

# *Mansonia titillans*, a newly recorded mosquito species in Chatham County

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New mosquito species to the Chatham County region is not unheard of. In the mid 1980's *Aedes albopictus* was first recorded and has since become well established in our area.



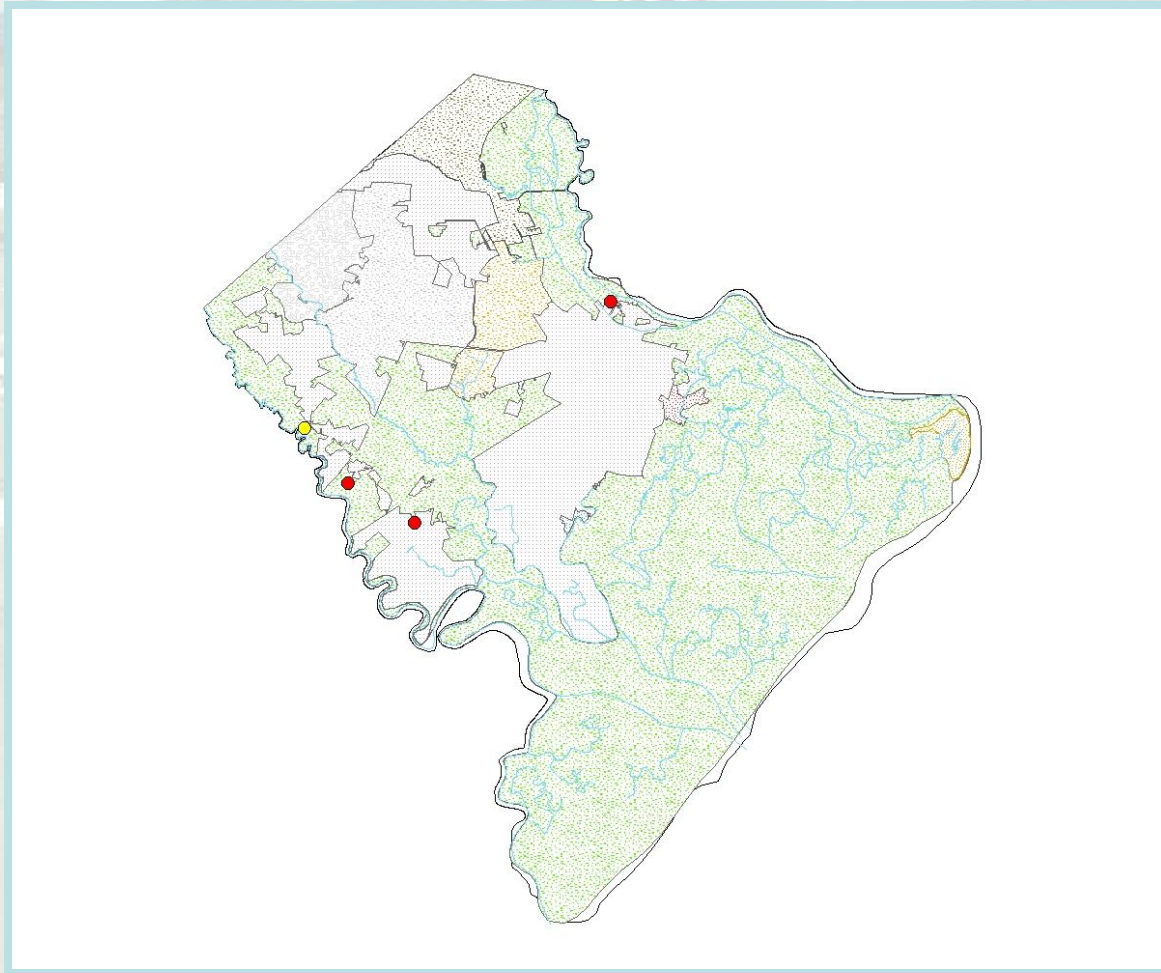
In 2007 *Culex coronator* was found for the first time in Chatham County, and is now a fairly common species encountered during the fall of the year, particularly in CDC light trap collections.



Late in the 2014 season *Mansonia titillans* was found in Chatham County, Georgia. Members of the *Mansonia* group can be a troublesome nuisance mosquito that readily bite humans.

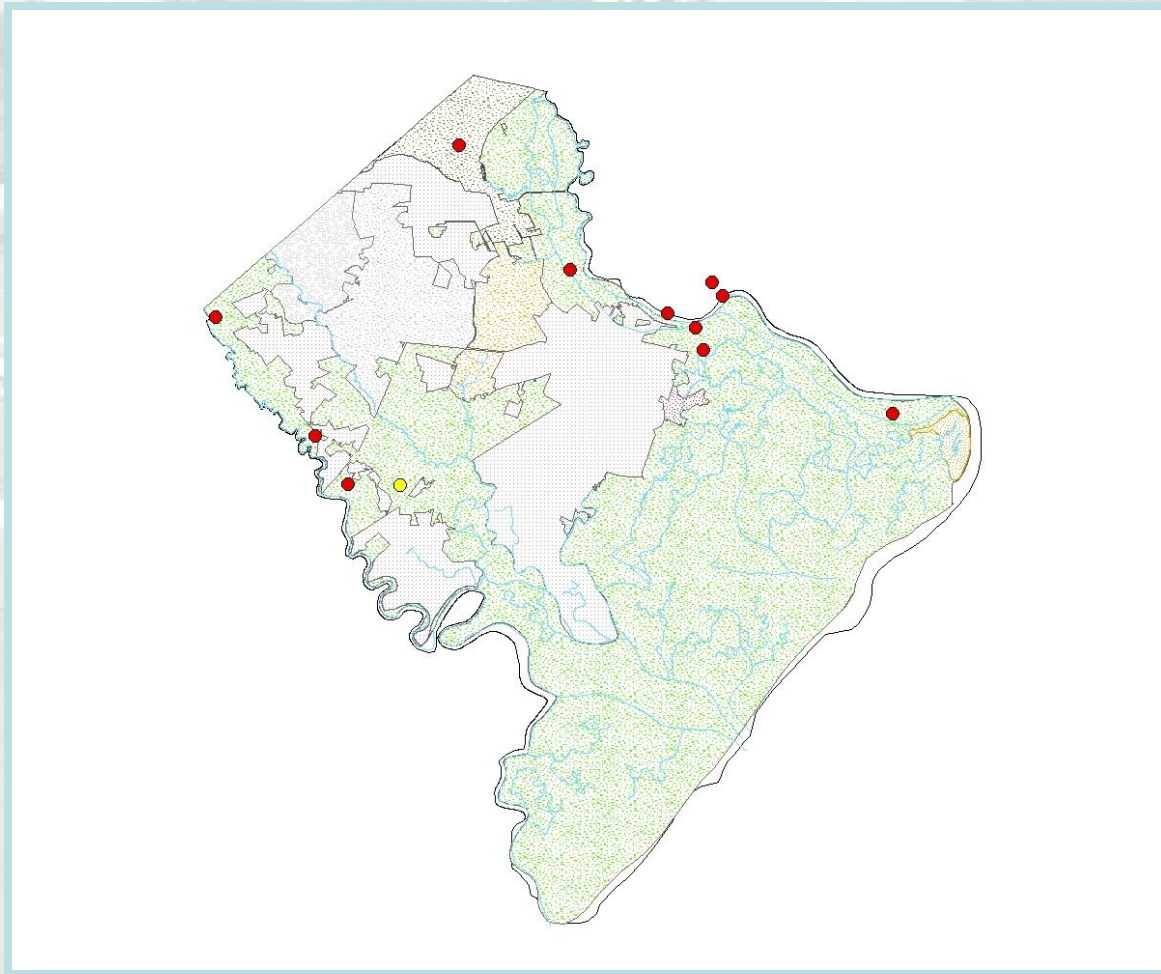


In 2014 *Mansonia titillans* was found at a total of 4 sites in Chatham County, Georgia.



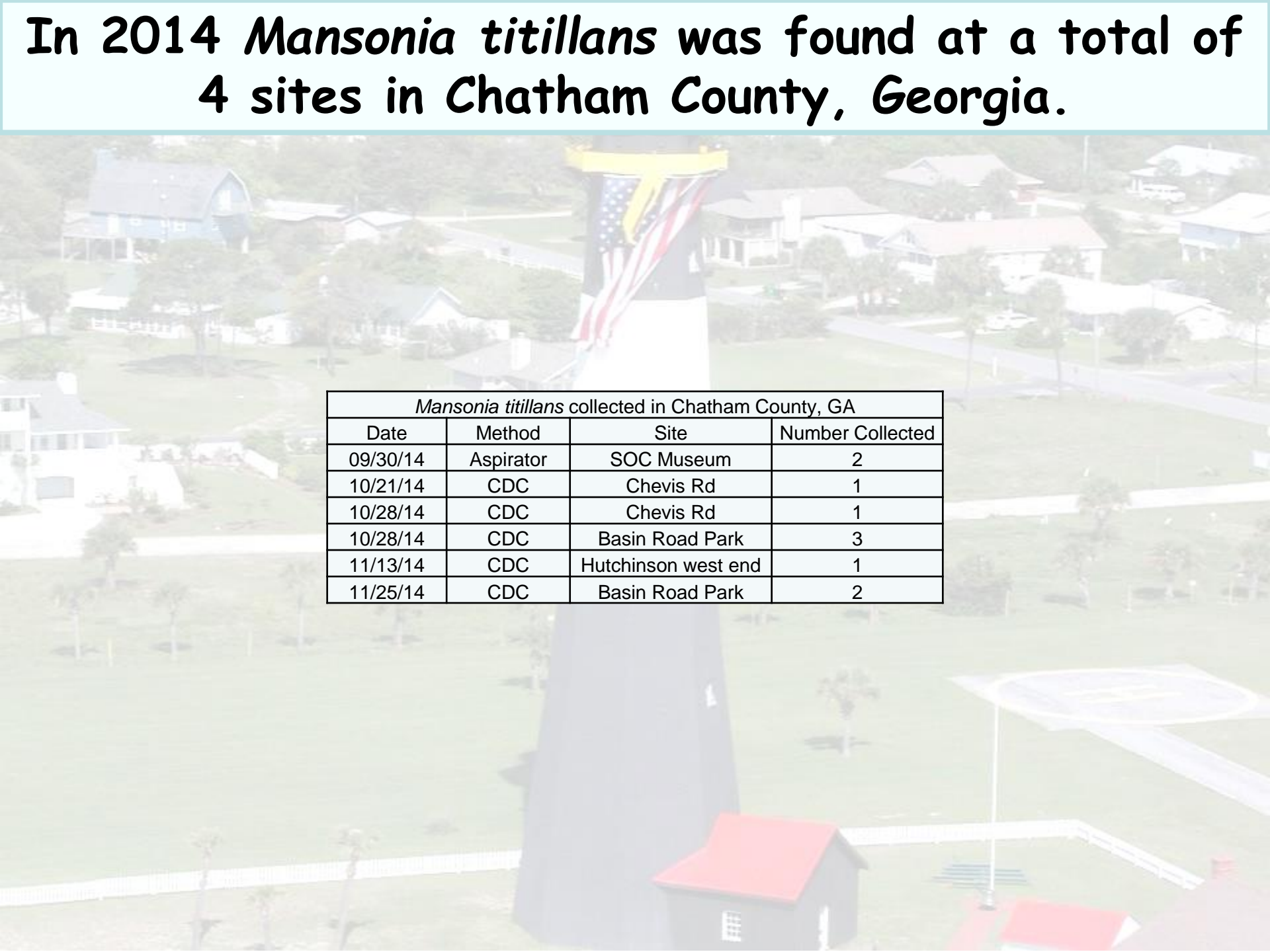
*Mansonia titillans* records from Chatham County, Georgia (aspirated collection in yellow, CDC trap collection in red).

In 2015 *Mansonia titillans* was found at a total of 7 sites in Chatham County, Georgia & 3 sites in Jasper County, South Carolina.



*Mansonia titillans* records from Chatham County, Georgia (aspirated collection in yellow, CDC trap collection in red).

**In 2014 *Mansonia titillans* was found at a total of 4 sites in Chatham County, Georgia.**



*Mansonia titillans* collected in Chatham County, GA

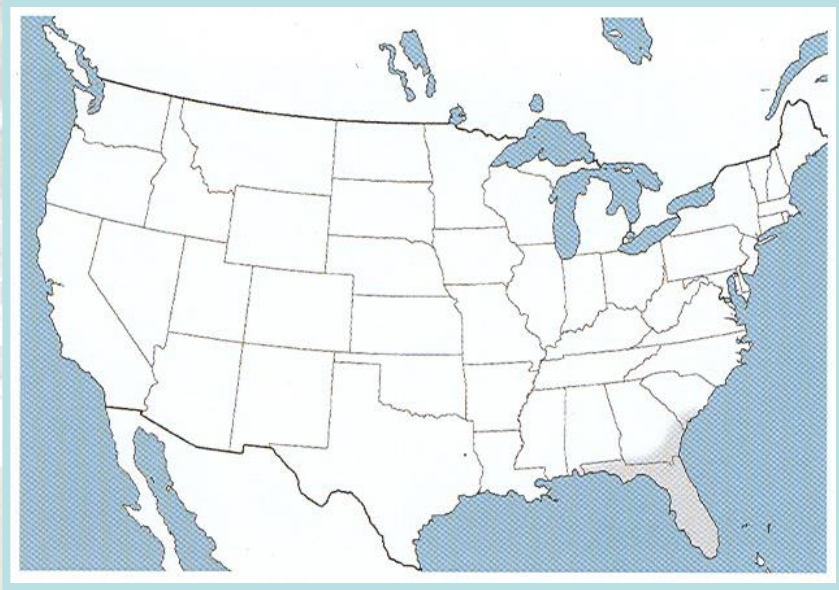
Date	Method	Site	Number Collected
09/30/14	Aspirator	SOC Museum	2
10/21/14	CDC	Chevis Rd	1
10/28/14	CDC	Chevis Rd	1
10/28/14	CDC	Basin Road Park	3
11/13/14	CDC	Hutchinson west end	1
11/25/14	CDC	Basin Road Park	2

# In 2015 *Mansonia titillans* was found at a total of 7 sites in Chatham County, Georgia & 3 sites in Jasper County, South Carolina.

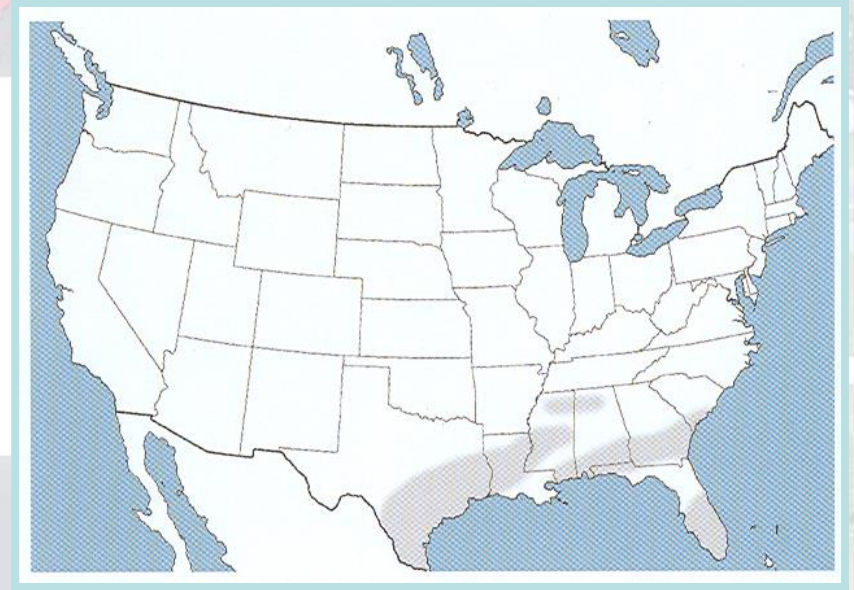
Mansonia titillans collected in Chatham County, GA and Jasper County, SC			
Date	Method	Site	Number Collected
08/06/15	CDC	Fort Pulaski	1
08/10/15	Aspirated	Hodge Airfield	1
08/11/15	CDC	Huckleberry	1
08/20/15	CDC	Fort Pulaski	1
08/26/15	CDC	E. of Gas Line DMCA's	2
09/08/15	CDC	Huckleberry	1
09/10/15	CDC	E. of Gas Line DMCA's	2
09/15/15	CDC	Basin Road Park	1
09/16/15	CDC	Rd 2 Elba/Causton Bluff	1
09/17/15	CDC	King's Island	2
09/17/15	CDC	E. of Gas Line DMCA's	10
09/21/15	CDC	Newport	1
09/23/15	CDC	Mid-Road DMCA's	1
09/23/15	CDC	13-A north	1
09/23/15	CDC	E. of Gas Line DMCA's	2
09/30/15	CDC	E. of Gas Line DMCA's	3
09/30/15	CDC	13-A north	1
10/6/2015	CDC	Fort Arygle Road	1
10/8/2015	CDC	Fort Jackson	1



# There are two species of *Mansonia* found in the United States

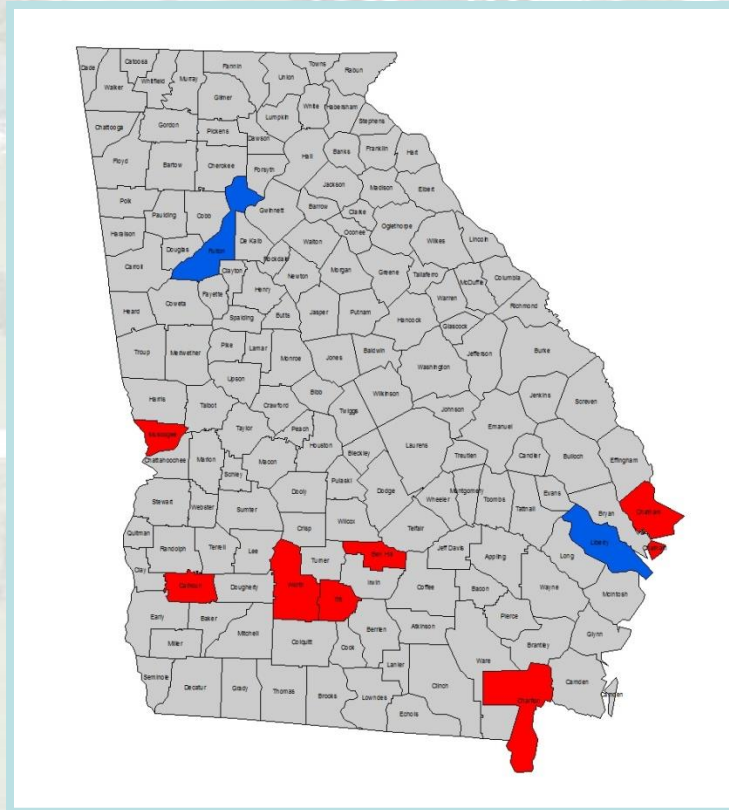


Distribution of *Mansonia dyari* from Burkett-Cadena (2013)



Distribution of *Mansonia titillans* from Burkett-Cadena (2013)

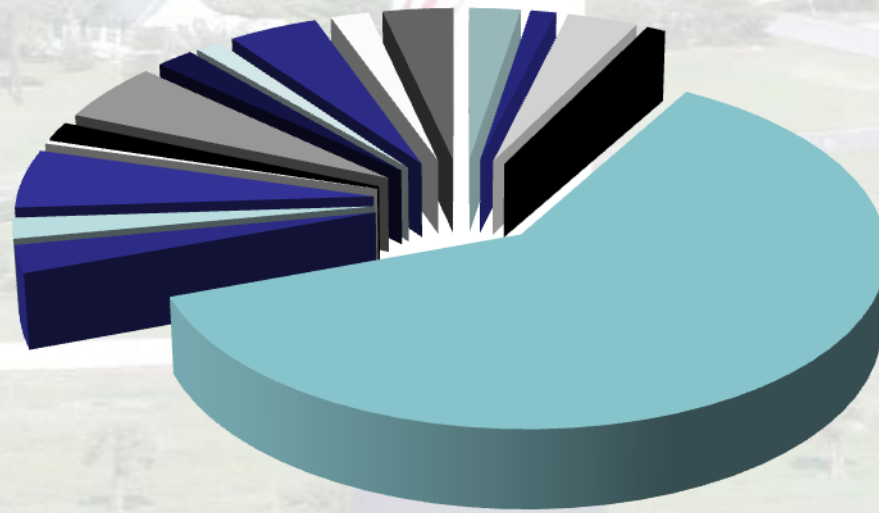
# There are two species of *Mansonia* found in the United States, both have been recorded in Georgia



*Mansonia titillans* (red) and *Mansonia dyari* (blue) known distribution in Georgia.

# Many other mosquito species were collected with *Mansonia titillans*

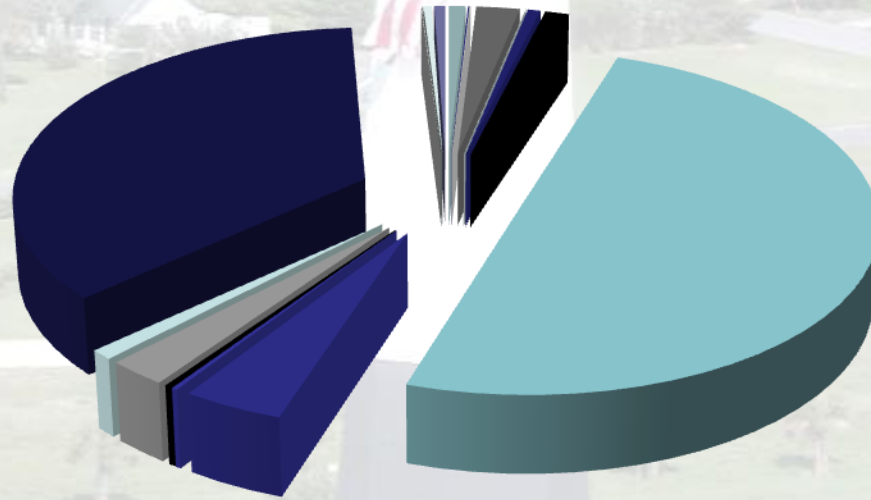
Species of mosquitoes collected with *Mansonia titillans* from CDC Light traps in 2014



- |                         |                        |                        |                            |
|-------------------------|------------------------|------------------------|----------------------------|
| ■ <i>Ma titillans</i>   | ■ <i>Ae albopictus</i> | ■ <i>Ae vexans</i>     | ■ <i>Cx erraticus</i>      |
| ■ <i>Cx nigripalpus</i> | ■ <i>Cx salinarius</i> | ■ <i>Cu melanura</i>   | ■ <i>Oc atlanticus</i>     |
| ■ <i>Oc canadensis</i>  | ■ <i>Oc dupreei</i>    | ■ <i>Oc infirmatis</i> | ■ <i>Oc taeniorhynchus</i> |
| ■ <i>Oc triseriatus</i> | ■ <i>Ps ferox</i>      | ■ <i>Ur sapphirina</i> | ■ <i>An crucians</i>       |

# Many other mosquito species were collected with *Mansonia titillans*

Species of mosquitoes collected with *Mansonia titillans* from CDC Light traps in 2015

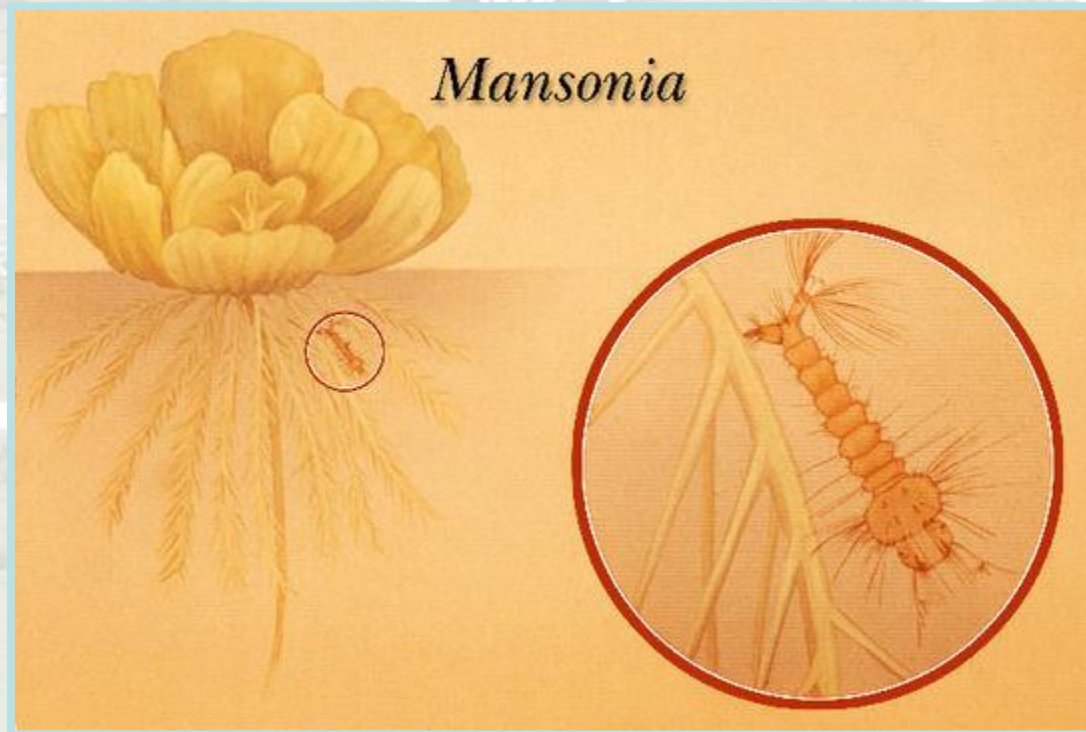


- |                             |                            |                         |                         |
|-----------------------------|----------------------------|-------------------------|-------------------------|
| ■ <i>Ma titillans</i>       | ■ <i>Ae albopicta</i>      | ■ <i>Ae vexans</i>      | ■ <i>An crucians</i>    |
| ■ <i>An quadrimaculatus</i> | ■ <i>Cx coronator</i>      | ■ <i>Cx erraticus</i>   | ■ <i>Cx nigripalpus</i> |
| ■ <i>Cx salinarius</i>      | ■ <i>Oc atlanticus</i>     | ■ <i>Oc dupreei</i>     | ■ <i>Oc infirmatis</i>  |
| ■ <i>Oc sollicitans</i>     | ■ <i>Oc taeniorhynchus</i> | ■ <i>Oc triseriatus</i> | ■ <i>Cq perturbans</i>  |
| ■ <i>Ps columbiae</i>       | ■ <i>Ps ferox</i>          |                         |                         |

# All sites where *Mansonia titillans* were found tended to share a mixed woods setting



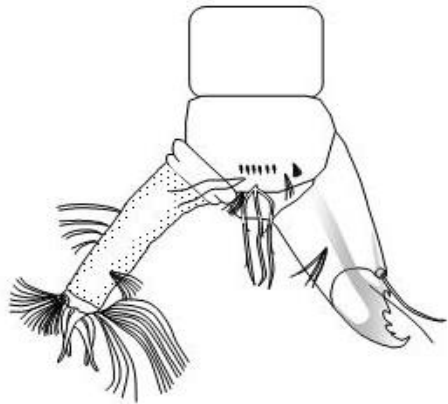
The larvae of *Mansonia* are generally associated with floating aquatic plants



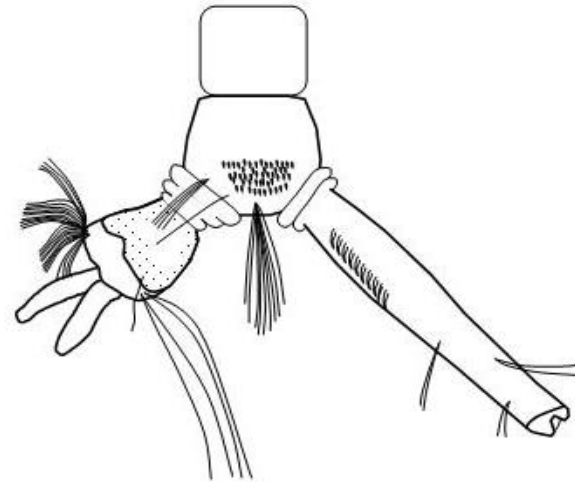
This is because *Mansonia* larvae are equipped with a modified siphon that pierces the "aerenchyma" of aquatic plants



Cross section of plant showing aerenchyma



*Mansonia*



*Culex*

Examples of such plants include cattails, water lettuce, and water hyacinth





However, attempts to capture *Mansonia* larvae with emergence traps have thusfar been fruitless





Thank You!



Questions?