



# Locally-Acquired Malaria in the 21st Century: Searching for Vectors

Becca Love

17 October 2024

# Acknowledgements

## Decatur

- Ellen Dotson
- Arabella Lewis
- Sabaa Logman
- Subhika Rao
- Jeanne Samake
- Carolina Torres Gutierrez
- Gonzalo Vazquez Prokopec
- Abigail Yeboah
- Clyde Shepherd Nature Preserve
- Machine shop

## Valdosta

- **Eric Chambers** and team

## Sarasota

- **Natalie Barber**
- Wade Brennan
- Coril Currie
- Wyatt DeMars
- Natalie Osborne
- Maverick Sheplar
- Adriana Vidal

# Why?

- Surprisingly low numbers of *An. quadrimaculatus* in shipped specimens

# Why?

- Surprisingly low numbers of *An. quadrimaculatus* in shipped specimens
- Surprisingly low numbers of *An. quadrimaculatus* in recent data

# Why?

- Surprisingly low numbers of *An. quadrimaculatus* in shipped specimens
- Surprisingly low numbers of *An. quadrimaculatus* in recent data
- Old studies suggest *An. crucians* is a poor vector

# Decatur



# Decatur



# Decatur





# Decatur



# Decatur

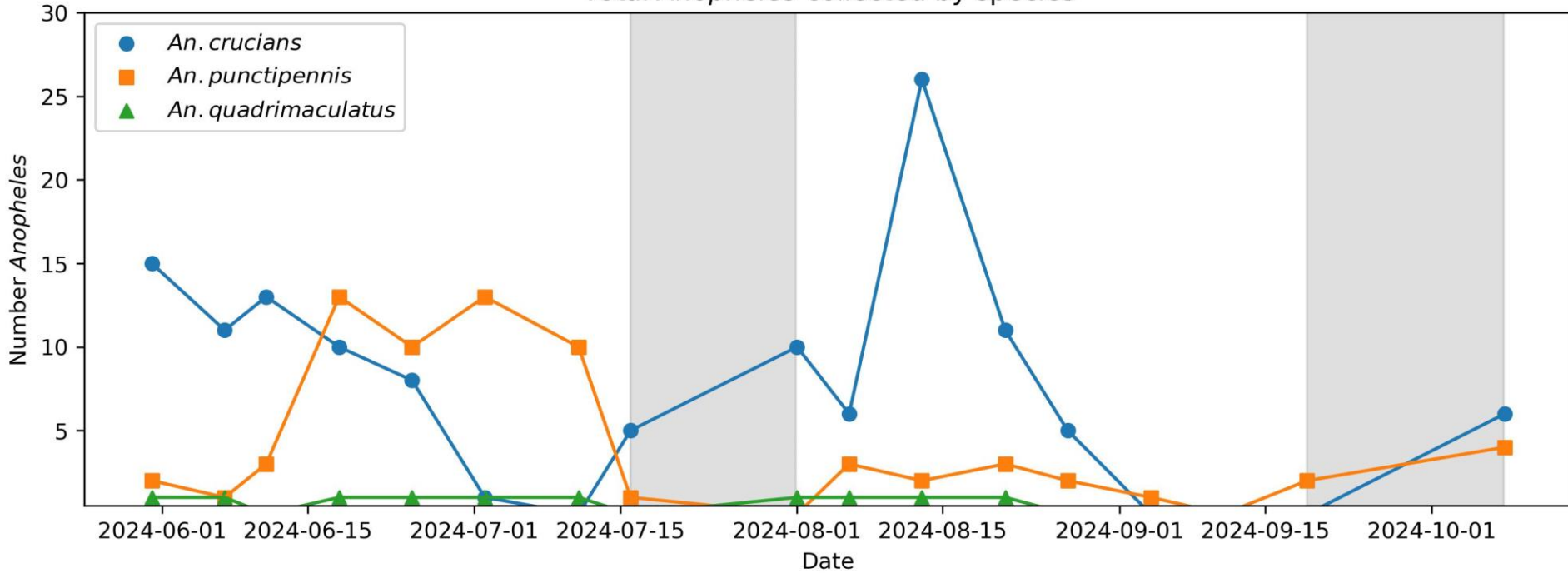


# Decatur

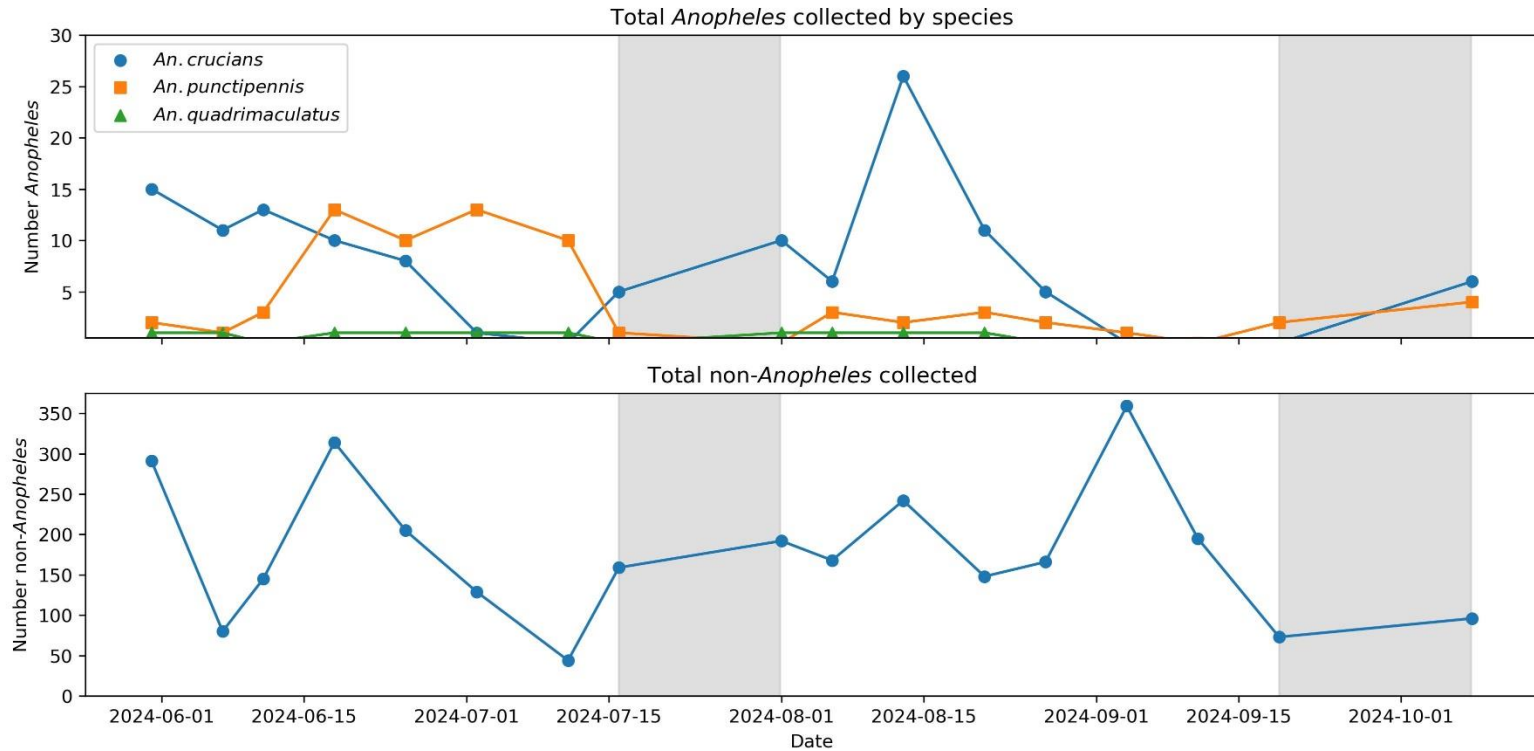


# Decatur

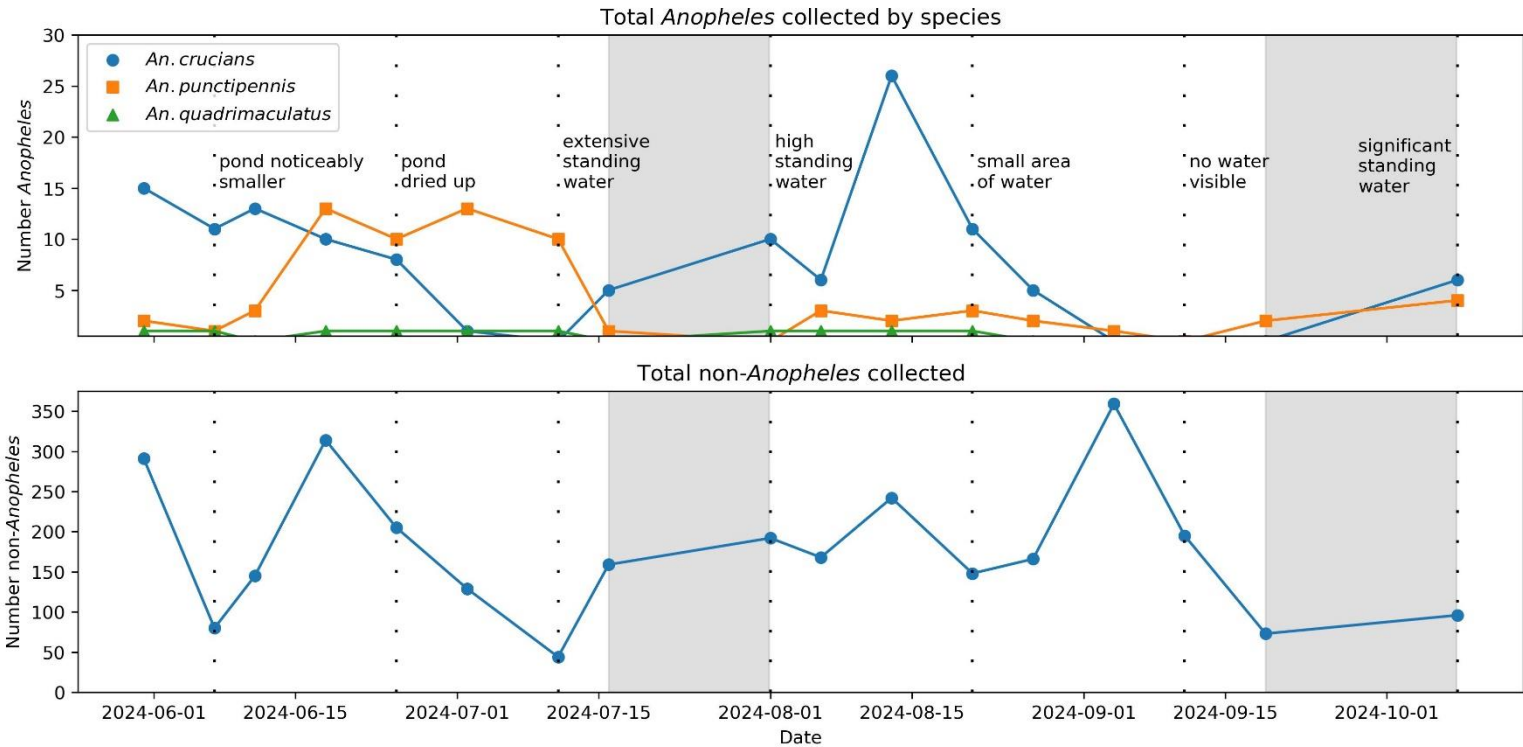
Total *Anopheles* collected by species



# Decatur

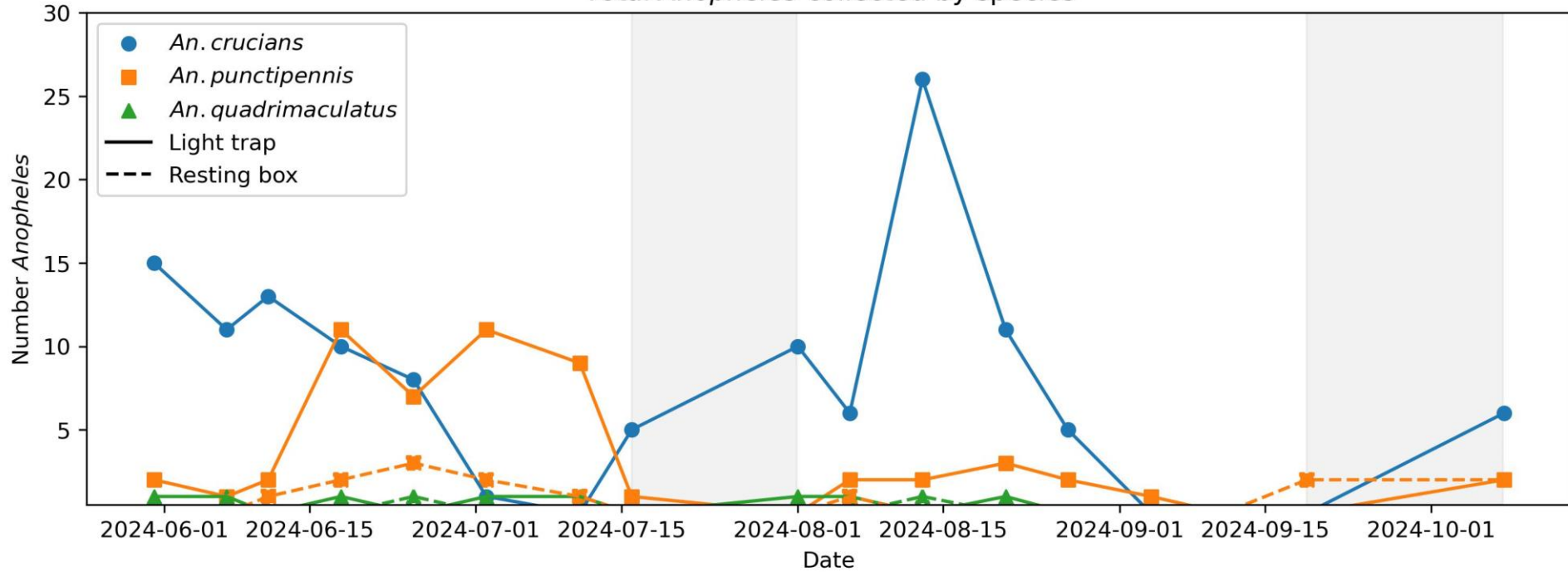


# Decatur



# Decatur

Total *Anopheles* collected by species

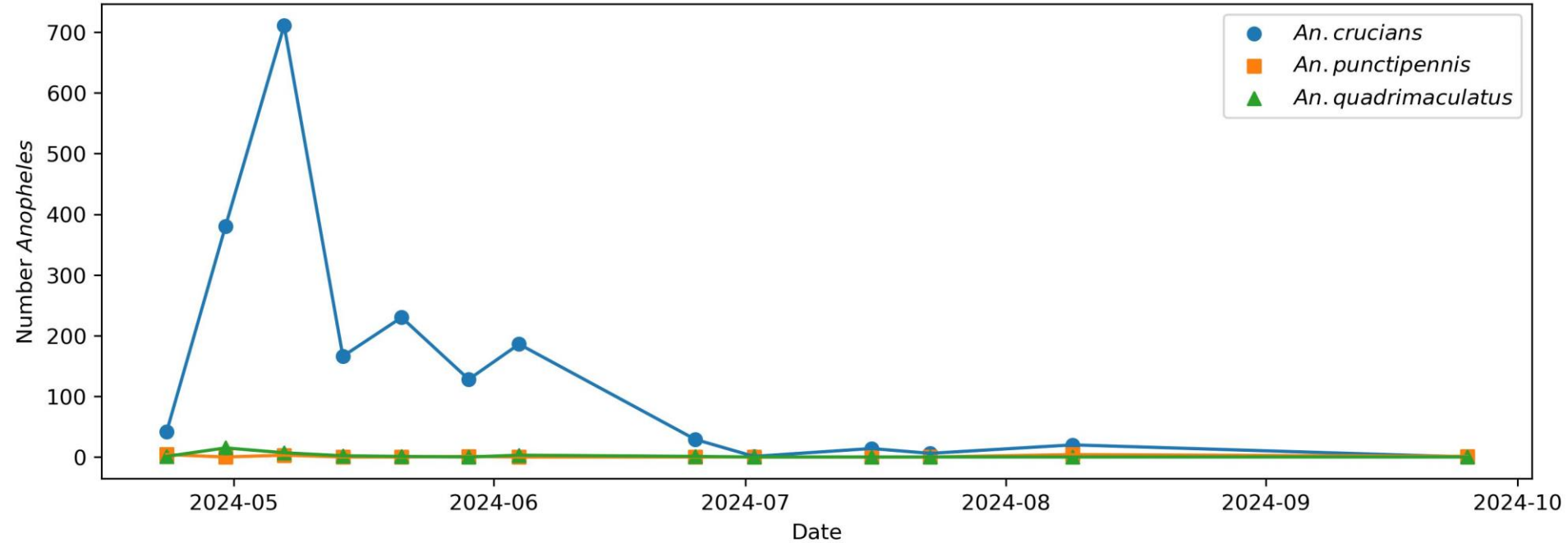


# Valdosta



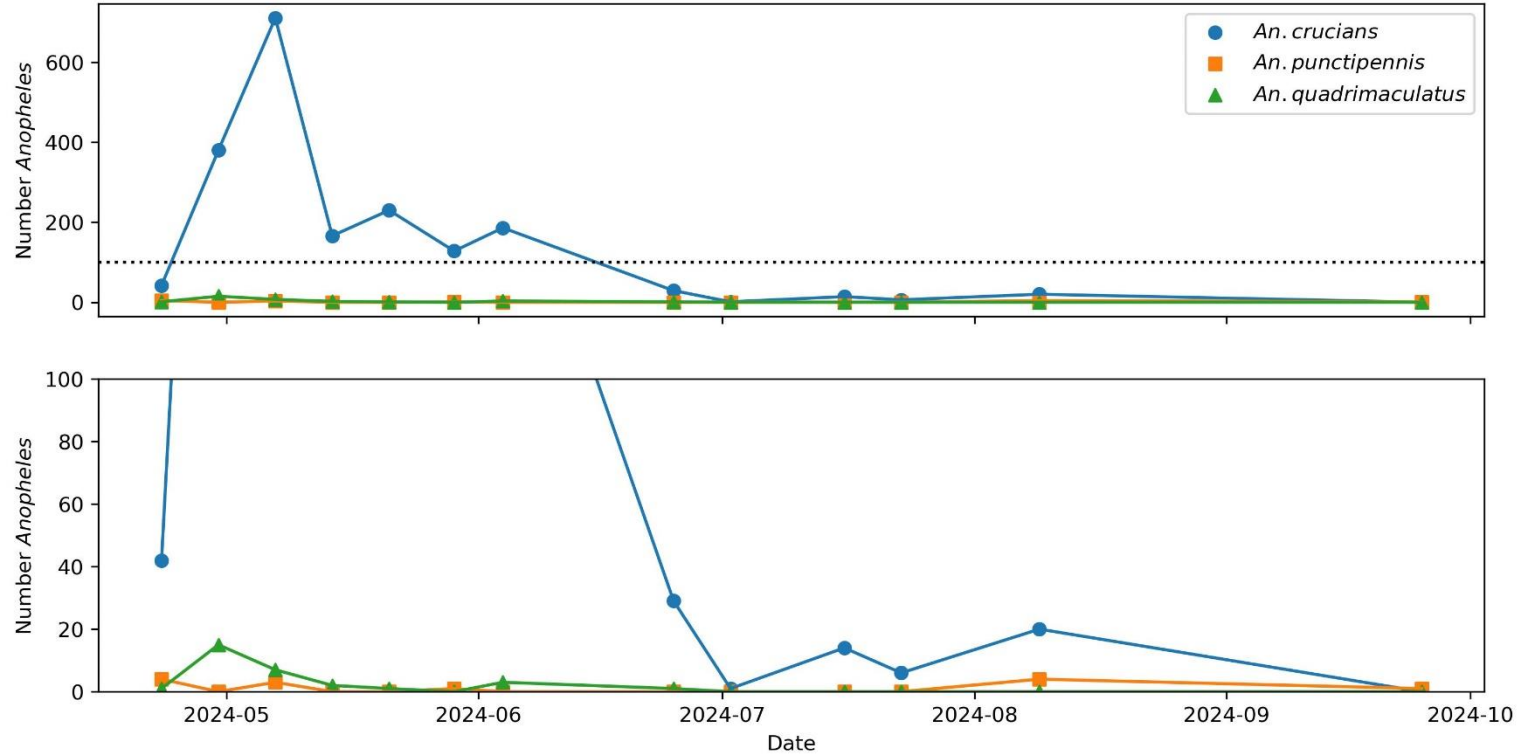
# Valdosta

Total *Anopheles* collected by species



# Valdosta

Total *Anopheles* collected by species



# Sarasota

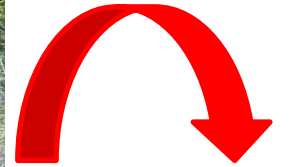


Photo credit: Natalie Barber

# Sarasota



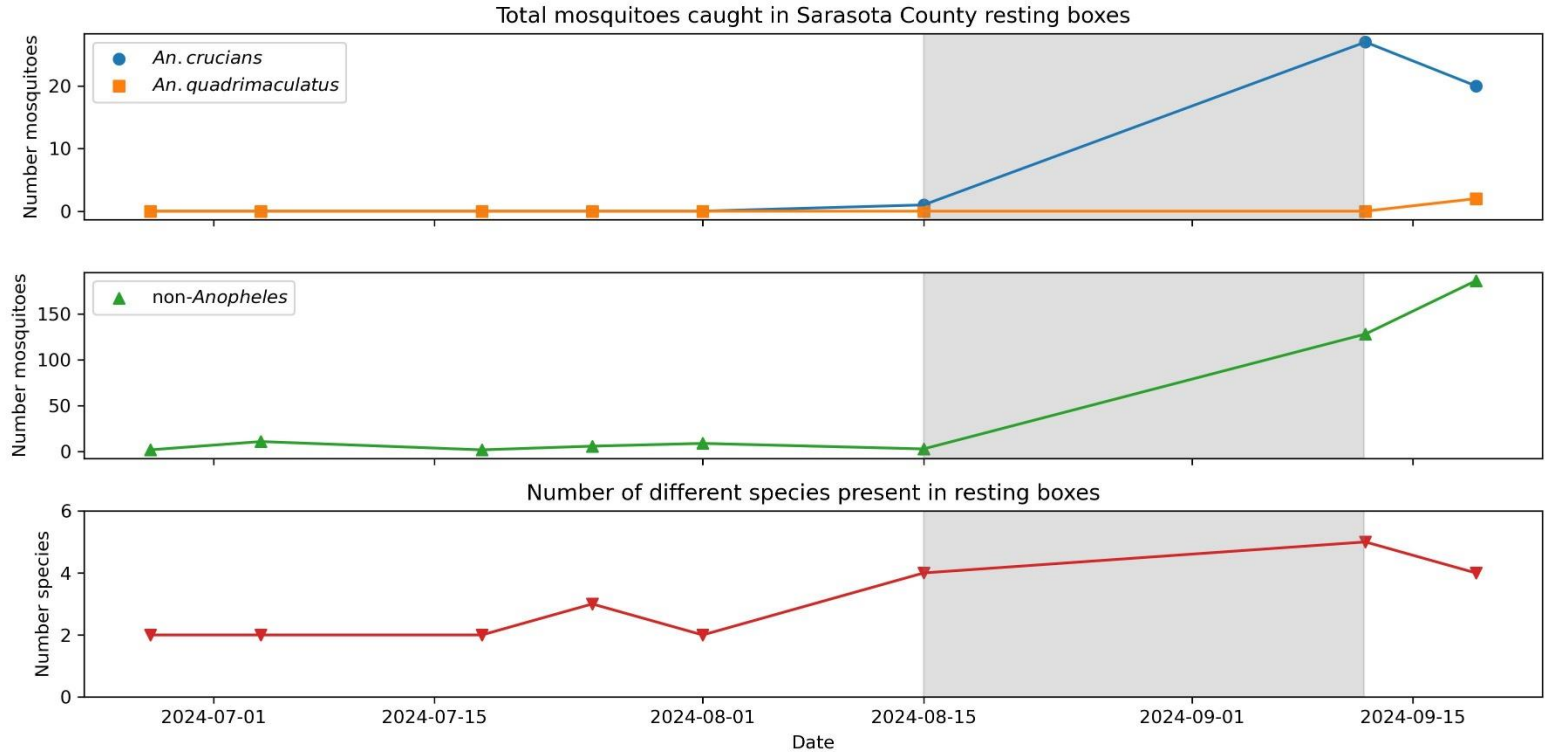
Photo credit: Natalie Barber

# Sarasota



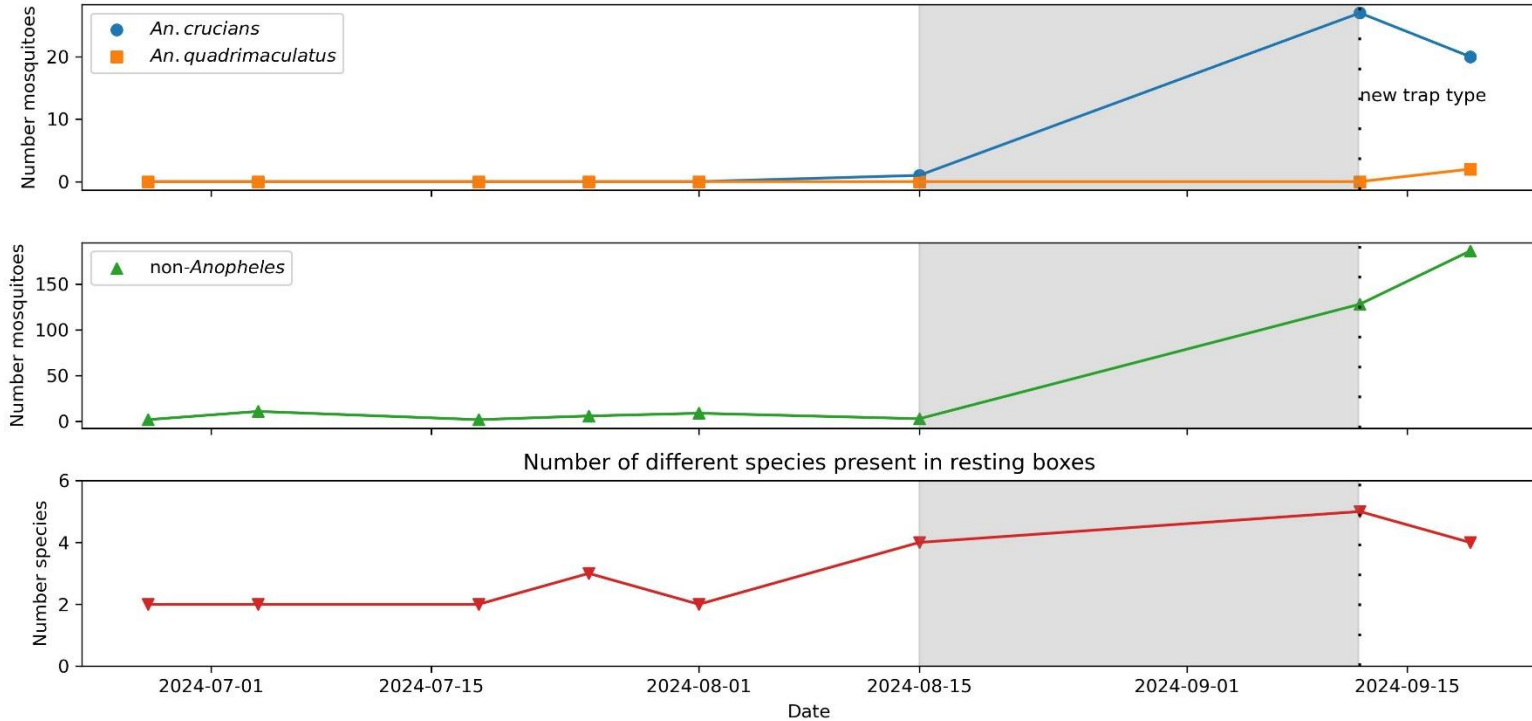
Photo credit: Natalie Barber

# Sarasota

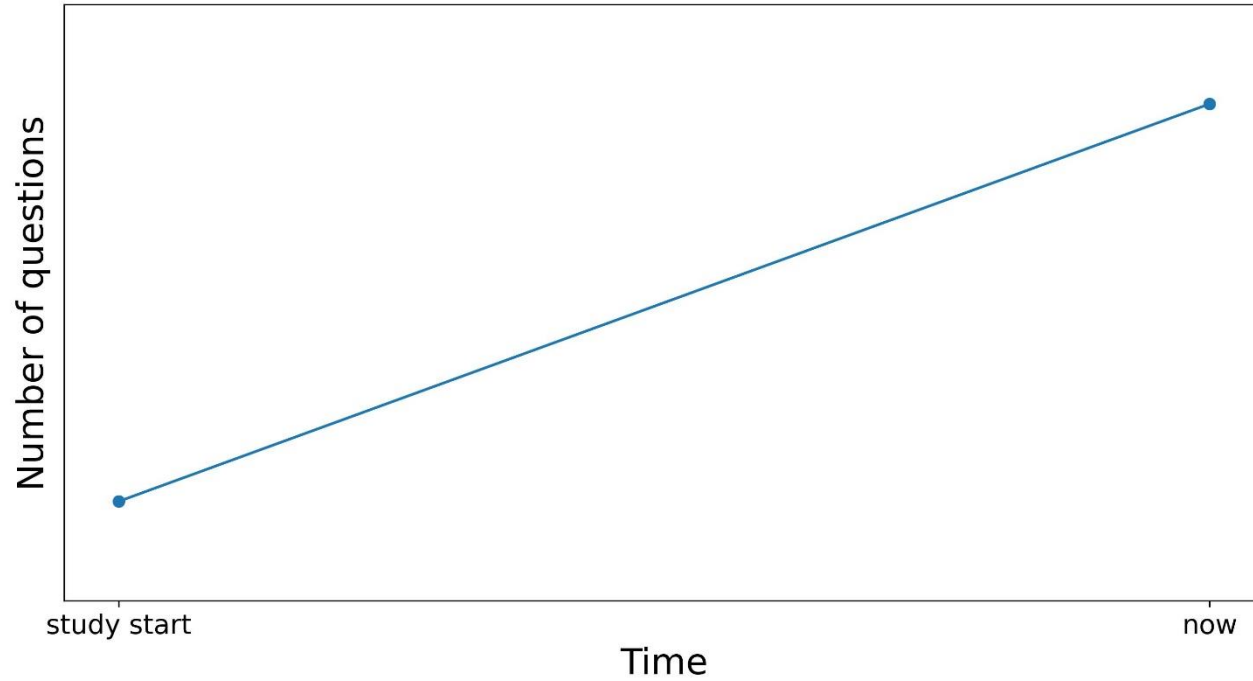


# Sarasota

Total mosquitoes caught in Sarasota County resting boxes



# Conclusions





# Next steps

- **Cold-weather sampling**
- **Different sampling techniques**
- **Molecular identification to species level**
- **Population genetics**

# What *Anopheles* are you seeing?

[utt0@cdc.gov](mailto:utt0@cdc.gov)

(404) 639-1420

For more information, contact CDC

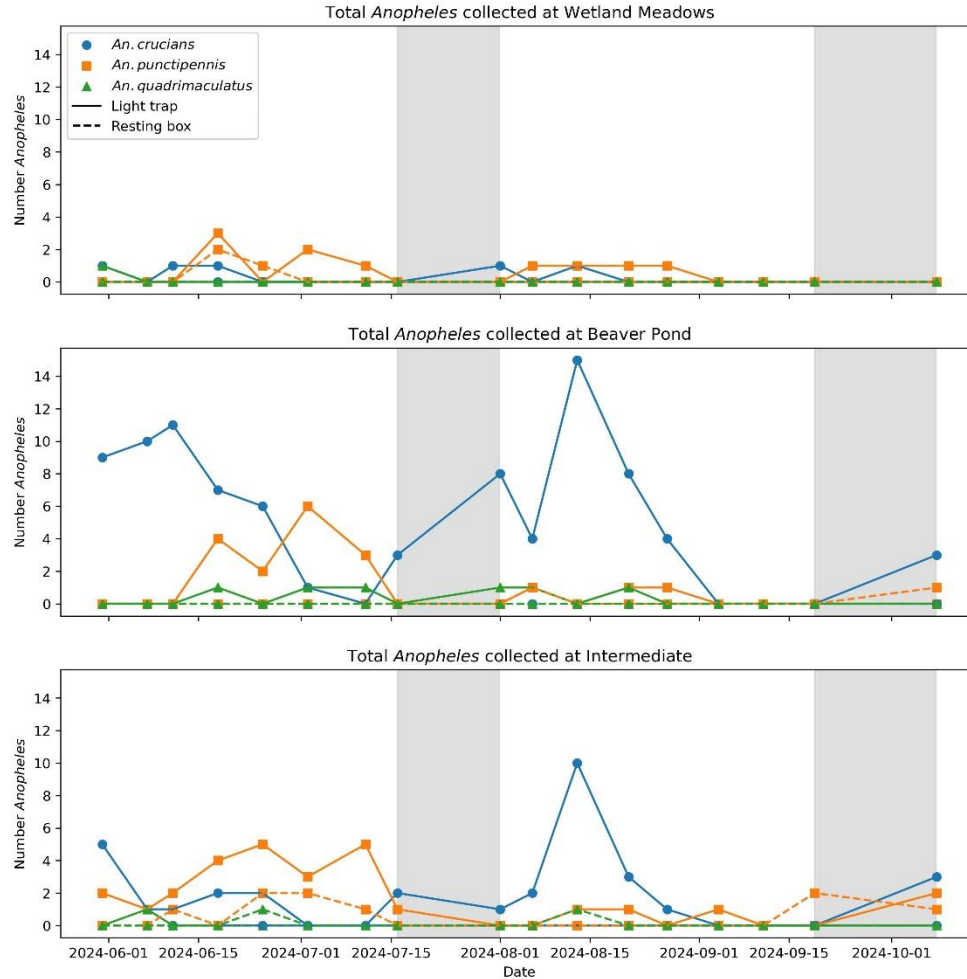
1-800-CDC-INFO (232-4636)

TTY: 1-888-232-6348 [cdc.gov](https://www.cdc.gov) [atsdr.cdc.gov](https://www.atsdr.cdc.gov)

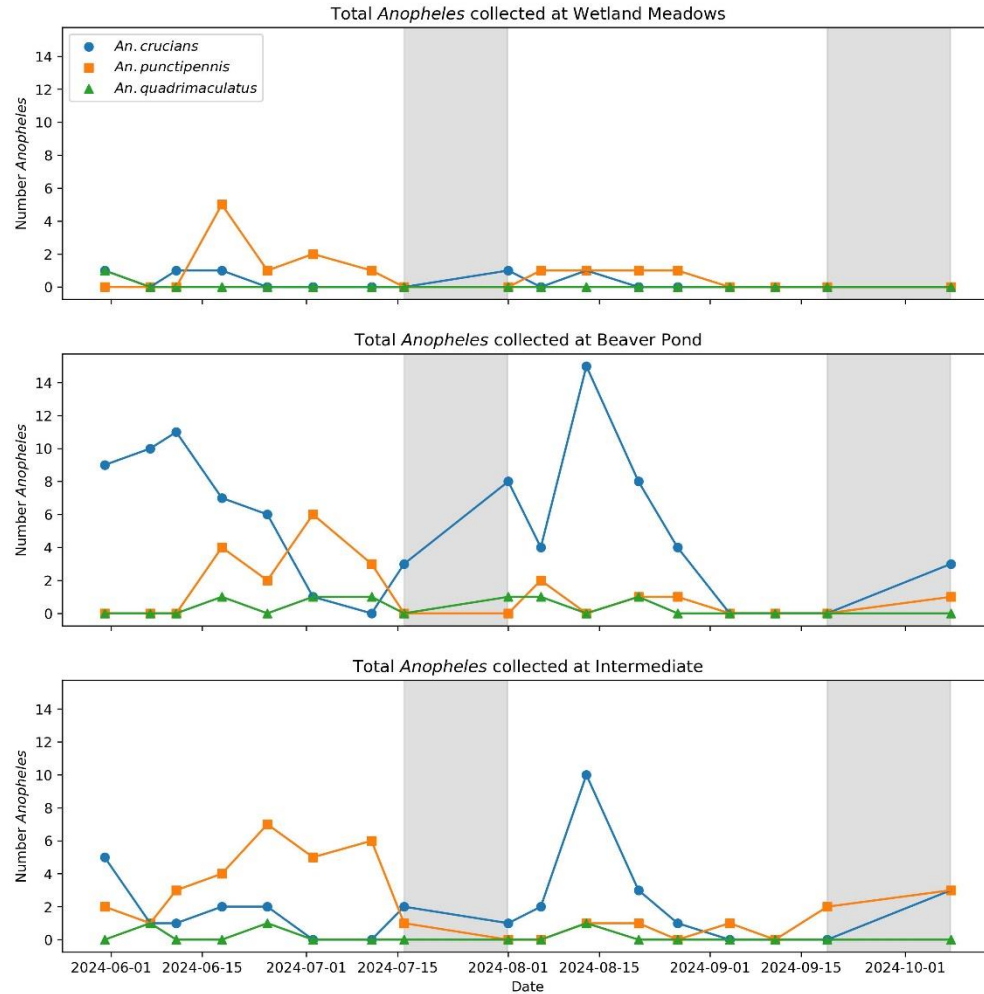
Follow us on X (Twitter) @CDCgov & @CDCEnvironment

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U. S. Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

# Decatur



# Decatur



# Decatur



## Clyde Shepherd Nature Preserve

The Clyde Shepherd Nature Preserve is a privately owned and managed 28 acre property open to the public daily from sunrise to sunset. The preserve is home to over 300 species of native Georgia plants and animals. Please enjoy the preserve and remember to leave nothing behind except footprints and to be kind to all of the inhabitants and visitors.

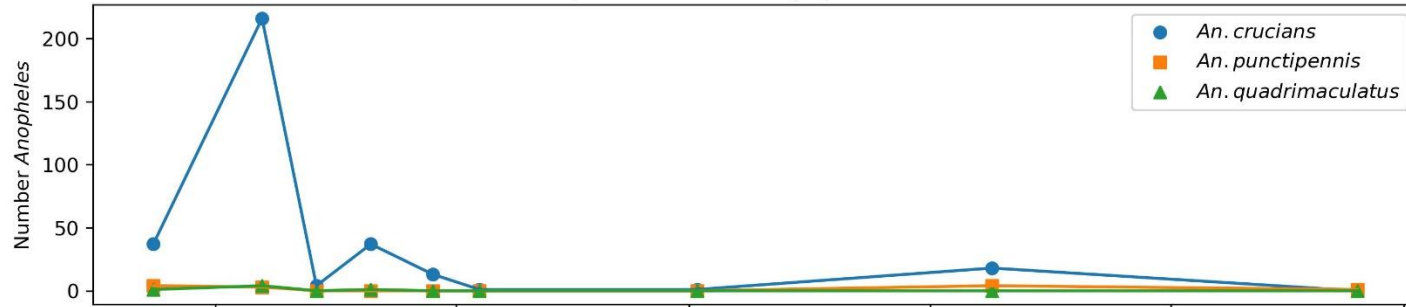
### Map Legend

- Outer Loop/Creek Trail .6 mile
- Pine Forest Trail .15 mile
- Hardwood Forest Trail .13 mile
- Beaver Pond Trail .19 mile
- Interpretative Trail .11 mile
- Wetland Meadow Trail .2 mile
- Sheep Ridge Trail .15 mile
- Trails with Boardwalks
- Bench
- Photo Blind
- Observation Deck
- Bird Feeder



# Valdosta

Total *Anopheles* collected by species at Brown Rd



Total *Anopheles* collected by species at Old Clyattville

