



FKMCD-Oxitec Public Educational Webinar #12

Community Partnerships: The Role Communities Play in Our
Pilot Project

31 March 2021



OXITEC

Introductions – Panelists With You Today



Andrea Leal
Executive Director
FKMCD



Greg Daniels
Owner
Cudjoe Bee



George Fernandez
Co-Owner & Chief Operating Officer
The Key West Butterfly & Nature Conservatory



Rajeev
Vaidyanathan
Director of U.S.
Operations
Oxitec



Kevin Gorman
Chief
Development
Officer
Oxitec



Meredith Fensom
Head of Public
Affairs
Oxitec



FKMCD and Oxitec are hosting a series of public educational webinars to share information with residents of the Florida Keys and provide forums to answer questions.

- Webinars are open to everyone.
- Webinars are recorded and made available for everyone after the event.
- All questions relating to the webinar topic(s) will be answered (some in batches if questions are similar).
- If time runs out, we will accept questions in writing via florida@oxitec.com.
- Questions and answers will be published in writing after the event with external or related online resources/references.

Upcoming:

Our webinar series continues in April, May & June!



Welcome to Webinar #12!

Today's Agenda:

- Brief Presentation
- Roundtable Discussion
- Your Questions Answered

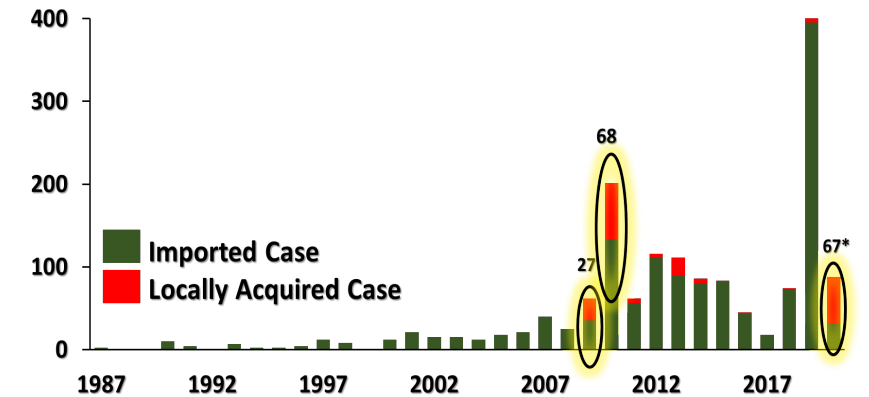
Documentation, resources, references, and other information are available at keysmosquitoproject.com

Why now, Why the Florida Keys? – Health and the Environment



- Dengue is an ongoing challenge with over 65 confirmed locally-acquired cases in Monroe County in 2020
- The threat of other diseases such as Zika, chikungunya and yellow fever persists
- Insecticide resistance in local mosquitoes
- Need more tools in our toolbox

Dengue Cases in Florida Since 1987



*As of 10/27/2020



- Environmental impact is a major consideration, including for human health
- Using species-specific tools minimizes harmful impacts
- Nine national and state agencies concluded Oxitec male mosquitoes pose no risk to human or environmental health

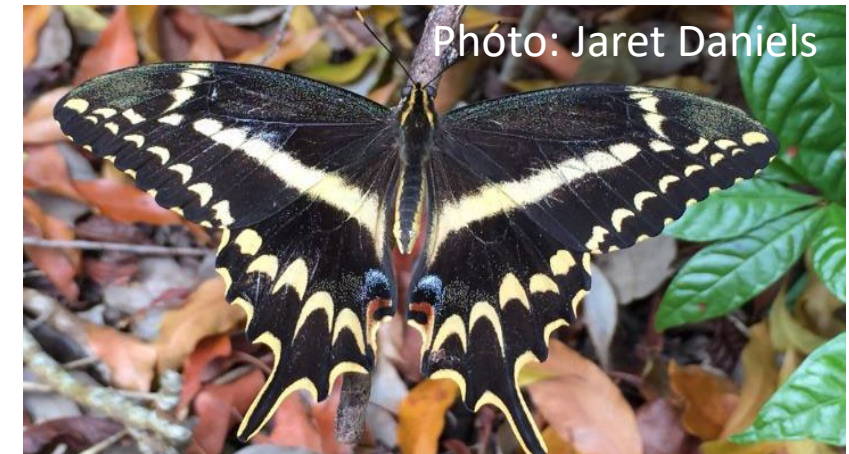
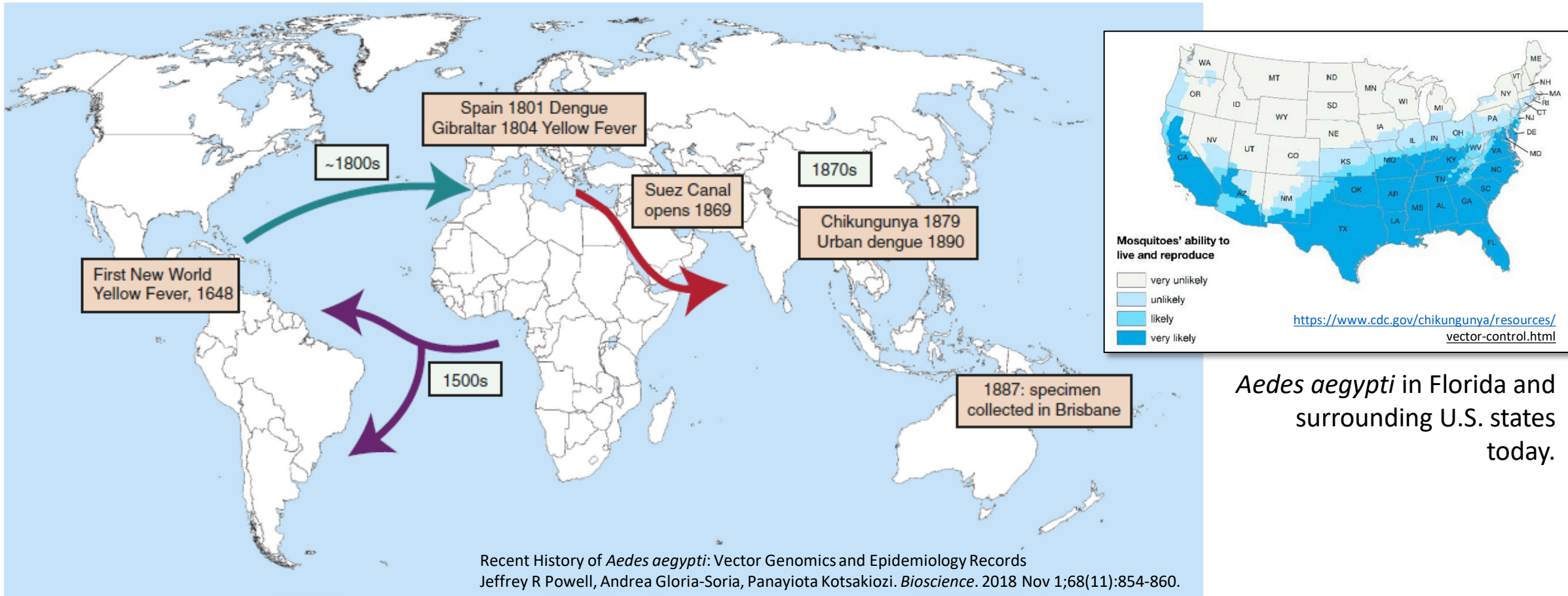


Photo: Jaret Daniels

Endangered Schaus' swallowtail butterfly lives near the recent dengue outbreak

The *Aedes aegypti* Mosquito: an Invasive Species in Florida

***Aedes aegypti* is not native to the Americas.** It was most likely transported from Africa by Portuguese ships sometime in the 16th century, **bringing viral diseases with it.**



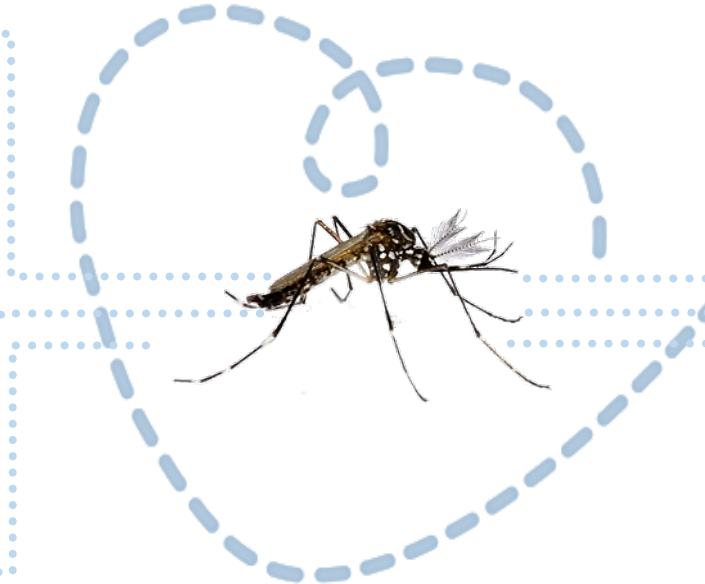
Aedes aegypti in Florida and surrounding U.S. states today.

OXITEC'S *Aedes Aegypti*

✓ TARGETED
SUPPRESSION

✓ SAFE, NON-
TOXIC, NON-
ALLERGENIC

✓ PROVEN
EFFECTIVENESS



MALE-ONLY
RELEASES
(male mosquitoes
do not bite)

TRACEABLE IN
THE FIELD

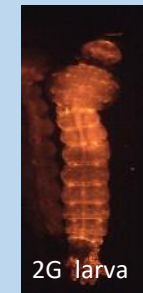
SELF-LIMITING IN
THE ENVIRONMENT



- No females produced
- Low-tech, egg-based devices enabled



- Easy track-and-trace in the field
- Non-toxic, non-allergenic

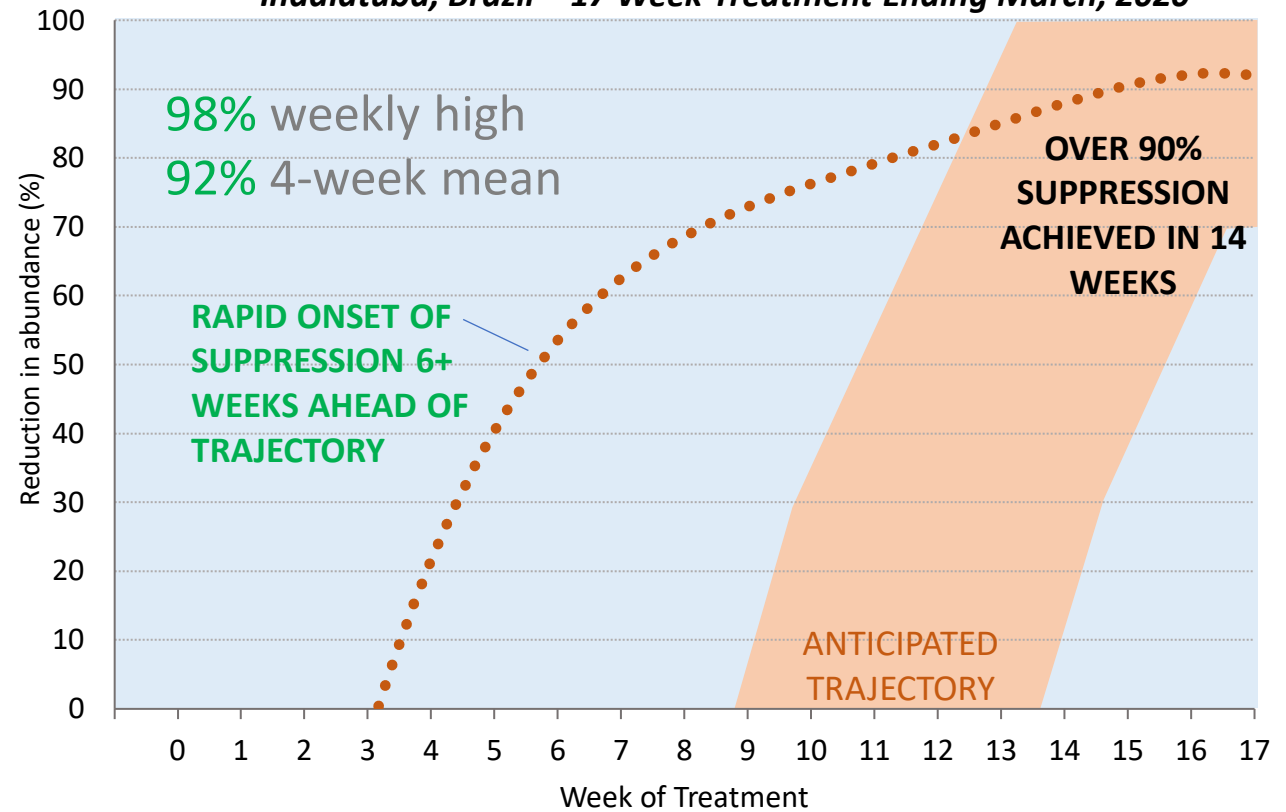


Results:

- ✓ Safe – no unintended impacts
- ✓ Males only – no female release
- ✓ Fully self-limiting – no persistence
- ✓ Significant suppression (see graph)
- ✓ 90% reduction in operations
- ✓ 94%+ public acceptance



Pilot Project #1 for Mini-Capsule Product – 1,000 Person Area
Indaiatuba, Brazil – 17 Week Treatment Ending March, 2020



6
Weeks

Faster to Suppression
than OX513A

90%

More Efficient
Production &
Deployment



No.

Oxitec mosquitoes do not bite.

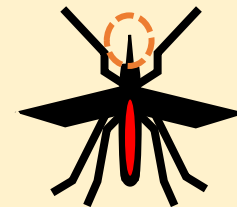
Only female mosquitoes bite

There will be no Oxitec female mosquitoes

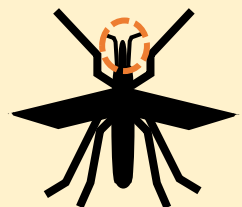
Oxitec male mosquitoes are safe and non-toxic

MALE MOSQUITOES CANNOT BITE

FEMALE:
Biting
mouthparts

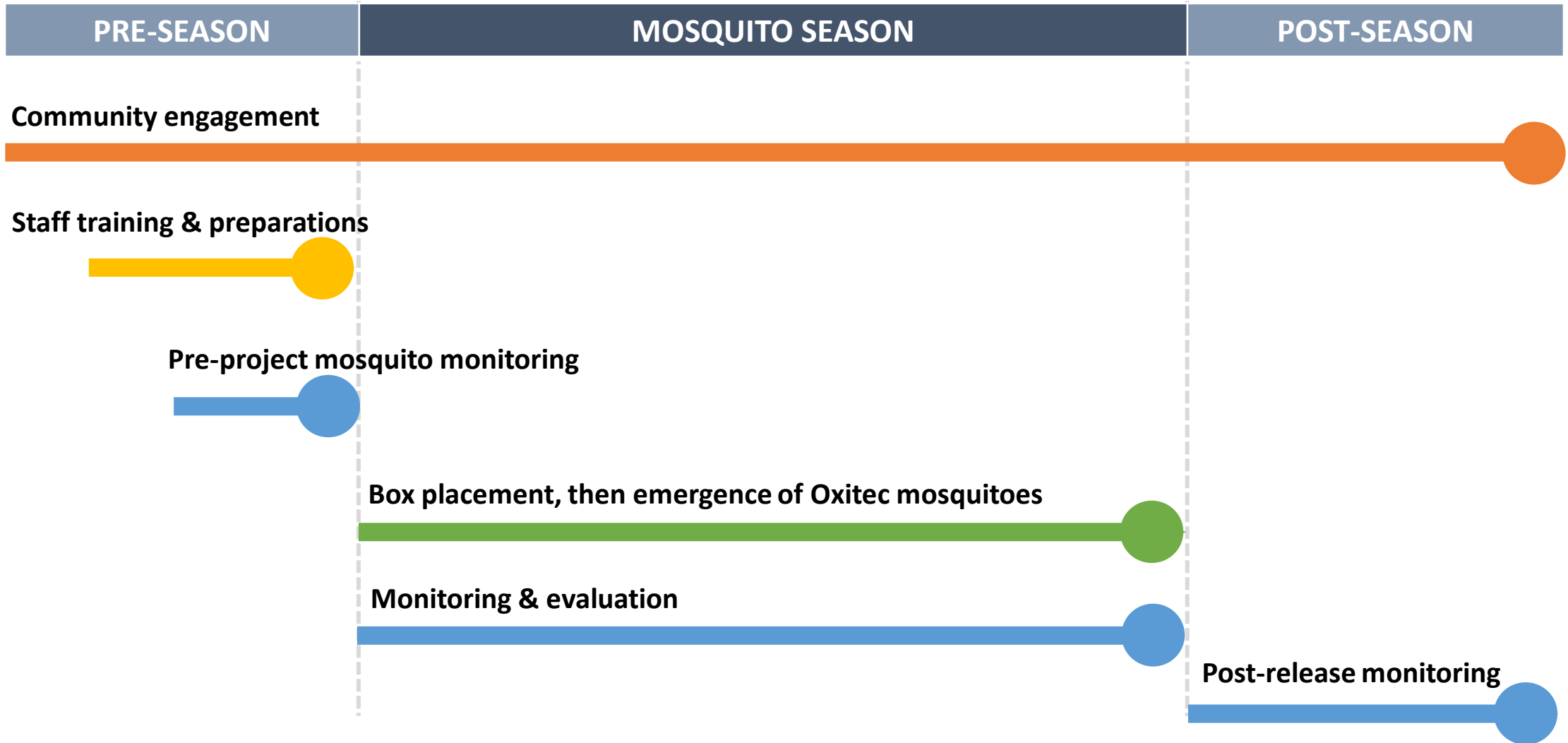


MALE:
Non-biting
mouthparts



The mouthparts of males mean they are physically unable to bite people

Florida Keys Pilot Project Timeline - 2021



Recent Community Engagement



FKMCD - #Oxitec Public Educational Webinar #11
55 views • 2 weeks ago



FKMCD - #Oxitec Public Educational Webinar #10:...
80 views • 1 month ago



FKMCD - #Oxitec Public Educational Webinar #9:...
85 views • 3 months ago



FKMCD - #Oxitec Public Educational Webinar #8:...
118 views • 4 months ago



Virtual Tour: Inside #Oxitec Labs Worldwide
585 views • 4 months ago



FKMCD - #Oxitec Public Educational Webinar #7:...
77 views • 4 months ago



Beginning in spring 2021, the Florida Keys Mosquito Control District (FKMCD) and Oxitec will evaluate the effectiveness of Oxitec mosquitoes to control the invasive, disease-spreading *Aedes aegypti* mosquito in the Florida Keys.

- Oxitec mosquitoes are safe and self-limiting.
- Like all male mosquitoes, Oxitec's male mosquitoes do not bite. Female mosquitoes bite and spread disease.
- The *Aedes aegypti* mosquito is the known vector of diseases including Dengue and Zika and becoming more resistant to traditional pesticides.

Please visit: keysmoquitoproject.com for additional resources.

PLEASE TURN OVER TO LEARN MORE! →





JOIN THE PROJECT!



SPEAKERS BUREAU

*What is your name?

How would you like to be involved?*

Please send me updates

I would like to host a box

I would like to host a trap

I would like to volunteer

*Email address

- ✓ Request a box
- ✓ Request a trap
- ✓ Sign up for updates
- ✓ Volunteer as a Project Ambassador

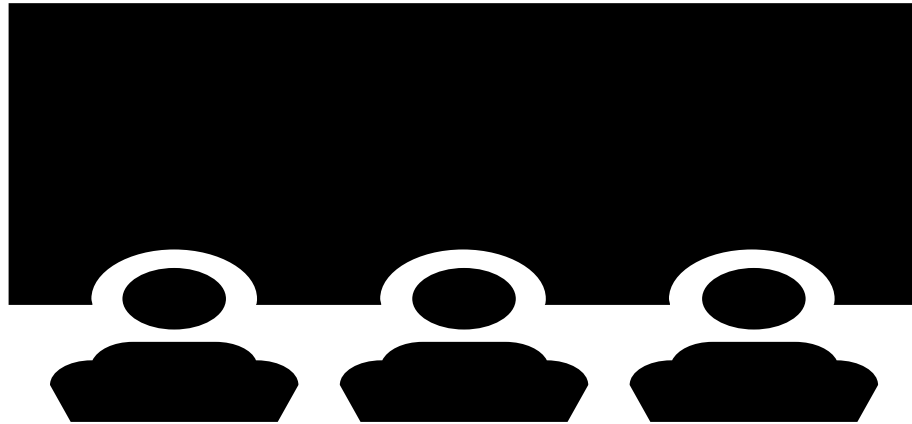


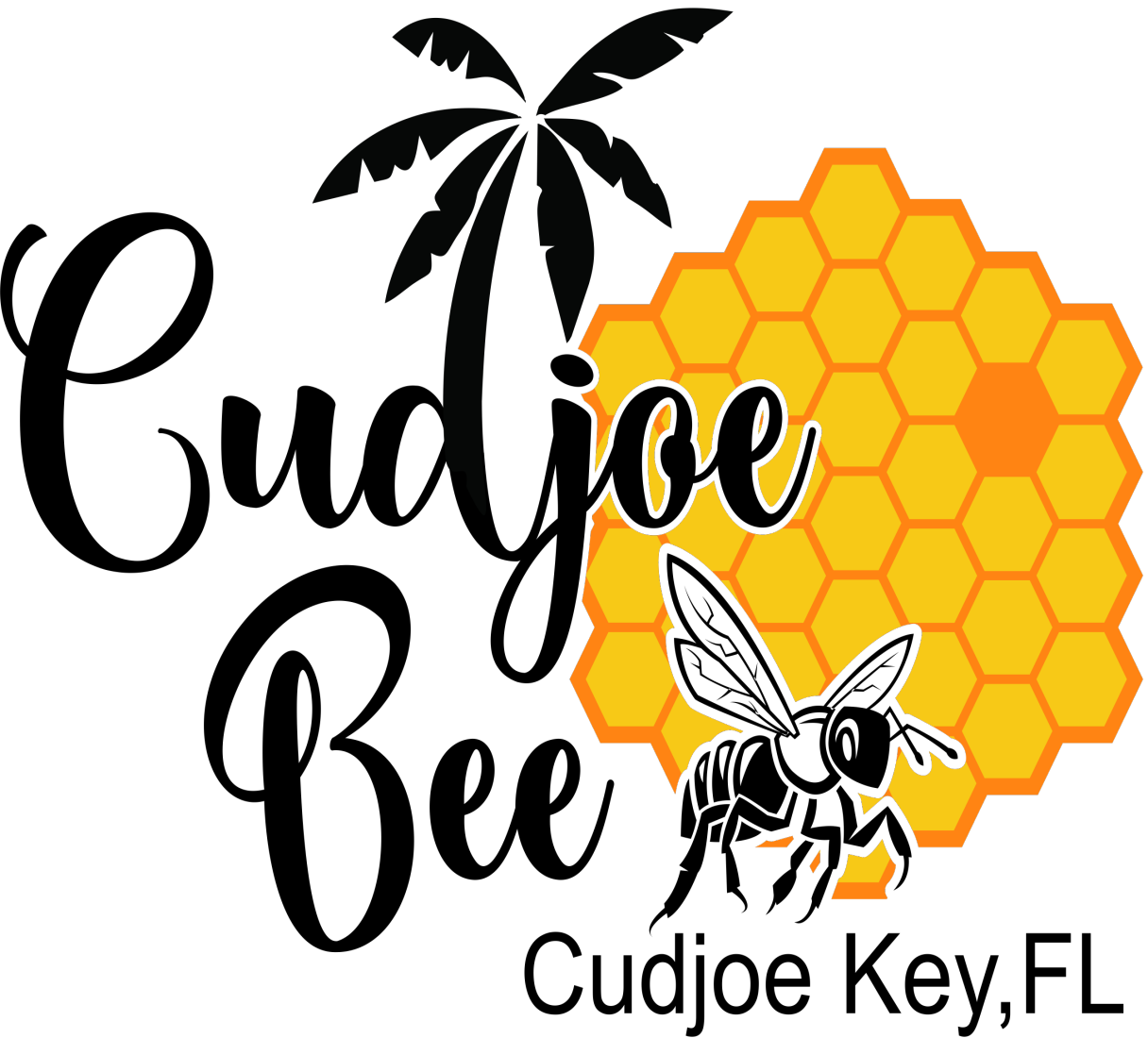
Beneficial Insects: Barometers for our Environment



- Oxitec's mosquitoes are a biological mating-based tool - there are no chemicals
 - Not prone to resistance development
 - Can be integrated with other tools, maintaining effectiveness through a multi-faceted approach







Any and all questions on this evening's topics are welcome!

(If we run out of time tonight, email florida@oxitec.com and we will attempt to answer your question if it isn't included in the growing FAQ or post-event summary we publish online at oxitec.com/florida and keysmosquitoproject.com)