

ACTUALISTIC INVESTIGATION OF BONE MODIFICATION ON LEPORIDS BY CARACAL (*Caracal caracal*) AND HONEY BADGER (*Mellivora capensis*); AN INSIGHT TO THE TAPHONOMY OF COOPER'S CAVE, SOUTH AFRICA

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ABSTRACT

Small carnivores and middle-sized mammals (mesomammals) are ubiquitous in fossil sites in South Africa, but their taphonomy is poorly understood. This study presents an actualistic investigation of bone modification by two captive small carnivores; the caracal (*Caracal caracal*) and honey badger (*Mellivora capensis*), housed at the Johannesburg Zoo. The carnivores were fed domestic rabbit (*Oryctolagus cuniculus*) carcasses as proxies for mesomammals and the bone modification of the resulting refuse and scatological assemblages were assessed in terms of their skeletal part representation, breakage patterns, digestive modifications and tooth marks. The investigation revealed that skeletal part representation and breakage patterns in the caracal and honey badger assemblages resembled those reported from other small carnivores. The caracal and honey badger assemblages were distinct from other carnivores in having overall light digestive modifications and a high frequency of tooth marks. Digestion was greater and tooth marks less frequent in the caracal than in the honey badger. Results were applied to the fossil assemblage of Cooper's D which has a large assemblage of mesomammals and small carnivores. While a taphonomic analysis of Cooper's D has not been published, initial results suggest that small carnivores had a great potential as contributors in the formation of the assemblage. The findings of this study emphasise the need for employing a variety of bone modifications in the identification of a small carnivore as an accumulator since there is rarely a single characteristic that is diagnostic for a particular carnivore.