

Project Update: October 2016

Discrimination between African wild dog and domestic dog tracks

The endangered African wild dogs (*Lycaon pictus*) are often wrongly blamed for attacks on livestock in the vicinity of protected areas. In some places, such as Hluhluwe-iMfolozi Park (South Africa), the park management financially compensate local farmers who have lost livestock to wild dogs in order to avoid their persecution. Therefore, farmers frequently accuse wild dogs for attacks that were actually perpetrated by stray domestic dogs. Following predation on livestock, the only evidence left by problem animals are often their tracks. The objective of this research is to assess the possibility of objectively discriminating between wild dog and domestic dog tracks. To do so, 74 wild dog and 82 domestic dog tracks were recorded by means of digital close-range photogrammetry. This recording technique enables the reconstruction of digital 3D models of the tracks. The information from the tracks will then be extracted by means of geometric morphometrics to analyse the size and shape differences between the two species.



Figure 1 - An African wild dog (*Lycaon pictus*) in Hluhluwe-iMfolozi Park, South Africa (photograph by Antoine Marchal)

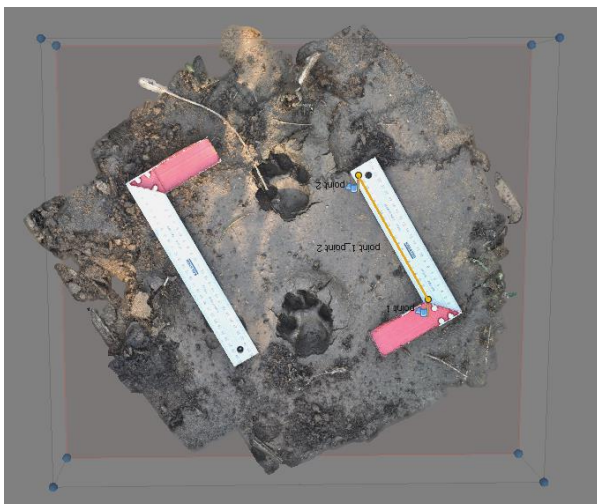


Figure 2 - Digital 3D model of two African wild dog tracks.