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**Short Fieldwork Report: Tell Brak (Syria), seasons 1984–2009**

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## Tell Brak (Syria), seasons 1984–2009

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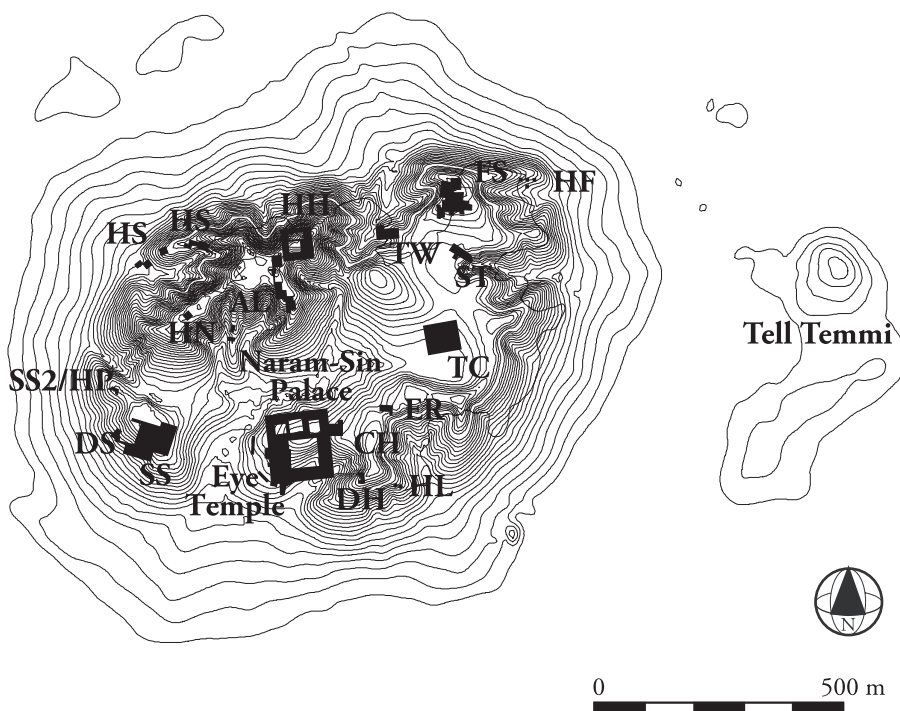
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Tell Brak (ancient Nagar/Nawar, 36°40'00"N 41°03'30"E) is the largest prehistoric archaeological site in north-eastern Syria, with its main mound covering ~60ha and rising up to 43m above the plain. The site is surrounded by several smaller satellite mounds and the total settlement area exceeded 130ha during some periods of occupation. André Poidebard (1930) conducted small sondage excavations at the site in 1930 and regular excavations were undertaken between 1937 and 1938 by Sir Max Mallowan (Mallowan 1947), accompanied by his wife Dame Agatha Christie (Christie Mallowan 1946). During the excavations, two monumental buildings were found: the so-called Eye Temple and the fort of Naram-Sin. The Eye Temple included thousands of small anthropomorphic figurines and was dated originally to the last centuries of 4<sup>th</sup> millennium BCE but has been recently re-dated to ~3900–3700 BCE. The fort of Naram-Sin is dated to ~2250 BCE and bears witness of Akkadian control over northern Mesopotamia.

Excavations at Tell Brak resumed in 1976 by a team based chiefly at Cambridge University, directed by David and Joan Oates. This project is still in progress, accompanied by various sub-projects such as *Exploring an Upper Mesopotamian regional centre* by Roger Matthews (1994–1996), excavations in the Area TC by Geoff Emberling, the field director of the Tell Brak archaeological project in 1998–2004, and the *Tell Brak Regional Survey Project* directed by Henry Wright (2004–2007). Since 2006, Augusta McMahon has acted as the field director of excavations at Tell Brak.

The main focus of the first seasons of excavations was to reconstruct the history of settlement at Tell Brak during the 3<sup>rd</sup> and 2<sup>nd</sup> millennia BCE. Important discoveries at the site include the Mitanni palace in Area HH on the highest ridge of Tell Brak and two temples with their administrative precincts dated to the Akkadian period in Areas SS and FS. Later, excavations at Tell Brak revealed a third pre-Akkadian temple with an adjacent administrative centre (the so called Oval Building) in Area TC. Recently, focus at the site has centred on investigating the Late Chalcolithic strata in Area TW (see **Figure 1**) where a monumental so-called Basalt Threshold Building was found together with an area of workshops dated to late 5<sup>th</sup> millennium BCE. Also, the remains of Late Chalcolithic occupation have been found at Temmi village (Area T2, 36°40'05"N 41°04'01"E) and at Tell Majnuna (see this volume), two satellite mounds of Tell Brak.

The results of recent excavations at Tell Brak have been published in many papers and books, including a series of preliminary reports in *Iraq* (e.g., Emberling et al. 1999; Emberling & McDonald 2003; McMahon & Oates 2007), some monograph papers in other journals (e.g., Oates & Oates 1997; Oates 2005; Ur et al. 2007; Oates et al. 2007), and three volumes of final reports (Oates et al. 1997, 2001; Matthews 2003), plus a fourth in progress.



**Figure 1.** General plan of the site with major areas of excavation (courtesy of Joan Oates & Augusta McMahon, adjusted by Barbara Sołtysiak).

During more than 30 seasons of excavations at Tell Brak, hundreds of human skeletons have been unearthed. The human remains excavated after 1976 were stored in the dig house at the site itself and were not studied until 2004, with exception of a small sample of three individuals exported to the Natural History Museum in London that were analysed by Theya Molleson (2001). Most of the bones from Tell Brak were studied by the present author in the dig house at the site during three autumn survey seasons (2004–2006) and three spring excavation/study seasons (2007–2009).

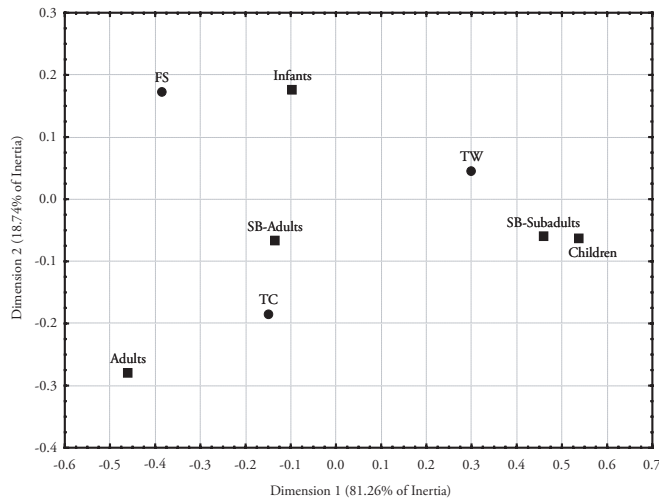
Since 1984, 173 human skeletons have been recovered at Tell Brak. Most of them are poorly preserved and are often incomplete. Three collective burials of disarticulated bones (total minimum number of individuals = 44) as well as 173 single bones or small bone assemblages were also recovered at the site. Most of the human remains were discovered in three areas in the northern part of the site: Area FS (years 1985–1993), Area TC (years 2000–2004), and Area TW (years 1997–2008). More than half of the individuals date to the later Early Bronze Age and to the very beginning of the Middle Bronze Age (Phases L = pre-Akkadian, M = Akkadian, N = post-Akkadian, ~2400–1950 BCE). Moreover, a large proportion of the human skeletal remains dates to the Late Chalcolithic (Phase E = Late Chalcolithic 2, F = Late Chalcolithic 3, ~4100–3600 BCE) (see **Table 1**).

**Table 1:** Sex and age distribution in the sample of skeletons from Tell Brak, by areas of excavation.

Area	Chronology	0–2 years	2.5–14 years	Adolescents	Adults			Total	Single bones		Total
					F	?	M		Subadult	Adult	
AL	EBA						1	1			
CH	Chalc	2				1	2	5			
DH		8						8			
FS	EBA	29		1	1	4	1	36	3	25	28
HHF	MBA	1						1		1	1
HNC	MBA	1						1			
SS	EBA	1						1		1	1
T2A	Chalc	2			1	1		4	1	3	4
T2B	Chalc	1	1			1	1	4		14	14
TB									1	1	2
TC	EBA	25	4	2	5		6	42	12	38	50
TT1					1			1			
TT34		2						2		2	2
TW	Chalc	41	15	1	1	3		61	29	38	67
VA										2	2
WP	EBA	1						1		1	1
?		2	1			2		5	1		1
<b>Total</b>		116	21	4	9	12	11	173	47	126	173

The Tell Brak sample includes a high proportion of infants (67% including foeti) in comparison to adults (18.5%), repeated in all major areas in spite of their chronological differences. In the disarticulated bone sample, however, 73% of the bone is adult and there are few infant remains. Infants, during both the Late Chalcolithic period and in the Early Bronze Age, were buried in intramural contexts whereas adults were only occasionally placed there. There are some differences in age categories, however, between the three major areas representing two periods of occupation at Tell Brak. A higher proportion of infant skeletons was discovered in Area FS, while in Area TC adult skeletons and single bones were more frequent. In Area TW, the skeletons and disarticulated bones of children (>2 years old) were most numerous among all areas. These differences are statistically significant ( $\chi^2=28.4$ ,  $p=0.0004$ ) and clearly visible on the Correspondence Analysis biplot (**Figure 2**). The prevalence of adult remains in the loose bone assemblages is difficult to explain considering the scarcity of adult burials at the tell. It is possible that these fragmented bones were transported from surrounding cemeteries along with building materials. It is also possible, however, that the damage may have been caused during construction activities at the site, as adult burials are larger than infant ones and as a result are more easily discovered and damaged.

Several anomalous burials were discovered at Tell Brak in the post-Akkadian strata. A temple found in Area FS had been deliberately closed and filled with sandy soil in which several hybrid equids were buried together with three human individuals. The three skeletons were incomplete and in some cases only the lower portions were present. The bones were exported



**Figure 2.** Correspondence Analysis biplot for the distribution of age categories in three main areas of excavations at Tell Brak.

to the UK to investigate whether the individuals were cart drivers. No skeletal features, however, supported such an hypothesis (Molleson 2001). Only the lower portions of the most complete skeleton remained in the dig house and were examined in 2005. This individual exhibited a dislocated right tibia-fibula joint as well as an impact trauma in both the fifth toes. Upon examination of the upper limb, prominent ulnar supinator crests were observed. Oates et al. (2008) discuss how such a pattern of traumatic and activity related skeletal modifications may suggest that the individual was a cultic acrobat, known as a *hub* in cuneiform sources. Such interpretation, however, has been disputed (Jurmain & Roberts 2008; Molleson 2008).

Other anomalous burials were found in Area TC, close to the Oval Building. One such burial consisted of a pit filled with very hard clay as well as the skeletons of a young male and a slightly older female (TC 2600 and TC 2601). Although well preserved and articulated, the skeletons were incomplete and placed in irregular positions. Not far away, a large pit containing the mixed remains of at least 32 adult and adolescent individuals was discovered. Although two other common burials have been found at Tell Brak within the Akkadian strata (Table 2), this large pit was very peculiar, particularly because bones and bone fragments were loosely scattered together with sherds and other types of waste (e.g., animal bone fragments, ash, and clay). Crania and long bones were virtually absent and the assemblage contained chiefly mandibles, foot and hand bones, ribs, vertebrae, and patellae. Some of the bones were fragmented before deposition. No clear taphonomic effects, however, were observable except occasional root etching. It appears as though larger skeletal elements had been removed from an older cemetery for reburial elsewhere whereas smaller bones had been gathered together and thrown into this pit.

Details of the anomalous burials in Area FS have been already published (Molleson 2001; Oates et al. 2008). In addition, dental measurements and carious lesion scores in human remains from Tell Brak were used in more general research papers on Mesopotamian populations (Sołtysiak 2006, 2007). A detailed report on skeletons from Area TW will be published in the 3<sup>rd</sup> volume of a final report series entitled: *Excavations at Tell Brak*.

**Table 2:** Multiple secondary burials at Tell Brak. MNI – minimum number of individuals.

Area	Locus	Phase	MNI	Comments
FS	1374(2)	M (Akkadian)	3	
TCJ	1693(2)	M (Akkadian)	9	Large pit, no details.
TCJ	2207+2214+2251(2)	N (Post-Akkadian)	9+3+20	Large pit with ashy deposits, bones mixed with sherds.

During the work on human bones from Tell Brak, the remains of several individuals from two other sites were also studied at Tell Brak, including five Late Chalcolithic skeletons from Tell Hamoukar reported in this volume. During the 2009 spring study season, 22 skeletons and 7 human bone assemblages from Chagar Bazar were also analysed, most of them dated to -1750-1650 BCE. The final report on this sample has been already published (Sołtysiak 2009).

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## Ghal-e-Kash, Tepe Lafoor & Molla Kheil (Iran), season 2009

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In the spring of 2009, during the study of human remains from Gohar Tepe (see this volume), single skeletons from three other sites in the Mazandaran province were analysed. The first of these sites is Ghal-e-Kash, located some 7km east of Amol and 300m south of