Project Gallery Antiquity Volume 086 Issue 331 March 2012

Bestwood 1: a newly discovered Earlier Stone Age living surface near Kathu, Northern Cape Province, South Africa

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Introduction

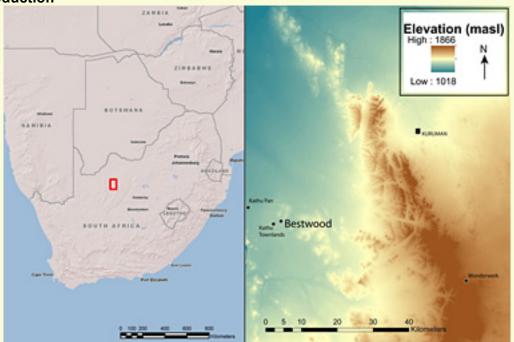


Figure 1. Maps showing the location of the Bestwood 1 site and other sites mentioned in the text. *Click to enlarge*.

The area around the town of Kathu in the Northern Cape Province of South Africa is the location of a number of significant Earlier Stone Age (ESA) localities (Figure 1). Kathu Pan 1 is a sinkhole site where excavations by P. Beaumont produced a rich assemblage of Acheulean and Fauresmith lithics and associated fauna (Beaumont 1990; Beaumont & Vogel 2006; Wilkins & Chazan, in press). The Fauresmith at Kathu Pan 1 has been dated by OSL (Optically Stimulated Luminescence) and ESR (Electron Spin Resonance) to c. 500 000 BP (Porat et al. 2010). Kathu Townlands is an open-air site, located partly on an outcropping of fine-grained ironstone (Beaumont 1990, 2004), whose surface is covered with a dense deposit of cores, flakes and occasional handaxes over an area of c. 25ha. Beaumont also identified a dense scattering of ESA artefacts on a hilltop c. 3km north-east of Kathu Townlands at Uitkoms Farm. Additional survey in 2011 revealed that the Uitkoms lithic scatter covers an area of c. 30ha mostly within the boundaries of the Bestwood Farm. The lithics lie directly on the surface of fine-grained ironstone bedrock and are mainly composed of this material, though artefacts made on quartzite are also present.

New discoveries at Bestwood

A raw material survey by J. Wilkins in 2010—part of her dissertation research on the lithic industry of Kathu Pan 1—resulted in the discovery of three new localities on the Bestwood Farm approximately 3km east of Kathu Townlands. The first two, Bestwood 1 (27.68267 S, 23.09169 E) (Figure 2a) and Bestwood 2 (27.68509 S, 23.09022 E), are found in sand quarries in the valley between two hills at the northernmost edge of the western flank of the Kuruman Hills. The preliminary investigation identified a lithic industry characterised by well-made handaxes (Figure 3a & b), well retouched scrapers (Figure 3c), occasional blades (Figure 3d) and a great diversity of core types, including choppers, polyhedrons, discoidal cores (Figure 3e) and unidirectional Levallois cores (Figure 3f). Another dense and extensive ESA scatter, previously unreported and provisionally designated as Bestwood 3, was discovered on a hilltop 1km to the east of the Uitkoms locality, some 500m past Bestwood 1.

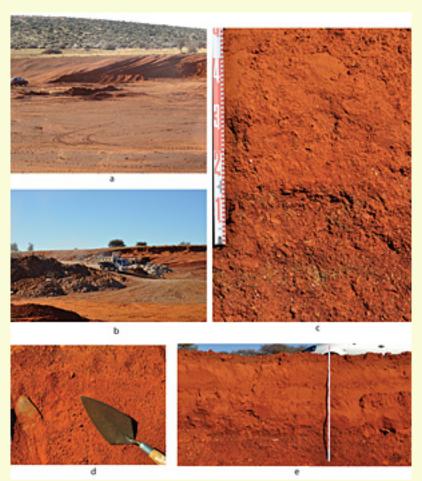


Figure 2. Bestwood 1: a) the site looking north in 2010 before mining of the gravels began; b) the site in 2011 with mining in process. Note that trucks arrive at the quarry with debris from preparing construction sites, mostly blocks of calcrete, which are dumped before the gravel is collected; c) detail of the section showing the interface between the sand and the underlying clay-rich gravel. Scale in cm; d) view of artefact lying flat at the interface between the sand and the underlying gravel; e) overview of section in trench left by the mining of gravel showing the interface between the sands and the underlying gravel.

Click to enlarge.



Figure 3. Artefacts collected at Bestwood 1: a & b) handaxes; c) large rough-out of a handaxe; d) transversal sidescraper; e) large blade; f) discoidal core; e) unidirectional Levallois core. All raw material is ironstone.

Click to enlarge.

Excavation and assemblages at Bestwood

In 2011, the Bestwood sites were revisited for an excavation planned to clarify the geological context of the archaeological deposit. Unfortunately, the rapid expansion of iron and manganese mining in the area has led to a development boom and a high demand for building materials. Bestwood 2 was found completely filled by construction debris (Figure 2b). Mining of gravel deposits underlying the sands was underway at Bestwood 1, with approximately 40 truckloads being removed daily. At this site we were able to recover a large collection of artefacts from disturbed contexts, excavate 5m² of archaeological deposit *in situ*, and collect geological samples from exposed sections. Following a report to the South African Heritage Resources Agency, the mining at the site was largely stopped.

The excavation showed that artefacts were found lying flat at the interface between the sands and the underlying sediment rich in illuviated clay and small subangular local gravel (Figure 2c-e). This situation was also observed in numerous exposed sections. All artefacts are in excellent condition with no indication of weathering or rolling and the assemblage includes very small flakes. Since it is very unlikely that the

artefacts lay exposed on the surface for a long period, it appears that Bestwood 1 is an ESA living surface that was rapidly buried.

The surface collection made in 2011 confirmed the characteristics of the lithic industry. In addition, there is now strong evidence for handaxe manufacture at the site with the recovery of large ironstone slabs, available locally in the bedrock, in the early stages of shaping (Figure 3c). Unworked ironstone slabs showed 'pot-lid' scarring on a single surface consistent with exposure to fire. There is little evidence for the use of river cobbles and quartzite, the closest sources being an outcrop 14km to the south-west and the Gamagara River some 19km to the west.

Conclusion and prospect

Bestwood 1 preserves an ESA living surface across a large area and holds the potential to provide broad horizontal exposures. The lithic industry is at present difficult to situate. The presence of Levallois cores differentiates the assemblage from the Acheulean of Stratum 4b at Kathu Pan 1 and the Acheulean of Excavation 1 at Wonderwerk Cave. Although some of the cores show negative scars of blades, only a small number of blades have been recovered. The well-made handaxes and rarity of blades clearly distinguish this assemblage from the Fauresmith of Stratum 4a at Kathu Pan 1. The diversity of cores is reminiscent of the Fauresmith of Excavation 6 at Wonderwerk Cave. Fortunately, the overlying sands are well suited to OSL dating and it should be possible, at the very least, to establish a secure minimum age for the site. The challenge now is to find ways to protect this site or to integrate archaeological excavation into the mining process. The increased scale of mining at Kathu and neighbouring ore deposits are likely to continue to put significant pressure on the unique archaeological resources of this region.

Acknowledgements

Research at Bestwood was undertaken with support from the Social Science and Humanities Research Council and under permit from the South African Heritage Resource Agency (SAHRA). We are grateful to Leon Jacobsen, Anna Phillips and Koot Msawula for assistance with fieldwork and Ian Watts and Liora Kolska Horwitz for their input.

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