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Author: Ms. Kristin Wegner
The GLOBE Program, United States

Ms. Sara Herrin
The GLOBE Program, United States
Ms. Lyn Wigbels
The GLOBE Program, United States
Ms. Kia
U.S. Department of State, United States

THE GLOBE ZIKA EDUCATION AND PREVENTION PROJECT

Abstract

For almost 25 years, the Global Learning and Observations to Benefit the Environment (GLOBE) Program (globe.gov) has been a leader as an international science and education program that connects a network of students, teachers and scientists to better understand, sustain and improve Earth's environment at local, regional and global scales. By engaging students in hands-on learning of Earth system science, GLOBE is an innovative way for teachers to get students excited about scientific discovery locally and globally. GLOBE scientific protocols are developed by scientists, tested by teachers and executed by students. Since the launch of GLOBE in 1995, 1.5 million students in more than 33,000 schools in over 120 countries have participated in GLOBE. In 2016, GLOBE expanded to include non-school based citizen scientists while upholding its commitment to formal science education. The GLOBE database has more than 162 million measurements, creating standardized, research-quality data sets that can be used in support of student and professional scientific research.

Through the support of the U.S. Department of State, the GLOBE Program is leading the GLOBE Zika Education and Prevention Project. The project will enlist thousands of students, teachers, and community leaders to collect data on mosquitoes for a global mapping project. Between May and June 2018, GLOBE trained over 110 Country Coordinators and Master Trainers in more than 65 countries on the Mosquito Habitat Mapper App and on how to engage their countries in this project through national and local workshops. To date, 27 countries have conducted 94 Country Mosquito Trainings with more than 2,400 participants. Over 35,000 data points have been submitted to the GLOBE database. Global data collection on this scale will provide the information needed to help international scientists and public health officials predict new outbreaks, better control mosquitoes, and reduce mosquito-borne infectious disease.

During the presentation, we will demonstrate how GLOBE students investigate the environment through GLOBE. We will engage the audience in using the GLOBE Observer Mosquito Habitat Mapper App to demonstrate how data are collected and present a related learning activity that aids students in the understanding of important scientific concepts, data collection methodologies, and the interpretation of data. We will demonstrate how students use the GLOBE website to visualize and analyze data. In addition, we will highlight GLOBE partnerships with Earth Science satellite missions and the Mission Mosquito Campaign that will gather data from project participants and beyond.