All photos in this newsletter are by James Gathany, Piotr Naskrecki or an unknown photographer and were obtained from the CDC.

WEST NILE VIRUS IS NO LONGER A PUBLIC HEALTH THREAT!!!!!!!

Zika Virus is the talk of the spring/summer so far. The media raises concerns and fears of the virus everyday: take caution when traveling to certain countries where Zika Virus is prevalent; athletes and tourists worrying about Rio de Janeiro for this year’s Summer Olympics; and Major League Baseball canceling games in Puerto Rico due to a mosquito. The sky is truly falling!!!

The sky is not falling. Obviously, we all know better. We (our mosquito control programs) are well prepared for this emerging public health disease. Utilizing an Integrated Pest Management (IPM) approach will aid in our battle against Zika Virus: identify the problem mosquito (*Aedes aegypti* and *Aedes albopictus*); monitor and survey where this mosquito might breed, hide, and inhabit; educate the public about this mosquito and what control methods can be utilized; follow your mosquito control guidelines/protocols to control this mosquito; and use a combination of control methods (biological, physical, and chemical) to prevent this mosquito from breeding, hiding, and inhabiting an area. The IPM approach has worked before and continues to work. Do not reinvent the wheel.

With Zika Virus receiving all the attention and media headlines, we must NOT forget about West Nile Virus. WNV is still out there – it is endemic in Ohio and there are cases every year in the state. West Nile Virus has been on the downward trend, but cannot be forgotten about. We still need to respect and pay attention to our *Culex* mosquito populations this summer.

New Name, New Logo?

We are now the Ohio Mosquito and Vector Control Association. All the pertinent information was submitted to State offices (Attorney General and the Secretary of State) over the past couple of months and we became the Ohio Mosquito and Vector Control Association on May 11, 2016. I want to thank our board member, Joe Lynch, for his efforts and persistence in this process.

As you probably noticed, there is no logo on this newsletter. With our name change (Ohio Mosquito and Vector Control Association), our logo will need to change (or be modified). I, along with the board, am asking for any and all suggestions for a new logo or modifications to our existing logo for our association. Please contact myself or a board member with your thoughts or ideas on our logo.

Your President,

Greg Putka
Ohio Department of Health Summer Plans

ODH-ZDP will be able to start accepting mosquitoes May 23rd and we encourage you to start sending mosquitoes as soon as you are up and running for the summer surveillance season.

Below you will find information and instructions for mosquito testing, as well as available resources to help with surveillance and public health messaging on vector-borne and zoonotic diseases. As in past years, we will test Culex mosquitoes for WNV. In addition, we will be focusing more on trapping and identifying Aedes aegypti and Aedes albopictus to develop maps for these potential Zika virus vectors in Ohio. Other arboviruses will be evaluated on case by case and/or as time and resources allow.

MOSQUITO SHIPPING
• We will begin accepting mosquito samples May 23, 2016.
• We recommend the use of CDC-gravid traps for WNV surveillance because they better target Culex species, which are primary vectors of WNV and SLE.
• We recommend the use of BG sentinel traps or oviposition traps for Zika surveillance because they better target Aedes species, which are primary vectors for Zika.
• For gravid traps and BG sentinel traps, keep mosquitoes frozen before and as cold as possible during transport.
• Shipping will be provided through UPS. Account code is A8A872.
• Coolers will be returned with tubes and other requested supplies. Please contact me via email if you need tubes or supplies to start.
• For oviposition trap samples, DO NOT freeze or chill ovitraps. Keep mosquitoes refrigerated with eggs if you are sending for us to rear. Make sure that the cloth is dried out and wrapped in a plastic baggie. Please send in a padded manila envelope (standard postage can be used) to:  
  Zoonotic Disease Program  
  Ohio Department of Health  
  8995 E. Main St., Bldg. 22  
  Reynoldsbug, OH 43068

MOSQUITO TESTING AND RESULTS
• Please provide Rich Gary with at least 1 email contact representative for results from each cooperating agency.
• We will work hard to provide timely response and will notify agencies of their positive mosquito samples by email. Results will be emailed within 24 hours of finding. (If positive results present, we will indicate in subject line.)
• Overall arbovirus surveillance updates will be e-mailed statewide every other Friday. If virus activity shows unusual increases during the season, we will increase to weekly statewide communications.

ATTACHMENTS:
• 2016 UPS Mosquito Shipping Directions: Please read carefully for instructions on submitting samples to ODH-ZDP for identification and testing.
• Setting up a Mosquito Control Program (CAVEAT: This document was developed for programs in Mississippi) – Several local public health partners have requested information on setting up a vector surveillance and control program. This is not something that can easily be addressed in a phone call or by email and neither ODH nor the Ohio Mosquito Control Association have current courses or documents on developing a surveillance/control program. I’ve attached this document, which was written by Dr. Gerome Goddard for programs in Mississippi because it provides a good overview of the basic components needed to set up a vector surveillance and control program. Keeping in mind that the vectors and diseases may differ slightly in Ohio and that applicators must follow Ohio pesticide regulations, the basic information is applicable to anyone with a vector control program or anyone wanting to start a vector control program.
• Traps and techniques used by ODH-ZDP to collect mosquitoes – This document includes basic instructions on a variety of traps and techniques that have been used in Ohio to collect mosquitoes for different types of surveillance. The sections on ovitrapping (oviposition trap) and gravid trapping may be most helpful. There is also information toward the end of the document on processing, packing and shipping samples to ODH. Remember that you can use the UPS account (see #1 above) to ship mosquitoes.
• BG Sentinel 2 trap manual – As you know, we have ordered these traps to distribute to local partners to conduct surveillance targeting Asian tiger mosquitoes, Aedes albopictus. Though we are still awaiting the arrival of these traps, I have attached the manual because it includes important information on the positioning of the trap as well as specs on the needed battery, which is not included. This will hopefully help you to further develop your plans for these traps and also to purchase the batteries needed for the trap.
• Mosquito trap request and ZDPpub request – These are order forms you can use to request field supplies or educational materials available from ODH. If you have already requested traps and are waiting, you do NOT need to submit another request. We have those requests and will ship out supplies as soon as they arrive. In addition to BG sentinel traps, we are ordering new gravid traps and other supplies that were quickly depleted after the April workshop. Materials can be ordered from ODH using the attached educational materials order form, or by contacting the Zoonotic Disease Program at 614-752-1029, option 1. There is no charge for these resources.

As the summer progresses, we will keep you updated if there are any changes.

Best wishes for a smooth field season,

Richard E. Gary Jr., Ph.D.
**Aedes aegypti vs Aedes albopictus**

<table>
<thead>
<tr>
<th></th>
<th>Aedes aegypti</th>
<th>Aedes albopictus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Yellow fever mosquito</strong></td>
<td>Has white scales on the dorsal (top) surface of thorax that form a “violin or lyre” shape and white banded legs</td>
<td>Has a white stripe down the middle of the top of thorax and white banded legs</td>
</tr>
<tr>
<td><strong>Asian tiger mosquito</strong></td>
<td>Has a white stripe down the middle of the top of thorax and white banded legs</td>
<td>Has white scales on the dorsal (top) surface of thorax that form a “violin or lyre” shape and white banded legs</td>
</tr>
<tr>
<td><strong>Occupies urban areas with or without vegetation</strong></td>
<td>Associated with thickets &amp; arboreal vegetation, shady areas resting in shrubs</td>
<td>Associated with thickets &amp; arboreal vegetation, shady areas resting in shrubs</td>
</tr>
<tr>
<td><strong>Sneaky or &quot;stealth&quot; biter</strong></td>
<td>Aggressive biter</td>
<td>Aggressive biter</td>
</tr>
<tr>
<td><strong>Take blood meals from humans and to lesser extent domestic mammals</strong></td>
<td>Bite many different species (of both mammals &amp; birds)</td>
<td>Bite many different species (of both mammals &amp; birds)</td>
</tr>
<tr>
<td><strong>Lays eggs in small artificial or natural containers such as bird baths, tins cans, flowerpots untreated swimming pools, or tires</strong></td>
<td>Utilizes natural &amp; artificial container habitats which include bird baths, clogged gutters, tires, and human-made containers</td>
<td>Utilizes natural &amp; artificial container habitats which include bird baths, clogged gutters, tires, and human-made containers</td>
</tr>
<tr>
<td><strong>Eggs are long, smooth, ovoid shaped like cigars</strong></td>
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</tr>
<tr>
<td><strong>Daytime biter, indoors and outdoors</strong></td>
<td>Daytime biter</td>
<td>Daytime biter</td>
</tr>
<tr>
<td><strong>Vector of yellow fever, dengue fever, chikungunya, and Zika virus</strong></td>
<td>Vector of dengue fever, yellow fever, West Nile Virus, Eastern Equine Encephalitis, &amp; Venezuelan Equine Encephalitis</td>
<td>Vector of dengue fever, yellow fever, West Nile Virus, Eastern Equine Encephalitis, &amp; Venezuelan Equine Encephalitis</td>
</tr>
<tr>
<td><strong>Eggs are laid singly on damp surfaces most likely to flood (tree holes, man-made containers)</strong></td>
<td>Eggs are laid singly on the sides of water holding containers (tires, birdbaths, containers, etc.)</td>
<td>Eggs are laid singly on the sides of water holding containers (tires, birdbaths, containers, etc.)</td>
</tr>
</tbody>
</table>

**Estimated range of Aedes aegypti and Aedes albopictus in the United States, 2016 Maps**

*Maps have been updated from a variety of sources. These maps represent CDC’s best estimate of the potential range of *Aedes aegypti* and *Aedes albopictus* in the United States. Maps are not meant to represent risk for spread of disease.*

**These maps DO NOT show**

- Exact locations or numbers of mosquitoes living in an area
- Risk or likelihood that these mosquitoes will spread viruses

**These maps show**

- CDC’s best estimate of the potential range of *Aedes aegypti* and *Aedes albopictus* in the United States
- Areas where mosquitoes are or have been previously found
The Division of Materials and Waste Management, in collaboration with the Ohio Department of Health, will make $250,000 available to fund grants for mosquito control activities. These grants are available to local health departments and related public entities to mitigate the potential for an outbreak of mosquito borne viruses such as Zika, West Nile, or La Cross Encephalitis. These grants will be made available on a first come, first serve basis. The Mosquito Control Grant factsheet and Mosquito Control Grant Application are posted on the Ohio EPA website.

For more information, please contact:
Adam Cummins
614-728-5328
or
Holly Hillyer
614-728-5348

The annual meeting of the Ohio Mosquito & Vector Control Association is set for October 26 & 27, 2016. It will be held at the Columbus Public Health auditorium located at 240 Parsons Avenue, Columbus, OH 43215. More details to follow. Hope to see you there!!!!

Is there a topic that you would like to present to the organization? Was there an interesting project that you worked on and would like to discuss it with the organization? Sign up to present at the 2016 annual meeting. Also, if you know of another great speaker or have a topic that interests you and you want it included at the meeting, please contact Michael Cooper at cooper@health.athens.oh.us as soon as possible.