

# School & Home Integrated Pest Management (IPM) Newsletter – June 2017



COLLEGE OF  
AGRICULTURE  
& LIFE SCIENCES  
COOPERATIVE EXTENSION

View this newsletter as a [PDF](#).

Editor: Shujuan (Lucy) Li, lisj@cals.arizona.edu

## 2017 Great Arizona Mosquito Hunt

The Arizona Department of Health Services, Maricopa County Department of Public Health, and University of Arizona invite you to participate in the 2017 Great Arizona Mosquito Hunt. This is an interactive activity to teach youth about new diseases carried by mosquitoes, mosquito biology, and learn more about disease risks across the state.

This project is intended for Arizona educators, youth organization leaders and students in grades 9-12, but other interested students and adults are welcome to participate. Participants will have the opportunity to provide valuable data to Arizona public health partners by collecting mosquito eggs to determine the presence of *Aedes aegypti* in their area. The results will be turned into a statewide map that will be used to direct public health efforts to protect Arizonans from mosquito-borne diseases.

### Background

The yellow fever mosquito (scientific name *Aedes aegypti*) is native to Africa, but is now established around the world, including in many parts of Arizona. This pesky mosquito can transmit serious viral diseases to humans, including dengue fever, chikungunya and Zika. These diseases, although rarely fatal, can cause high fever, headaches, and severe pain in muscles or joints. Zika is also linked to birth defects, including microcephaly (when a baby's head is smaller than expected). None of these viruses are currently circulating in Arizona, but that could change if a virus-infected traveler comes home and is bitten by an *Aedes aegypti* mosquito. That mosquito could pass the virus to other people, other mosquitoes could become infected and the virus could spread.

### We Need Your Help!

Public health officials in Arizona want to help communities prepare and protect themselves against possible introductions of dengue, chikungunya and Zika viruses. The first step is to find out where the *Aedes aegypti* mosquitoes are. While some areas of Arizona have been surveyed for *Aedes aegypti*, there are many communities, and parts of communities, that have not. All mosquitoes are aquatic in the juvenile stages, so eggs are laid in or near water. *Aedes aegypti* likes to lay its eggs on the sides of small containers of water, usually human-made objects like buckets or old tires. With community participation in placing oviposition traps, we can create an accurate, detailed map of where this mosquito is present in Arizona. With a more complete picture of the distribution of this mosquito, counties can identify high-risk areas if a human case of one of these diseases is reported. We also need to know where the mosquito is NOT present to identify lower-risk areas and to monitor for accidental introductions of this pest. All participants will receive a copy of the final *Aedes* distribution map!

### Activity Checklist

- Receive mosquito trapping supplies by mail.
- Set out one or more mosquito traps and leave in place for 1 week.
- Check the traps and replace water and trap papers weekly for 2 to 4 weeks.

\_Enter data on the Great Arizona Mosquito Hunt website: azhealth.gov/mosquito.

\_Send paper from trap back using the provided stamped, self-addressed envelope.

If you would like to participate in the hunt, which will begin in August, Please [click here](#) to register and receive kits. The 2017 Great Arizona Mosquito Hunt will take place during August-September of 2017. Participants will be contacted and sent kits in early August.

For more information about the project, please visit [azhealth.gov/mosquito](#).

With questions, email [vbd@azdhs.gov](mailto:vbd@azdhs.gov) or call 602-364-3676.

Thank you, The Great Arizona Mosquito Hunt Team

---

## Building Your Trap

### Step 1: Make sure you have everything

Locate a black jar, cup, or container. You can paint it or use black tape. You'll only need two to three rabbit pellets and one sheet of seed germination paper per trap.



### Step 2: Assemble the trap

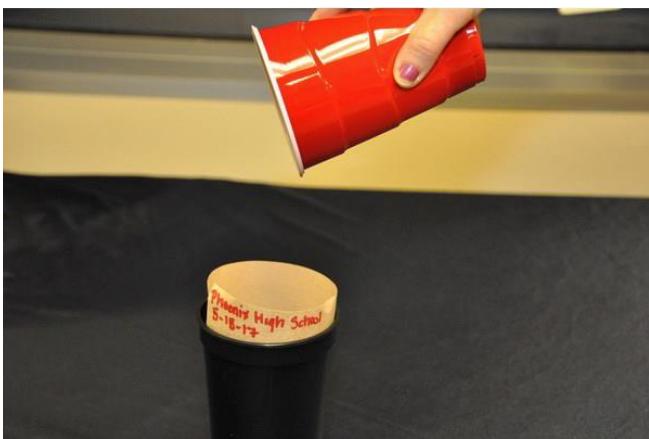
Write the name of your school and the starting date on the seed germination paper. Put it in the container.





### Step 3: Activate the trap

Drop in two to three pieces of rabbit food. This acts as bait. Then just add water!



### Step 4: Set the trap

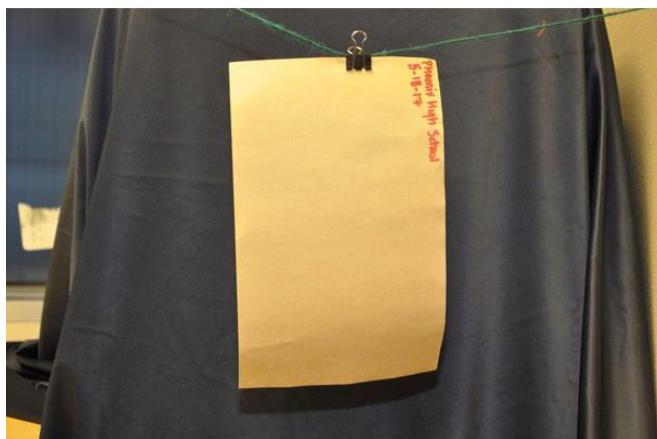
Place the trap in a shady location near some plants. Do not place next to a hose or sprinkler. If needed, add some rocks to the trap to keep it from tipping over.

Let it sit for one week. Use additional seed germination paper and rabbit pellets to place additional traps over several weeks or trap in several locations.



#### **Step 5: Collect the eggs**

Pull the seed germination paper out of the trap. Be sure to dump the water (if there is any left). Allow the paper to completely dry.



#### **Step 6: Send your data**

Send the seed germination paper back using the provided stamped, self-addressed envelope. Also enter data on the [Great Arizona Mosquito Hunt](http://azhealth.gov/mosquito) website: [azhealth.gov/mosquito](http://azhealth.gov/mosquito).

Thank you, The Great Arizona Mosquito Hunt Team

---

### **UA Guidance regarding Travel to Regions with Mosquito Borne Illnesses**

#### **Before you travel**

Please review mosquito bite prevention information from the Centers for Disease Control (CDC) at [http://www.cdc.gov/chikungunya/pdfs/fs\\_mosquito\\_bite\\_prevention\\_travelers.pdf](http://www.cdc.gov/chikungunya/pdfs/fs_mosquito_bite_prevention_travelers.pdf).

Practicing effective mosquito bite prevention provides significant protection against the following diseases:

- Malaria (<http://wwwnc.cdc.gov/travel/diseases/malaria>),
- Dengue fever (<http://wwwnc.cdc.gov/travel/diseases/dengue>),
- Chikungunya (<http://wwwnc.cdc.gov/travel/diseases/chikungunya>),
- West Nile virus (<http://wwwnc.cdc.gov/travel/diseases/west-nile-virus>),
- Yellow fever (<http://wwwnc.cdc.gov/travel/diseases/yellow-fever>) and
- Zika virus (<http://www.cdc.gov/zika/index.html>).

#### Special guidance for Zika virus prevention related to pregnancy

All travelers, particularly women of child bearing age and their sexual partners are advised to wear mosquito repellent with DEET while visiting destinations with local Zika virus transmission. Travelers should continue to do so for 3 weeks after departure. The Arizona Department of Health Services advises women who are or may be pregnant,

**“A pregnant woman wearing DEET is better than a pregnant woman with Zika”.**

For travel to countries with local Zika virus transmission, the CDC recommends:

- Pregnant women or women planning to become pregnant defer travel, if possible (<http://wwwnc.cdc.gov/travel/page/zika-travel-information>). If unable to defer travel, please carefully review the following information: <http://www.cdc.gov/zika/pdfs/zikapregnancyinfographic.pdf>. Postponing pregnancy for 8 weeks after departure if both partners are asymptomatic or for 6 months if the male partner develops symptoms or is diagnosed with Zika virus.
- Symptomatic women or women diagnosed with Zika virus should wait 8 weeks from symptom onset before attempting to get pregnant.
- Male travelers should use condoms or abstain from sex for 8 weeks regardless of pregnancy plans. Condom use is every time from start to finish and includes oral, anal, or vaginal sex.
- If a sexual partner is pregnant, the male partner should use condoms every time or abstain from sex for the duration of the pregnancy.

Consult with your Primary Care Physician or OB/GYN Physician if you or your sexual partner will be traveling to or has traveled to a country with local transmission of the Zika virus. For consultations regarding upcoming international travel health requirements, contact the UA Campus Health Service Travel and Immunization Clinic at 520-621-2292 (<http://www.health.arizona.edu/spotlight/traveling>).

---

## Webinars and Events

Please join in for the [2017 All Bugs Good and Bad Webinar Series](#). This webinar series provides information about good and bad insects. Webinars are free and open to everyone. Webinars will be on the **first Friday of each month at 2 p.m. Eastern time**.

Upcoming webinars include:

1. Drain Flies, House Flies, and Fungus Gnats - August 4, 2017
2. Meet Our Native Pollinators - September 1, 2017
3. New Invasive Ants to Know About - October 6, 2017

For more information about upcoming and past School IPM webinars:

<http://articles.extension.org/pages/74016/2017-all-bugs-good-and-bad-webinar-series>.

For more information about the EPA Schools program, visit:

<http://www.epa.gov/schools/>

For more information about Community IPM, visit:

<http://www.extension.org/pages/23359/urban-integrated-pest-management-community-page>



For more information about School IPM in Arizona, visit:

<http://cals.arizona.edu/apmc/westernschoolIPM.html>

**Shujuan (Lucy) Li**, Assistant in Extension - Public Health IPM. Email: [ljsj@cals.arizona.edu](mailto:ljsj@cals.arizona.edu)

**Dawn H. Gouge**, Public Health IPM Expert. Email: [dhgouge@cals.arizona.edu](mailto:dhgouge@cals.arizona.edu)

**Shaku Nair**, Assistant in Extension - Community IPM. Email: [nairs@email.arizona.edu](mailto:nairs@email.arizona.edu)

**AI Fournier**, IPM Assessment. Email: [fournier@cals.arizona.edu](mailto:fournier@cals.arizona.edu)

**Ursula Schuch**, Environmental Horticulture. Email: [ukschuch@ag.arizona.edu](mailto:ukschuch@ag.arizona.edu)

**Kai Umeda**, Extension Agent, Turf. Email: [kumeda@cals.arizona.edu](mailto:kumeda@cals.arizona.edu); <http://turf.arizona.edu>

**Dave Kopec**, Turf Specialist. Email: [dkopec@ag.arizona.edu](mailto:dkopec@ag.arizona.edu)

**Michael Wierda**, Assistant in Extension - Pesticide Safety Education. Email: [mwierda@email.arizona.edu](mailto:mwierda@email.arizona.edu)

To view all our previous newsletters, visit:

<https://cals.arizona.edu/apmc/public-health-IPM.html#newsletter>

<https://cals.arizona.edu/apmc/westernschoolIPM.html#newsletter>

## Acknowledgements

This material is based upon work that is supported in part by the National Institute of Food and Agriculture, U.S. Department of Agriculture (USDA NIFA). Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the U.S. Department of Agriculture. Additional support is provided by the U.S. Environmental Protection Agency (EPA) and the University of Arizona – Arizona Pest Management Center (APMC).



United States  
Department of  
Agriculture

National Institute  
of Food and  
Agriculture