



## McGregor Museum Kimberley

Archaeology Department: Canteen Kopje – read more

**The data recovered from the site have three-fold importance.**

- Firstly, the systematic study shows that earlier characterisations of Canteen Kopje require revision. Much has been written on the site to support a number of interpretations of the pattern of Earlier Stone Age occupation in South Africa, often validated by reference to the first hand observations of archaeologists such as Breuil, van Riet Lowe and Goodwin. But these were based on subjective impressions, surface collections, and the amassing of typologically significant pieces following the ethos of the day – giving rise to artificially exaggerated perceptions of the frequencies of bifaces, cleavers and Victoria West cores. The recent work makes it abundantly clear that the older interpretations need revising. Therefore the first important result of these excavations is that they set the record straight.
- Secondly, as a systematic study, the new data can be incorporated into modern syntheses of the Lower and Middle Pleistocene of South Africa, and can contribute to understandings of the Acheulean. In turn, a balanced interpretation will improve the site's tourist and heritage potential and allow it to take its place as one of the significant archaeological sites in South Africa.
- Thirdly, the excavations revealed new and hitherto unsuspected deposits, indicating a more complex deposition history. The excavations have also revealed aspects of the occupation of the site by hominids that were previously unknown, and the potential of the site to contribute to more detailed contextual understandings of hominid behaviour in Lower and Middle Pleistocene times has been significantly increased.

Hominids during Acheulean times appear to have been attracted to the site by an ideal combination of nearby permanent water and abutting hillsides with an abundance of fresh exposures and loose cobbles and boulders of andesite, for knapping. A predominance, amongst stone cores, of andesite boulder cores in Strata 2a and 2b Upper may be an indication that Canteen Kopje was, at that time, primarily a big flake producing workshop site. This activity was evidently carried on over a considerable time, while the absence of large numbers of flake tools and large cutting tools such as handaxes and cleavers implies that secondary manufacturing activities may have been carried out away from the immediate vicinity of the site. This, in itself, implies a perceived landscape structure in terms of differences in locality; one which had temporal depth (McNabb in Beaumont & McNabb 2000).

However, some flake tools do occur on site, implying that activities other than primary manufacture did take place there. It is possible; too, that some of the non-prepared core forms may have been used as tools. Stratigraphic evidence suggests that the two unprovenanced giant handaxes from Canteen Kopje come from the base of Stratum 2a.

Of note is the occurrence of Levallois prepared core technology in both Strata 2a and 2b Upper, while Victoria West cores – now documented for the first time in a stratified context – are confined to Stratum 2a. Cores of neither Levallois nor Victoria West type have been noted in 2b Lower.

Fauresmith material – also rare in stratified contexts – was found in the lower levels of the Hutton Sands and to a depth of 0.3 m in Stratum 2a in Area 1. Associated with it was a cache of specularite nodules and blades made from banded ironstone – the nearest sources for these raw materials being in the Postmasburg area, some 200 km to the west. It is suggested that a Fauresmith activity locale was at or near the excavated trench in Area 1.

As regards dating, assemblages with Victoria West cores at Kathu Pan 1, and Wonderwerk, are linked to faunas that include *Elephas recki recki* (an extinct elephant) and/or *Hipparion* (an extinct horse). The last certain occurrence of these species at dated East African localities are earlier than 800 000 years ago. Could the levels containing these stone tools at Canteen Kopje be of comparable antiquity?

One of the problems that remain to be explained, and which has relevance to the age of the sequence, is the dramatic shift at Canteen Kopje from a predominance of colluvial accumulation to a final mode in which aeolian action deposited the Hutton Sands. One plausible palaeoenvironmental mechanism in this regard could be the replacement of short climate cycles by larger 100 000 year fluctuations that began at about 900 000 years ago.

If this dating evidence proves to be viable, it is possible that the mass of absolutely fresh and seemingly *in situ* knapping debris in the upper 2.4 m of Stratum 2b Lower could well range back to about 1 million years, while the base of the sequence, a further 3.2 m down, could lie in the 1.2 million year range.

Whatever the eventual results of current efforts to date the site (palaeomagnetic dating is in progress), there appears to be fairly firm evidence for "Mode 2 technology with prepared core elements" in the subcontinent substantially earlier than the 350 000 – 250 000 year range proposed by Foley and Lahr (1997).

The sheer extent and richness of Canteen Kopje is a significant feature – not altogether unusual at a regional level – but more so in the Old World: it is not yet clearly understood what these large accumulations (read higher population densities) during handaxe times in Southern Africa may mean.

The recommencement of medium-scale diamond mining adjacent to the site has serious implications. The excavations of Area 2 – which had preserved an undisturbed sequence of deposits – have since been destroyed; and the last of the pristine deposits may soon be irretrievably lost. It is hoped that our findings will help secure what remains of Canteen Kopje. We acknowledge the role of the National Monuments Council in halting mining on the declared portion, and the assistance of the Department of Minerals and Energy and the KWAGGA Kimberley Mining Multi-stakeholder Forum. In particular we are grateful to the community of Barkly West for their resolve to have the site preserved, researched and developed.