

# A Peek into Our Program; The DeKalb Experience

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October 22, 2009



# First, a peek into DeKalb County



- DeKalb County is the most **densely populated & ethnically diverse** county in Georgia

# First a peek into DeKalb County

- DeKalb covers **268 square miles**
- It encompasses **nine municipalities**, including the county seat of Decatur and a portion of the City of Atlanta

# First a peek into DeKalb County

Areas of interest include:

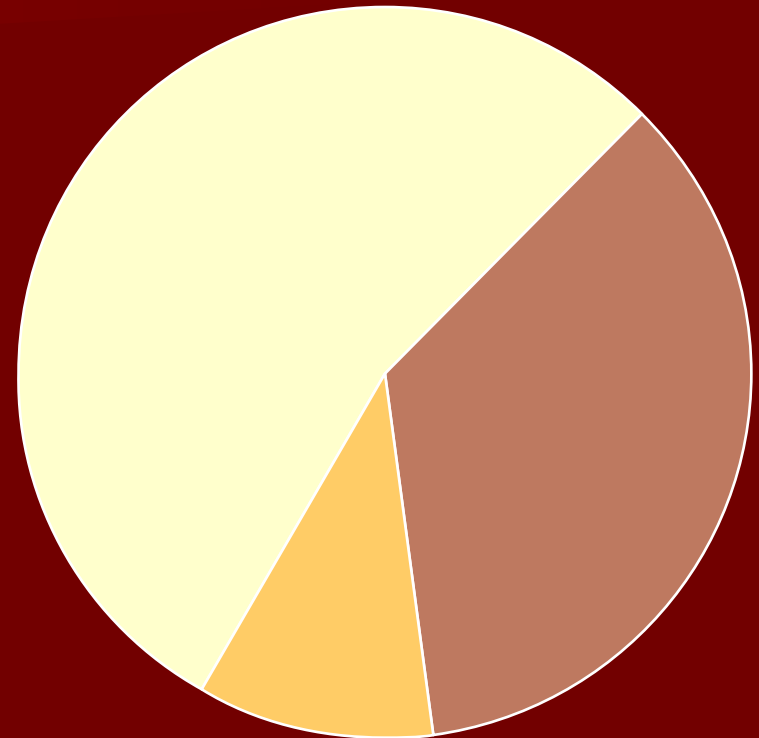
- Stone Mountain Park
- Emory University & CDC
- DeKalb
- Perimeter Center
- International Corridor
- Fernbank Science Center



# Population: 739,956

- **54.1% Black** or African American
- **35.4% White**
- **17.4% Foreign-born**
- 10.4% Hispanic/Latino
- 4.1% Asian

\* From 2008 American Community Survey



■ Black or African American   ■ White   ■ Other

# The Crew !





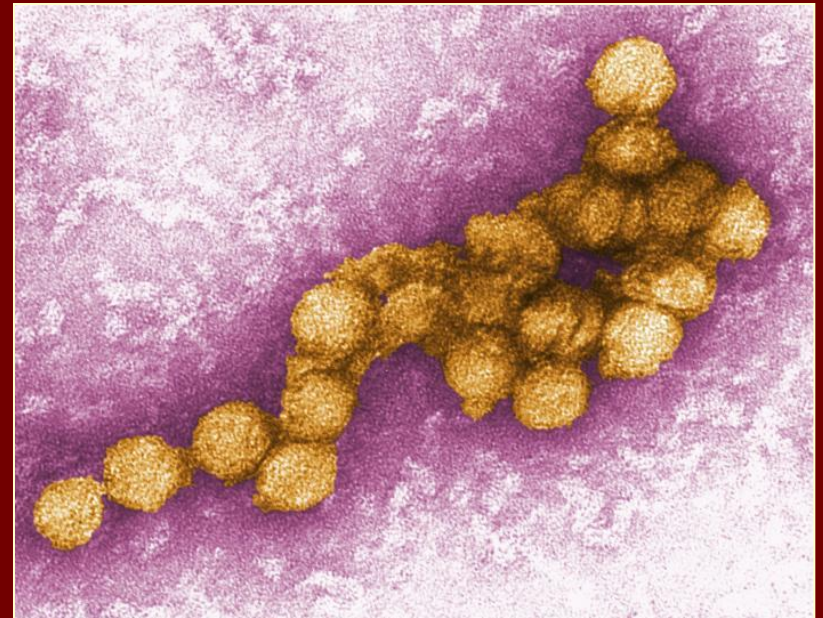
# The Mission

## Mosquito Control vs. Arbovirus Control

- *Culex quinquefasciatus*

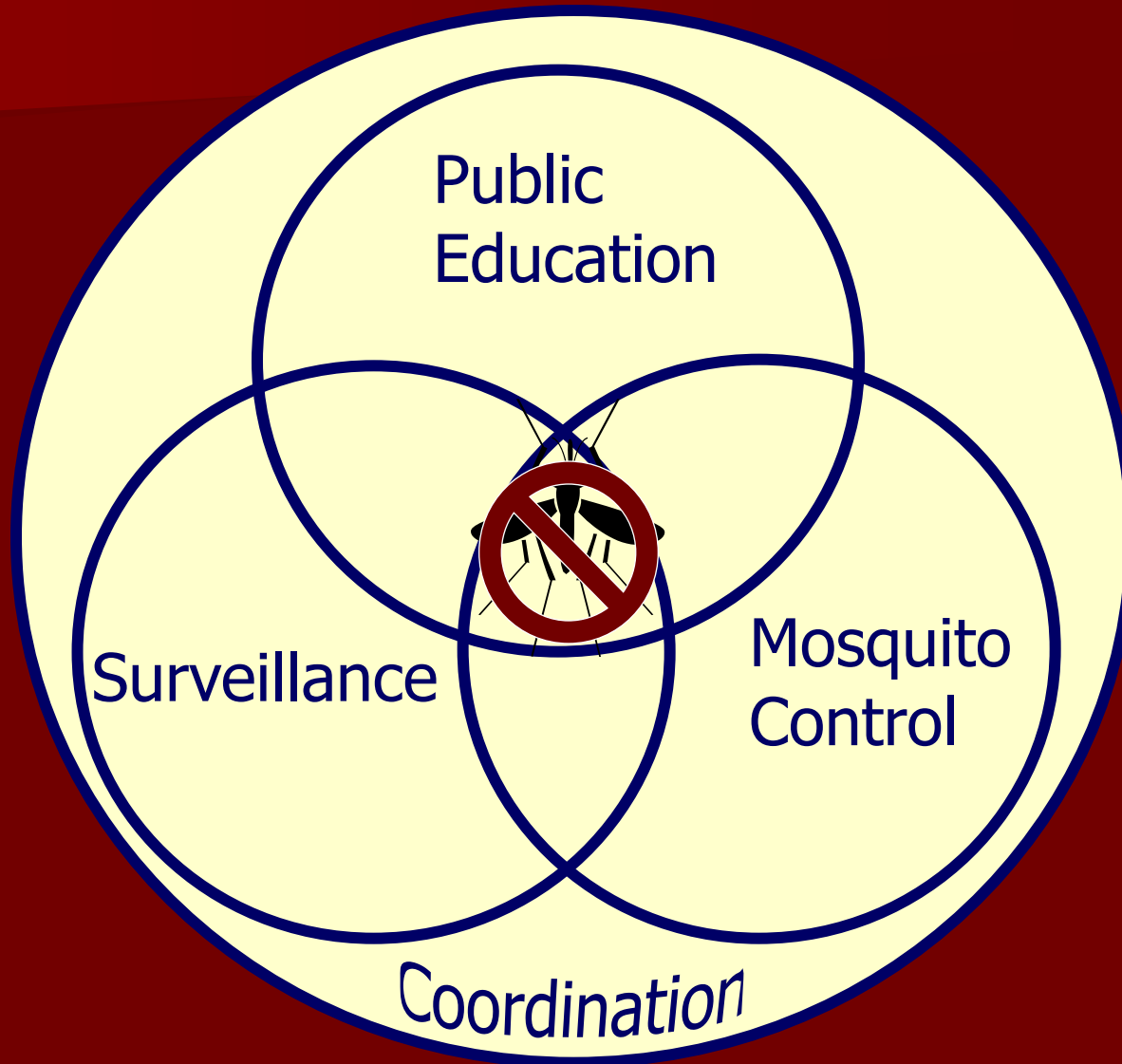


- West Nile virus





# The Strategy



# Public Education



**Health Fairs**



**Neighborhood Meetings**



**Media Events**

**Senior Center Presentations**



**Television Interviews**



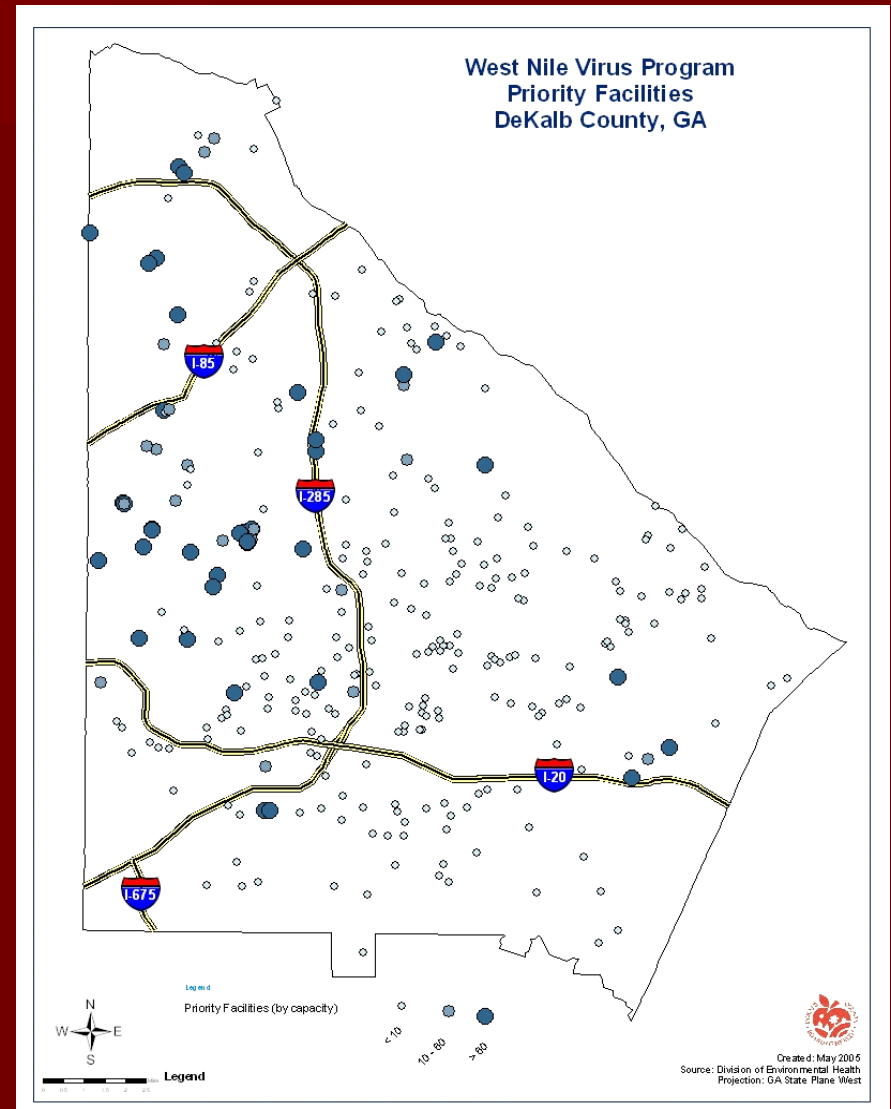
**Town Meetings**



**Door to Door Contact**

# Priority Facilities

- Provide an **assessment** of the property and educate staff about **reduction of mosquito breeding sites**
- **Larvicide** around areas with concentrations of high risk individuals
- Provide West Nile Virus **information** including personal protection measures to residents/visitors of facilities



## DeKalb County Board of Health Arbovirus Program Update

2009 Season Update

Reporting Activity January through September 17, 2009

### Human Surveillance:

- ◆ No 2009 cases of West Nile virus (WNV) in DeKalb County residents
- ◆ 2 WNV cases in Georgia (Muscogee and Tift counties)
- ◆ One WNV viremic blood donor, blood donation tested positive for WNV but did not develop symptoms of illness, in Georgia (Clinch County)
- ◆ 280 WNV cases (8 deaths) in CDC National Report including 51 in Colorado and 40 in Texas

### Mosquito Surveillance:

- ◆ 4 WNV positive mosquito collections from 3 locations in DeKalb County
- ◆ 12 WNV positive mosquito collections in Georgia (DeKalb [4], Fulton [2], Lowndes [5], and Muscogee [1] counties)
- ◆ 24 mosquito trap locations sampled weekly
- ◆ 486 collections of mosquitoes submitted for arbovirus testing
- ◆ 355 mosquito trap nights
- ◆ 6,278 total mosquitoes counted and identified

### Avian Surveillance:

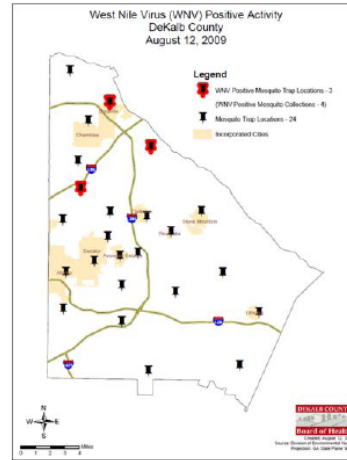
- ◆ No WNV positive birds in Georgia
- ◆ 56 reports of dead birds in DeKalb

### Mosquito Control Efforts:

- ◆ 248 calls requesting mosquito control efforts received and visited
- ◆ 248 priority facilities including senior centers, personal care homes, higher risk centers and green spaces have been visited, larvicided and staff educated on eliminating mosquito breeding sites on their property
- ◆ Larviciding of storm drains throughout the county in progress
- ◆ Detailed assessments, including distributing educational materials, reducing mosquito breeding sites and larviciding, in the environment around positive activity and areas where surveillance has indicated increased risk for virus activity

### Additional Arbovirus Activity:

- ◆ Eastern equine encephalitis (EEE) results in South Georgia (38 horses, 1 calf and 1 dog)
- ◆ 2 WNV positive results in dogs in Georgia (Brooks County)
- ◆ 2 cases of LaCrosse encephalitis (Cherokee and White counties)
- ◆ 2 cases of internationally-acquired dengue reported (Travel to El Salvador and Honduras)

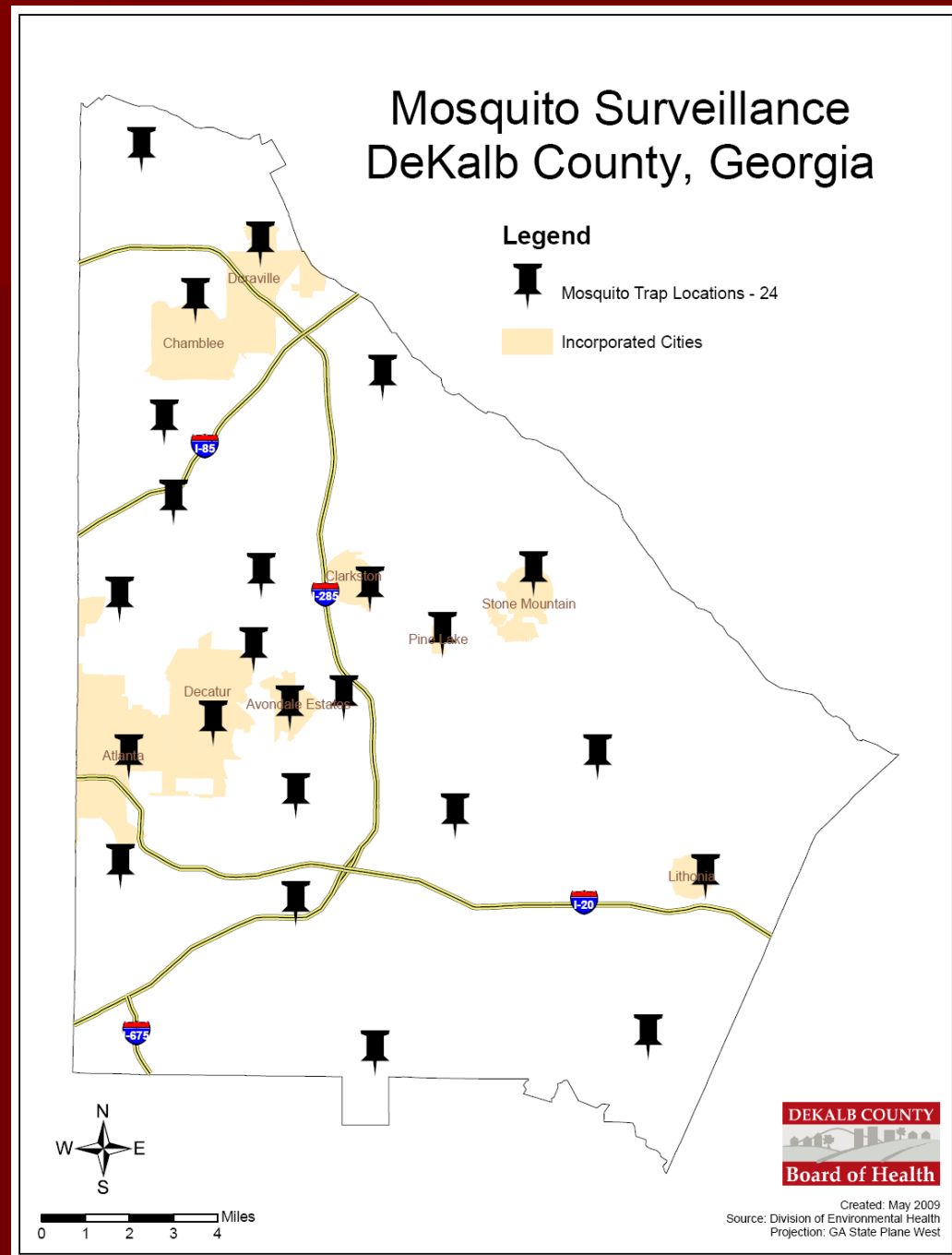


# Education

- Program Updates to Commissioners and public
- West Nile virus positive activity notification
- Website Updates
- Press Releases

# Mosquito Surveillance

■ 24 Mosquito Trap Locations



# Mosquito Surveillance

## ■ Methods for collecting mosquito

- Dip for Larvae
- Fay Prince Trap
- CDC Light Traps
- Gravid Traps
- Backpack Aspirator



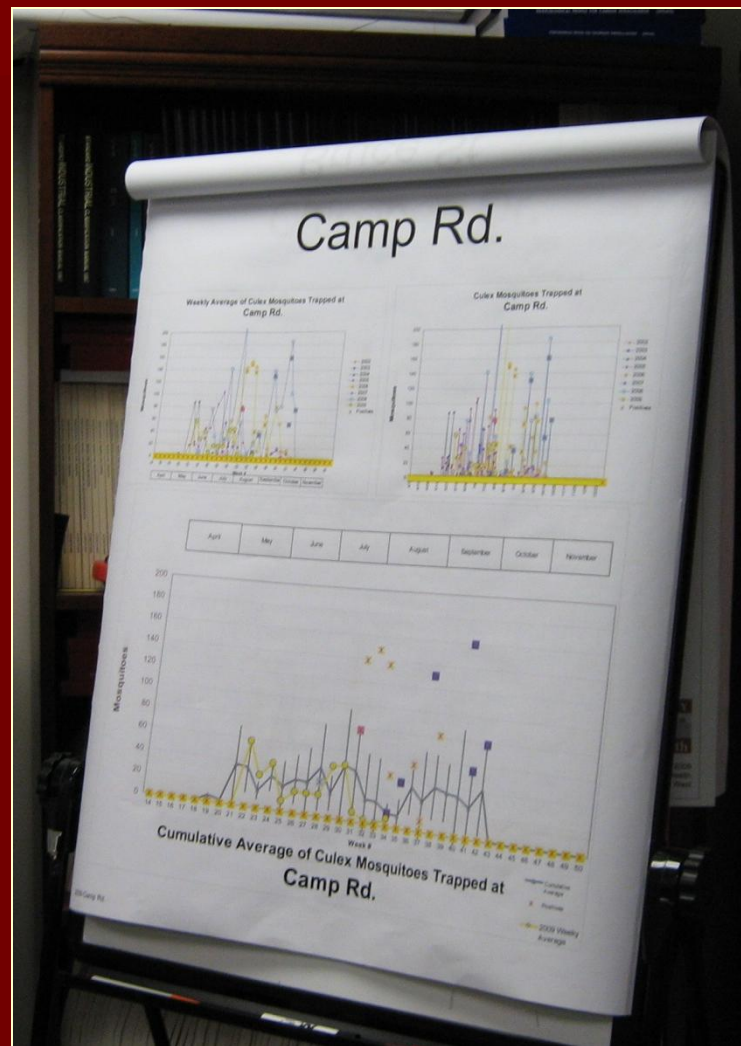
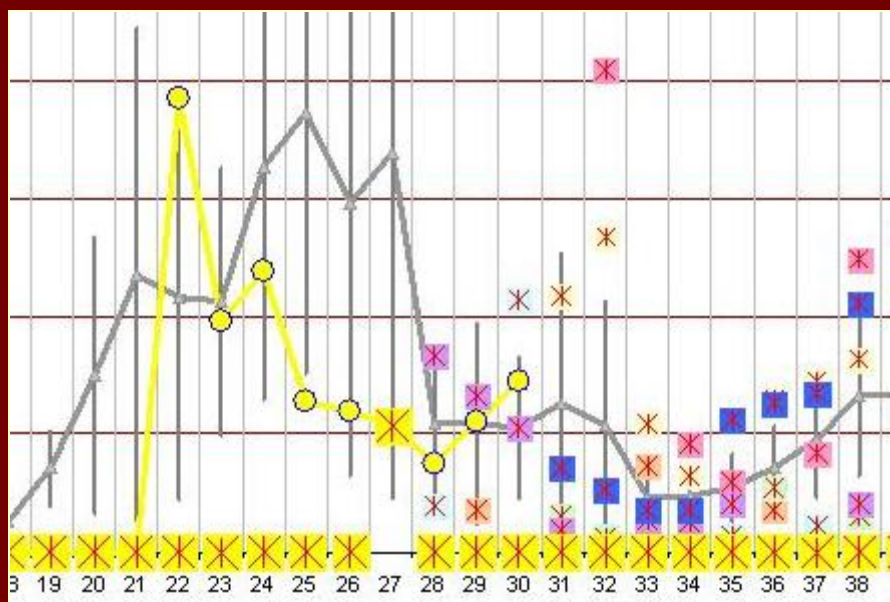
# Mosquito Surveillance

- Count, sort and identify species of mosquitoes
- Select specimens sent to lab for virus isolation



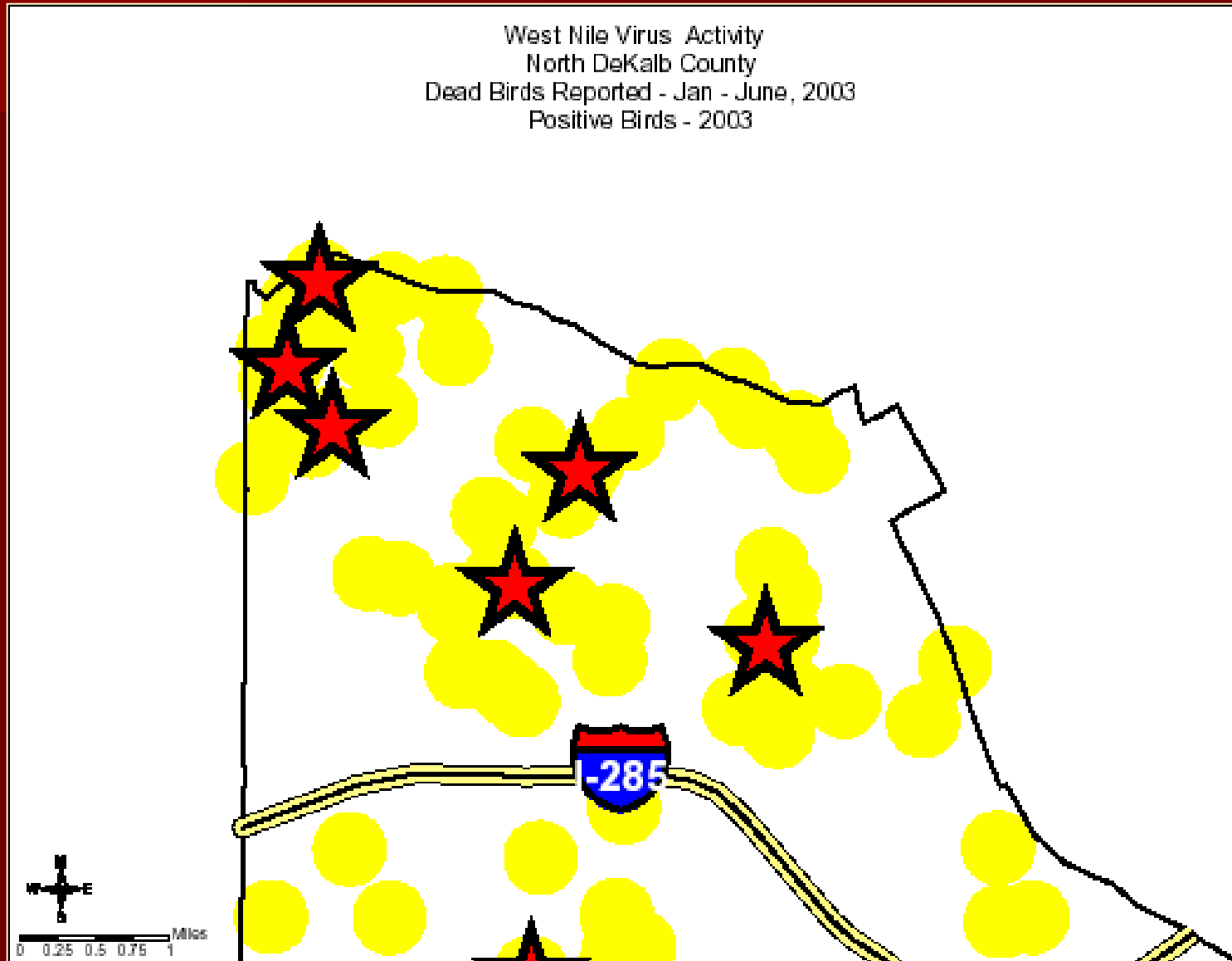
# Mosquito Surveillance

- Analyze the data!
- Respond to the data as well as positive results



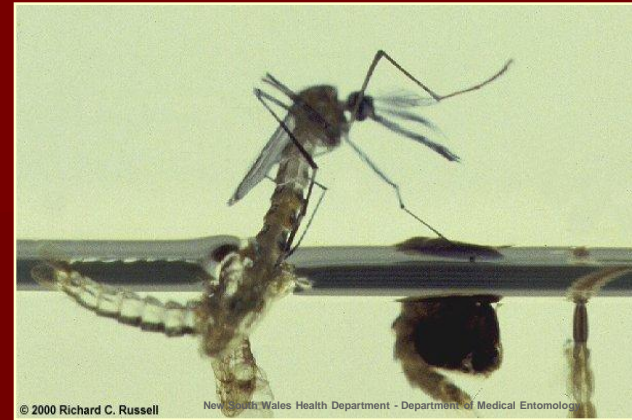


# Bird Surveillance



# Mosquito Control

## Larvicide



- Detailed environmental assessment around positive activity and areas of concern
  - Neighborhood assessment
  - Distribution of educational material
  - Larviciding when appropriate
- Calls for mosquito control efforts
- Larviciding of storm drains and catchment basins throughout the county



# Door to Door

WWW.DEKALBHEALTH.NET  
404-568-7871



## WEST NILE VIRUS

### PROTECT YOURSELF AND YOUR FAMILY

- Avoid mosquito bites
- Eliminate breeding sites
- Help your community

- **West Nile virus (WNV)** is spread by infected mosquitoes and can cause serious, life-altering and even fatal disease.
- **Be aware of your risk for illness.** Anyone can get sick; those age 50+ are at highest risk of becoming seriously ill. Symptoms may last several weeks and some effects may be permanent.

Symptoms of severe illness include:

- Severe headache
- Mental confusion
- Muscle weakness
- Tremors (shaking)
- High fever
- Stiff neck
- Coma
- Paralysis

See your health care provider if you develop any of these symptoms.

- **Avoid mosquito bites.** All it takes is one bite from an infected mosquito to get WNV.
- **Use mosquito repellent.** Follow manufacturer's instructions. The most effective repellents contain:
  - DEET
  - Picaridin
  - Oil of lemon eucalyptus
  - Permethrin (for clothing, shoes, bed nets and camping gear but **not** for skin)
- **Cover up** with long sleeves and pants.
- **Know that peak biting hours** are from dusk to dawn.
- **Eliminate breeding sites.** Don't give mosquitoes a place to breed. Encourage your neighbors to do the same.



FOR MORE INFORMATION:  
404-508-7871  
WWW.DEKALBHEALTH.NET

DeKalb County Board of Health  
Division of Environmental Health  
Technical Services Program

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## MOSQUITO PREVENTION CHECKLIST

The mosquitoes that carry West Nile virus tend to breed in containers and typically do not fly very far. Therefore, your help is needed to effectively reduce mosquito populations around your home.

Make a checklist of items in your yard to check weekly for standing water. Empty, drain or remove. Remember, a bottle cap can hold enough water to breed mosquitoes.

I have marked the items below that I noticed may need attention.

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Air conditioner   | <input type="checkbox"/> Plastic sheeting              |    |
| <input type="checkbox"/> Birdbath          | <input type="checkbox"/> Rain barrel, cistern          |    |
| <input type="checkbox"/> Boat              | <input type="checkbox"/> Rain gutters and drains       |   |
| <input type="checkbox"/> Bucket, pan, can  | <input type="checkbox"/> Swimming pool, spa and covers |   |
| <input type="checkbox"/> Container         | <input type="checkbox"/> Tarp or other plastic covers  |    |
| <input type="checkbox"/> Decorative pond   | <input type="checkbox"/> Tire                          |    |
| <input type="checkbox"/> Ditch             | <input type="checkbox"/> Tree hole                     |   |
| <input type="checkbox"/> Drink can, bottle | <input type="checkbox"/> Truck bed                     |    |
| <input type="checkbox"/> Flower pot        | <input type="checkbox"/> Wading pool                   |    |
| <input type="checkbox"/> Litter and debris | <input type="checkbox"/> Wagons, trucks, toys          |  |
| <input type="checkbox"/> Low spot in yard  | <input type="checkbox"/> Wheelbarrow                   |  |
| <input type="checkbox"/> Magnolia leaves   |  |   |
| <input type="checkbox"/> Pet bowl          |  |   |

Additional concerns in your yard are:

Thank you for helping us protect the health of those who live, work and play in DeKalb County!

QUESTIONS?

CONTACT: \_\_\_\_\_

NUMBER: \_\_\_\_\_

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I have marked the items below that I noticed may need attention.

Air conditioner

Birdbath

Boat

Bucket, pan, can

Container

Decorative pond

Ditch

Drink can,  
bottle

Flower pot

Litter and debris

Low spot in yard

Magnolia leaves

Pet bowl



Plastic sheeting

Rain barrel,  
cistern

Rain gutters and  
drains

Swimming pool, spa  
and covers

Tarp or other plastic  
covers

Tire

Tree hole

Truck bed

Wading pool

Wagons,  
trucks, toys

Wheelbarrow



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QUESTIONS?

CONTACT: \_\_\_\_\_

NUMBER: \_\_\_\_\_

# In Action



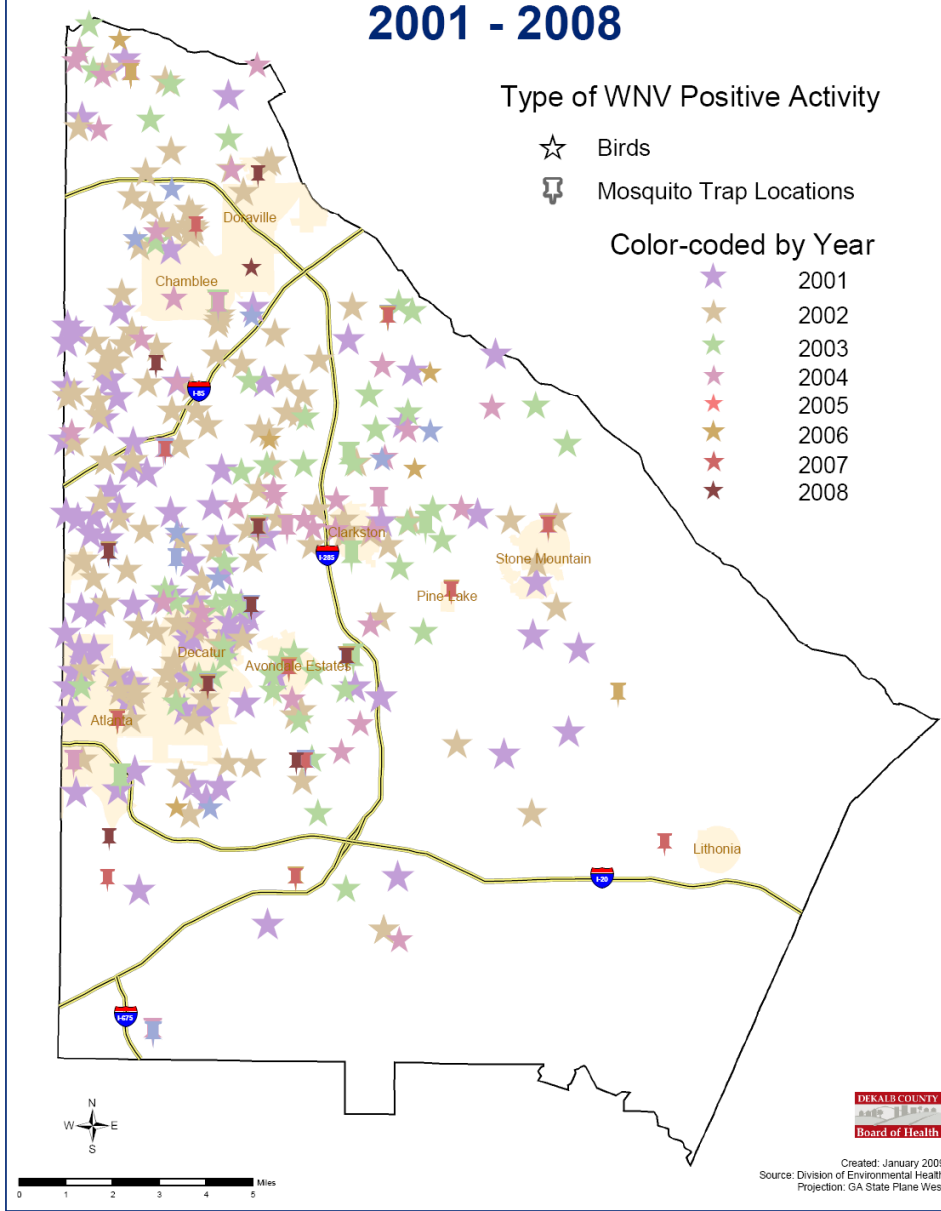
# So....

# How are we doing?

Year		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Grand Total
DeKalb	Human Cases			0	5	0	1	3	0	4	0	13
	Fatalities			0	1	0	0	0	0	0	0	1
Georgia	Human Cases			6	44	50	21	20	8	50	8	207
	Fatalities			1	7	4	1	2	1	1	0	17
National	Human Cases	62	21	66	4156	9862	2539	3000	4269	3630	1370	28,975
	Fatalities	7	2	10	284	264	100	119	177	124	37	1124

Georgia and National Data from CDC National Case Counts for West Nile virus on CDC.gov  
West Nile virus first arrived in Georgia in 2001

# West Nile Virus Positive Activity 2001 - 2008



# Questions?



*Anopheles gambiae*



Questions about this presentation  
may be directed to

**Juanette Willis**

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DeKalb County Board of Health

**Phone: (404) 508-7900**

Web site: *[www.dekalbhealth.net](http://www.dekalbhealth.net)*



