

Arkansas State University launches citizen science project to tackle mosquito woes in Jonesboro

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This summer, residents of Jonesboro can join forces with Arkansas State University (ASU) researchers in a unique citizen science project aimed at combating mosquito populations. The project, funded by a \$50,000 grant from the City of Jonesboro, seeks public participation to collect valuable data on mosquito activity within city limits.

"With Arkansas leading the nation, Craighead County is one of the five top rice-producing counties. When rice fields are flooded in early summer, significant mosquito development can occur. These rice fields extend into the city resulting in substantial mosquito nuisance issues," said Dr. Tanja McKay, professor of entomology and chair, Department of Biological Sciences.

The research team builds upon a 2009 study that identified 16 mosquito species in Craighead County through the deployment of six traps. This new project expands the scope, utilizing 10 traps strategically placed throughout Jonesboro.

"This is a citizen science project where we will be working with citizens of Jonesboro to get them excited about science while educating the public on mosquitoes," added McKay.

The project seeks volunteers willing to host a mosquito trap on their property for a short period over the summer. A member of the research team, which includes graduate and undergraduate students from ASU's Departments of Biological Sciences and Psychology and Counseling, will visit participating locations twice – once for trap placement and again for retrieval and analysis of the collected mosquitoes.



"We are interested in the attitude of the participants in the citizen science project. We want to know if, by participating, they are more interested in science than they were before they participated," said Bentonville native Ashley Lestina, who recently received a bachelor's degree in psychology from A-State.

"We want to educate citizens about mosquito-integrated pest management and monitor mosquito populations through citizen-led trapping efforts. The mosquitoes in the traps will be counted and identified by species," McKay said.

"I am excited to work on a new organism and work on trapping and monitoring. We will see where the mosquitoes are emerging and where the populations are peaking. We can find out where the hot spots are," said Laura Starkus, lab technician.

The research team will collaborate closely with Vector Disease Control International (VDCI), the company contracted by the City of Jonesboro for mosquito eradication efforts.

McKay said they hope to set traps up so mosquitoes can be collected from different parts of the city to see where the highest numbers are coming from.

"We would like to get as many citizens as possible in Jonesboro to participate in this project. By working together, we can make a real difference in promoting public health and advancing scientific knowledge," she continued.

Jonesboro residents interested in participating in this impactful citizen science project can sign up to host a mosquito trap at the following link: https://www.mdpi.com/2075-4450/13/2/164

Together, ASU researchers and engaged citizens can make a significant difference in controlling mosquito populations and protecting public health in Jonesboro.