Little Feet

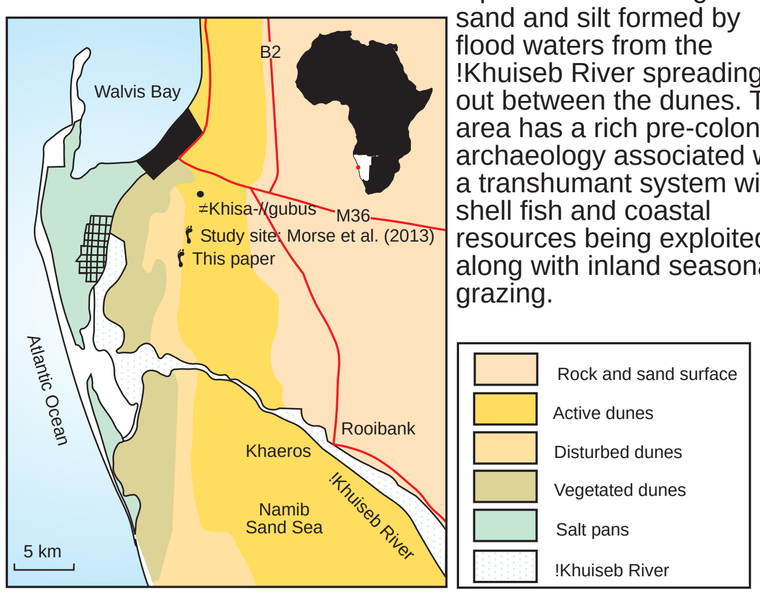
Matthew R Bennett
Bournemouth University, Talbot Campus, Fern Barrow, Poole, BH12 5BB, UK

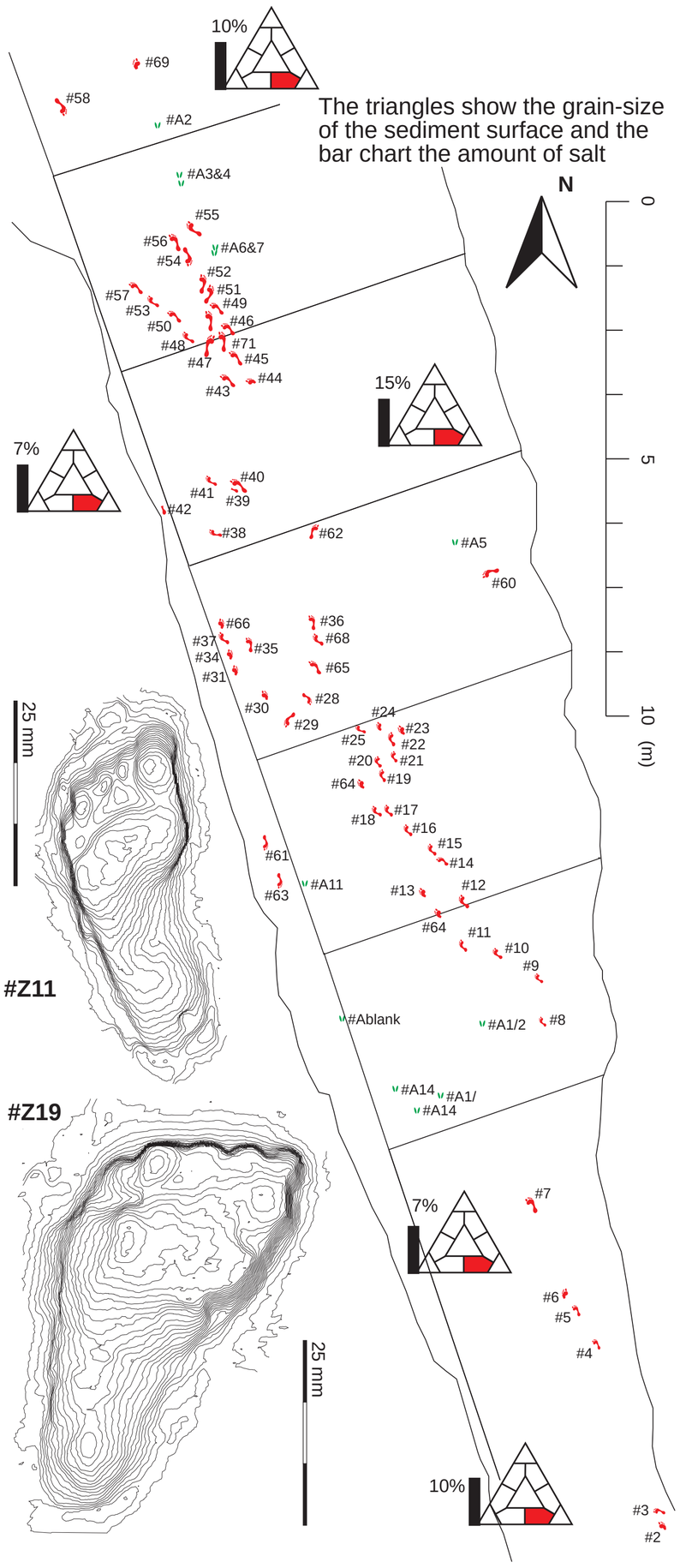
ABSTRACT

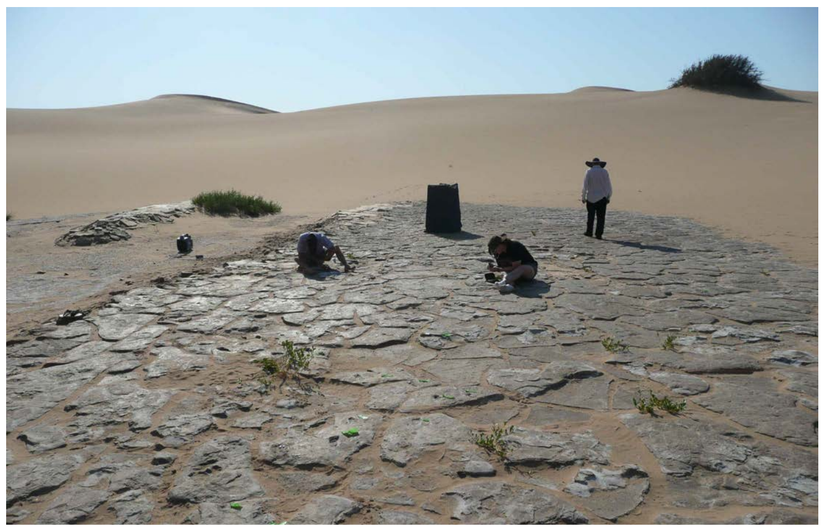
Here we report on a Holocene inter-dune site close to Walvis Bay (Namibia) which contains exceptionally well-preserved children's footprints. The footprint surface has been dated using Optically Stimulated Luminescence (OSL) methods to approximately 1.5 ka^{-1}. The distribution of both human and animal tracks, is consistent with the passage of a small flock of ungulates (probably sheep/goats) followed by a group of approximately 9 ± 2 individuals mainly children or young adults. Age estimates from the tracks suggest that some of the individuals may have been as young as three years old. Variation in track topology across this sedimentologically uniform surface is explained in terms of variations in gait and weight/stature of the individual print makers. The significance of the site within the literature on human footprints lies in the quality of the track preservation, their topological variability despite a potentially uniform substrate, and the small size of the tracks, and therefore the inferred young age of the track-makers. The site provides an emotive insight into the life of the track-makers.

Bennett MR *et al.* (2014). Exceptional preservation of children's footprints from a Holocene footprint site in Namibia. *Journal of African Earth Sciences. 97, 331-341.*

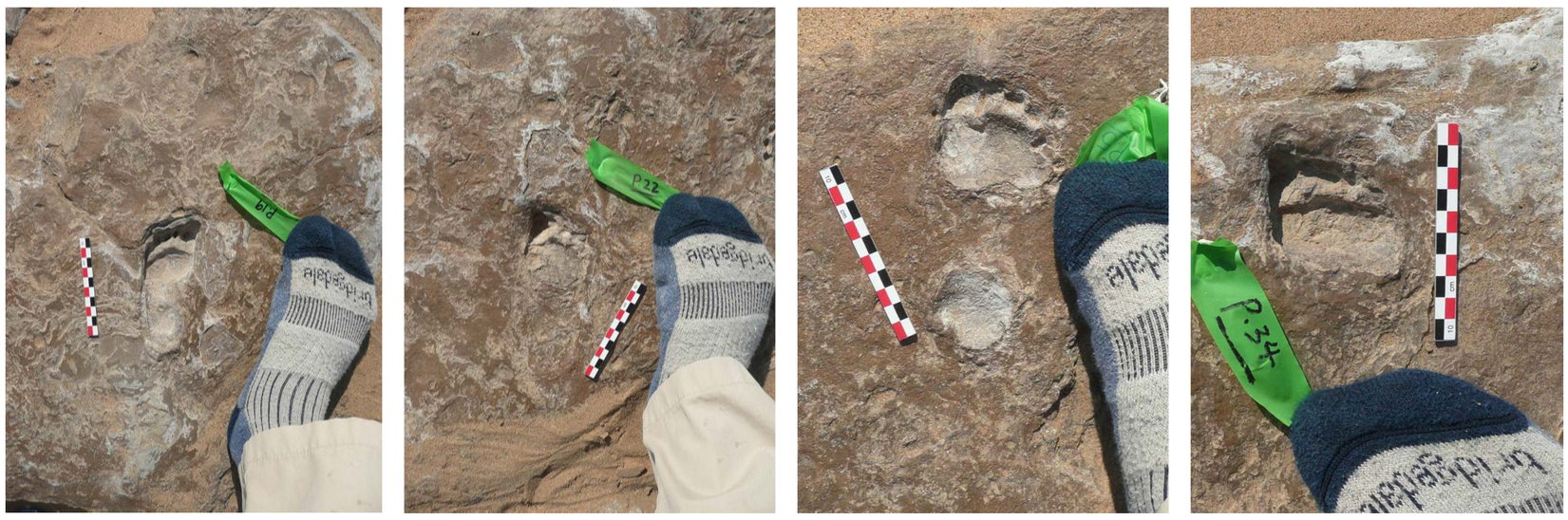
The footprint site is located just south of Walvis Bay in Namibia. It has been dated to approximately 1,500 years ago and is located between giant sand dunes. The human tracks follow those made by goat/sheep and were digitised by an optical laser scanner in 2010. The tracks are preserved in fine-grained sand and silt formed by flood waters from the !Khuiseb River spreading out between the dunes. The area has a rich pre-colonial archaeology associated with a transhumant system with shell fish and coastal resources being exploited along with inland seasonal grazing.





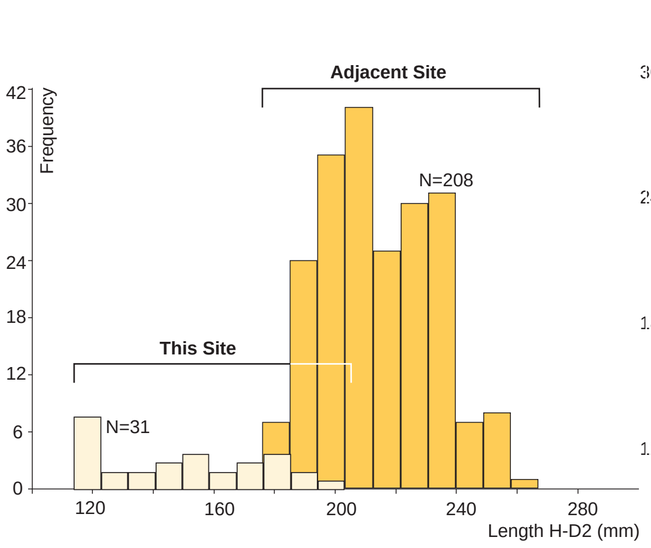


The silt surface shown between the dunes was deposited by flood waters. The flood waters provided a water source for livestock and wild animals. Animal and human tracks are preserved in the silts. Access to the remote site is by Quadbike; the square tent-like object houses the optical laser scanner, shielding it from the dust and sunlight.

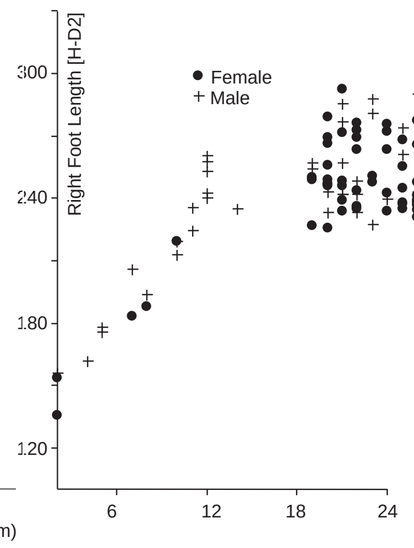


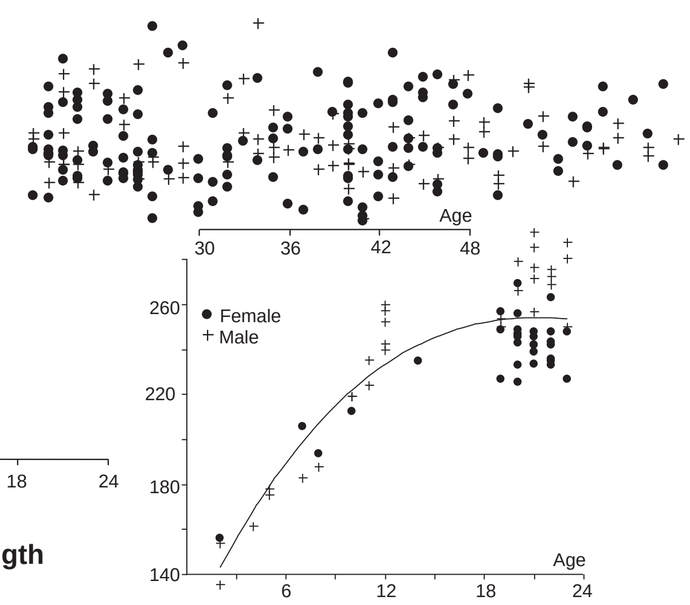
As shown above the indivdiual human tracks are very small. The foot shown is a UK Size 8 and gives a strong visual reference with respect to size. Some prints are complete, others consist of the toes and ball area only. The quality of preservation is so good that in some cases you can see skin texture.

Further examples of the human tracks present at this site. Note the tendency for some of the tracks to show evidence of supination; that is for the weight to rest on the outside or lateral edge of the foot. This may reflect the stage of development of the track-makers foot. Further research is needed to explore this idea.



Foot Length Compared





Age and Foot Length

Bournemouth.ac.uk **mbennett@bournemouth.ac.uk**