

## Project Update: October 2017

I received the funds for my grant on May 16, 2017 and commenced with my project shortly after. My field data collection was conducted within a 7-week period from May 19th to July 4th 2017. I had a wonderful field crew consisting of research assistants, local contacts and fishers. My first sampling trip was a reconnaissance survey where I selected a site on the Pra River at Twifo-Praso in the Central Region. On this trip, I established contact with a local fisher who confirmed the presence of *O. niloticus* in the river using a photograph and a live specimen. Subsequently, I conducted reconnaissance surveys and sampled one site on the Ankobra River (Sanwoma-Western Region), two sites on the Tano River (Asuhyea, Brong Ahafo Region and Elubo, Western Region), one site on the Juen lagoon (Jewhi Wharf, Half-Assini, Western Region), and three sites on the Black Volta River (Kantu, Talewona and Lawra, Upper West Region). Within the sampling period, I also obtained farmed *O. niloticus* from five hatcheries and farms operating on the Volta Lake in Ghana. Finally, I obtained wild *O. niloticus* samples from two sites on the main Volta River, downstream of the fish farms, which I designated as Notreku Site 1 and Notreku Site 2. Four hundred and five individuals of *O. niloticus*, representing both wild and farmed fish, were sampled for this study and their fin-clips obtained. The fin-clips were dried, stored and transported to Virginia Tech on July 6th 2017 for genetic analysis. I commenced with DNA extraction immediately upon arrival in Virginia Tech. The DNA for more than 350 individuals have been extracted and sequencing is currently underway. Microsatellites DNA analysis will begin as soon as the sequencing is complete.



Left: Gifty Anane-Taabeah and crew sampling on the Juen Lagoon in Half Assini, Western Region. Centre: A fisher removing overnight sample of *O. niloticus* stored in a basket in the Black Volta River, Kantu, Upper West Region. Right: Gifty extracting DNA at Virginia Tech, Virginia, USA. Photos by Gifty Anane-Taabeah.





Left: Wild *O. niloticus* sampled from the Black Volta River, Kantu, Upper West Region.  
Right: Farmed *O. niloticus* from a commercial farm on the Volta Lake, Asutwara, Eastern Region.