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Hippo cannibalism

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Carnivory in the common hippopotamus *Hippopotamus amphibius* ('hippo') was observed in Masuma Dam by Dudley (1993) and by de Castro (2015 and 2016). More recently Dudley *et al.* (2016) has compiled several observed incidents of carnivory in central, east and southern Africa.

Dudley *et al.* (2016) argue about the importance of carnivory and particularly the observed cannibalism in the transmission of anthrax among hippo populations.

In 2018-19 Zimbabwe had the lowest rainfall in nearly four decades (The Herald, 2019) and Hwange National Park was no exception, receiving much less than its 576mm yearly average,

During a visit in mid September 2019 the park was very dry and several of the pans were drying or already dry. This situation was also severely affecting some of the dams that require pumped water to keep an acceptable water level. Both Nyamandhlovu and Masuma Dams' water levels were very low despite efforts to pump water day and night.

Large numbers of animals such as elephants, buffalo, greater kudu and impala were coming to drink daily and water levels were seen declining slowly but steadily on a daily basis, more than previously seen.

The hippo population normally observed at Masuma Dam was estimated at about 16 individuals (de Castro 2015b) and only one was seen at the dam part of the time, apparently commuting between Masuma and Mandavu reservoir, a much larger water body situated 15km away.

While spending an afternoon at Mandavu we noted a dead hippo floating close to the shore opposite to the picnic site. There were a number of crocodiles and a couple of hippos feeding on it (Figs 1 & 2).

It is believed (Dudley, 2018) that hippos are not able to open up a carcass and that they depend on natural fermentation or on other carnivores to do so in order for them to feed. It is likely that the crocodiles had eaten part of the carcass so the hippos were able to feed on it. The hippos were seen pushing the carcass and submerging. They would later emerge chewing and swallowing.

After about one hour the wind started blowing the carcass towards the centre of the lake and the hippos did not pursue it, staying at the opposite shore with their pod. Hippo cannibalism has been reported earlier (Dorward, 2015; Dudley *et al.*, 2016) and the present observation adds Mandavu reservoir to other areas in Africa where this phenomenon has been reported.

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Figure 1: Figure 1. Hippos and crocodiles around the dead hippo carcass. Credit: Julio A. de Castro.



Figure 2: Figure 2. Hippo feeding on the carcass. Credit: Julio J. de Castro.



References

de Castro J 2015a. https://bushsnob.com/2015/12/10/a-new-hippo/.

de Castro J 2015b. https://bushsnob.com/2015/02/22/hippos-from-hell/.

de Castro J 2016. https://bushsnob.com/2016/01/21/naughty-hippo-again/.

Dorward LJ 2015. New record of cannibalism in the common hippo, *Hippopotamus amphibius* (Linnaeus, 1758). African Journal of Ecology 53: 385-387.

Dudley JP 1996. Record of carnivory, scavenging and predation for *Hippopotamus amphibius* in Hwange National Park, Zimbabwe. Mammalia 60(3): 486-490.

Dudley JP 2018. Personal communication.

Dudley JP, Hang'Ombe BM, Leendertz FH, Dorward LJ, de Castro J, Subalusky AL, and Clauss M. 2016, Carnivory in the common hippopotamus *Hippopotamus amphibius*: implications for the ecology and epidemiology of anthrax in African landscapes. Mammal Review 46: 191-203.

The Herald 2019. https://www.herald.co.zw/sadc-records-lowest-rainfall-in-38-years/ Consulted on 23/9/19.