

Project Update: December 2016

My first experiment, capture-recapture of African giant pouched rats (*Cricetomys* sp.) in Ngel Nyaki forest, encountered a slight problem with the bright phase of the moon, but after waiting for about a week I was able to trap 38 individuals in the next session and at the end of that experiment I had a total of 93 capture events of which 52 of the captures were unique individuals. With this sufficient sample size, I was able to carry out a spatially explicit capture-recapture (SECR) analyses. The best model (out of over 60 models) estimated the density of the rats to be 5.97 rats per ha and the population to be 4474 rats within the 7.5 km² of the largest continuous forest in Ngel Nyaki. My results were presented at a conference (ATBC 2016) and in a seminar (APLORI, 2016).



Left: Biplang holding a trapped African giant pouched rat (*Cricetomys* sp.) being marked. Photo by Godson Dangu. Right: Biplang Yadok presenting a seminar on African giant pouched rats (*Cricetomys* sp.) in Ngel Nyaki at the AP Leventis Ornithological Research Institut, Laminga, Nigeria 2016: Photo by Elisha Barde.



Left: African giant pouched (*Cricetomys* sp.). Photo by Biplang Yadok. Right: First and last slides of the ATBC talk presented in France 2016.

My second experiment, seed removal by African giant pouched rats (*Cricetomys* sp.) was successful with only *Carapa oreophila* seeds. This is because advisors thought it wise to look at the effect of season on seed predation and dispersal using artificial seeds. More so, I already have two years seed removal data using *Anthonotha noldae*, *Beilschmedia mannii*,

Santiria trimera, *Milletia conruai* and *Carapa oreophila* which is presently being analysed and reported in a manuscript for publication. However, because *Carapa oreophila* has a wide range of sizes (up to 20 fold), I used it for a seed size experiment in August 2016.



Left: African giant pouched rat (*Cricetomys* sp.) carrying *Carapa oreophila* seeds placed in experimental plot: Bushnell camera trap. Right: *Carapa oreophila* seeds placed in experimental plot.

I carried out an awareness creation on the seed dispersal potential of African giant pouched rats (*Cricetomys* sp.) and the need to conserve Ngel Nyaki forest. This activity was carried out in November 2016 in order to meet students while on session in their respective schools. This activity was carried out in Maisamari, Yelwa and Dujire primary schools as well as Maisamari and Yelwa secondary schools. Posters and pamphlets were distributed to staff and students during our outreach. In addition, we briefly explained the information on our posters to individuals who responded to the questions on our questionnaires. We administered questionnaires about *Cricetomys* hunting in Yelwa village and in Dujire villages to 100 and 60 respondents respectively; these villages are the closest communities surrounding Ngel Nyaki forest. All respondents were given free posters.



Left: Biplang Yadok and his team giving a short conservation talk at Yelwa primary school. Photo by Idriss Musa Sarki. Right: Biplang Yadok administering a questionnaire to a resident of Yelwa village. Photo by Idriss Musa Sarki



Left: Biplang Yadok giving a short awareness on African giant pouched rat (*Cricetomys* sp.) and the need for Ngel Nyaki conservation to a resident of Yelwa village. Photo by Idriss Musa Sarki

Right: Biplang Yadok and his team giving a short conservation talk at Maisamari primary school. Photo by Idriss Musa Sarki



Biplang Yadok and his team giving a short conservation talk at Government day secondary school, Maisamari. Photo by Idriss Musa Sarki