Report on Excavations at Wonderwerk Cave December 17-20, 2007

Submitted by Michael Chazan, August 5, 2008 Excavations carried out under SAHRA permit 80/07/11/006/51a

Terms of the permit limit excavation to Square Q32. The grid at Wonderwerk follow is in yards so that Square Q32 is one square yard. The edges of the square had been eroded away so that the actual area excavated was somewhat less.

Excavation Methods

Excavation carried out in 5 cm. spits with objects recovered in excavation mapped in three coordinates. All sediments screened through fine mesh screen. A marked line on light stand at back of excavation area was used as datum.

Opening height 40 cm. below datum. Closing height 75 cm. below datum.

Results

This limited excavation provided new information about the deposits of St. 12 in Excavation 1 at Wonderwerk Cave. Micromorphological analysis of the section left by Beaumont's excavation in this area indicated that there were pockets of bioturbation. This observation was supported by the paleomagnetic samples, some of which showed the lack of a clear signal that is consistent with bioturbation.

In the excavation of Square Q32 we were able to expose well-preserved burrow structures. The base of these structures was often highly compacted sediments that could be lifted intact. The plan view of these burrows is clearest at the base of the 50-55 cm. below datum unit. Here there is a clear branching pattern to the burrow. Further research is needed to determine whether it is possible to identify the animal responsible for the burrow. It is important to note that the burrow features were horizontal in orientation and were unlikely to have been a cause of intrusion of sediments from other strata. Moveover, most artifacts and microfauna were not found in burrows.

There were some organic remains associated with one burrow. These strands of grasslike plants extended through much of the west end of the square and was horizontal. We have not yet determined whether this botanical material is in fact insitu.

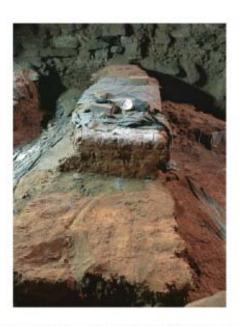
Because the artifact sample from Beaumont's excavation of St. 12 is very limited we had expected to find few artifacts. However, the total number of artifacts recovered is over 20 which almost doubles the sample available from the samle. As in the sample from Beaumont's excavation, small unretouched flakes are dominant. There are also some pieces that appear to be small cores, as well as a small number of larger flakes and retouched flakes. Macrofaunal remains were limited to a milk tooth of a .buck. Microfauna was present and in very good condition.



Position of datum point on lamp stand at the back of Excavation 1



Burrows at the bottom of 50-55 cm. below datum



Area at the end of excavation. Note burrow in the base and the uniformity of sediments in the profile.



Organic remins at 55-60 cm. below datum. Note that the dark color of the sediment is due to a shadow.



Unretouched Flake (Object 4: 40-45 cm. below datum.)



Core (?) (Lithic Bucket 40: 70-75 cm. below datum)

1 cm.



Retouched Flake (Object 20: 70-75 cm. below datum)



Tooth germ 40-45 cm. below datum



Microfauna 65-70 cm. below datum