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Predation by Southern Yellow-billed Hornbill on adult Southern Grey-headed Sparrow

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Predation by Southern Yellow-billed Hornbill on adult Southern Grey-headed Sparrow

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On 17 October 2017 we camped at Camp No. 2 at Monamodi Pan (S 25° 03' 16.3"E 22° 06' 21.3") in the Mabusehube area of the Kgalagadi Transfrontier Park, Botswana, a very dry area where food and water were scarce at the time of the visit. Birds gathered in large numbers at the few watering points available (Figure 1).



Figure 1: Doves drinking at Monamodi Pan. Photo: Julio de Castro.

The main bird visitors at our campsite were Southern Grey-headed Sparrows (*Passer diffusus*) but Cape Sparrows (*Passer melanurus*), Violet-eared Waxbills (*Uraeginthus granatinus*) and Sociable Weavers (*Philetairus socius*) were also present. Half a dozen Southern Yellow-billed Hornbills (*Tockus leucomelas*) were residents at the camp and were regularly seen on the ground. All bird species came to look for possible food items and water throughout the day.

On 18 November 2017 at about 10:20 am some small birds suddenly flew off where they

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were foraging in a response usually observed when there is (or it is perceived to be) an attack by a bird of prey. We then saw that a Southern Yellow-billed Hornbill had caught one of the adult Southern Grey-headed Sparrow and it was in the process of killing it by violently shaking it and thrashing it against the ground (Figures. 2 and 3).



Figure 2: A few seconds after the bird was caught. Photo: Frank Rijnders.

The hornbill partially defeathered the victim on the ground before flying into a nearby tree. Here it continued to remove some more feathers by vigorously hitting and rubbing the sparrow against the tree (Figures 4 & 5).

It succeeded in removing most of the feathers and, at 10:53am the hornbill finally swallowed its prey (Figures. 6 & 7). The whole process lasted a little over thirty minutes.

At no time did the other sparrows or other birds attempt to mob the attacker and, after a few minutes, birds were seen again feeding on the ground at the place where the predation had taken place a few minutes earlier.

Hockey et al. (2005) cites that the Southern Yellow-billed Hornbill's diet includes "a wide range of invertebrates and small vertebrates". Among the latter, nestlings of Red-billed Quelea (*Quelea quelea*) are mentioned, together with an extensive list of prey animals. However, the list does not mention predation on adult birds.

It is possible that the observed behaviour was fortuitous. However it appears more likely that Southern Yellow-billed Hornbills take advantage of the mayhem created when large numbers of birds gather at waterholes or are distracted when foraging together to catch their prey by surprise (Figure 8).

It could be argued that, as hornbills do not produce pellets or casts, the removal of the feathers could be connected to this fact. However, it is more likely that, together with the strong knocking of the victim against the tree, this behaviour aims at facilitating the swallowing of the prey.



Figure 3: The Hornbill thrashing the recently caught bird. Photo: Julio de Castro.

References

Hockey PAR, Dean WRJ and Ryan PG 2005. Roberts - Birds of Southern Africa. The Trustees of the John Voelcker Bird Book Fund.



Figure 4: The hornbill 'plucking' the sparrow. Photo: Julio de Castro.



Figure 5: Another view of the bird being plucked. Photo: Frank Rijnders.

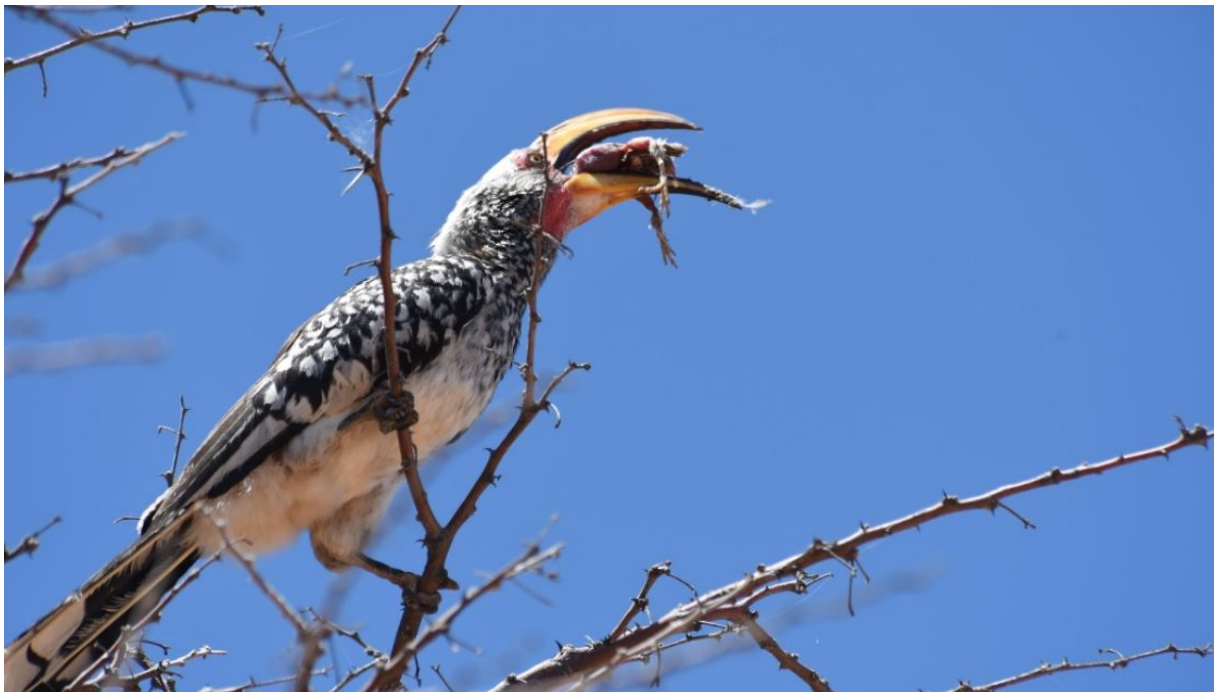


Figure 6: The Hornbill starting to swallow the now defeathered prey. Photo: Frank Rijnders.



Figure 7: The Hornbill swallowing its prey whole. Photo: Julio de Castro.



Figure 8: Birds crowded at a water source are easy prey to predatory birds. Photo: Frank Rijnders