CDC Mosquito Collections in Coastal Georgia for Adult Mosquito Identification Key

Georgia Mosquito Control Association Annual Meeting
Athens, Georgia
October 18, 2018

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Water, Food, and Environmental Health Services Branch
What We Will Discuss:

- Purpose of the project
- What we did
- What we found
- When to expect new tool
Why Is CDC Collecting Mosquitos in Georgia?

- Hurricane Recovery Crisis NOFO
  - CDC-RFA-TP18-1802
- Eligibility of Vector Control (Mosquito Abatement) Federal Assistance through FEMA
- Assist public health professionals who do not perform mosquito surveillance and identification regularly

Screenshots: YouTube/Tyler Bennett
Mosquito Identification Challenges:

• Mosquito traps damage mosquitoes
• Morphology is tricky
• Difficult to translate black and white illustrations in a dichotomous key.
Mosquito Collection in Coastal Georgia

- CDC team: Dominic Rose, Andrew Ruiz, Christine Vanover
- Dates: July 16-August 2, 2018
- 46 larval collection sites
- 11 adult collection sites
- 9 different counties
What we found and next steps

- 26 different species found out of the 53 known species known to occur in Georgia
  - Was not able to collect them all due to seasonality of certain species
- Other states: FL and TX
- CDC Division of Vector-borne Diseases, Ft. Collins projects final on-line mosquito identification key to be released in 2020

<table>
<thead>
<tr>
<th>Aedes albopicitus</th>
<th>Culex coronator</th>
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<tbody>
<tr>
<td>Aedes atlanticus</td>
<td>Culex erraticus</td>
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<tr>
<td>Aedes canadensis canadensis</td>
<td>Culex quinquefasciatus</td>
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<tr>
<td>Aedes dupreei</td>
<td>Culex nigripalpus</td>
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<td>Aedes fulvus pallens</td>
<td>Culiseta melanura</td>
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<td>Aedes infirmatus</td>
<td>Mansonia titillans</td>
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<td>Aedes mitchellae</td>
<td>Psorophora columbiae</td>
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<td>Aedes sollicitans</td>
<td>Psorophora ciliata</td>
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<td>Aedes taeniorhynchus</td>
<td>Psorophora ferox</td>
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<td>Aedes triseriatus</td>
<td>Psorophora howardii</td>
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<td>Aedes vexans</td>
<td>Toxorhynchites septentrionalis</td>
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<td>Anopheles crucians</td>
<td>Uranotaenia saphirina</td>
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<td>Anopheles punctipennis</td>
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</tbody>
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Special Thanks to Chatham County Mosquito Control District!

- Jeff Heusel
- Ture Carlson
- Bobby Moulis
- Laura Peaty
- Everyone else!
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Questions?

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