

## Project Update: July 2015

Mambo vipi from Kenya!

I am learning that the rainy season in Kisumu is a bit odd these days. Although July has historically been the wettest month of the year, we have gone 15 days without a shower. As a hydrologist, I am very interested in seeing how the water in Impala Sanctuary moves during saturated events. This will be particularly important for the implementations of long-term solutions to waste disposal in and around the park. So, I will continue to carry my rain jacket and hope for a mid-day shower.



The good news is that with clear skies I have been able to move easily about the park over the past two weeks. I spent a day with the animal keepers and we followed the breeding herd of Sitatunga antelope (15 females, one male). They are secretive creatures by nature, so we spent most of the day sheltered by papyrus where they like to rest in the shade. We confirmed that the antelope do not drink from Lake Victoria. Instead, their main water sources are further up on the main land in the path of the contaminated water. One of the sites we blocked off immediately after confirming the contamination in June. The other sites were less obvious to us and we have since made a barrier and created a watering hole. In the next few weeks we will see if they use it and how they have altered their behavior accordingly. The KWS research scientist, senior warden, and park warden have been diligently learning the instrumentation, calibration process, and how to interpret the results that we are finding in the field. We have been spending Tuesday and Thursday mornings

collecting the samples together and then working on the analysis. On Wednesday and Fridays I spend time with them individually to input data into excel and to interpret the results we are finding. During the upcoming week I plan to just shadow them in the field as they sample and use the equipment. I am hopeful that they will not need to rely on my expertise and can consult each other as questions arise.

A highlight from the past week was working with the youth from the Wildlife Clubs of Kenya. I hosted a three-hour workshop for 15 students (ages 10-17) that focused on water quality analysis. I gave a short power point presentation at Impala Sanctuary, but my arching goal was to get the students in the field to serendipitously have discussions on groundwater/surface water interactions. In teams of 5 I sent them on a scavenger hunt within the park with GPS units to find specific features (i.e. a well, a natural spring, an example of polluted water, animals drinking, Lake Victoria). We had a ball! I also spent a Monday afternoon lecturing to a group of 15 college students who have intern placement positions in conservation management at Impala Sanctuary. I benefitted from hearing about the ideas they had for potential solutions to the waste water pollution that is harming the Sitatunga antelope.