

SHORT COMMUNICATION

Camera-trap records of groups of ten and eleven Honey Badgers *Mellivora capensis* in northern Botswana

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Abstract.

Camera traps in Wildlife Management Area NG33 to the east of the Okavango Delta in northern Botswana captured videos of groups of ten and 11 Honey Badgers *Mellivora capensis* travelling close together. These group sizes are close to the maximum ever recorded, and double the previous maximum reported from southern Africa. How and why these large groups formed is unknown.

Keywords: Honey Badger, Ratel, *Mellivora capensis*, mustelid, social behaviour, Okavango, Botswana.

Détection par pièges photographiques de groupes de dix et onze ratels *Mellivora capensis* dans le nord du Botswana

Résumé.

Des pièges photographiques dans la Zone de Gestion de la Faune NG33 à l'est du delta de l'Okavango, dans le nord du Botswana, ont capturé des vidéos de groupes de dix et onze ratels *Mellivora capensis* voyageant près l'un de l'autre. Ces tailles de groupe sont proches du maximum jamais enregistré, et le double du maximum précédent rapporté pour l'Afrique australe. Comment et pourquoi ces grands groupes se sont formés est inconnu.

Mots-clés: Blaireau à miel, Ratel, *Mellivora capensis*, mustélidé, comportement social, Okavango, Botswana

Honey Badgers *Mellivora capensis* are large mustelids with a distribution stretching from the southern tip of Africa, through the middle East to Nepal and India (Do Linh San *et al.* 2016). Although they are widespread, their density appears to be low, and local populations are vulnerable to human–wildlife conflict. They are opportunistic predators and in the only area where they have been studied intensively – the southern Kalahari – they live in large, overlapping home ranges. There adults are solitary, but young stay with their mothers until they are nearly full grown at 12–16 months of age (Kingdon 1977, Begg 2001, Begg *et al.* 2003, 2005, 2013).

In northern Botswana, the Botswana Predator Conservation Trust used camera traps to monitor the reactions of Leopards *Panthera pardus* to the scent of a component of their urine. The camera traps were in sets of four, each with two cameras 30 m apart on opposite sides of a vehicle track, facing each other along the track, mounted 78 cm off the ground, and two cameras 10 m apart on opposite sides of the track, aimed diagonally across the track, mounted 58 cm off the ground. All the cameras were 1 m from the edge of the track. The cameras were Reconyx Ultrafire XR6s (Reconyx, Holmen, WI, USA), set for high sensitivity, 1 s trigger delay (the minimum), taking 30 s of video on each trigger. Videos taken at night were illuminated by long-wave (940 nm) infrared floodlights in the cameras.

In the early morning of 17 May 2017 three of a four-camera array at 19°32'7" S, 23°38'36" E in the NG 33 Wildlife Management Area east of the Okavango Delta captured two consecutive 30 s videos of a group of Honey Badgers trotting past, heading south. On the videos from the last camera in the array, the leading badger that triggered the camera was followed by another one that passed the camera 6 s later, and then by four in a tight bunch after a further 4 s, and a single one 16 s behind the leader. No others appeared until the camera triggered again when a single badger ran past 40 s after the start of the first video, followed by another after 7 s and another after a further 8 s. Ten Honey Badgers passed the camera in 55 s, all going in the same direction (Videos available at: [Link1](#), [Link2](#)). Two of the other three cameras captured the same number of animals in two consecutive videos. The fourth camera had been pushed out of position by an elephant and captured only two.

On 17 June 2017 a camera array at 19°30'3" S, 23°38'47" E about 4.8 km northeast of the previous site, captured a group of 11 Honey Badgers moving south along the road. A leading bunch of six was followed after 4 s by another badger, and after 14 s by two more. The next video shows a single badger 34 s behind the bunch of six, followed by another one 8 s later. The one at the rear was limping on its left hind leg (Video available at: [Link3](#)). The two other working cameras at the site confirmed the group size.



Figure 1. Partial view of a video extract with part of the 10-individuals group of Honey Badgers recorded in the NG 33 Wildlife Management Area east of the Okavango Delta, Botswana.

The videos are not clear enough to see what sex any of the badgers were. There were no overt interactions between any of them.

These are clearly exceptional group sizes for Honey Badgers; they are usually seen singly, sometimes in twos and rarely in threes. In southern Africa the largest recorded

group had five members (Begg 2001), and Kingdon (1977) reports observers having seen four, six, eight and 12 together in east Africa. The twelve were foraging in a cattle *kraal* but the behaviour of the other large groups, and whether the twelve were, as is likely, simply an aggregation at a rich food source, is unrecorded. What prompted ten and 11 Honey Badgers to travel together is unknown; and no explanation based on known Honey Badger behaviour is plausible. No individual badgers can be recognised from the videos, and the possibilities that the group persisted for a month, that it dispersed and reformed, or that there were two groups with different or overlapping membership all seem unlikely. Both groups were travelling; they were certainly not aggregated at a rich food source, and although groups of up to three males are known to pursue females for mating (Begg 2001), and females may be accompanied by one or two grown cubs, an assembly of ten or eleven would require multiples of such groupings. The behaviour of all the animals matched the “determined straight line trotting” of male associations (Begg 2001) but the two groups were double the size of the largest male association seen by previous authors.

No matter why or how the groups formed, their occurrence shows that there is much still to learn about these charismatic animals.

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