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ÇUKURIÇİ HÖYÜK – A PREHISTORIC SITE IN EPHEOS

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Çukuriçi Höyük is the oldest excavated prehistoric site in the vicinity of Ephesos (fig. 1). This artificial mound (so-called *tell* or *höyük*) is composed of settlement remains of different periods (fig. 2), which can be dated from the 7th until the 3rd millennium BC (Neolithic, Chalcolithic and Bronze Ages). First systematic excavations were initiated in 2007 and are continuing as part of the ERC project *From Sedentism to Protourban Societies in Western Anatolia* since 2011. Studies are focusing on the settlement history of Çukuriçi Höyük itself as well as on broader scientific questions in Western Anatolia including environment, ecological resources, climate conditions, changing use of plants and animals and social structures. Besides archaeology, also geophysics, paleogeography, metallurgy, inorganic chemistry, petrography/mineralogy, geology, zoology and genetics, botany, anthracology, organic chemistry, physics and anthropology are involved in the perennial research.

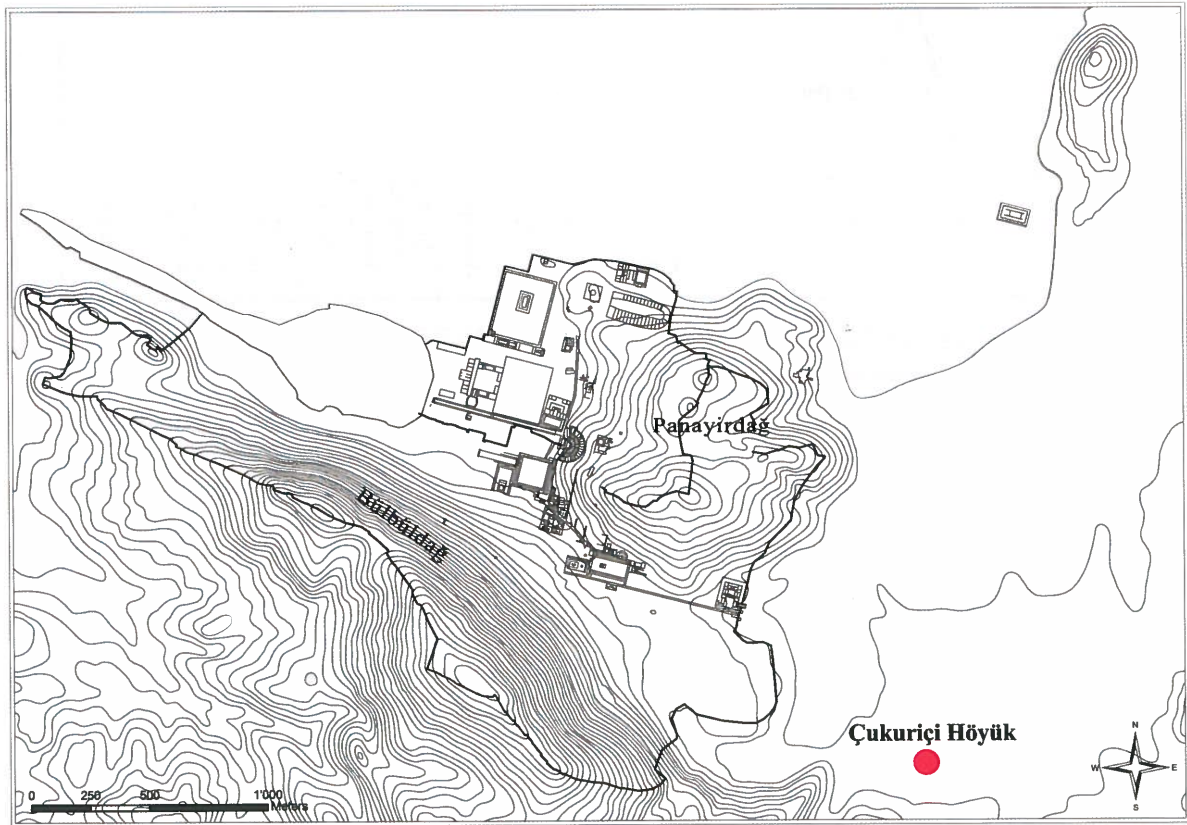


Figure 1. Map of the Çukuriçi Höyük.

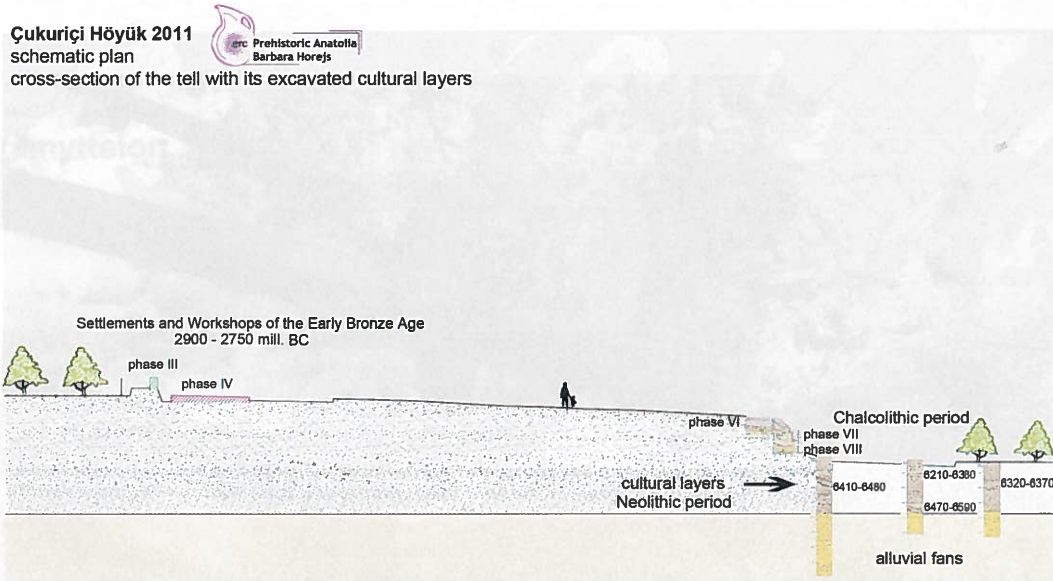


Figure 2. Cross-section showing different periods of settlement in Çukuriçi Höyük.

Early Metallurgy (Bronze Age)

The youngest settlements are dating in Early Bronze Age 1 between 2900–2750 calBC by ¹⁴C-dates. Besides ordinary household activities, intensive metallurgical activities were identified by excavating the settlement areas under study and carrying out scientific analyses. Metallurgical workshops with up to now 25 ovens and associated finds indicated that metal processing took place directly in the living quarters (fig. 3). The tools allowed us to identify all the production stages of various metal objects (fig. 4). Especially the smelting debris examined provided useful clues with regard to the production of arsenical copper at the beginning of the Bronze Age. The copper ores are not clearly identified so far and are one of the main aims of current investigations.



Figure 3. Field view showing metal processing took place directly in the living quarters.



Figure 4. Tools used in metal processing in Çukuriçi Höyük.

Early Farmers (Neolithic period)

Recent excavations in 2011 were conducted at the foot of the Çukuriçi Höyük. Previous geological drills unveiled settlement material down to a depth of 3,80 m below today's surface. Numerous features from Neolithic period (7th millennium BC) were documented in the new excavations, such as different living and activity areas, consisting of houses, huts and pits for storage and cooking. Remains of food production and consumptions are for example preserved from partially burnt plants and mainly domestic animals (pig, cattle, sheeps and goats) as well as fish and seafood. Intensive use of the Aegean sea by the Neolithic inhabitants of this settlement is not only indicated by fish remains, but also by a remarkable high percentage of imported obsidian – a special volcanic stone from the Aegean island of Melos that is used for different tools.