, WV, WI, WY (146), AL (367), AZ (604), MI (744), NH (78), UT (522); Canada: ONT (146), MAN (728), PQ (416); Map after Arnell (11); Tax. 11, 431, 784.





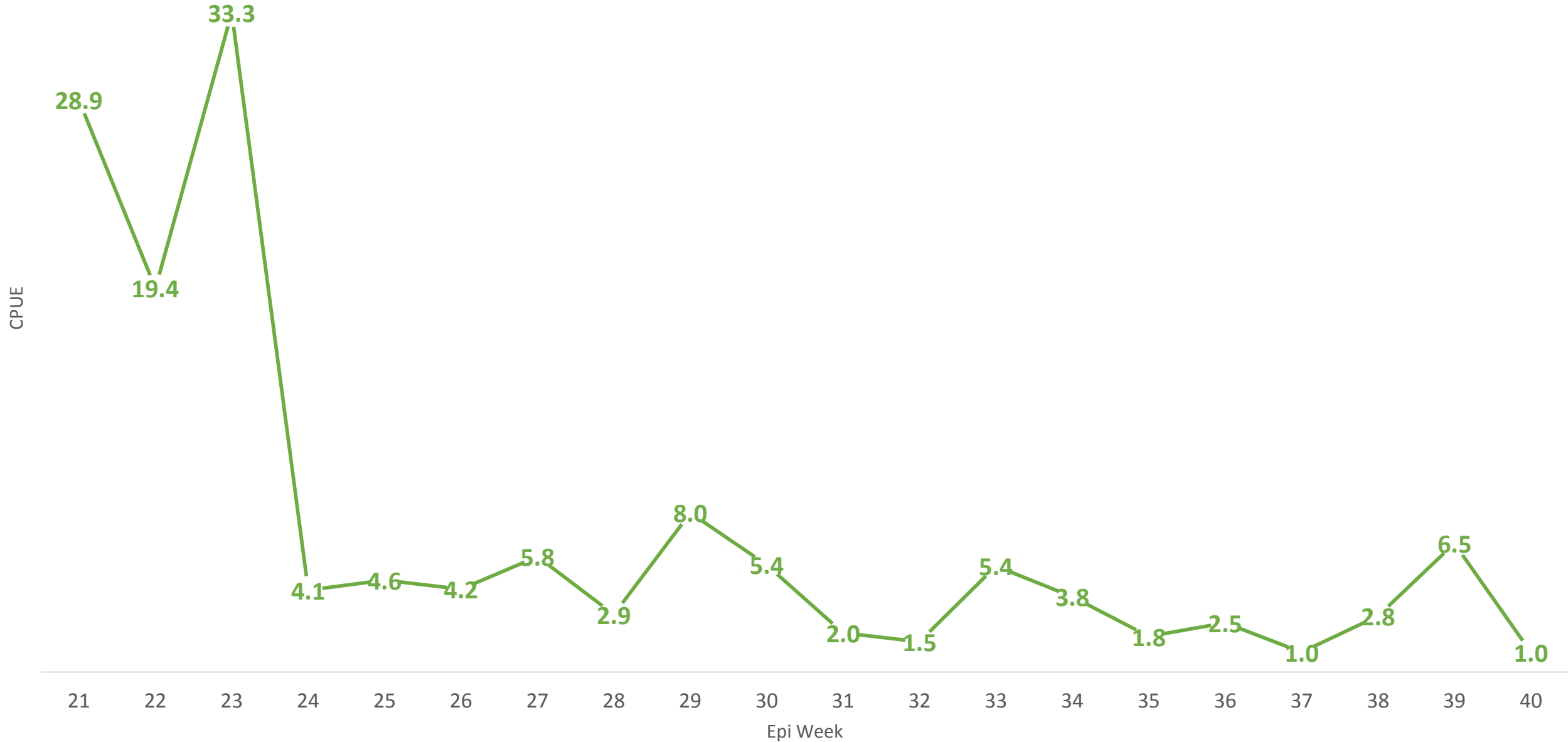


# Natural History

- Multivoltine
  - Spring broods tend to be larger
- Floodplain breeder
  - Found in same places as *Ae. vexans* and *Ps. ferox* (Abdel-Malek 1949)
  - Hatching cue- grasses? (Abdel-Malek 1948)
- Strong, active flier
- Dawn/dusk biter
  - Will feed in daytime if disturbed
- Omnivorous feeder
  - Small mammals but will bite birds, amphibians and reptiles (Wright and DeFoliart 1970)
- Possibly higher in population than NJ light trap data suggests
  - Large sample bias observed between landing count and NJ light trap (Duryea 1990)
  - CDC and resting box collections closer to observed



OC. TRIVITTATUS POPULATION PER TRAP-NIGHT/EPI WEEK  
BRISTOL COUNTY, MA 2007-2018



# Public Health Concerns

- Competent vector of
  - West Nile
  - Eastern Equine Encephalitis
  - Jamestown Canyon
  - Cache Valley
  - Snowshoe Hare
  - Potosi
  - Trivittatus
- Dog heartworm
  - Similar to *Ae. vexans*
- Trivittatus Virus
  - *Oc. trivittatus* primary vector
  - Bunyaviridae, California serogroup
  - Transovarial
  - Transstadial
  - Primary host
    - Eastern cottontail rabbit (LeDuc 1979)
  - Some evidence for human infection (Groseth 2015)
    - Serilogic
    - Suspected symptomatic illness
  - No impact on mosquito fitness (Berry 1987)

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# Thank you!