

Operational Mosquito Control in DeKalb County

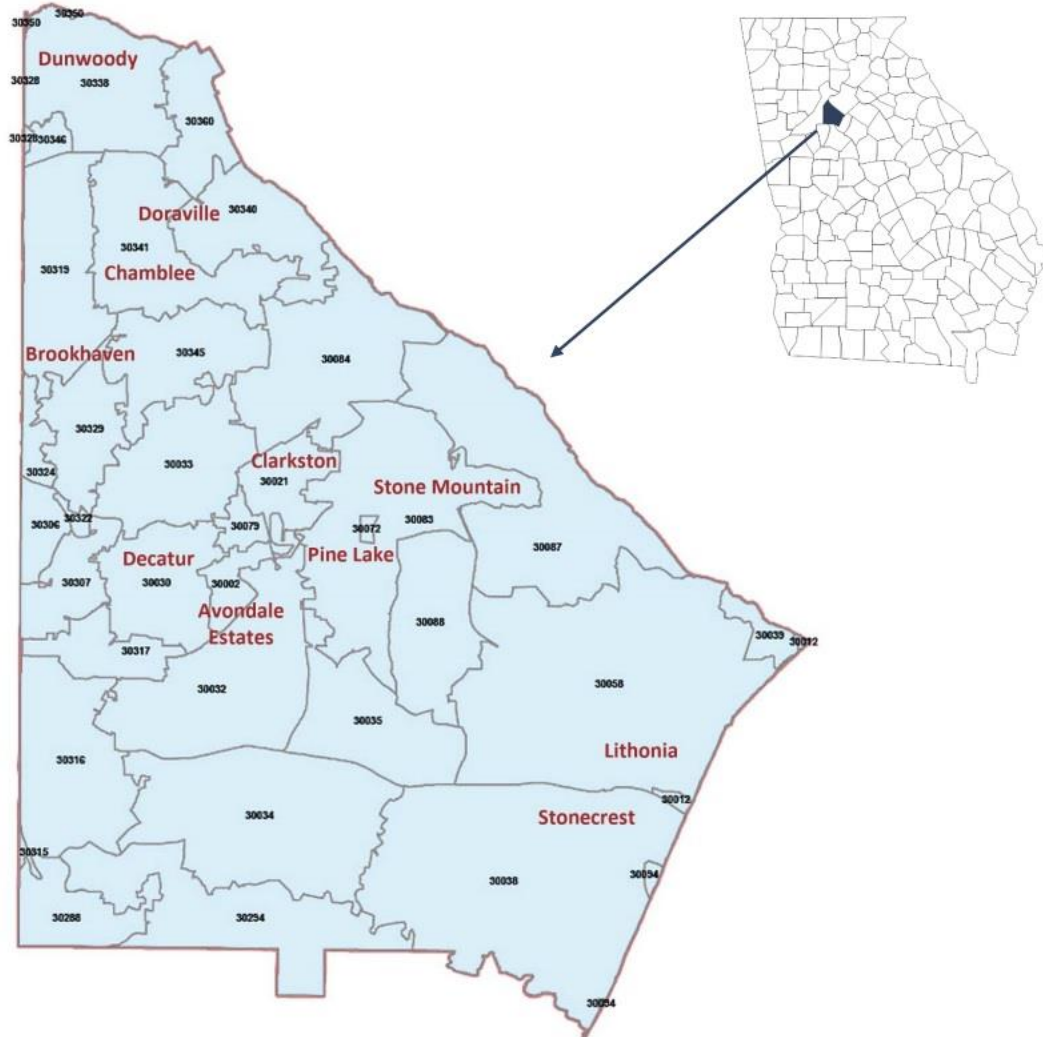


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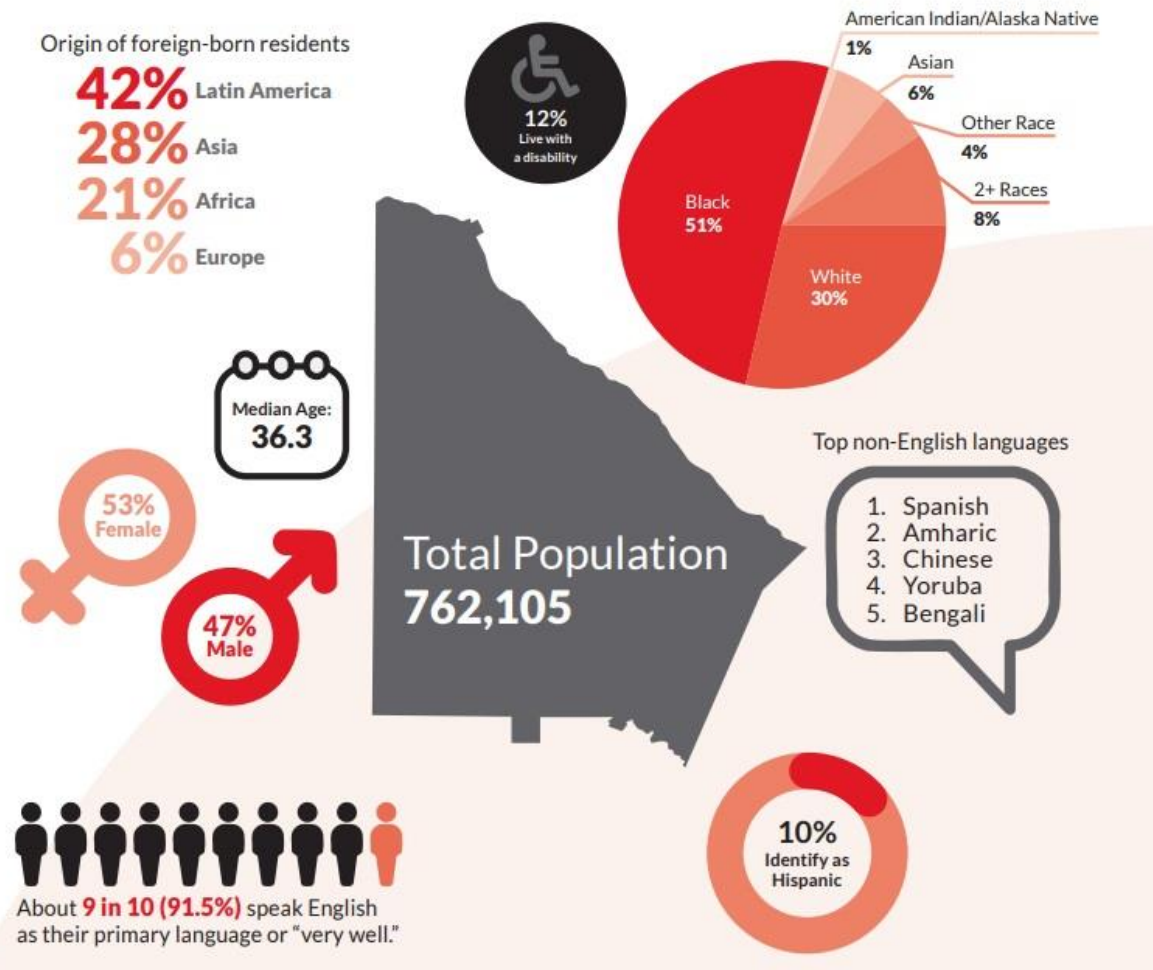
Where exactly is DeKalb County?



DeKalb County by the numbers

Demographics

A review of the demographic makeup of DeKalb County provides an understanding of the diverse population DeKalb Public Health serves. Knowing the community helps us tailor our services.



What does an Entomologist in an Environmental Health Program Do?

West Nile Surveillance Program

- Gravid Trapping and West Nile Surveillance
- Dead Birds

Mosquito Complaints

Nuisance Pool Complaints

Bedbug Complaints

Restaurant Pest Complaints

Rodent Complaints

What does an Entomologist in an Environmental Health Program Do?

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In short ... a little bit of everything

DeKalb's Mosquito Targets



Culex quinquefasciatus

Southern House Mosquito

Crepuscular / Night Biter

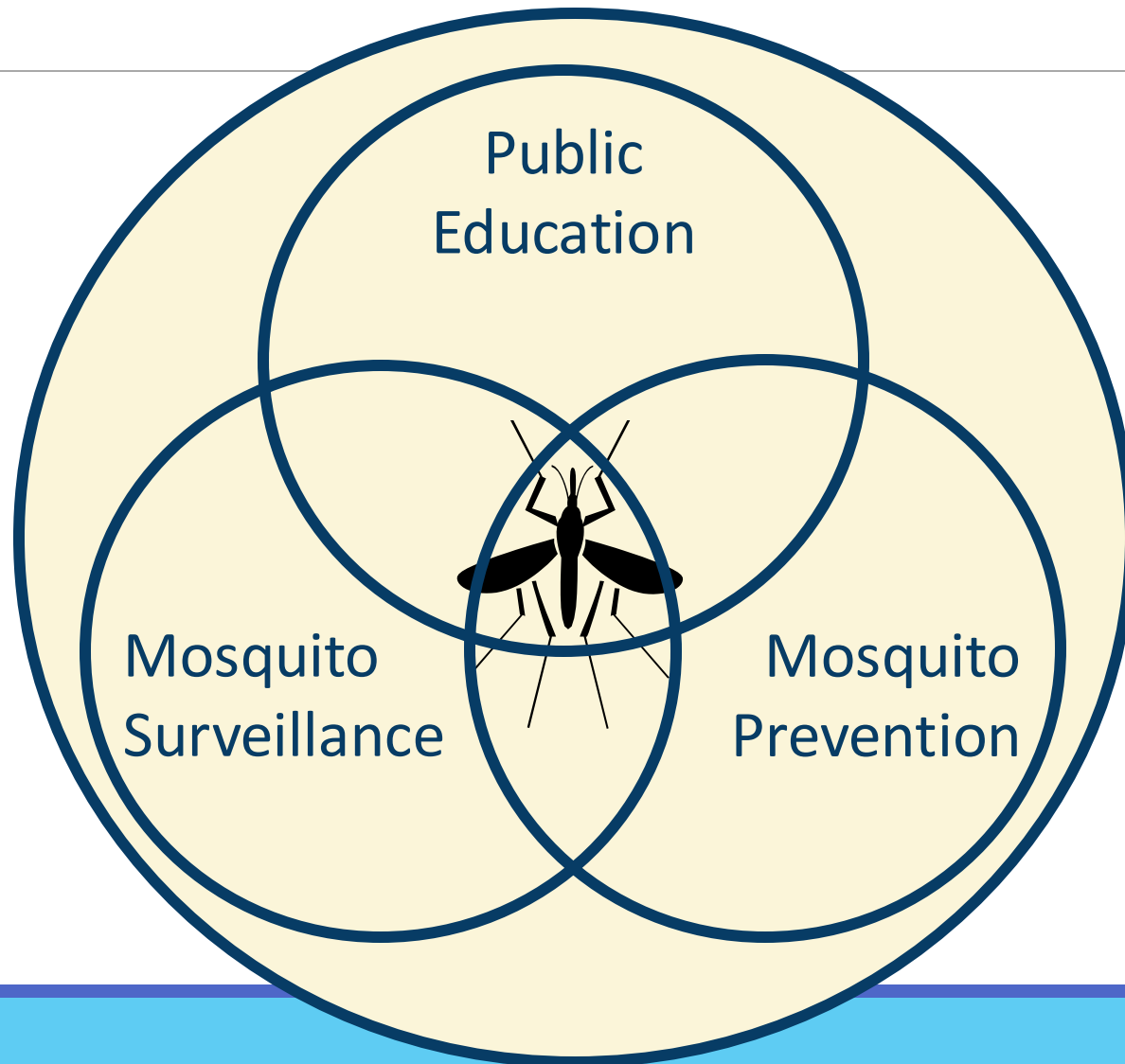


Aedes albopictus

Asian Tiger Mosquito

Day Biter

Vector Control Strategy: IPM



Mosquito Surveillance



Dead Bird Surveillance

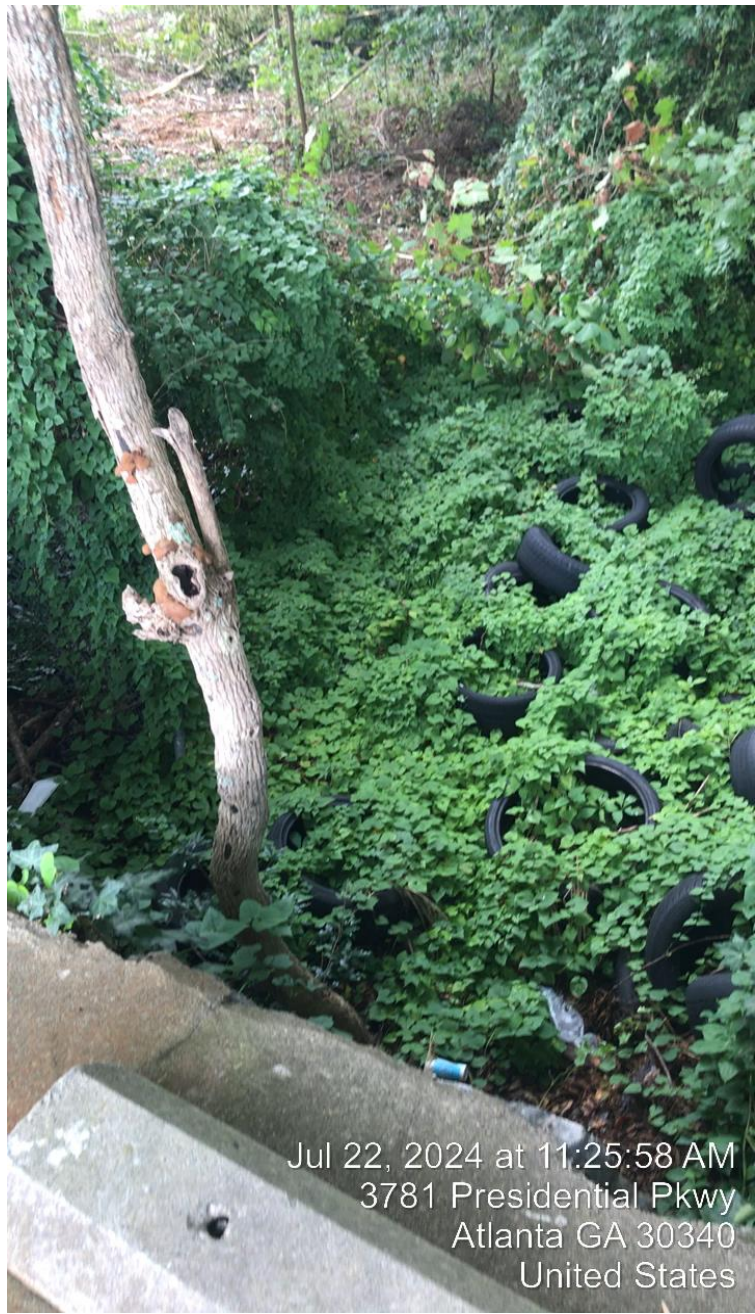


Mosquito Prevention - Complaints



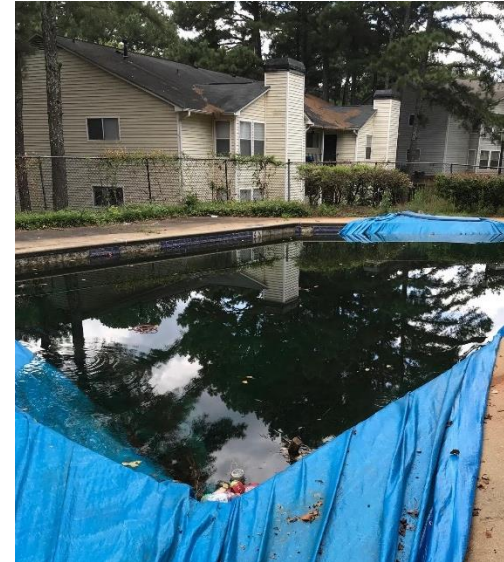
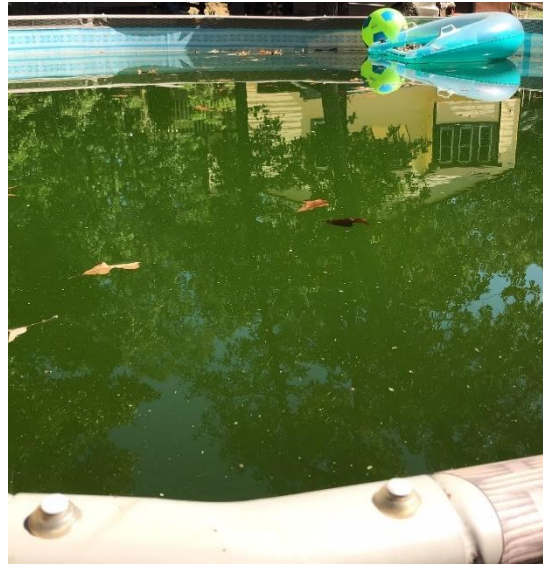
Mosquito Prevention - Tire Dumps





Jul 22, 2024 at 11:25:58 AM
3781 Presidential Pkwy
Atlanta GA 30340
United States

Nuisance Pool Complaints



Mosquito Prevention

Larvaciding

- Storm drains and catchment basins
- Requests for mosquito control assistance
- Detailed assessment around areas of concern

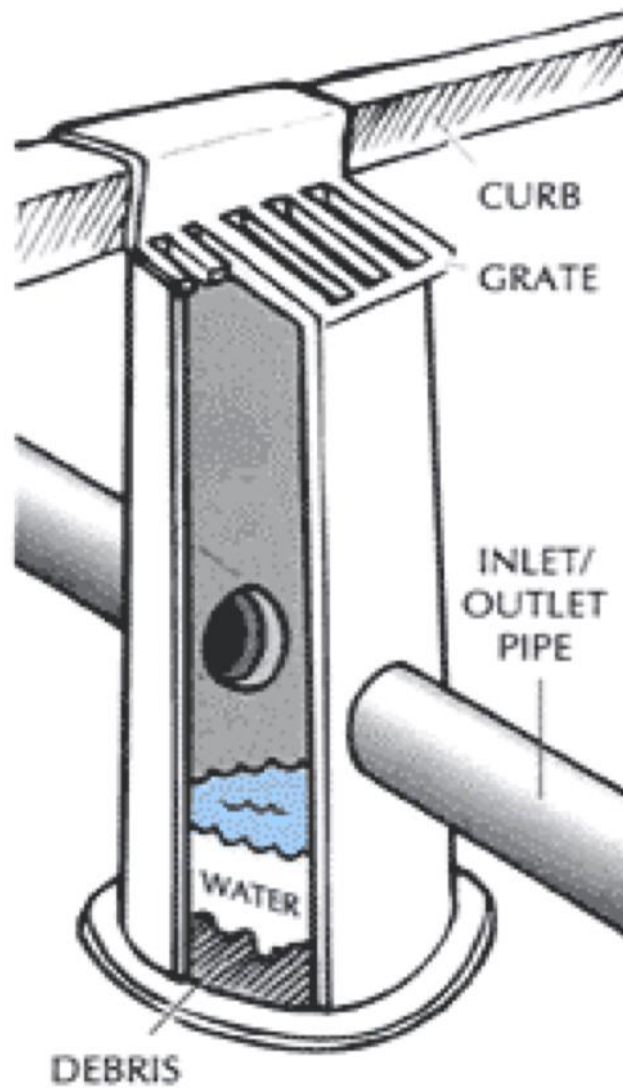


Health Department - Department of Medical Entomology

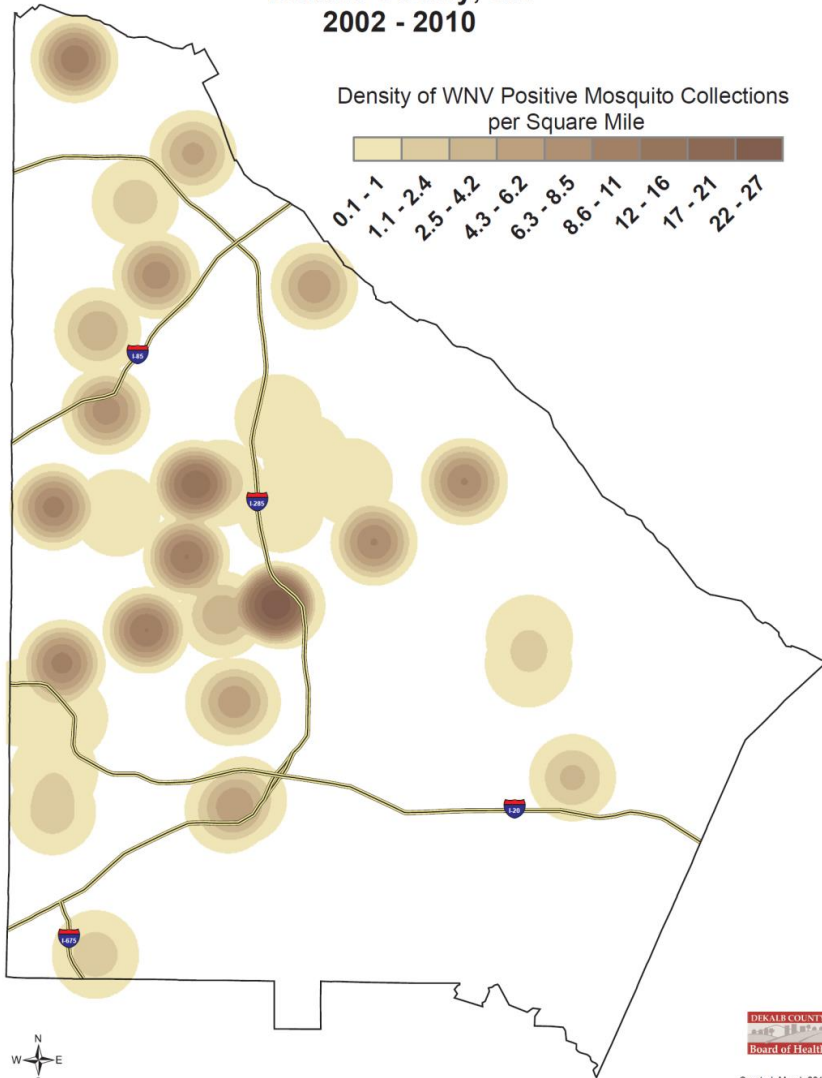


Mosquito Larvae

- Storm drains are catchment basins
- Requests for mosquito control assistance
- Detailed assessment around areas of



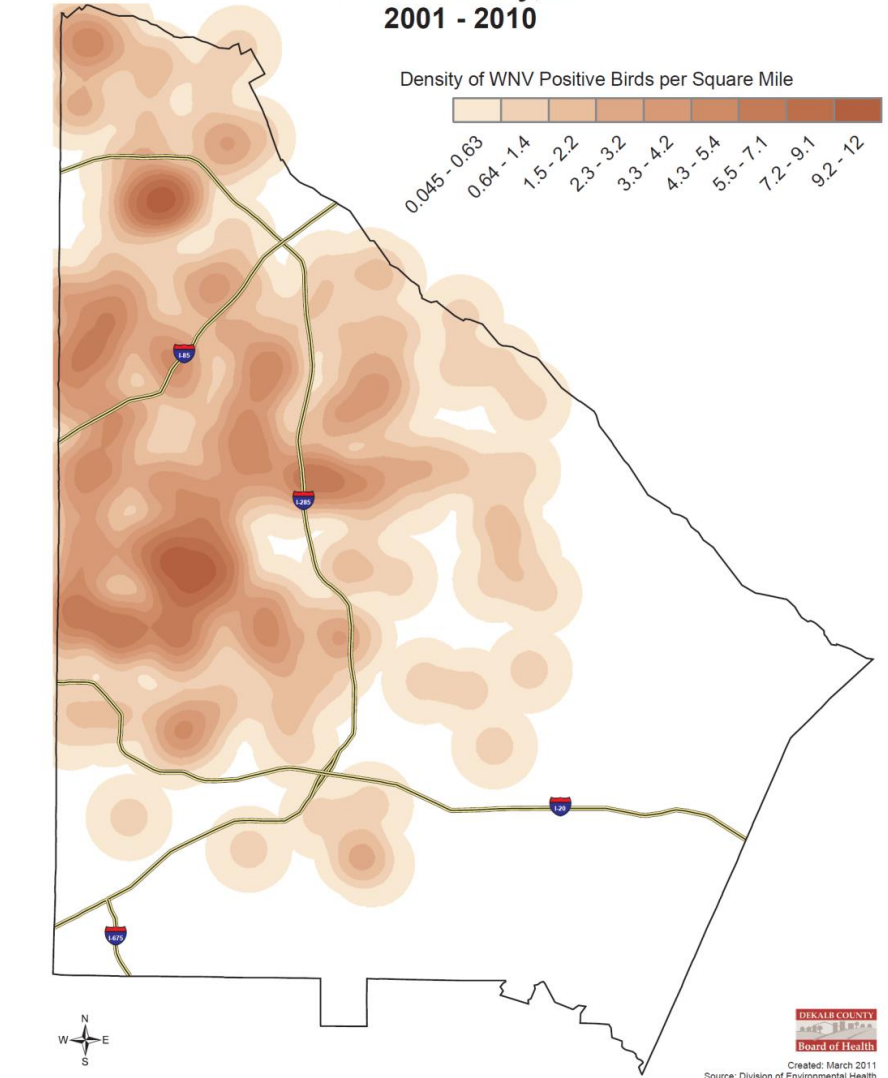
West Nile Virus Positive Mosquito Collections DeKalb County, GA 2002 - 2010



0 1 2 3 4 5 Miles

Density Classification: Natural Breaks (Jenks), Nine Classes, One Mile Fixed Search Radius

West Nile Virus Positive Birds DeKalb County, GA 2001 - 2010



0 1 2 3 4 5 Miles

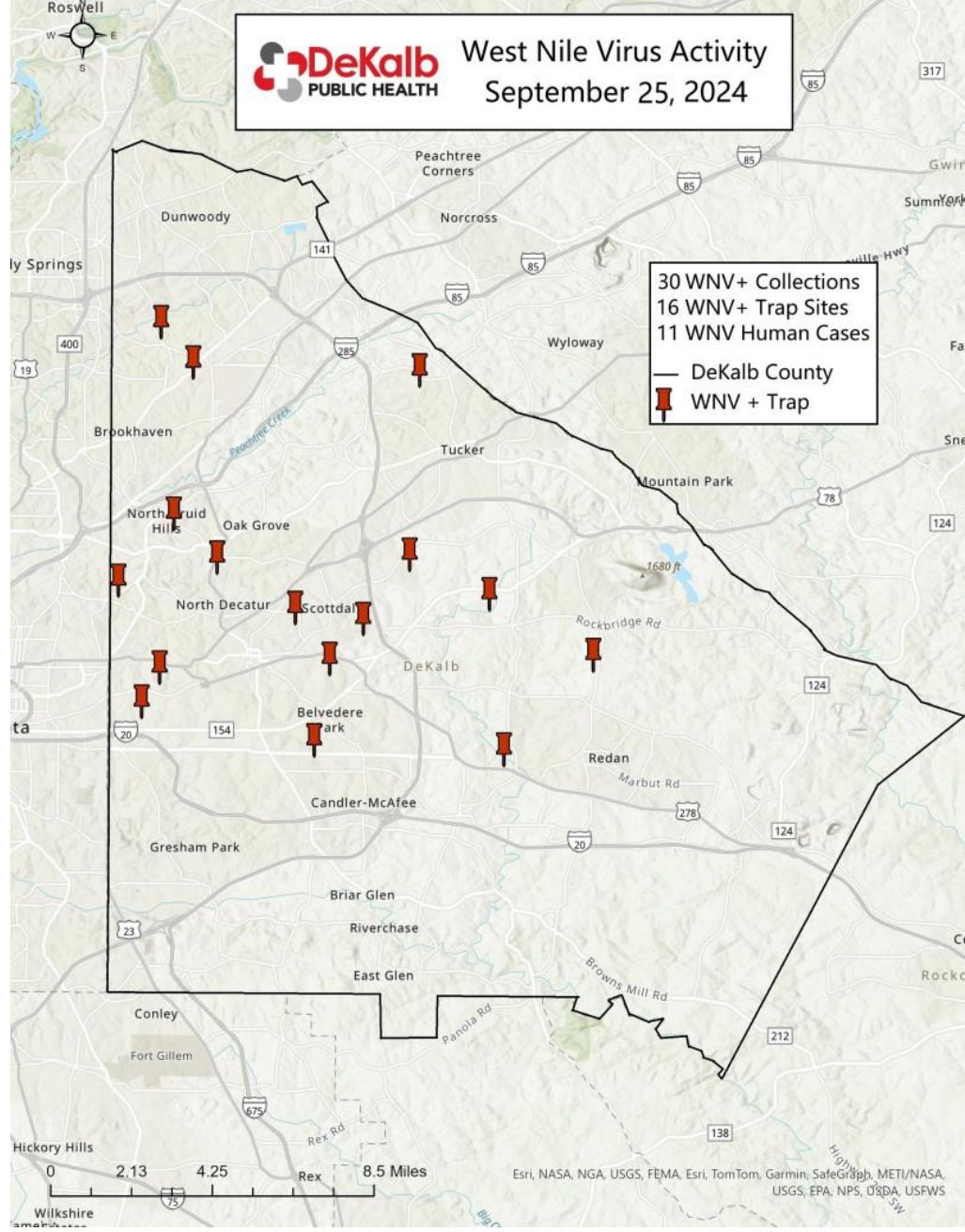
Density Classification: Natural Breaks (Jenks), Nine Classes, One Mile Fixed Search Radius



West Nile Virus Activity September 25, 2024

30 WNV+ Collections
16 WNV+ Trap Sites
11 WNV Human Cases

— DeKalb County
📌 WNV + Trap



Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, USFWS

DeKalb WNV: Cases & Mosquitoes

	2018	2019	2020	2021	2022	2023	2024
Human WNV cases ¹ (N)	2	1	1	0	0	4	13
Human WNV deaths ² (N)	0	0	0	0	0	1	1
Total number of mosquitoes submitted for testing	9,004	12,641	8,861	12,091	6,646	14,539	12,111
Mosquito pools ³ submitted for testing	468	592	400	522	306	684	632
Percent of mosquito pools ³ positive for WNV	17.5%	5.1%	8.3%	2.9%	9.5%	4.2%	5.5%

¹“Human WNV cases” includes probable and confirmed cases.

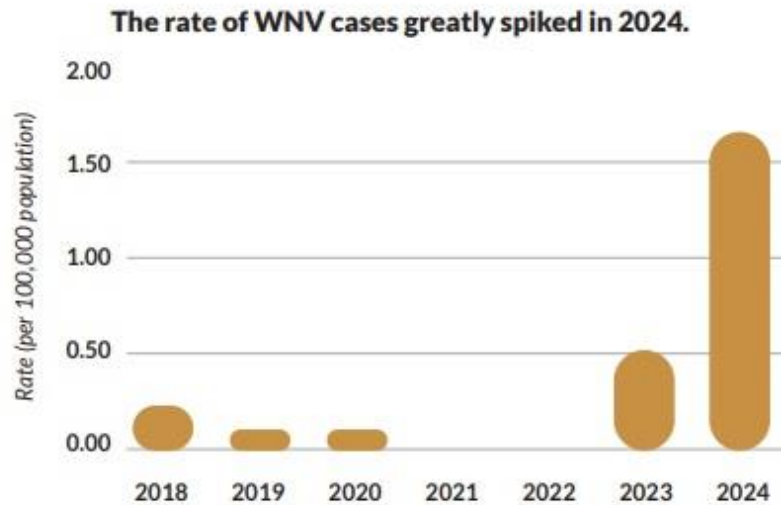
²“Human WNV deaths” includes cases that list WNV as a cause of death on the death certificate.

³Mosquito pools are groups of mosquitoes that are submitted together for testing.

West Nile Human Cases in DeKalb

West Nile virus (WNV) disease is a viral illness that's usually spread through the bite of an infected mosquito. It's the most commonly reported mosquito-borne illness in DeKalb County.

Data for 2024 were included in this section due to the large increase in WNV cases that were reported that year.



Data: West Nile virus infection rate by year, DeKalb County, 2018-2024.

Source: Online Analytical Statistical Information System, Georgia Department of Public Health, 2025.

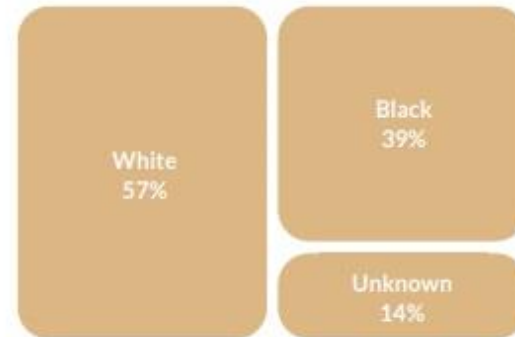
Demographics

Gender



Average Age

57.8
Years



76% of reported cases identified as not Hispanic.

Data: Percentage of West Nile virus cases by sex, average age, race, and ethnicity, DeKalb County, 2018-2024.

Source: Division of Environmental Health, DeKalb Public Health, 2025.

Lessons Learned and Future Goals

- Need for educational outreach to Hispanic community.
- Opportunities for coordinated tire dump removal.
- Geography, funding, staffing, and community factors all contribute.
- Recognizing and addressing these variations can lead to smarter, more equitable mosquito control.

Any Questions?

