USDA National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

Southern IPM Center

GRANT IMPACT STATEMENT

Mosquito BEACONS: Biodiversity Enhancement & Control of Non-native Species (2024)

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Invasive Mosquitoes

continue to spread throughout the southern U.S., creating surveillance and management challenges.

Surveillance

Accurate surveillance and species identification are essential for effective vector control.

Source Reduction

Many invasive mosquitoes breed in small water-holding containers, making public participation critical.

Many invasive mosquitoes breed in small water-holding containers. Mosquito BEACONS uses oviposition traps to support surveillance and early detection. Photo: Mosquito BEACONS Workshop, University of Florida.

BEACONS

The Mosquito BEACONS Working Group unites regional partners to strengthen invasive mosquito surveillance, control, and awareness.
Photo: Mosquito BEACONS Logo, University of Florida.

Mosquito life-stage collections teach mosquito biology, surveillance, and source reduction. Youth training increased average knowledge scores from 29.3% to 83.7% after training, Photo: Mosquito BEACONS Workshop, University of Florida.

WHY THIS PROJECT WAS NEEDED

Education

Public knowledge of mosquito biology helps reduce breeding sites and mosquito borne disease risks.

Surveillance

Inadequate surveillance can allow invasive mosquito species to spread before detection.

Reduction

Removing standing water helps reduce mosquito breeding sites.

Training

Identification, surveillance, and data analysis are important skills.

Collaboration

Researchers, practitioners, extension, and more collaborate to improve mosquito management.

Mosquito BEACONS Working Group **Shining light on invasive and non-native mosquito species.**

PROJECT IMPACT

3	15-20%	209	380	$35,000
Annual Training Workshops	Increase in Skills	Participants Trained	Stakeholders Reached	Additional Funding

Lasting Impact

- **Strengthened collaboration and expanded partnership for mosquito surveillance and management.**
- **Increased youth knowledge by 54.4% through education programs on source reduction, disease prevention, etc.**
- **Supported 2 graduate students in developing surveillance dashboards and data resources.**
- **Developed publications and educational resources supporting mosquito management and education.**

BEACONS workshops bring together mosquito control, public health, extension, and research professionals to strengthen invasive mosquito surveillance and management capacity across the southern United States.
Photo: Project Team

Addressing A Need

Early detection depends on trained public health and mosquito control professionals.

Product

Hands-on training workshops build identification, surveillance, and data analysis skills to detect invasive species before the populations become established.

Mosquito BEACONS workshop held in Atlanta, GA in partnership with University of Florida, University of Georgia, and The Centers for Disease Control and Prevention. Photo: Project Team

Continue Exploring Resources

THIS IS IPM RESOURCES

Scan to explore IPM resources and connect with the IPM community. This Is IPM.

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