Rufford Small Grant

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Distribution, habitat use and population status of African wild dog in the Tchabal Mbabo mountain range, Adamawa region, Cameroon

Landscape showing the Mayo Riga River in the Tchabal Mbabo mountain range

Second Progress Report

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Figure 1: Survey team in the Tchabal Mbabo mountain range.

Goal: Installation of the camera traps in the forest-savannah mosaic (Tchabal Mbabo mountain range) during the dry season to confirm the presence of African wild dog

During this second field trip, we deployed 20 camera traps for the dry season and for three months of trap nights per camera in the savannah habitats of the Tchabal Mbabo mountain range (TMMR). We also noted the anthropogenic activities present in the study area and characterized the habitats where camera traps were installed to highlight the habitats used by the target species.

Survey design

Camera traps deployment in the Tchabal Mbabo mountains range

We used a similar model of cameras (Digital Hawkray Trail Camera 30MP 2K) (Figure 2) which contained the same quality of SD micro cards 32GB and Lithium Energizer AA batteries.

Figure 2: Camera trap model established in the TMMR .

From 8 to 21 January 2024, we used two systematic grid cell to establish 20 camera traps in the Shrubland savannah and Woodland savannah habitats in the TMMR during the dry season. Each camera station located within a grid cell was georeferenced using a Garmin 64S Global Positioning System (GPS) and was placed at 2 km intervals. These cameras were generally installed on wild prey and livestock trails base on the literature knowledge and the perception of local communities on wild dog obtained during the questionnaire survey conducted on July, 2023. Camera traps were strapped on trees at a height of 30-40 cm above the ground (Figure 3), perpendicular to wild dog targeted location and at a distance of 4-8 m following the protocol from Bruce et al. (2018) adapted for medium to large-sized mammal surveys.

Figure 3: Camera traps installation in the shrubland savannah in the TMMR.

Assessing distribution of African wild dog and habitats selection

During this survey, camera traps were usually installed in the open areas, especially in two habitat types such as woodland savannah (Figure 4a & b) and shrubland savannah (Figure 3c & d). We recorded the relevant habitat parameters including altitude, slope, weather, vegetation type, canopy cover, and undergrowth. In each habitat where the cameras were established, we recorded the GPS coordinates, characterized the vegetation type following a pre-established code describing the percent closure of canopy (close, open, very open). The undergrowth type (grass or shrub), slope class (moderate, steep), and weather were also recorded.

Figure 4: Main habitat types where the camera traps were established : a & b) Woodland savannah, c & d) Shrubland savannah.

Results expected

- Documented presence evidence of the African wild dog in the Tchabal Mbabo Mountain Range.

- Established distribution and habitat used by the target species in the study area during the dry season.

Next step

The next step to this project will be to conduct the camera trap service, batteries and SD memory cards change, and data sampling in the same camera traps location in the savannah habitats of the Tchabal Mbabo moutain during rainy seasons. This activity will start in early April 2024.

Human activities in the TMMR

Legend: a) Bush fires, b) M'bororo farmland, c & d) M'bororo camp.