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African golden cat confirmed in Mpem et Djim National Park, Cameroon

Information on the distribution and geographic variation of colour morphs of the African golden cat *Caracal aurata* remains limited. Here, we document the African golden cat in Mpem et Djim National Park MDNP in Cameroon through a camera trap survey.

The African golden cat (hereafter, golden cat) occurs in forests and forest-savannah mosaics of West and Central Africa (Bahaael-din et al. 2015). It is an elusive species and one of the least known carnivore in Africa (Ray et al. 2005). The limited number of systematic studies and documented occurrences leads to lack of knowledge about the species current distribution and phenotypic variations throughout its range. Bahaael-din et al. (2015) signalled different colour morphs including golden/reddish-brown, grey, melanistic and chocolate brown in the geographic range of the species but also a wide variation in the degree of spotting on the pelage. The species is listed as Vulnerable on the IUCN Red List and is threatened throughout its range by habitat degradation, loss and fragmentation, and by poaching, particularly being caught in hunters' snares (Bahaa-el-din et al. 2015). Here, we document the presence of the golden cat in Mpem et Djim National Park MDNP in Cameroon and provide photographic evidence of coat colouration and pattern of at least one individual.

Mpem et Djim National Park (Fig. 1) is located in the Centre Region of Cameroon (5°–5°20' N / 11°30'–12° E; 976 km²; average altitude of 640 m). The protected area is located within the northern transition zone of Central African forests and supports a mosaic of closed-canopy forest, savannah grasslands, and gallery forests. The rugged terrain, inaccessibility, and low human population density around the protected area have helped maintain relatively intact ecosystems (Kirsten 2018). Over 76 species of mammals

representing about 58% of the estimated species of mammals in Cameroon have been reported from this park. These include honey badger Mellivora capensis, serval Leptailurus serval, aardvark Orycteropus afer, chimpanzee Pan troglodytes, hippopotamus Hippopotamus amphibius, and giant pangolin Smutsia gigantea (MINFOF 2011, Atagana et al. 2018). A camera trap survey to document medium to larger-sized terrestrial mammals was carried out in MDNP from 3 September to 3 December in 2018. Nineteen cameras (Cuddeback X Change Color Model 1279, Bushnell Aggressor) were deployed in savannah-grassland, forest-savannah transition zone and gallery forest for a minimum of 85 trap days per camera. Cameras were set to take three images per trigger event both in the day and night (white flash) with no delay between triggers. The image quality was set at 5 Mp for Cuddeback and 8 Mp for Bushnell cameras. All other settings were set at default. Cameras were placed at a height of 30-45 cm above the ground level which is suitable for smaller to medium-size terrestrial mammals (>0.5 kg; Amin et al. 2015, Bruce et al. 2018a). The survey had a total 1,363 operational camera trap days. Two camera trap events provided photographic record of the golden cat at two different locations. It remains uncertain if it is the same individual on the two recorded events. We obtained a capture rate of 0.15 event per 100 trap days, calculated as the number of independent photographs of

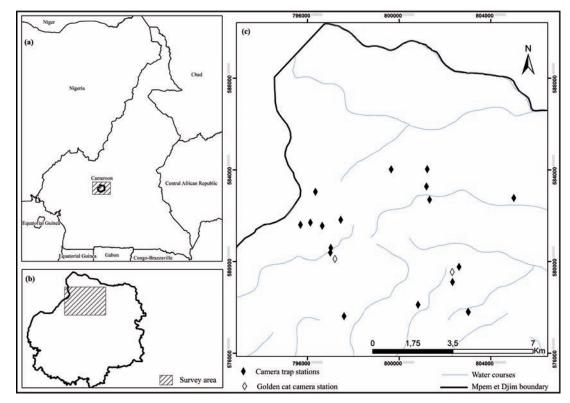


Fig. 1. Locations of camera trap pictures of African golden cat in Mpem et Djim National Park, Cameroon.





Fig. 2. (A) Camera trap photo of African golden cat in Mpem et Djim National Park, Cameroon (event 1); (B) snared golden cat in the MDNP (Photos J. P. Bissek).

the golden cat (that is, not close-sequenced images) for each camera station divided by the total number of trapping days at each station (Bahaa-el-din et al. 2016). Bruce et al. (2018b) obtained a mean capture rate of golden cat of 0.58 (± 0.15) independent photographic events per 100 trap days in one camera trap survey of the Dja Biosphere Reserve DBR, Cameroon (note that several other nearby DBR grids did not document golden cat). Bahaa-el-din et al. (2016) had capture rates ranging from 10.5 to 20.9 events per 100 trap days in five different sites in central Gabon.

The first MDNP golden cat event (Fig. 2a) was recorded in a forest-savannah transition zone (5°14'14.0" N / 11°43'37.7" E; 654 m) on 25 October 2018 at 15:37 h after 44 camera days. The second event was recorded in a savannah grassland area (5°14'33.4" N / 11°40'51.5" E; 661 m) on 13 October 2018 at 12:20 h after 35 camera days. The recorded golden cat pelage appears to be largely greyish brown with some heavier black spotting on the undersides of the front legs. Bahaa-el-din et al. (2015) noted that there is considerable variation of coat colours and patterns even within a region. Though the habitat of this protected area remains in relatively good condition, illegal bushmeat hunting occurs and snare lines pose a real threat to the golden cat. In 2015, a golden cat was found caught in a snare in forest habitat of MDNP (5°10'30.5" N / 11°36'54.4" E; Bissek 2015; Fig. 2b). Desnaring is a priority management action to help ensure that golden cat persist in MDNP.

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