

Edward S. Horvath
Owner/Vector Ecologist
Three Rivers Mosquito and Vector Control
Klamath Falls, Oregon

Americans are lucky! We live in a country, provided with reliable electricity, running indoor water and air conditioning. Access to some of the best healthcare, with no fear of the generator providing the sole electricity, failing during surgery. We rarely think of mosquito-borne disease, until summer. Even then, we have issues like West Nile Virus, Encephalitis, or for those in the Southeast, Dengue has been popping up on the radar as well as Zika. For us, Malaria is a disease of the past. Most Americans are lucky to even remember when Malaria was a problem in the United States. In US history, there were over one million cases of Malaria during the Civil War alone. By 1947, there were approximately 15,000 cases and by 1951, Malaria declared eradicated in the United States.

This is not the same for the people of Nigeria. There are more cases and Malaria related deaths in Nigeria than any other country. Malaria is a risk to 97% of Nigerians. Over 100 million Malaria cases and more than 300,000 Malaria related deaths each year.

In 2016, Three Rivers Mosquito and Vector Control, a privately owned, Oregon based company, entered into an International Agreement with the Centre for Malaria Research & Phytotherapy and the University of Port Harcourt's Teaching Hospital, in Nigeria, to create an efficient and effective mosquito/Malaria control program. The first phase was to create educational outreach programs and establish vector control strategy workshops.

In April 2019, I started by teaching 75 Professors, Doctors, Public Health Professionals, States and National Malaria Elimination Program Staff, Entomologists and University students, the basics of a modern mosquito abatement and Malaria Control program. This was great timing, as the workshop and lectures were surrounding World Malaria Day (April 25th). We packed a lot into long days of lectures, discussions and field exercises. As we all know, from any aspect of vector or pest control, the foundations of any successful control project in implementing a complete IPM strategy, including public education as the foundation. This was the first most of them learned of IPM, as this is not what has been done in Nigeria in the past. This group came together to evaluate the current mosquito/Malaria control practices and put together ideas and strategies, utilizing IPM, to create a mind-set for Malaria eradication in Nigeria and Africa.



The Staff of the States and National Malaria Elimination Programs started the training off very defensive of their current strategies. They held their ground, stating that their current plan (using bed nets and indoor residual treatments) is on track, to have Malaria elimination by the end of 2020. As the class discussed the timeline, laughter broke out from the otherwise very professional group. Nobody in the room could even imagine that the States and National agencies were so delusional, to think that the increasing numbers of Malaria cases and deaths in Nigeria was any indication of Malaria eradication.

At the end of the workshop series, I was honored to be the first of two lecturers for the 2nd Annual Professor SJS Cookey Legacy Lecture and commemoration of 2019 World Malaria Day Event, with an audience of more than 450 students, staff and guests. When I asked the room, "who has ever had Malaria", laughter arose. Rephrasing the question, "who has never had Malaria," only one person raised their hand (and that was not me). Three hours in this auditorium, no air conditioning, 450+ people and 88°F outside; the indoor temperature exceeded 115°F, made this Oregonian a bit overheated.





I was surprised when presented a plaque as a token of the University's appreciation for my program. After the lecture, a group of Professors, Doctors and University VIP invited me to a gathering for lunch and drinks. So much was going on for the week leading up to this; I felt a huge load taken off my shoulders and felt others taking on some of the responsibility. Our next steps will be to increase the educational portions with workshops and train the trainer sessions offered in addition to seeking support and funding from State, National and International sources.

It was great to hear the discussion amongst the people that they felt hopeful, believing Malaria can, one day be eliminated in Nigeria and their children's children could potential grow up not remembering how it was living with Malaria.