

## ANNUAL REPORT: Boncuklu 2016 FIELD SCHOOL

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### Project aims

There has been much controversy about the mechanisms by which the earliest farming spread around the world. There are few sites where we are able to observe direct evidence for earliest adoption or development of farming. In addition a focus on how the spread of farming occurred has distracted from understanding how the adoption of farming affected those caught up in the process and changed the relationships between people, plants, animals and landscapes. At Boncuklu we have demonstrated adoption of farming by indigenous central Anatolian foragers (Baird *et al* 2012) so the project gives us a chance to understand what this uptake of farming meant for such foragers, in terms of their household organisation and practices, engagements with the landscapes, ritual and symbolism, as well as understanding the spread of farming to the west, ultimately into Europe. The ritual and symbolic practices at Boncuklu are especially intriguing given that Boncuklu seems to be a direct predecessor of Çatalhöyük and located only 9.5 kms to its north and we can thus investigate the factors involved in the appearance of large population aggregations that typify the Neolithic of SW Asia.

### 2016 season

We excavated in 2 main areas of the site, Area P and Area M. In Area P we investigated 2 buildings, which appear to be standard Boncuklu houses, with the intention of learning more

about the domestic activities in these houses and the deployment of ritual and symbolism within the structures. In Area M we investigated open areas between buildings as well as one building that does not appear to be a standard domestic house. In M we aim to dig a sounding to natural through what is likely the full sequence of the site to study evidence of changing economy and environment through time.

#### Area M:

Excavation in Area M concentrated on two areas. The first along the west side of the Area aims to create a sounding through the whole sequence. We are excavating stratigraphy earlier than in the rest of M in this area. Work is focusing on two main elements here, a building and a series of open areas with midden accumulations.

#### Building 24:

We removed at least 20 floors in the north-western dirty kitchen area of B 24. In doing so we identified a line of stakeholes along the western edge of the hearth for B 24. Presumably this created a screen around the hearth of installations for cooking with. These floors were notable for concentrations of egg shell. To the north-west of the hearth was a deeply sunken area with coarser floor linings which contained high concentrations of bird, fish and amphibian bone, indicating the importance of these foodstuffs and their preparation in the houses. To the west of the hearth a feature had been packed with thick marl plaster and the first floors over this feature were painted with red and orange paint. Some of the floors near the hearth also are red painted. This degree of symbolic activity is so far unusual in the kitchen areas of other Boncuklu houses and suggests that contrasts and divisions in the use of space that seem to be common features at the site could on occasion be transcended.

#### Middens:

To the north and earlier than Building 24 we continue to excavate a series of midden lens, general dump of organic material in this open space. In the north-eastern part of this area, we continued to excavate a series of very fine laminations of alternating clay, ashy silt and thin white ash lenses all apparently contained within a cut and representative of very repetitive activity. So far we estimate over 300 laminations.

In the north central and western part of the trench we excavated some deeper more massive layers of midden. Some of these had built up against edges lined with matting or layers of vegetation preserved as phytoliths. Cutting into these midden deposits were 4 open air hearths, of slightly different phases but all clustered in the same location. In previous seasons we have excavated later hearths in this area as well indicating repetitive action even within these open areas.

Cut into these various sets of middens was a pit. These contained a cache of objects placed on a bone. These included an extremely long flint blade, exceptional compared to the rest of the

lithic assemblage and by the standards of the Neolithic, certainly a product of specialist manufacture and an import. Along with it was a grooved stone, an elongated polisher/hammer and a large axe covered with ochre. We were only able to excavate a small part of the pit, it is not impossible that the pit is one end of a grave (which we will investigate in future seasons) or a deposition associated with the other graves in the area.

#### M North extension:

In this area we are investigating a sequence of buildings that do not conform to our standard domestic structures. Building 23 is the earliest of a sequence of three. Excavated this season in the area of the building which survives, were a sunken clay lined hearth, a plaster basin which also seems to have been used for fire related activities and a pit filled with layers of charcoal and ash. We have excavated 10 floors from the western side of this building. The number of fire installations suggest this may well be a kitchen structure for use by people living in other houses.

In the north part of Area M underlying B23 is an earlier building, B26. We have exposed only part of its northern wall so far, the interior of the building was to the south and was filled with compact ashy deposits. This wall was notable in having a niche cut onto it, into which was placed a boar jaw reminiscent of and presumably an antecedent similar installations at Çatalhöyük.

To the south of and earlier than the surviving elements of B 23 were a series of surfaces, some of which were overlaid by a phytolith layer in 2015. There are also areas of clay affected by the typical concentrations of stakeholes and drip marks, we find near hearths. These surfaces have many features cut into them, in a notably high density, including quite large pits relative to the size of other such features at Boncuklu. We excavated four large pits and a depression lined with phytoliths. One of the pits had an animal scapula and a boar tusk placed within it. The surfaces are likely to have been part of an earlier building pre-dating B23, but again of specialised purpose like later B 23 and B 16.

#### Area P:

We have continued to excavate Building 21, a sub-oval building early in the sequence in this area. This year we removed a series major plaster floors from the clean area of the building and two smaller floor patching from the dirty kitchen area. Cut into the south-western part of the dirty area was an irregular scoop, levelled with packing material, possibly a temporary hearth, the fill contained a fragment of ground stone. In 2015 we documented a final remodeling of the south-western wall towards the end of the life of the building and this year we found an adjacent area of the wall had also been rebuilt slightly earlier and a post-socket created in the wall at this point. It would appear likely this area of the wall had continuous problems with slumping perhaps due to underlying softer deposit or the presence of an earlier possible burial or pit in the south-west corner of the building.

A series of small features were cut into the floors along the south-eastern and south-western walls. These included two elongated cache pits, two post-holes and a grave. These features had a series of deliberate depositions of distinctive artifacts. The earlier cache pit contained a fragment of a bone tool, obsidian blade and figurine, the later cache pit, which may originally have been used to store obsidian, had a small number of obsidian tools and a decorated stone plaque plastered into it. One of the small features along the western edge of B 21 was a grave rather than a posthole. This contained the remains of a perinatal child lying on its back, crouched with head at the western end of the grave.

#### Building 20:

We completed the excavation of B20 in Area P this year. B20 cuts into B21 and thus post-dates it. Three earlier floors in B20. In the process we have revealed red painted areas around floor slumping over earlier post-hole cuts. We also detected a grave in the south east corner of the building. This had been cut from later floors of this building. This was an adult lying on its side. No grave goods were found with this burial, which is the only one so far documented in B20. This seems to have been a relatively short-lived building. We excavated the construction cut and wall for this building revealing that whilst most of the sub-structure consisted of bricks on end laid sloping against the cut for the building, the north-westernmost bricks had been laid flat where the cut was very shallow, perhaps suggesting that they were set close to the contemporary ground surface.

#### Micromorphology sampling:

Dr Wendy Matthews and Dr Marta Portillo-Ramirez sampled 9 thin section blocks from middens, structures, laminated surfaces and coprolite areas in Area M. This work is vital for understanding how the buildings and midden areas were used and whether animals were kept on site, key to learning about whether animals had started to be domesticated.

#### Experimental archaeology:

A series of experiments aiming to understand manufacture and plastering of floors, use of hearths and fire places, use of dung as fuel and in plasters, characteristics of different other fuel types and cooking experiments using facilities like those on site were conducted to explore materials and their manipulation, cooking methods and the way the Neolithic buildings might have operated in terms of heat and smoke within the structures.

#### **Student experience**

IFR students were able to participate fully in the site research and all the excavation activity documented above, being trained in fine scale stratigraphic excavation by professional archaeologist supervisors and experienced PhD students. They worked with the environmental sampling activities as well. They participated in the experimental work. Because of the suite of specialists and PhD students present conducting research on the site they were able to benefit

from tailored training in archaeobotany and benefit from information about the specialist research included in lectures and site tours. Very positive student feedback attests to the quality of the training – with 97% satisfaction. The free form feedback indicates the “fantastic” quality of the experience.

**Publications:**

Three papers have been published about Boncuklu in 2016, 1 in World Archaeology on special depositions and the symbolism of the buildings, 1 in Current biology (on our ancient DNA results), 1 on the experimental archaeology in Turkish. 2 have been accepted, 1 in Cambridge Archaeological Journal and 1 in Journal of Archaeological Science, both these deal with different aspects of our early pottery.

We are in the process of completing paper for submission to PNAS. Volume 1 of the Boncuklu monograph has made some good progress.

Papers will be presented at Nottingham University, at British School in Athens and at the Directorate general Annual symposium of Excavations in Turkey and at METU in Turkey in the course of the next 6 months.