

## **Canteen Kopje – SAHRA Report for 2008-2009**

**Permit No. 80/07/04/006/51**

R.J. Gibbon, G.M. Leader and K. Kuman

University of the Witwatersrand

School of Geography, Archaeology and Environmental Studies

Private Bag 3, PO Box WITS 2050, South Africa

Telephone: +27 (0)11-717 6059, Fax: +27 (0)11-717 6578

Email: ryan.gibbon@gmail.com

Office Address: Richard Ward Building, Room 519, East Campus

A third field season was spent on excavations in March of this year at Canteen Kopje. During the three week fieldtrip we managed to excavate a 3m<sup>2</sup> trench at pit 6 through 5 m of gravel until the water table was reached. There is at least 1.5 m of unexcavated gravels still sitting on bedrock that will be excavated when/if the water table drops. The top 2 m of the gravel deposit contained Victoria West technology while the remainder contained simpler Acheulean technology.

Excavation was carried out by digging in 20 cm spits in the 3m<sup>2</sup> trench which was considered to be one unit. 11 samples for cosmogenic nuclide burial dating, consisting of at least 5-10 quartzite clasts, were collected from sieve residue during the excavation process from different levels throughout the gravel sequence. This sampling was focused on the top 2 m of the deposit containing the Victoria West technology as a tighter age constraint needs to be obtained for this specific technological development. The quartzite clasts from each level will be run separately. The age for the each level will then be determined using an isochron technique that uses the variability of data from each clast to determine the age of the deposit as a whole. During this field season a similar sample was also collected from an old miner's shaft near to the base of Pit 4. This sample will be able to test our theory that this is the oldest deposit at Canteen Kopje and could predate the gravels at Pit 6.

In addition to the cobbles collected for dating, 13 sediment samples were collected at 10 cm intervals throughout the Hutton Sands that cover the gravel deposits. These samples will be studied in order to gain a better understanding of the nature of these deposits, as well as to clarify site formation aspects.

In terms of the archaeology, Tim Forssman has completed his study of the LSA material from all tranches of the excavation, and his Honours thesis was forwarded to Mary Leslie at the Cape Town SAHRA office earlier this year. Two radiocarbon dating samples from charcoal have been run for dating and we are waiting for a third result on bone to come back soon. Once we have a better understanding of the time period represented we will be able to finalise our interpretation of the LSA material.

All of the artefacts from the 2009 season have been brought to the McGregor Museum in Kimberley where they are being processed by George Michael Leader as part of his PhD research. Leader is currently undertaking a full analysis of the Victoria West and underlying Acheulean material excavated this year, and he expects the cataloguing and analysis to be completed by the end of the year. His study is focused on core organisation throughout the sequence. Dr. Kathy Kuman will be doing a detailed study of the bifaces, which will be brought to Wits University once they are catalogued and a preliminary study completed by Leader.

In sum, the excavations at Canteen Koppie have provided a large, well-provenanced sample of the Acheulean that includes one or more pre-Victoria West phases and overlying it the Victoria West industry, all from within 5 metres of gravels. At the top of the gravel and in the base of the Hutton Sands, it appears that a final Acheulean may be present, but a larger sample needs to be retrieved for certainty. Overlying this are MSA levels, which will also be enlarged in future excavations. The sequence ends with the LSA, which is currently being dated and readied for publication.