

HABITAT & SETTLEMENT IN PREHISTORIC, HISTORIC & CONTEMPORARY PERSPECTIVES

This strategic research initiative supports research focused on assessing long-term change from prehistory to the present day. Anatolia has one of the best-defined long-term records of settlement during the Holocene period, and its study is central to a range of questions in prehistory, including the changing relationships of humans with the environment, the formation of large-scale settlements and shifts in urban-rural relationships. Developments in the Black Sea coastal region sometimes ran parallel to changes in Turkey, but followed a different course at other periods, creating interesting comparisons, parallels and alternatives. Of particular interest are mankind's attempts to live in as well as adapt to and change conditions set by the environment through time and also the effect of human beings on their natural environment and landscape.

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Boncuklu: the spread of farming and the antecedents of Çatalhöyük

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The Boncuklu project offers the opportunity to investigate what the uptake of farming meant for early Holocene foragers, in terms of their household organisation and social practices, landscape engagements, ritual and symbolism, as well as to understand the spread of farming from the Fertile Crescent, to points to the west and 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 is located just 9.5km to its north.

Fieldwork

In 2019 we started the season with a number of aims. In Area M west we planned to excavate to natural deposits in order to produce a complete sequence through the site and document the nature of the earliest occupation. In Area M east we intended to investigate the use of the open areas in this part of the settlement, including the previously identified human toilet area (reported on in *Heritage Turkey* 2018) and Building 26. In Area R we hoped to investigate the use of the open space in this portion of the site and the nature of a distinctive early structure; and, finally, in Area L we aimed to explore the nature of activities on the eastern edge of the site and the latest phases of Neolithic activity on the site, including whether they mark a transition to more substantial mixed farming.

In Area M west we reached apparently natural deposits in some parts of the trench, and so documented the earliest occupation in this area of the site. This early occupation has a

distinctive set of features that are not common in later phases. We recorded midden deposits accumulated in an open area. These are relatively compact, unlike later midden deposits in Area M, and revealed few artefacts but larger quantities of animal bone; this suggests very distinctive patterns of use in the area. Within these deposits we found a number of small oval features, apparently settings for baskets or possibly other artefacts. There were also some small channels lined with phytoliths and two instances of small oval clay platforms that had been repeatedly built up with layers of clay; these were apparently some form of work installation. There were also small external hearths in the same area and a large pit with some coprolites at its base. The work undertaken in this area also offered the opportunity for Aroa Garcia-Suarez to undertake micromorphological sampling of the external hearths.

In the lowest parts of the deposit we noted a series of naturally formed concretion deposits which may overlie an earlier occupation. This perhaps hints that some of the earliest occupation was of an intermittent nature; we intend to investigate this possibility further in 2020.

In Area M east we also achieved our main aims. In particular, we have added important knowledge to our understanding of structures on the site. The earliest phase in this area relates to a building, Building 26. We traced only the southern edge and southeastern corner of this structure. We exposed the latest floors in the building running against the inner face of the southern wall. They were covered by



Wall of Building 26.

an in-situ dense burnt layer consisting of several layers of reed material. This layer was moderately thick and did not show the weave typical of matting, as we have documented it elsewhere on the site. It might have been roofing material, but there was no evidence of burnt beams overlying it. Thus it may well have been that, on occasion, layers of reed were laid as floor coverings, something we have not observed previously. We also traced the exterior face of this building wall. We excavated midden surfaces built up against the southeastern wall and along the southern exterior face, for the first time documenting exterior activity directly associated with a specific building. We could also see that the exterior face of the building was covered with a fine white plaster, with a finish matching that in the interior. This indicates that, unlike other structures we have excavated, the walls of this building were largely free standing. It also means that a boar jaw placed in a niche in this wall must have faced the exterior, unlike previously documented animal-bone installations, which faced the interior of the structure. Perhaps this was seen as a ritual means by which to protect buildings against threats from the outside.

To the south, and post-dating Building 26, was a series of surfaces with hearths and small pits. There was also a burial cut into this area.

Finally in this part of the site, we excavated more of the human toilet area in the southeastern corner of Area M east. As a consequence, we have increased the sample of coprolites and further documented the complex sequencing

in the midden. This comprises alternating layers of coprolites and phytoliths, which suggests relatively long-term use of this public toilet area.

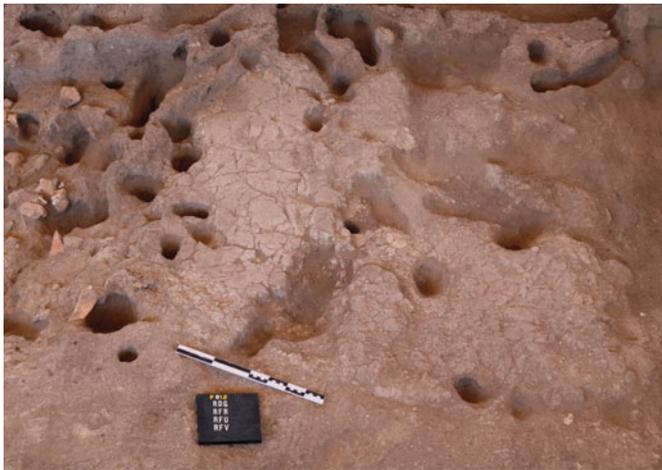
In Area R, we better documented what we now understand to be a very large Neolithic pit or depression used for the dumping of much refuse, especially large animal processing by-products, but also material from particular food-consumption events, such as concentrations of bird bones. The centre of the depression saw the use of fire, potentially related to food-consumption activities. Within the depression much structural debris had accumulated, presumably from surrounding areas. These deposits overlay a sub-rectangular feature with very thick clay floors (several centimetres thick); this was presumably a large oven or basin for processing liquids. We have not documented an oven or basin on this scale previously, so it certainly hints at a previously unimagined scale of processing activity in open areas.

In Area P we exposed the western half of Building 22, which stood four courses high in a number of places. This offers the opportunity to investigate an unusually well-preserved building.

In Area L we were able to excavate to the natural marl. The resulting sequence from the study of the artefacts and ecofacts will provide important insights into the later phases of Neolithic occupation at the site. Excavation here has also helped us to document peripheral site activities. Particularly notable is a large pit that had been cut into the marl; this was probably a marl extraction pit, with marl being procured for the manufacture of building floors, features and wall faces. We also excavated more of an extensive plaster-faced lining and cut that was probably part of a very large pit or possibly plastered ditch at the edge of the site. Thus we now understand more about the later Neolithic phases and use of the site edge. Further investigation of the animal bone and plant remains will allow us to investigate changes in economic activities at the end of the occupation of the site.



Burnt reeds on the floor of Building 26.



Large sub-rectangular oven or basin in Area R.

Experimental studies and public engagement

Gökhan Mustafaoğlu continued experimental work on our Neolithic replica buildings, which also contribute to our visitors' understanding of the nature of Neolithic houses and open spaces. In 2018 we reconstructed the largest building we know of from the Neolithic site. Since it took us much of the 2018 season to put up the structure, the interior still required finishing in keeping with our Neolithic houses. It took six people the best part of two weeks to complete the floor and wall plastering.

We conducted some more fire experiments in the buildings, especially in the reconstructed 'light structure'. These confirmed that the light structure functioned particularly well in this regard, with its extra ventilation, and that such structures would have been very suitable as food-processing and kitchen buildings. Inspired by the improved functionality of such ventilation arrangements, we experimented with improving ventilation in the standard house structures by removing a small number of bricks from the tops of the walls of one of our replica buildings. This significantly improved the ventilation of the building when the hearth was being used. We have no direct material evidence of such an arrangement, but it certainly seems a plausible option.

We also repaired the roofs of the buildings, which had suffered significant wear over a winter that saw much rain and snow. This confirmed the importance of regular maintenance of roofs and floors in the Neolithic period.

In terms of visitor facilities, we installed an interactive installation on ancient food, designed by Jessica Pearson as part of her AHRC project, in our visitor centre, complete with replica food. We also installed several new panels explaining our scientific work on population mobility and human health and diet. These include specially commissioned paintings designed by Jessica.

As part of our development of a Neolithic garden, we created a pond with wetland plants that are documented in our archaeobotanical record, in order to illustrate the nature of the Neolithic wetland environment to visitors. It was

quickly visited by red dragonflies and frogs, which suggests something of the nature of the habitat in the Neolithic. We further developed the area of the garden by planting more of the tree species that were present in the Neolithic environment, mainly on the hills surrounding the plain, and exploited by Neolithic communities. We created two new fields, where we planted Neolithic-type crops in order to illustrate to visitors the nature of Neolithic farming. To do so we had to source traditional varieties of wheat and peas that are not much used today.

We also hosted a press day, which was attended by about 30 journalists from major media outlets in Turkey, that coincided with the visit of the mayor of Karatay, our local municipality. As a result, the site received wide media coverage over the course of the following days, and the mayors of Karatay and Konya committed their support to further development of visitor facilities.

Visitor numbers have risen from approximately 500 in 2018 to over 1,200 in 2019. The publication of an article featuring Boncuklu in the Turkish and American *National Geographic* magazines (with a circulation of 65 million) may have helped this process.

Acknowledgements

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Reconstructed Neolithic wetland pond.