

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



Survey team in the Lougga Koumbi village (Tchabal Mbabo Mountain range)

Progress Report

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Background

African wild dog is an iconic species threatened throughout its home range. The species is considered to be extinct in Cameroon, with the possibility of the existence of small isolated, and remote populations. African wild dog has received considerable research efforts in other parts of the world, but in Cameroon, particularly in the Tchabal Mbabo mountain range located in the Adamawa region, this species remains understudied. This study aimed to document the presence evidence of the African wild dog and their habitat selection in the Tchabal Mbabo mountain range. We prior carried out a questionnaire survey to gather local ecological knowledge on African wild dogs from local communities living in and around the Tchabal Mbabo forest massif.

Methodology

Villages selection and survey design

A questionnaire developed and the survey protocol designed. We have purchased field equipment, including 20 camera traps, 435 batteries and 20 SD memory card, and 01 GPS, 02 PowerBank, 06 headlamps, 01 first Aid Kit, 01 Computer, 02 Tents, and 03 Sleeping bags. We also obtained research authorization from the University of Yaoundé 1 and a letter of the Divisional Officers of Mayo Banyo and Galim Tignère to conduct the study. After that, we travelled to each village to inform village chiefs about the objectives of the mission.

The questionnaire entitled " population status, knowledge and local usage of wild dogs in the Tchabal Mbabo mountains range, Adamaoua-Cameroon", was loaded into tablets of surveyors in KoBoCollect (KoBoToolbox, 2018). It was structured into 5 parts addressing: (1) identification of respondents and control test, (2) general knowledge of wild dogs, (3) cultural uses of wild dogs, (4) threats to wild dogs and (5) legislation and conservation of wild dogs. Before starting the fieldwork, we organized a training day with all interviewers to harmonize the survey approach and minimize potential bias (Fig. 1).



Figure 1: Discussion with the interviewers and harmonization of the survey approach during the training day.

The questionnaire survey was conducted on 22-31st July 2023 through an interview using a semi-structured questionnaire in eight villages around the Tchabal Mbabo mountain (Dagum, Dodéo, Lougga Koumbi, Manaré, Mayo Dagum, Mayo Gniwa, Mayo Léléwal, Ngadda Taparé). These villages were primarily selected among those located nearest the study area and therefore likely in the home range of the targeted species, and secondly based on their

accessibility. Respondents were selected using the snowball sampling technique i.e. with the help of local translators, the interviewers introduced to locals likely to have good Local Ecological Knowledge on the African wild dog. Each interview was done with one person at a time and lasted less than 30 minutes, and a local guide to translated questions in the local language when necessary to ensure consistent communication with respondents (Fig. 2).



Figure 2 : Interview with local people a) survey assistant discussing with the respondent within the Dagum village, b) 2nd survey assistant discussing with the respondent within the Mayo Dagum village, c) Principal investigator and guide discussing with the respondent in the Dagum village, d) Principal investigator discussing with the respondent in the Dodéo village.

Results

Overall, we surveyed 215 people of whom 98.14% (n=211) were men and 1.86% (n=4) were women. Twenty-seven persons declined to participate in the survey and one respondent failed the negative and positive control. Among respondents interviewed, most of them were non-indigenous (60.9%, n=131). African wild dog is not largely known by people around the Tchabal Mbabo mountain range, because few respondents (46.0%, n=99) claimed to know this species. African wild dogs were named « Safadou » in their native language by 28.4% (n=61) of respondents, and only 4.91% of them (n=3) were able to name it French as « Chien sauvage » which means “wild dog”. The African wild dog is perceived as having few important in the culture of local people in the study area for religious reasons. Indeed, due to its morphology almost similar to the domestic dog, Islam prohibits the consumption or any other use of this species. Few respondents (23.3%, n=50) claimed that it is important to conserve the wild dog.

Among them, most (78%, n=39) thought that this species was at risk of extinction in their environment and the main threat is the extension of pasture areas.

Next step

The next step to this project will be the installation of the camera traps in the forest-savannah mosaic (Tchabal Mbabo Mountain) during dry and rainy seasons to confirm the presence of African wild dog. These activities will start in early December for the dry season after the savannah wildfire.

Field challenges



Survey team waiting the car to be repaired by the driver during their trip.



Survey team crossing the Mayo Damayero River located few kilometres from the Lougga Koumbi village in the study area.