

Dear resident,

For the last 60 years, the Florida Keys Mosquito Control District (FKMCD) has been using the best available resources to fight the *Aedes aegypti* mosquito. This non-native species lives in and around our homes and is a threat to our health and comfort.

As the Director of FKMCD, I am always looking for more effective ways to keep our mosquito population down to an acceptable level. The most promising solution is the technology developed by Oxitec.

Oxitec's solution is based on using genetically engineered *Aedes aegypti* mosquitoes. The males, which cannot bite or transmit disease, are released to mate with wild females. Few of their offspring survive, which reduces the infestation in the next generation. After multiple releases, the local mosquito population is reduced.

This solution has already been tested in the Cayman Islands and in Brazil with successful reductions of the *Aedes aegypti* populations by over 90% in the study areas. Based on these results, FKMCD has agreed to work with Oxitec on a similar project here in the Florida Keys.

In the attached flyer, you will find more information on this project and how the solution works.

I believe that this solution will bring great benefits for the residents and visitors of the Florida Keys. We look forward to your support and collaboration during this important study.

Thank you.



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Michael S. Doyle **FKMCD** Executive Director questions@keysmosquito.org

### Florida Keys Project

Working together on a new solution to help fight disease-carrying mosquitoes





The Florida Keys Mosquito Control District **(FKMCD)** has been working hard to reduce the disease-carrying *Aedes aegypti* mosquito pest, and is looking for new tools to use in the war against mosquitoes.

The current control methods kill mosquitoes by treating their breeding and egg-laying areas with insecticides, but there are many sites that can't be reached.

96%

94%



Oxitec scientists have engineered a strain of the *Aedes aegypti* mosquito.

Oxitec males are released and mate with wild females and the offspring die. Successive releases are aimed at reducing the local *Aedes aegypti* population. This is a new tool in the fight against mosquitoes. It has been shown to significantly reduce *Aedes aegypti* mosquitoes in trials in other countries.

Oxitec mosquitoes have been released in several countries. Field trials have been completed in the Cayman Islands and Brazil and there's currently a trial in Panama.

A single female can produce over **500 eggs** in her lifetime.

Females **blood-feed** to get nutrients to produce eggs. Males do not bite or transmit disease

bedr

92%

Mosquito

suppression

Man

99%

### Wild mosquito problem

## Aedes aegypti mosquitoes are a **non-native** species in the USA.

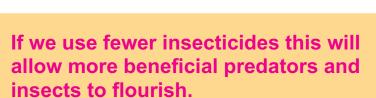
They are more than just a nuisance as they can spread serious diseases such as dengue fever and chikungunya.



The Food and Drug Administration Center for Veterinary Medicine (FDA-CVM) is working with other agencies including the Centers for Disease Control and Prevention (CDC) and Environmental Protection Agency (EPA) for federal regulation of this project. There will be no releases until the FDA has completed an evaluation.

# Oxitec and FKMCD are working together to inform the community about the mosquito releases and to answer questions.

If FDA agrees that releases can proceed following their review, we anticipate starting in 2015. Oxitec male mosquitoes would be released up to 3 times a week. Project results will be made available to the public.



**Key West** 

This approach is targeted to the Aedes aegypti mosquitoes which can spread disease as the Oxitec males only produce offspring with their own species.

Both the released mosquitoes and their offspring will die – they do not stay in the environment.

## FAQ

Q1

Will I notice the mosquito releases?

You might notice a truck driving around to release the Oxitec male mosquitoes. When they are released they disperse quickly.



What would happen if my pet or I get bitten?

Male mosquitoes don't bite. Every effort is made to release only males. In previous Oxitec trials 0.03% of the mosquitoes released were female, but there's no difference between the bite of an Oxitec female and a wild one. You and your pet would have the same response to any bite. FDA-CVM will include this in their evaluation of the release. Q3 A

Can the Oxitec genes spread in the environment?

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Island

No, the male mosquitoes only produce offspring with their own species, and both the males and their offspring die.

### For more information





floridatrial@oxitec.com





#### keysmosquito.org questions@keysmosquito.org

Tel: (305) 292-7190