

Project Update: August 2020

Activities for assessment of habitat quality in areas formerly occupied by elephants in Nyungwe National Park, Rwanda are going on well. Data were collected from various research sites in the field for 2 months in June and July 2020. The data collected included plant species, DBH (diameter at breast height), habitat type, landform, elevation, forest canopy structure and geographic coordinates.

Currently, we have completed data collection from different research sites in Nyungwe National Park. These sites include Kamiranzovu swamp (Uwinzira), Uwinka, Bigugu and Mubuga (Gasare). From our observations during data collection on the field, these research sites are different from each other in different aspects such as elevation, plants species forest structure, landform and habitat type.

Kamiranzovu

Kamiranzovu is the biggest swamp found in Nyungwe National Park where it covers an area of 13 km². It has a variety of habitat and forest structures which include swamp, short open forest, tall open forest, tall closed forest and moderated steep mountains covered by tall closed forest.

These are areas were used much by elephants for foliage, drinking water as well as to travel when changing location. Some parts of Kamiranzovu habitats are hard to access due to being waterlogged as they retain water which would cause flooding in neighboring areas.

Uwinka

Uwinka is another site where data were collected. This area is dominated by short closed forest, tall closed forest, tall open forest and it was the main route used by elephants while feeding and as transit way. Due to these reasons, elephant poachers used to make pitfall traps along this route of Uwinka mountain chain toward Bigugu and Mubuga to trap elephants and making it hard for elephants to escape out of them.

Today, some marks of these elephant pitfalls traps are still visible on the site.

Bigugu

Bigugu is the highest mountain in Nyungwe national Park and Its highest peak is 2950 m above sea level. During our research activities, data were collected from the skirt and bottom of this giant mountain where elephants used to spend most their time feeding in that mixed forest of bamboo and other plant species.

This location was considered as a stopover for elephants because it was rare to climb Bigugu mountain without being stopped by these forest engineers when enjoying the shade from both trees and mount Bigugu. Plants species in this area are thorny bushes both medium and thick which make it hard to access some places around.

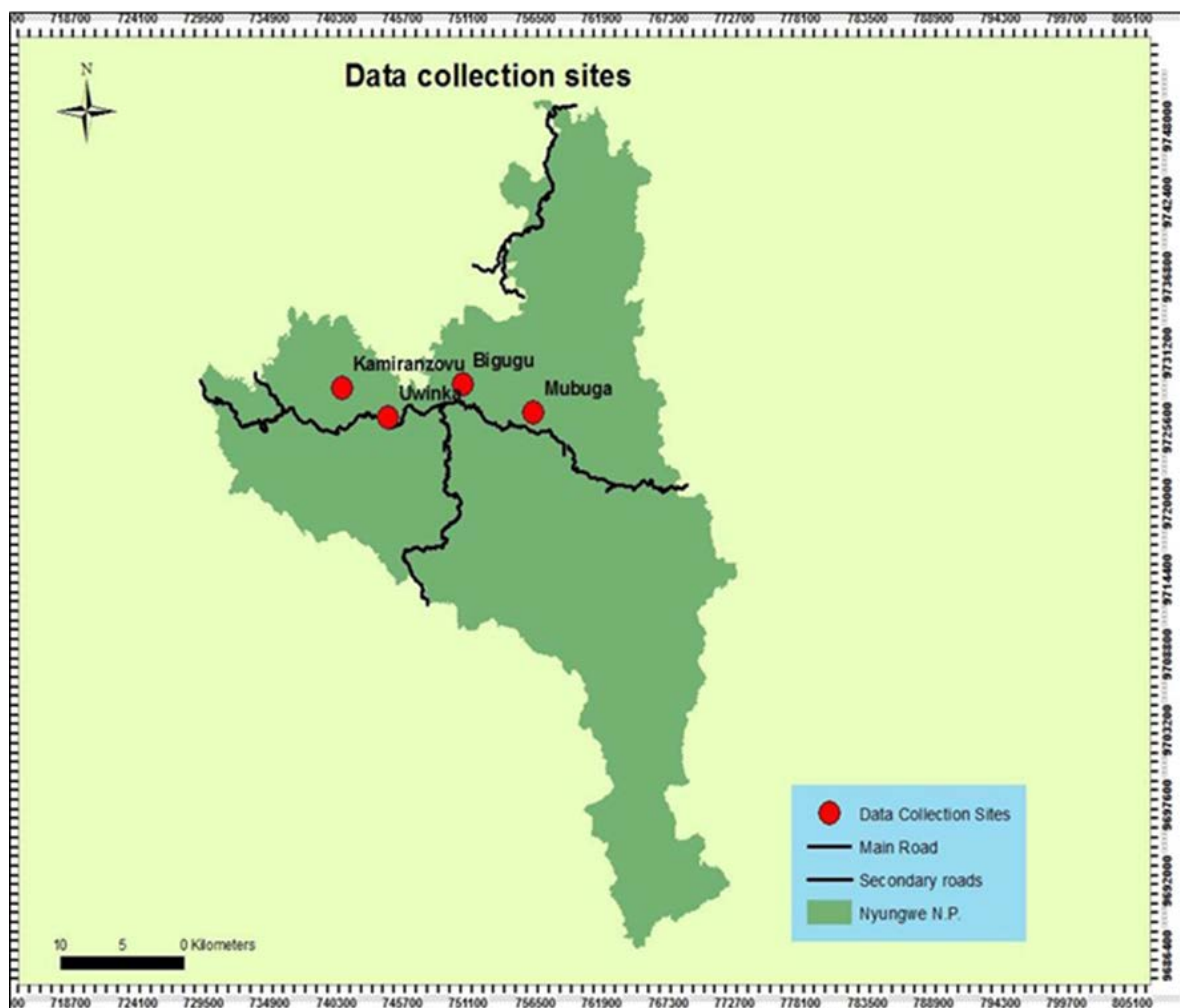
Mubuga (Gasare)

Mubuga is the areas that located on the Congo Nile divide ridge. Even though it is surrounded by some moderate mountains, from afar it looks like Kamiranzovu swamp but a closer view to it shows a flat area covered by some *Juncus*, *Erica johnstonii* and some water bodies but less wet ,which differentiates it from Kamiranzovu. It can be accessed even though it is too thick to penetrate parts.

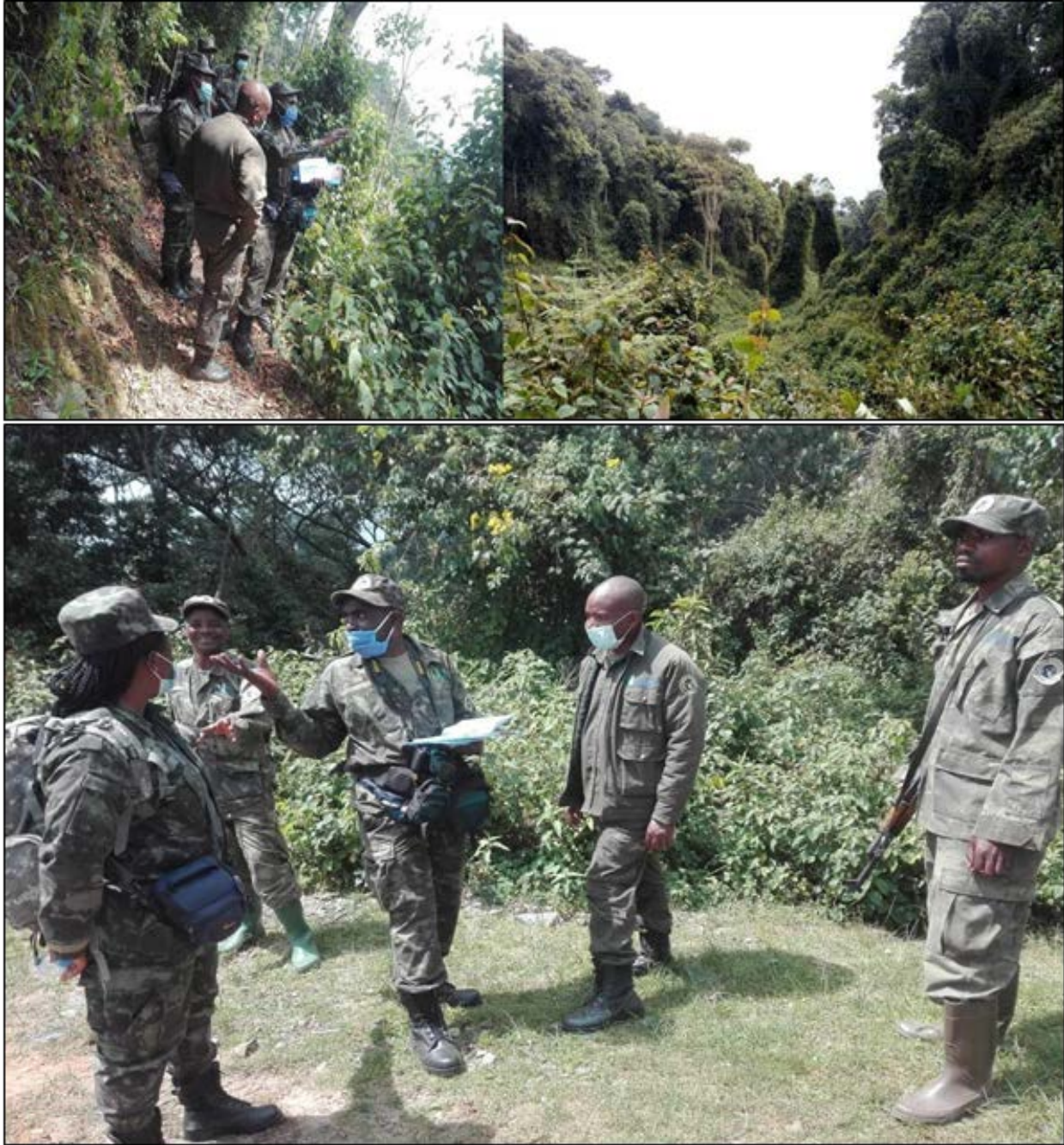
Field Visitors

During data collection, we worked closely with senior staff and different departments of Nyungwe National Park mainly the research and monitoring department. The research and monitoring warden of Nyungwe National Park visited us on the field to see how research activities are being carried out.

The visit of this senior staff from Nyungwe National Park was very important because it showed the value Nyungwe National Park management gives this research, an important tool which they will use for elephant reintroduction planning and implementation as well as help park managers to monitor elephant-habitat interaction and environmental response to this interaction.



Map of data collection sites, Nyungwe National Park. © NIYONSABA Daniel, 2020



Research and monitoring warden of Nyungwe National Park (second from right) during his visit on the field to see how research activities are being carried out. © NIYONSABA Daniel, 2020.



One of Waterbody in Kamiranzovu swamp which was used much by elephants for foliage, drinking water in Nyungwe National Park. © NIYONSABA Daniel, 2020



Uwinka site, the main route used by elephants while feeding and as transit way. © NIYONSABA Daniel, 2020



This location was considered as stop over for elephants where elephants used to spend most their time feeding in that mixt forest of bamboo and other plants species. © NIYONSABA Daniel, 2020



Mubuga, an area that located on the Congo - Nile divide ridge. This place was among favorite places for elephants.