

# **Environmental Considerations at Chatham County Mosquito Control**

Georgia Mosquito Control Association

October 17-19, 2012

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# Introduction

- Master Naturalist Program
- Examples of how we address environmental concerns



# Examples of how we address environmental concerns

## -Highly Trained Staff (23/30)

Employees must understand mosquito biology and available control options to use IPM strategies



All control is based on current surveillance results and is NOT pre-scheduled.



Checking site for larvae



Light Trap



Gravid Trap



Sentinel Chickens



Landing Rates

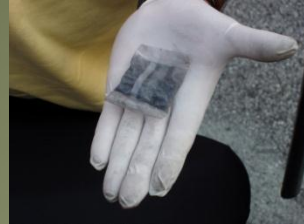


Test Mosquito Samples  
*Culex quinquefasciatus* - WNV  
*Culiseta melanura* - EEE





# IPM allows various control methods...



# Adult Mosquito Surveillance

**Chatham County has 40 species**

**Only 11 are important nuisance/vector species**

*Aedes albopictus*

*Aedes vexans*

*Ochlerotatus sollicitans*

*Ochlerotatus taeniorhynchus*

*Psorophora ferox*

*Psorophora columbiae*

*Culiseta melanura*

*Coquillettidia perturbans*

*Culex quinquefasciatus*

*Culex salinarius*

*Culex restuans*

# ...uses thresholds.

- a.  $\geq 300$  *Culex* prior to detection of WNV.
- b.  $\geq 200$  *Culex* after detection of WNV.
- c.  $\geq 100$  *Culex* from any trap site where WNV has been detected.
- d.  $\geq 15$  *Culiseta* collected from a light trap.



# Annual Equipment Calibration

Granular



Liquid





# Efficacy Testing



## MATERIALS FOR BOTTLE BIOASSAY.



# Spray nozzle technology





# Bees





# Mosquito fish





# Ditching operations along the river



# Biorational Larvicide selection

Bti

Bacillus sphaericus

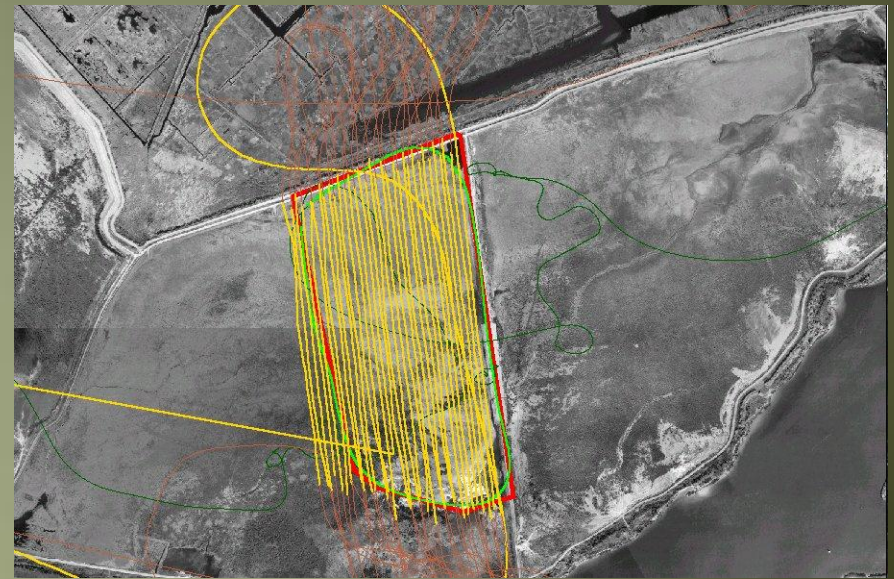
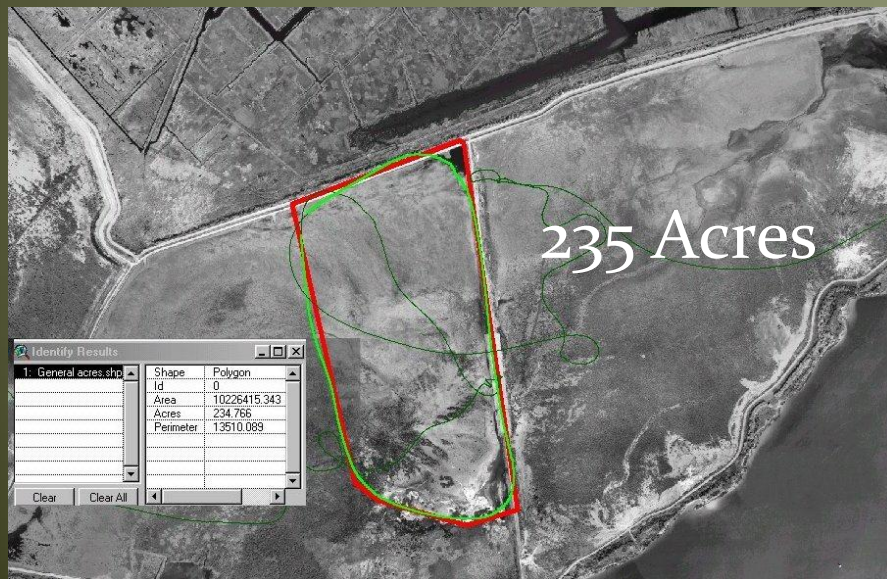
Methoprene

We do not use Dimilin

We do not use Temephos



# Larviciding after major rain events





# Surgical adulticing / amount



# Adulticide selection

- 8 labeled products
- Prefer aerial operations
- Naled is our primary
  - 24 hr half life
  - No water offset
  - Hydrolyzes quickly



# Disposal and Hazardous Waste



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# Community



Students and Interns



Schools



Youth Programs



Fire Suppression, Police Support, Search and Rescue



# Questions?

Thank you!

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