From Surveillance to Suppression: Glynn County's Integrated WNV Response Strategy

Samuel Harrod

Biologist

Vector Disease Control International



- Overview of Glynn County Program
- Historical: Previous WNV activity in Glynn County
- 2025 Detection and Surveillance
- Response Strategy
- Public Communication and Outreach
- Operational Highlights
- Impact and Outcomes
- Lessons Learned and Future Planning



Overview of Glynn County Program

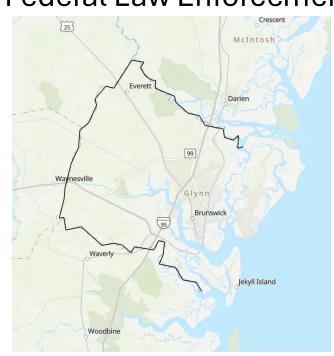


- County contracts out entire mosquito control program to VDCI
- County had its own program before contracted out in 2014
- 420 sq mi of land and 165 sq mi of water
- The largest city is Brunswick
- Includes prominent islands of Jekyll, St. Simons, and Sea Island

Also contracted by GP Cellulose and the Federal Law Enforcement

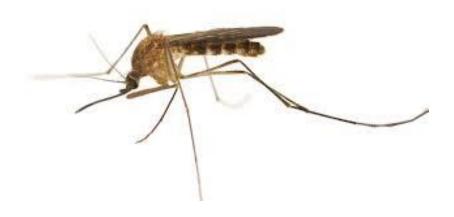
training center (FLETC)

- Staff includes: Manager, Biologist, 2 full-time Techs, Administrator, and 5 spray truck drivers
- Typically truck spray 300,000 to 400,000 acres per year
- Larvicide 3,500 to 4,500 acres a year
- Includes an average of 2,000 acres sprayed by air
- Aerial adulticide 55,000 to 65,000 acres a year





Historical: Previous WNV activity in Glynn County

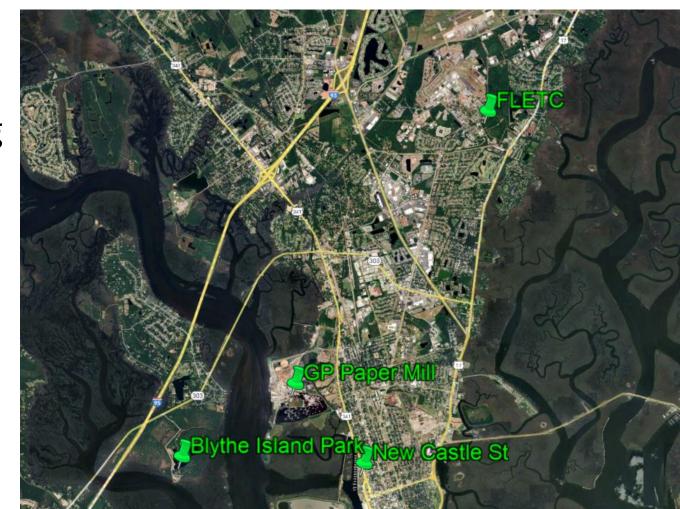


- 2024: 3 positive pools
 - August: 2
 - October: 1
- 2021: 1 positive pool
 - September: 1
- 2019: 12 positive pools
 - July: 2
 - August: 2
 - September: 7
 - October: 1



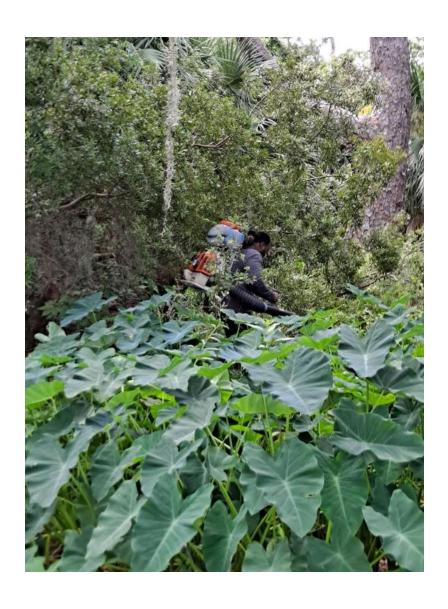
2025 Detection and Surveillance

- Date of detection was August 22, 2025
- 5 positive mosquito pools
 - Blythe Island Regional Park
 - Federal Law Enforcement Training
 Center
 - GP Paper Mill
 - New Castle Street
- No human cases reported





Response Strategy



- Surveillance and Testing
 - Increased mosquito trapping and testing
- Larval Control
 - Targeted inspections and larvicide treatments
- Adult Mosquito Control
 - Evening truck-based ULV spraying
 - Rotated chemicals
 - Aerial application
- Population Monitoring
 - Trap data used to evaluate treatment effectiveness
 - Continued to monitor areas for the remainder of the season



Larval Control

VectoBac 12AS

- Wet application
- 2oz/gal Dilution
- $18,560 \text{ oz} = 1,450,000 \text{ ft}^2 \text{ treated}$

Altosid XR-G

- Dry Application
- 7lbs/acre
- 532oz = 206,910 ft² treated by hand/ backpack sprayer
- 9,493oz = 3,692,270 ft² treated aerially







Adult Control

- 9 truck applications were conducted across 3,221 Acres, using alternating chemicals to maximize efficacy
 - 23.7 gal of Anvil covering 2,208.6 Acres
 - 4.6 gal of Mosquito Mist covering 418.1 Acres
 - 4.5 gal of PermX covering 418.1 Acres
 - 2 gal of Permanone covering 187.2 Acres



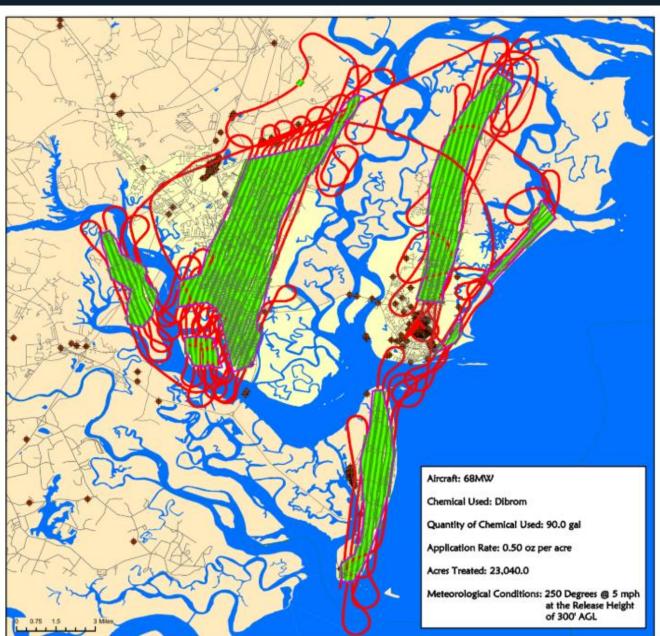




Aerial Control

- Aerial Adulticide Mission
 conducted on August 25, 2025
- Covered 23,040 acres
- Chemical used was Dibrom at 0.5 ounces per acre







Post-Treatment Trap Data

- Blythe Island
 - Pre-Treatment: 272
 - Post-Treatment: 2
- New Castle Street
 - Pre-Treatment: 144
 - Post-Treatment: 6
- GP Paper Mill
 - Pre-Treatment: 138
 - Post-Treatment: 5
- FLETC
 - Pre-Treatment: 337
 - Post-Treatment: 8





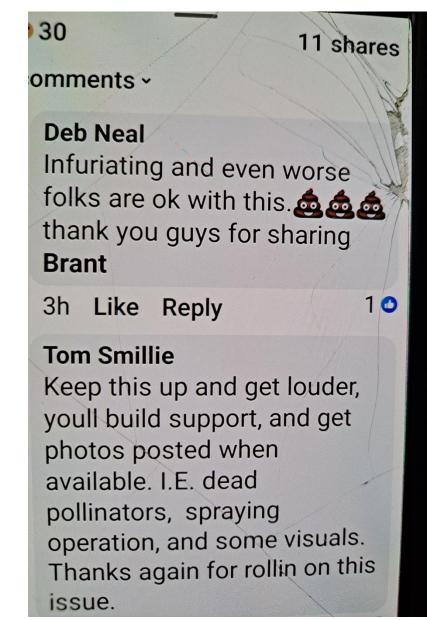
Public Communication and Outreach

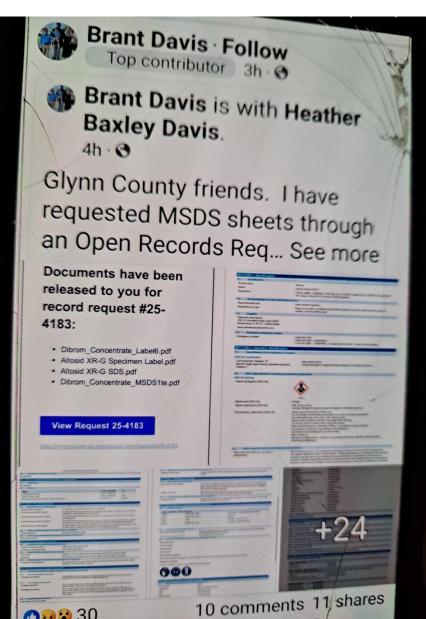
- New Public Works Director
 - Posted aerial notification on Facebook
 - This was before the WNV positive pools
 - Had meeting with director
- Georgia Department of Agriculture
 - Inspector reached out and attended the aerial mission
- After WNV notification went out, we received a lot of citizen service requests
- Action News JAX

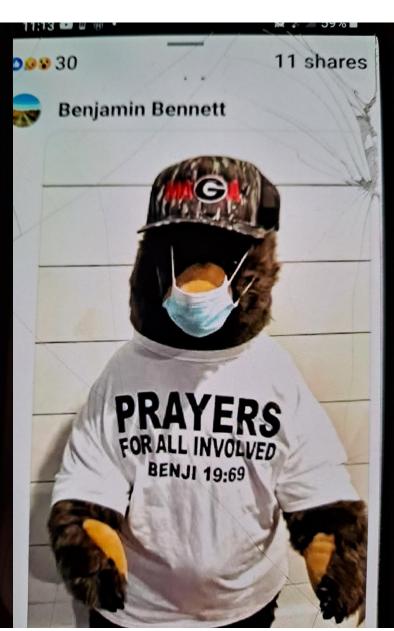




Public Communication and Outreach

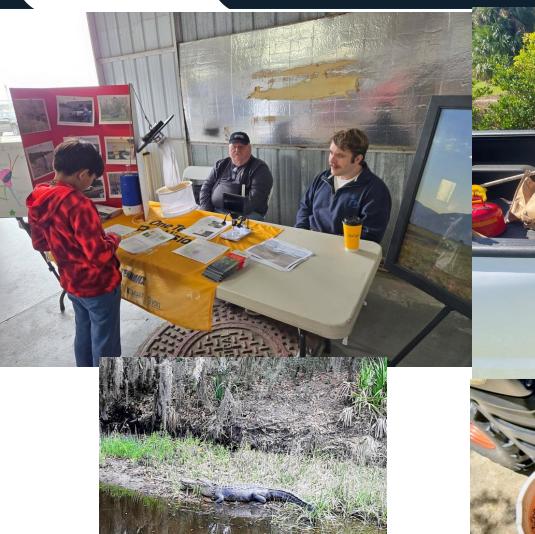








Operational Highlights







Impact and Outcomes

- Reduction in mosquito populations in targeted zones
- No confirmed human cases
- No additional positive pools
- Strengthened community awareness and preparedness
- Developed a relationship with the new Public Works Director
- Got to "show off" for the Ag Inspector
- Great teamwork



Lessons Learned and Future Planning

- Don't post on Facebook!
- Fortunate that we had contracts for the private areas (FLETC and GP)
 - Highlights the need for area-wide control and monitoring



Questions



Samuel Harrod Samuel.Harrod@VDCI.net (912) 814-6856