

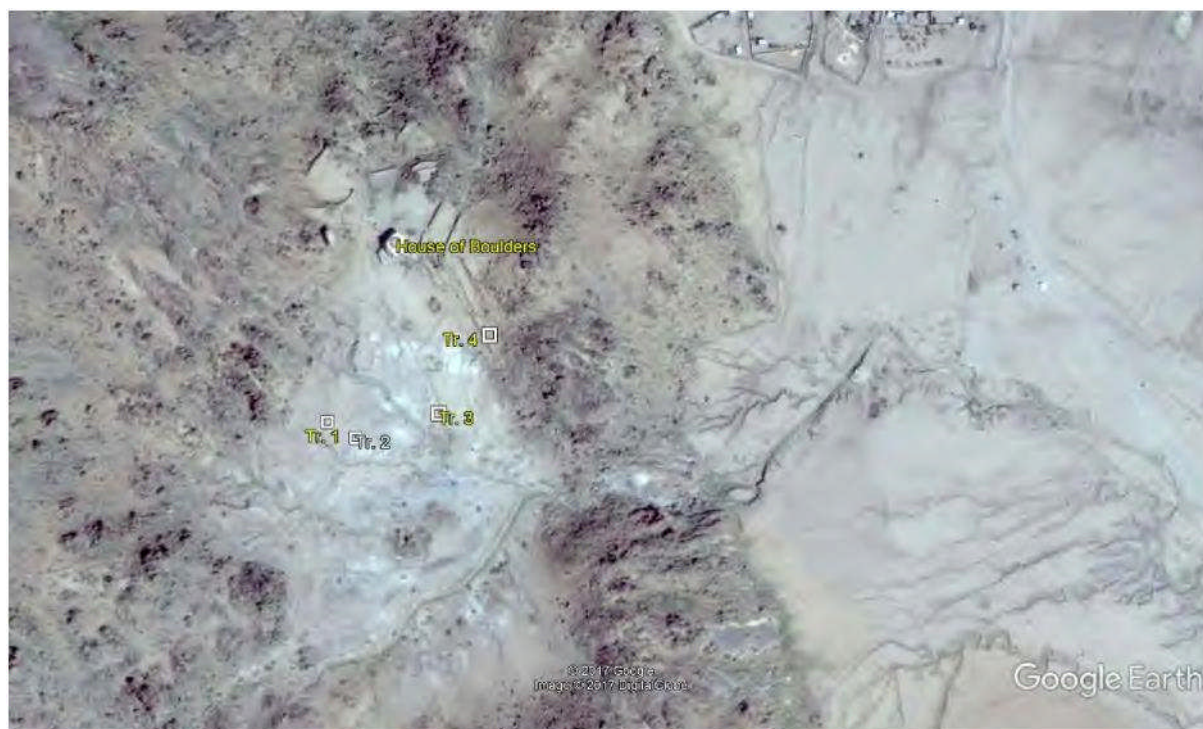
**A short end of season report on Jebel Moya 2017. Joint project of the Institute of Archaeology, University College London, and University of Khartoum**

**Project title: UCL – UoK Expedition to the Southern Gezira (Sudan): Mobility, identity and interaction of pastoral peoples with the Nile Valley**

This project is jointly directed by Dr. Michael Brass (UCL) and Prof. Ahmed Adam (U. Khartoum). Professor D. Q. Fuller acted as field director from 14-18 Oct. The field season spanned from 2-18 October.

As is well-known Jebel Moya was extensively excavated by the Wellcome Expedition of 1910-1914, but some substantial archaeological deposits remain. A key aim of this project is the carrying out targeted sampling and recording using more modern methods, including archaeobotany, modern zooarchaeology and osteoarchaeology, including the potential for ancient DNA, isotopes and AMS radiocarbon dating, alongside artefactual analysis.

In the present season four trenches were excavated, with the aim of carrying out systematic sampling at different locations on the northern half of the site area where substantial archaeological deposits remain. The locations of these trenches are indicated on the satellite image below (Fig. 1). Trenches 1, 2 and 4 (Fig. 2) were standard units, excavated in 10cm spits, and each was sampled for flotation for archaeobotanical remains. None of these trenches reached natural bedrock or archaeologically sterile horizons, so stratigraphy was drawn, plastic woven sacks were laid on the lowest level reaches and trenches were backfilled, to help protect unexcavated deposits and to facilitate further investigation in future. Trench 3 was located to rescue the skeletal remains of an eroding burial, but was not excavated below the base of this burial. Trench 5 was an unfinished unit started immediately adjacent to west of Trench 1.



**Fig. 1. Satellite image of the Jebel Moya locality, indicating locations of Trenches 1 through 4, as well as the House Boulders built by wellcome. Note the southern edges of the modern village is visible to the North.**



**Fig. 2. View for Wellcome House of Boulder towards Southwest indicating locations of Trenches 1, 2 and 3**

### **Trench 1**

This unit was 2m by 2m and excavated to a depth of 90cm (Figs. 3, 4) Finds included ceramics (predominantly of Phase 3: Meroitic/Post-Meroitic period) and animal bones, as well as horizon of scattered stones (including one quern) at ca. -80cm, which was planned but of no clear pattern. Flotation samples were taken from this sequence.



**Fig 3. Trench 1 Stratigraphy. 50cm scale; trowel points north. Note Trench 5 visible by feet in background.**





**Fig. 4. Trench 1, being backfilled, illustrating backfilling procedure to facilitated future continued excavations.**

## Trench 2

It was 2m x 2.5 meters. This was situated on a highpoint in the preserved site sediment near an eroded wadi section that indicated a considerable depth of stratigraphy, including Mesolithic 1 pottery at the base of this Wadi exposure and Neolithic pottery in a stratum in-between the Mesolithic and Meroitic/Post-Meroitic strata. This was the deepest trench excavated, although it did not reach sterile deposits and one of the richest in finds of all kinds and charcoal recovered through flotation. It was excavated to a depth of ca. 150cm. Sediment samples for phytoliths were taken from the natural strata in this trench.



Fig 5. Trench 2 during drawing of stratigraphy.



**Fig 6. Trench 2 stratigraphy, 50cm scale, trowel pointing North.**

Finds of note included a diminutive groundstone axe and a clay animal figurines (pictured below), probably of a goat. Both of these were from lower levels (below 1 meter), and these were either from the start of the Meroitic-era occupation or from end of the previous phase of occupation, pending further analysis. A quern, animal bones and charcoal concentration as well as abundant pottery suggest that the Meroitic-period of occupation resulted in a long duration occupational stratigraphy.





**a**



**Fig. 7. Views of clay animal figurine from Trench 2. Note are two ears and two horns (horn and ear on the left side are damaged); horns emerge from the top of the hear and curve back; also, tail is held erect; face is pointed and triangular; upper leg shoulder protrude out above front legs (see comparisons below). These feature all point towards identification with goat (*Capra*), as horns and tails do not follow such patterns in *Ovis* or *Bos*. Something related, such as a wild ibex, might also be a possible identification.**



**Fig. 8. Comparative prototypes of main domestic animals**

**Trench 3** This trench was laid out around a partially exposed burial eroding out of a slop. This was a rescue excavation but also has high potential of yield important osteoarchaeological data. The skeleton appears to be supine, facing right with hand between legs, of an adult, perhaps female.





**Figure 9. Eroding bones on surface, Trench 3, being cleaned by Dr. Mike Brass.**





**Fig. 10. Trench 3, eroding burial on slope, after surface cleaning.**

#### **Trench 4**

This trench was placed near the eastern edge of the site area on the southern side of an erosional gully, which had exposed bones (animal) and a large groundstone. The ashy sediments, with fairly abundant ceramics and charcoal, suggest that this was an occupational sequence. Lithics and beads were also found in this sequence. Sediment samples for phytoliths were taken from the natural strata in this trench and from a possible residue on the quern surface.



Fig. 11. Trench 4 under excavation, showing the protruding groundstone and other artefacts in adjacent eroding wadi.





**Fig. 12. Trench 4, east facing section at the end of excavations, including a massive groundstone quern.**

### Trench 5

Two meters to the west of Trench 1 is a stone ringed tumulus, part of small tumulus field. A 2x2 meter unit was started as section in the corner of this tumulus and taken down to the first compacted surface. A further meter square north of this towards the centre of the mound was laid out, but time was insufficient to bring this down to the same level. No below ground features or cut was yet exposed to confirm that this indeed a burial. What can be determined at this stage is that a earth mound was built about the ground surface, after the formation of Layer 1 in Trench 1 had begun. A ring of stones was then laid around this the outer part of this mound.



Figure 13. Trench 5, exploring the superstructure of a tumulus type.



### Flotation and wet-sieving program

Systematic flotation was carried out, using a washover bucket method through 250 micro mesh size (Figs. 14, 15). This returned charcoal and hopefully small seed/fruit remains. Samples were taken through the entire sequences of Trench 1 and Trench 4 and the lower parts of Trench 2. Each spit was sampled by two replicate samples of 20 litres each (i.e. 40 L for spit), except for one smaller context sample that was not of the same volume. In total 40 flotation samples were processed. It is hoped that light fractions (charcoal) can be exported for analysis at UCL's archaeobotany laboratory. Heavy fractions that did not float were then wet sieved on 3mm mesh and sorted for any potential lithics, animals, beads or other fines. This produced 5 small beads, on calcite or of ostrich eggshell as listed below.

List of bead finds (from heavy residue of flotation samples). Photos below.

1. Tr. 2- spit 14. (Flot #29) Ostrich eggshell disk bead
2. Tr. 2- spit 12 (Flot# 23) Stone (calcite) globular/ thick disk bead; broken.
3. Tr. 4- spit 5 (Flot#8) Ostrich eggshell square bead
4. Tr. 1- spit 9 (Flot #30) Ostrich eggshell square bead
5. Tr. 4- spit 3 (Flot.#7) Stone (calcite) globular bead; broken.



Fig. 14. Beads, from tope left 1, 2, 3, 4, Bead 5 cross section and Bead 5 top view.



**Fig. 15. Flotation and wet-sieving set up at Jebel Moya village *hafir* at the base of Jebel Moya.**

#### **Museum work**

In addition, research has been undertaken at the British Museum and at the National Museum in Khartoum. From the British Museum, a representative sample of the Mesolithic sherds from Shaqadud in the Butana of the central Sudan was examined. From the National Museum, the Mesolithic sherds from Jebel Moya were identified and all of them analysed. The data derived from these collections will be used to re-evaluate the hypothesis of Isabella Caneva of late Mesolithic connections between the Libyan Sahara and the southern Sudanic Nile Valley at the end of the late Mesolithic ca. 5000 BC.