



# 2015 Report University Park Mosquito Control Program



# Background information

- ▶ The 2015 had been the third year of the mosquito control program (MCP)
- ▶ The MCP has an integrated pest management approach
- ▶ The two most common mosquitoes in UPMD are the Asian Tiger mosquito and the Northern House mosquito
- ▶ The main goal of the program is the education of the residents about mosquito behavior
- ▶ The second goal is to change residents behavior in relationship to mosquito populations to be able to reduce its' population



# Approach to UP residents

- Use of a flyer as an educational tool

**Avoid mosquito bites**

- Wear long sleeve shirts, long pants, socks and shoes when mosquitoes are more active.
- Apply repellent such as picaridin, DEET, oil of lemon eucalyptus only to expose skin and/or clothing.
- Use mosquito netting over infant carriers, and strollers
- Install or repair window and door screens to keep out mosquitoes

**Volunteer to be a BLOCK CAPTAIN if you can help with any of the following:**

- Help distribute education materials to your block
- Sign up your neighbors for yard inspections
- Help conduct yard inspections
- Host an informational meeting for your block
- Filter mosquito complaints or questions to the mosquito pilot coordinator, Oswaldo Villena.

**University Park Residents: Sign up for a Mosquito Yard Inspection!**

Sign up at:  
[Tinyurl.com/qaldagu](http://Tinyurl.com/qaldagu)  
Or  
[mosquito@upmd.org](mailto:mosquito@upmd.org)

Oswaldo Villena, A UMCP Environmental Science graduate, will be:

- Conducting a free yard inspections from June through September to identify Asian Tiger Mosquito breeding areas
- Applying BT (*Bacillus thuringiensis*) granules in undrainable containers upon request. This is a bacteria that targets mosquito larvae.

For additional information:  
<http://www.scribd.com/doc/23129218/Take-Back-Our-Yards-Flyer-mp-Aedes-Transect>

**Take Back Our Yards!**

**UP's Asian Tiger Mosquito Control Program**



For more information please contact us at:  
E-mail: [mosquito@upmd.org](mailto:mosquito@upmd.org)  
Phone: 301-852-1889  
Website: [www.upmd.org](http://www.upmd.org)

**Asian Tiger Mosquito**

**General information**

- The Asian Tiger Mosquito (*Aedes albopictus*) is a small, dark mosquito with a stripe and banded legs.
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- They are strongly attracted to bite humans, but will feed on dogs, cats, deer and other mammals, as well as birds.
- These mosquitoes can use natural habitats (mesholes) and artificial habitats (tires, toys, flower pots, etc) with water to lay their eggs.
- The entire immature or aquatic cycle (from egg to adult) can occur in as little as 8-10 days. They have a short flight range (<200 m), so egg production sites are likely to be close to where this mosquito is found.

**Medical importance**

- The Asian Tiger mosquitos are medically important as vectors for diseases in humans that include West Nile Virus, Dengue and Chikungunya.
- The "Tiger" can also transmit dog heartworm parasites.
- The "Tiger" have also been found infected in nature with Eastern equine encephalitis, and Japanese encephalitis viruses.
- The "Tiger" is a very aggressive daytime biter. Its peak feeding times are during early morning and late afternoon.

**Habitat**

- The Asian Tiger mosquito lays its eggs on the inner side of water holding containers such as tires, flower pots, plates under potted plants, buckets, clogged rain gutters, birdbaths, toys, ornamental ponds, etc.



**What can you do?**

- Check your yard weekly for water-filled containers.
- Don't leave out containers that can collect water.
- Wash out bird baths with a strong stream of water.
- Throw away or recycle water holding containers that are not needed.
- Check rain gutters
- Talk to your neighbors about the "tiger"
- Treat sources of water you can't drain with mosquito dunks or granules. These contain a type of bacteria that only targets mosquitoes and flies.

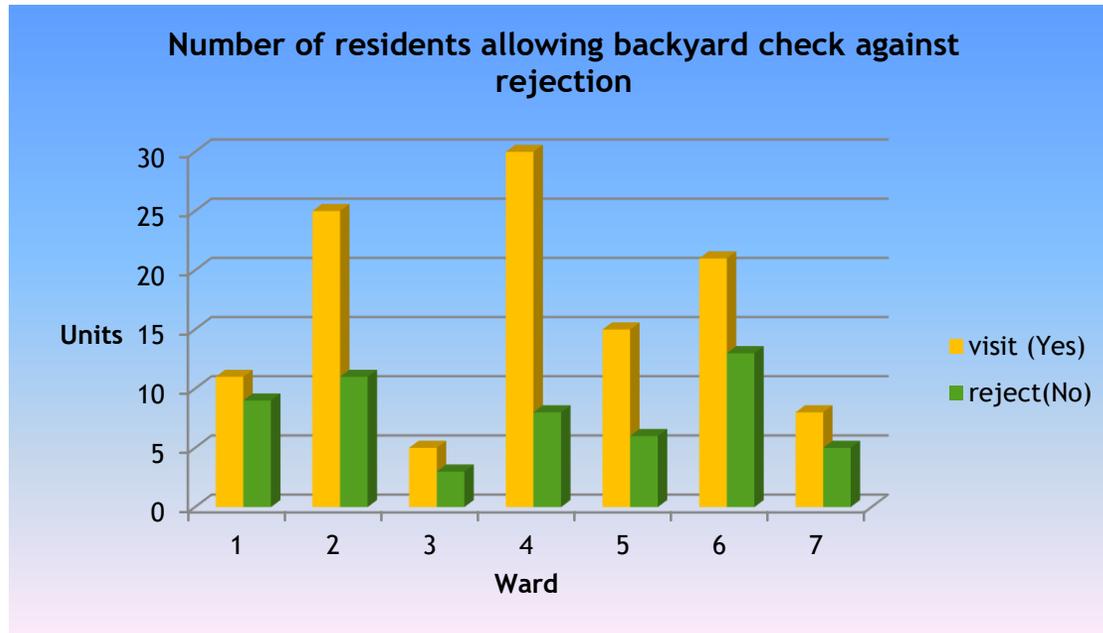


# Approach to UP residents

- ▶ We applied a questionnaire to UP residents to assess their level of concern and knowledge on the presence of mosquitoes in the town.
- ▶ We also posted 65 signs “Take back our yards!” on yards where owners allowed us to place one.
- ▶ We participated in three town events in 2015 as a way to reach more residents: the rain barrel design event, the Mutt Strutt event, and a ward meeting organized by Mr. David Brosch in ward 1.
- ▶ We set up a web page where residents could register for a backyard visit. The link is [www.tinyurl.com/qaldagu](http://www.tinyurl.com/qaldagu)

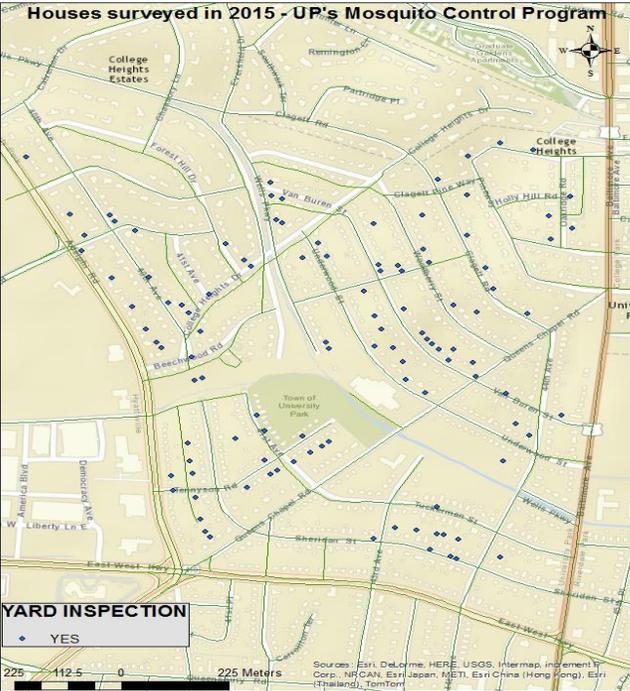
# Results: Houses visited in 2015

- ▶ 250 residents were visited/contacted last year. Of these 68 % allow a yard survey and 32 % rejected a yard survey



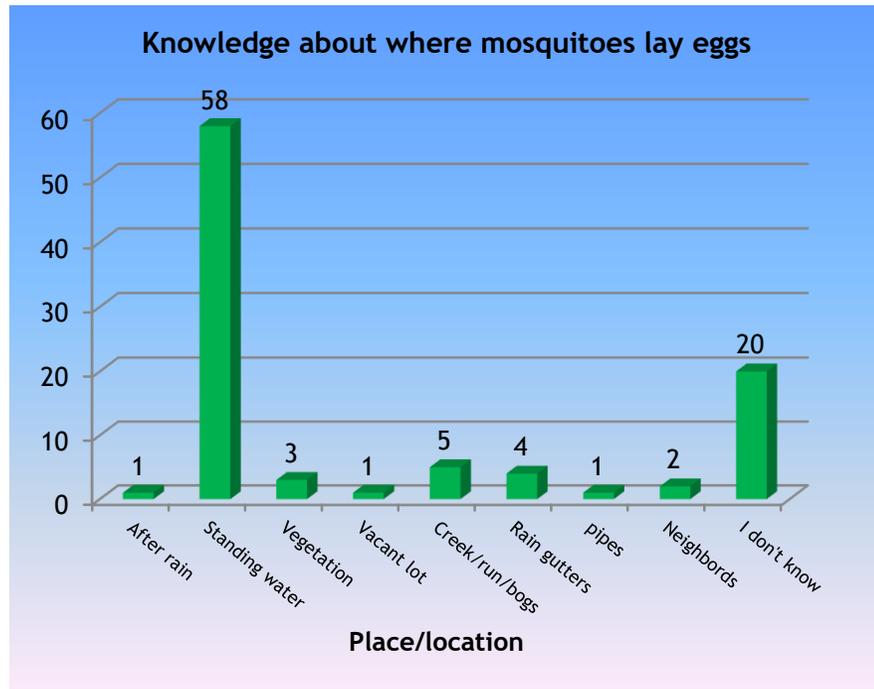
# Results: Number of backyards visited

► A total of 170 backyards were visited/surveyed in 2015.

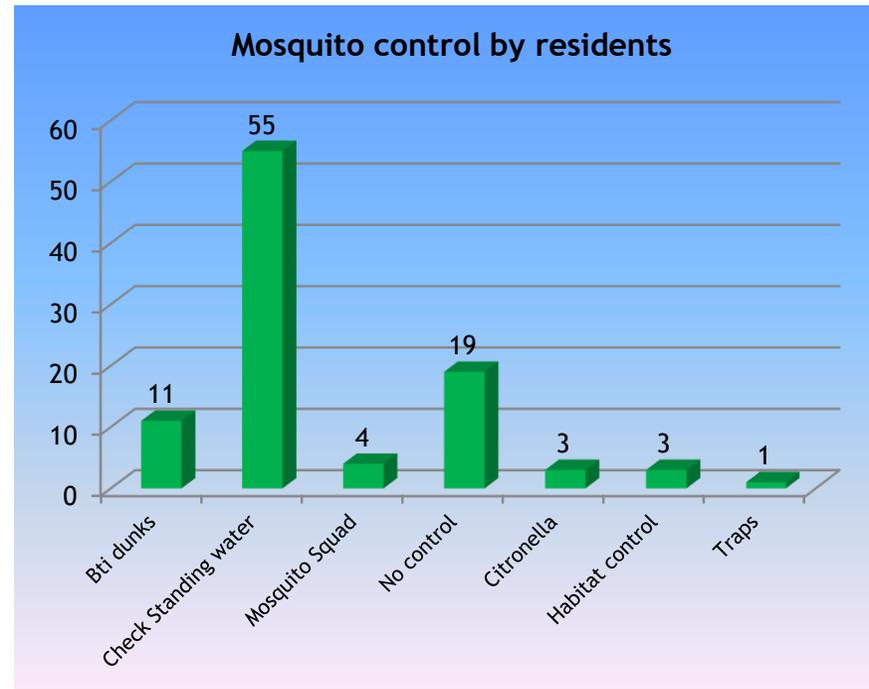


# Results: Knowledge about mosquito oviposition and methods to control mosquitoes

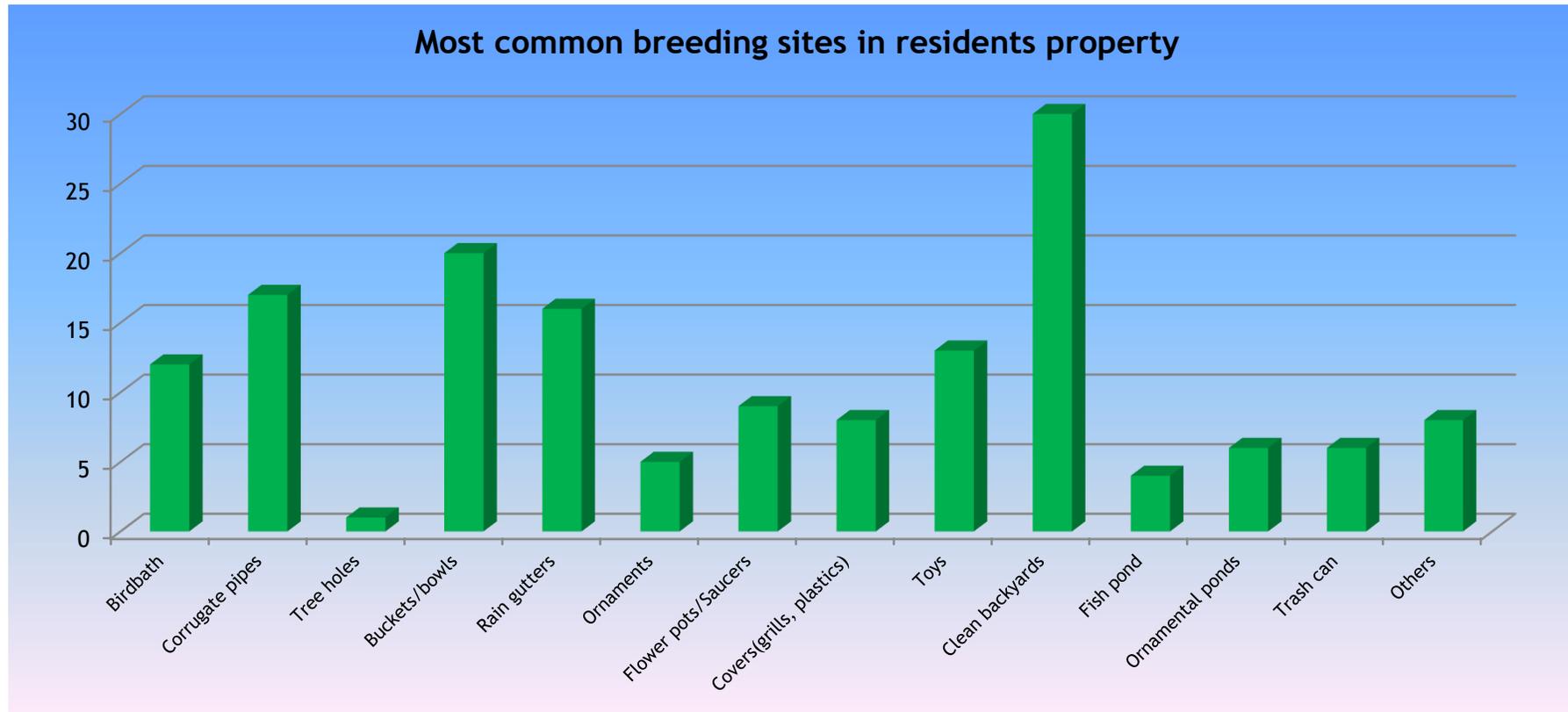
## Knowledge about mosquito oviposition



## Methods to control mosquitoes

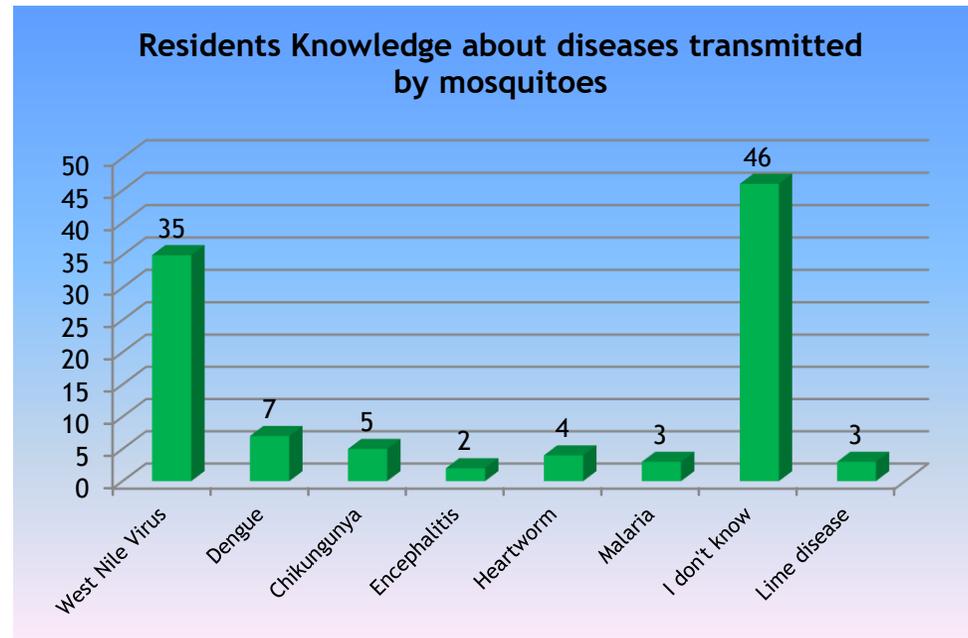


# Results: Most common breeding sites in residents' property

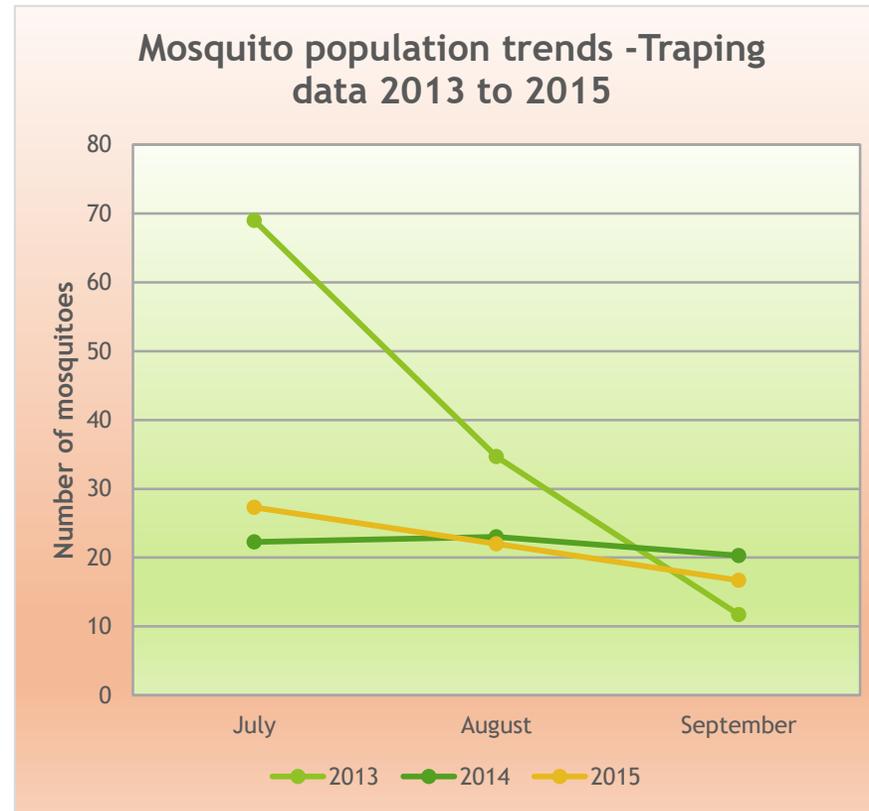
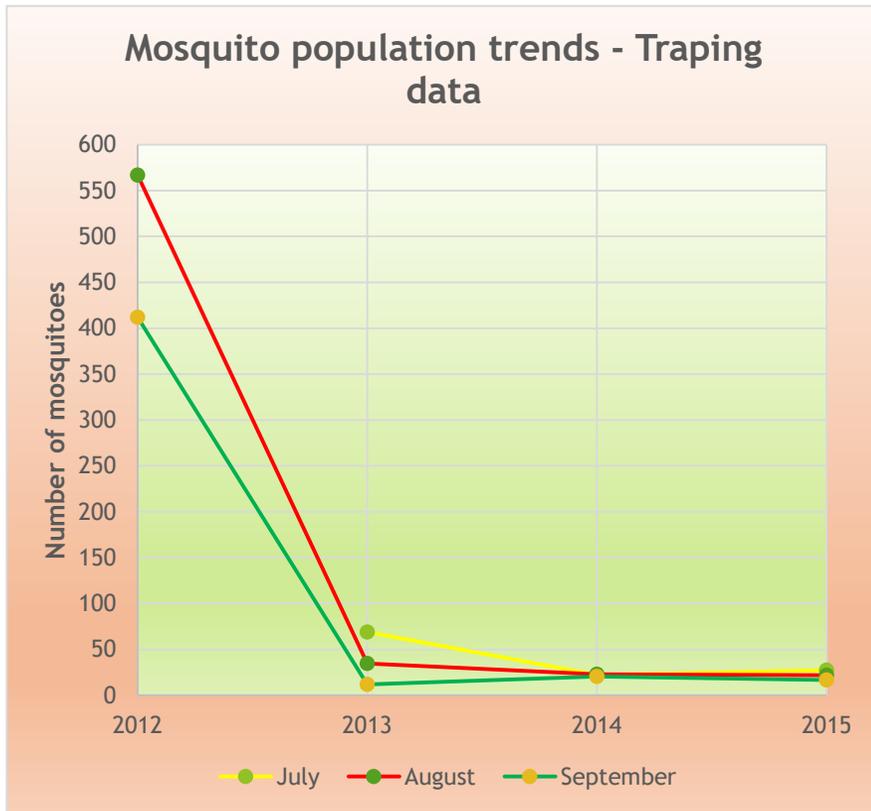


# Results: Knowledge about diseases transmitted by mosquitoes

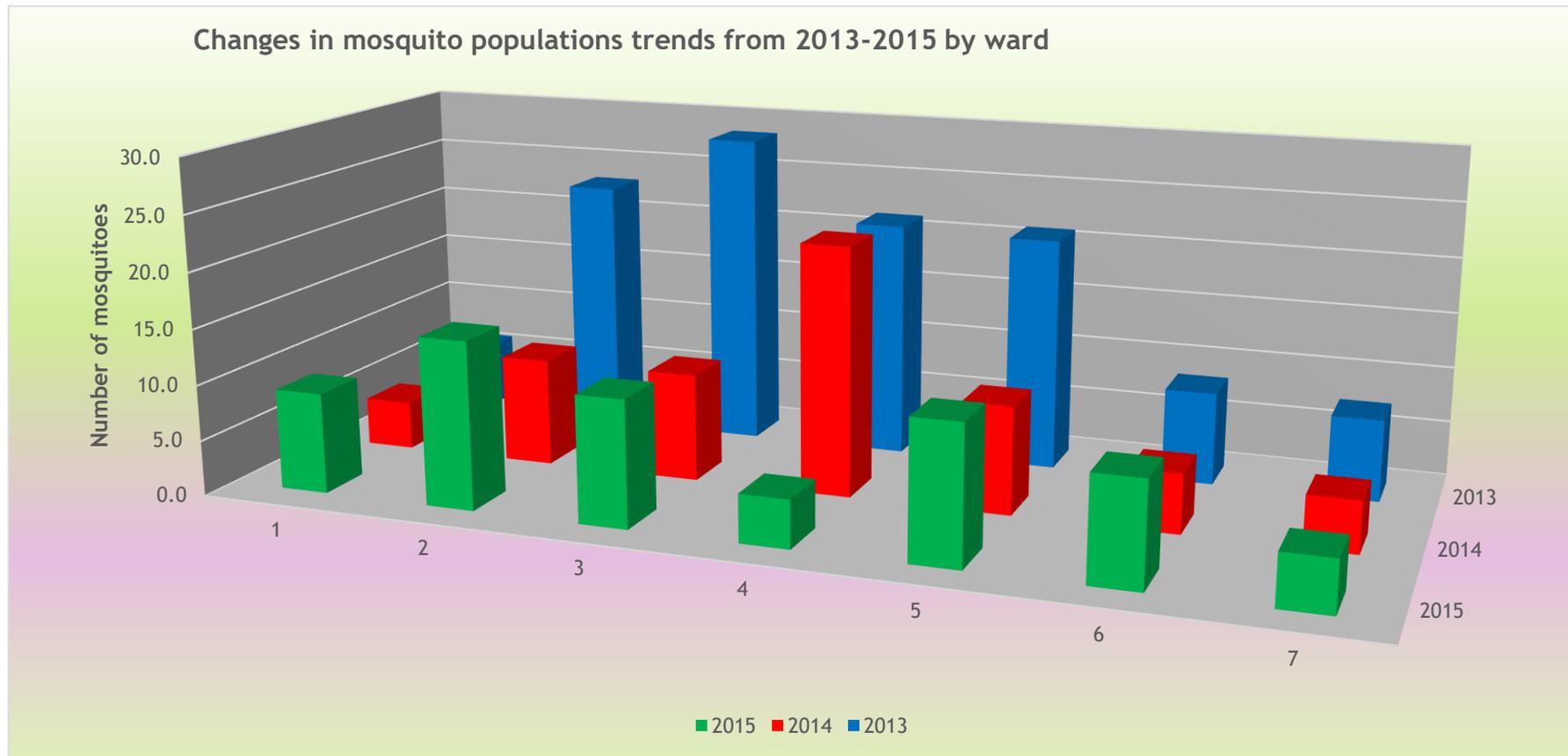
- ▶ More than 50 % of the residents did not know what diseases are transmitted by mosquitoes



# Results: Changes in mosquito population trends from 2012 to 2015



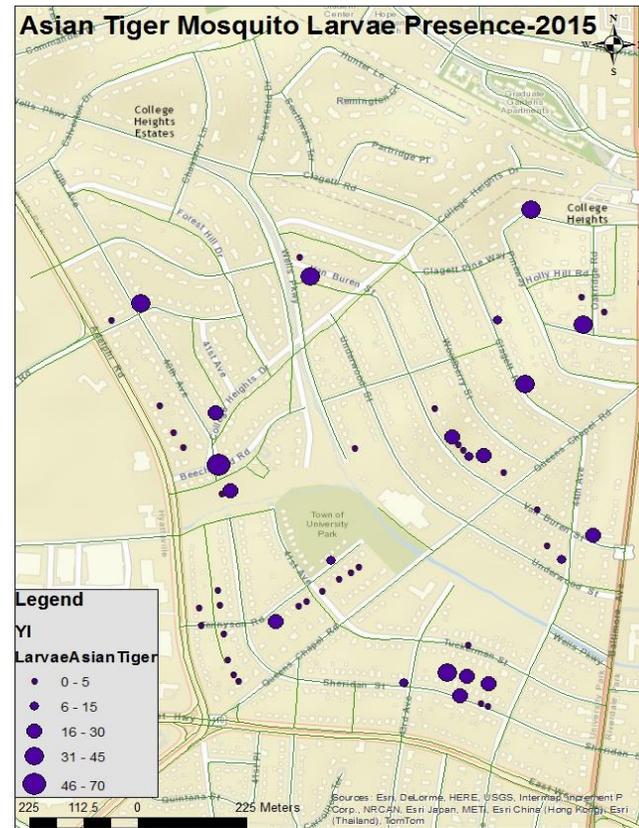
# Results: Changes in mosquito population trends from 2013 to 2015 by ward



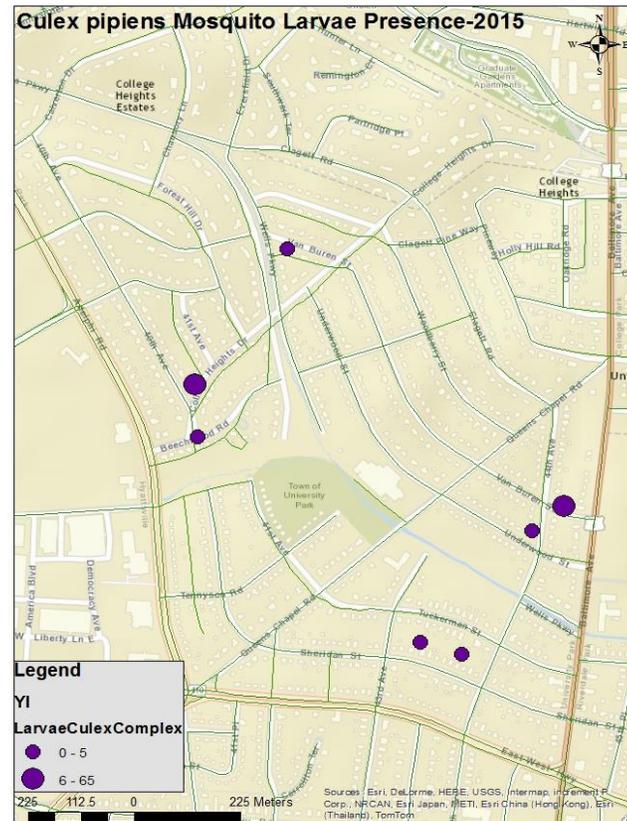
# Sign effect in yard survey - UP 2015



# The Asian Tiger Mosquito larvae presence in UP - 2015



# The Northern House Mosquito larvae presence in UP - 2015





THANK YOU