For Immediate Release

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Florida Scientists Fight a Daily Battle Against the “World’s Deadliest Animal:” The Mosquito
~Drones, boats, planes and high tech used on front lines to control mosquitoes as rain and new species flood the state~

Naples, FL -- What looks like rain to most Floridians is an alarm for the public servants who work in communities throughout our state to control the nuisance, and health threats, caused by mosquitoes. That alarm is amplified after tropical deluges in our state, such as the downpour that closed roads, schools and the airport in Broward County last week.

“Standing water is an emergency to us,” said Sandra Fisher-Grainger, President of the Florida Mosquito Control Association and Director of Hernando County Mosquito Control. “It only takes a bottlecap of water for female mosquitoes to lay their eggs, and our trained experts around the state immediately take action to limit the risks of disease-spreading mosquitoes.”

April 16 – April 22, is Florida Mosquito Control Awareness week, giving the public an opportunity to learn more about the 24/7 battle against a growing number of species.

Members of the state’s Florida Mosquito Control Association are on the job 365 days a year battling mosquitoes that bring irritation and sometimes major illnesses to all 67 counties.

Some of the most critical work against mosquitoes comes in laboratories throughout the state.

Drawing from a wide range of fields including chemistry, entomology, biology, and more, mosquito control professionals are identifying new species as they enter Florida.
MORE THAN 80 MOSQUITO SPECIES IN FLORIDA

For most Floridians, a mosquito is just a mosquito.

But there are more than 80 distinct species of mosquitoes in our state, carrying various levels of risk.

“Each species has unique traits that make them more or less likely to carry dangerous diseases,” said Dr. Keira Lucas, Deputy Executive Director of the Collier Mosquito Control District. “Our work in the lab makes sure we tailor our tools for control to best ensure the safety of all Floridians and visitors.”

As an international hub of tourism and trade, new mosquito species can arrive in Florida via our ports or highways.

And early detection is key because once a species arrives in Florida, it could eventually feel at home in all parts of our state.

For example, a new invasive species was found in the United States for the first time in 2018 by University of Florida mosquito biologist Dr. Lawrence Reeves.

The species, called Culex lactator, has now been identified in Collier and Lee counties by mosquito control scientists in those southwest Florida counties.

While scientists are still studying this mosquito and don’t believe it is anything more than a nuisance, the spread of this species shows how quickly more dangerous mosquitoes can come to Florida and spread statewide.

Another species that was identified by Dr. Reeves in 2019 in south Florida may pose more of a threat.

The invasive Aedes scapularis is of greatest concern due to the diseases it is capable of transmitting to people (i.e., yellow fever, lymphatic filariasis, and Venezuelan Equine Encephalitis). Originally detected in the Florida Keys in 1945, the Aedes scapularis was absent from the state for 75 years.

The species has now become well-established in south Florida and will continue to move north.

According to a March 2023 Journal of Medical Entomology article, the identification of these “new” mosquitoes is adding to a trend in which mosquito species previously found only in the tropics appear to be establishing in Florida.

The arrival of non-native mosquito species presents the possibility to spread mosquito-borne disease, including Zika, West Nile virus, Chikungunya and Dengue fever.
DRONES NOW CHASE MOSQUITOES WHERE HUMANS CAN’T

Making the job more challenging is the simple fact that most mosquitoes grow and multiply in areas humans cannot comfortably or safely access, such as marshes, wetlands and swamps - all plentiful in Florida.

More mosquito control programs are turning to drones to find and treat breeding grounds that would otherwise be inaccessible.

“Just as more species enter our state, we deploy more high-tech tools to control them,” said Fisher-Grainger. “Drones have joined trucks, planes and helicopters as ways to set traps and destroy mosquito larvae before they can pose a threat.”

Thankfully, Florida’s more than 20 million residents and millions of visitors have robust defenders with hundreds of dedicated public servants at 15 independent Mosquito Control Districts and 42 county or municipal programs.

"The health and well-being of every Floridian, visitor and business is at the heart of what we do each and every day,” said Richard Weaver, President-elect of the Florida Mosquito Control Association and Business Manager of the Anastasia Mosquito Control District. “Our teams use cutting-edge technology and scientific tools to help keep our state’s families and businesses safe and prosperous."

Each Floridian can help control mosquitoes with just a few steps. The University of Florida has information on how to identify potential breeding sites and how best to eradicate the mosquitoes.

The Florida Mosquito Control Association is celebrating its 100th anniversary of protecting the state’s residents, businesses, and visitors.

For more information, please visit the Florida Mosquito Control Association by clicking here.

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