# Al-'Obeidat Structures in the Western Negev: An Example of Bedouin Architecture from the British Mandate Period in Israel

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ABSTRACT: This survey report describes two well-preserved built Bedouin structures located near Se'elim in the western Negev (map 129). The condition of both structures provides information on their height, construction and the features located inside. Ethnographic data collected by Gazit indicates that the Tarabin built these structures in the 1930s when they were beginning to sedentarize. The construction of these buildings also coincides with the occupants' cultivation of cash crops. Both buildings provide data for the study of the Negev Bedouin and the Mandate period from an archaeological perspective.

## INTRODUCTION

THE Israeli Antiquities Law of 1978 does not provide legal protection to archaeological sites and artefacts that postdate 1700 CE.<sup>1</sup> Nevertheless, there is a growing body of archaeological literature on the Ottoman period (e.g., Toombs 1985; Boas 2000; Israel 2006; Arbel and Rauchberger 2015). In contrast, the British Mandate is typically beyond the research interests of many archaeologists. Recently, Horwitz, Winter-Livneh and Maeir (2018: 85) suggested that there is a tendency in academia to avoid this timeframe for political reasons. While this sentiment may be true for some, others have recorded archaeological remains from this era even though it is not the subject of their research (e.g., Magness *et al.* 2016; Magness *et al.* 2017). Most of the archaeological data pertaining to the British Mandate has been generated by archaeologists employed by the Israel Antiquities Authority (e.g., Arbel, Hater and Yechielov 2012; Peretz 2015; Seriy 2015). Beyond salvage archaeology the number of projects that address research questions related to the Mandate period is scant (e.g., Saidel and Erickson-Gini 2014).

This survey report documents two well-preserved built Bedouin structures, identified as al-'Obeidat structures 3 and 4, located c. 8 km southeast of modern Se'elim in the Negev (fig. 1). The former is a skeuomorph of a two-room Bedouin tent (fig. 2), and the latter is a one-room structure (fig. 3). Both provide information

<sup>1</sup> http://www.antiquities.org.il/article\_eng.aspx?sec\_id=42&subj\_id=228&autotitle =true&Module id=6 (accessed June 2018).

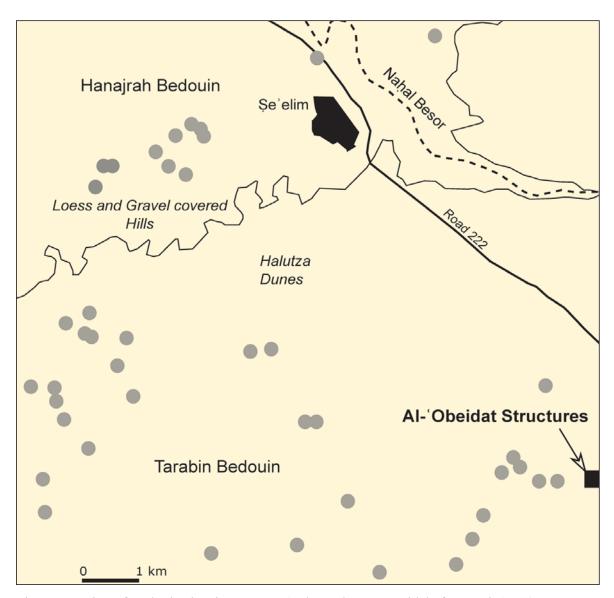


Fig. 1. Location of Bedouin sites in map 129 (redrawn by B.A. Saidel after Gazit 2012)

on architectural features that are often not preserved in the archaeological record (e.g., Ustinova and Nahshoni 1994: 170–173). These constructions also provide data for studying the Negev Bedouin and the Mandate period from an archaeological perspective. Al-'Obeidat structures 3 and 4 also provide archaeological evidence for the sedentarization of the al-'Obeidat Bedouin in the western Negev during the 1930s.

The al-'Obeidat clan are members of the Tarabin tribe, which arrived in the western Negev at the beginning of the nineteenth century and remained there until the end of the British Mandate (Bailey 1980: 48, map 3, 69, map 4, 74, map 5). Prior to the partitioning of Palestine, the Tarabin numbered 5,876 families or 33,062 souls (Muhsam 1966: 28, table 1, 29, table 2). Unfortunately, the al-'Obeidat clan is not mentioned in the published censuses conducted by the Mandatory administration.

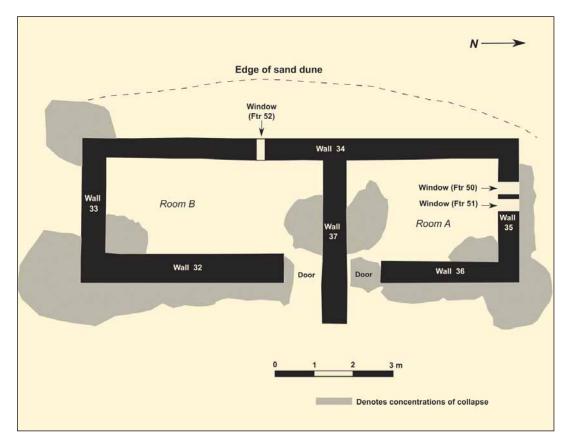


Fig. 2. Al-'Obeidat structure 3: schematic plan (drawn by B.A. Saidel)

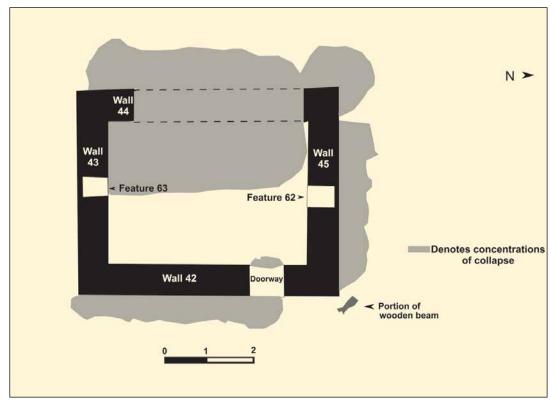


Fig. 3. Al-'Obeidat structure 4: schematic plan (drawn by B.A. Saidel)

## BACKGROUND

By the late nineteenth century the Negev Bedouin were impacted by a range of social and economic processes (Ben-David 1990; Kressel and Ben-David 1995; Ben-David and Kressel 1996). For instance, inter-tribal warfare ceased and tribal boundaries became established. The Bedouin also became increasingly involved in agriculture, and some of their barley was imported to the United Kingdom, where it was used to brew beer (Petrie 1891: 12–13; Huntington 1911: 74; Ben-David 1990: 190–191; Kressel and Ben-David 1995: 121–122). While travelling through the Negev in August 1902 Musil noted the presence of Bedouin granaries (*bawâjek*) that were owned by the following individuals: 'abu Rğêle', 'eš-Šweḥi' and 'abu Tnên' (1908: 62, 70).<sup>2</sup> The establishment of a commercial market in Beersheba eventually provided the Ottoman Empire with a means to assert a measure of control over the Negev Bedouin (Kressel and Ben-David 1995).

Following World War I, the British Mandatory administration sought to rule the Negev Bedouin indirectly by grafting on to their tribal structure (Amiran and Ben-Arieh 1963: 167-168; Marx 1967: 10; Abu-Rabi<sup>c</sup>a 2001: 31-32). Sheikhs functioned as a point of contact for British administrators who sought their assistance with a variety of issues, such as tax collection and drumming up volunteers to enlist in the Palestine police (Abu-Rabi'a 2001: 40; Nasasra 2014: 33–34). The British also provided the Bedouin with various employment opportunities (e.g., Nasasra 2015). At this time the Bedouin and their fellahin dependents were growing cash crops, which were purchased by grain merchants from Gaza and Hebron (Kressel and Ben-David 1995: 122; Ben-David and Kressel 1996: 10). These entrepreneurs also leased Bedouin pastures to grow barley and wheat (Kressel and Ben-David 1995: 122). Contemporary accounts suggest that many Bedouin were directly and indirectly involved in agriculture (e.g., Epstein 1939: 58, pl. XVII, 69-72; Kirk 1941: 59, zone 3, 60). The actual sale of Bedouin barley and wheat was conducted in Beersheba by sheikhs, such as Sulayman al-'Uqbi (Ben-David and Kressel 1996: 19-22; Kressel and Ben-David 1995: 123, 127).

#### SITE LOCATION

Al-'Obeidat structures 3 and 4 are in the southeast corner of map 129 (Gazit 2012). This survey universe measures  $10 \times 10 \text{ km}^2$  and contains three land forms (fig. 1). Low hills covered with loess and gravel are situated in the northeast corner. The Naḥal Besor/Wadi el-Esani courses through the northern portion of this terrain. The Ḥaluṣa sand dunes are located to the south and southwest of modern Road 222. The vegetation is characterized as a Saharo-Arabian zone

<sup>2</sup> Musil (1908: 62) specifically equates the term 'Kornspeicher' with bawâjek.

(Feinbrun-Dothan 1986: map 1), and in winter, precipitation varies from 180 to 130 mm as one moves in a north–south direction.<sup>3</sup>

Historical sources, such as a topographic map of the 'Beersheba' area, indicate that two tracks crossed map 129 (Great Britain 1915). The Gaza–Khalasa road extended through this survey universe in a northwest–southeast direction. The Darb el-Zol was a north–south track that joined the Gaza–Khalasa road at Bir el-Esani. In Newcombe's assessment, the Darb el-Zol could accommodate 'fully laden camels' (Great Britain 1915). For example, a camel can carry up to 225 kg on a long journey and as much as 500 kg on a short haul (Rosen and Saidel 2010: 73).

## PREVIOUS RESEARCH

Bedouin activity in map 129 consists of 42 campsites that in many cases comprise a hearth and a sherd scatter of Black/Grey Gaza Ware and occasionally include a few miscellaneous artefacts (e.g., Gazit 2012: sites 198, 404, 407). The chronology for Gaza Ware pottery combined with the timing of the Israeli War of Independence indicates that the Bedouin remains located in map 129 are broadly dated from 1700 to 1948 (e.g., Rosen and Goodfriend 1993; Israel 2006).

In 1985 Gazit discovered three stone and mud buildings in the southeast corner of map 129. At this time al-'Obeidat structures 1–3 were still standing with their roofs intact. The roofs consisted of tamarisk beams covered by a layer of wattle and daub and twigs. By 1999 the roofs had collapsed. Gazit noted that buildings 1–3 are mud and stone skeuomorphs of the Bedouin tent. His publication of map 129 (2012) provides a brief description of these structures (appendix H), but there are no illustrations or plans of them as they postdate 1700 CE.<sup>4</sup>

In 1999 Gazit returned to map 129, where he encountered a Bedouin shepherd aged 30–40 years. In the course of an ethnographic interview Gazit learned that the al-'Obeidat clan, which is part of the Tarabin tribe, constructed buildings 1–3 in the 1930s. Henceforth, these three constructions are identified as al-'Obeidat structures 1–3. For the Bedouin these buildings functioned as winter quarters 'over the course of several generations'. It is not uncommon for pastoral nomads to seek winter accommodations in shelters that are built of durable materials (e.g., Diqs 1967: 17; Aurenche and Desfarges 1983: 157, 161; Lönnqvist, Valjus and Lönnqvist 2011: 377).

<sup>3</sup> http://www.antiquities.org.il/survey/new/default\_en.aspx#Physical\_Geography\_ and Ecology (accessed June 2018).

<sup>4</sup> http://www.antiquities.org.il/survey/new/default\_en.aspx#Preface (accessed June 2018).

<sup>5</sup> http://www.antiquities.org.il/survey/newmap\_en.asp#zoom=9.0000; xy:34.80852508545,31.298049926757;mapname=129 (accessed June 2018).

# AL-'OBEIDAT STRUCTURES 3 AND 4

On July 11, 2015, Saidel and Erickson-Gini revisited al-'Obeidat structures 1–3 to document, photograph and draw plans of them. This fieldwork was limited to one day as this area is actively used for military training, an issue that also posed a significant problem for Gazit's fieldwork. Saidel and Erickson-Gini discovered that al-'Obeidat structures 1–2 had collapsed, and their locations were demarcated by heaps of earth and stone. They relocated al-'Obeidat structure 3, as well as an additional one-room building, identified as al-'Obeidat structure 4, which had escaped Gazit's attention.

Al-'Obeidat structure 3 is positioned on a slope overlooking a valley to the south. Today, this structure is surrounded by a fair amount of scrub (figs. 4–5).



Fig. 4. Al-'Obeidat structure 3: view to the west; scale measures 3 m (photograph by B.A. Saidel)



Fig. 5. Wall 34, al-'Obeidat structure 3: view to the east (photograph by B.A. Saidel)

<sup>6</sup> http://www.antiquities.org.il/survey/new/default en.aspx (accessed June 2018).

Approximately 1.5 m to the west of this building, a low encroaching sand dune measures c. 0.60 m in height. Al-'Obeidat structure 3 (c. 3.80 × 11.15 m in size) rests directly on sand (fig. 4). The walls are made of unhewn fieldstones bonded with mud mortar. There is no evidence for the use of mudbrick. The eastern and southern walls (32, 33, 36) have largely collapsed, but wall 34, made of tightly packed stones bonded with mortar, still stands over 2 m in height (fig. 5). Some portions of this feature were made with long thin stones laid in courses.

Wall 37 divides this structure into two compartments, rooms A and B. This wall (0.60 m in width) is made of stones bonded with mud mortar. There is no connecting doorway between rooms A and B. The former measures 2.95 m in width and 4.00 m in length. In wall 35 there are two offset windows, features 50 and 51 (table 1), positioned at two different elevations (fig. 6). Feature 50 is 1.05 m above ground level; feature 51 is c. 0.40 m below and slightly to the east of feature 50. The lintels in both apertures were made of large stones. In the northeast corner of this room there are patches of straw-tempered mud plaster on the wall. Room B measures approximately 3.00 m in width and 4.00 m in length.

Structure	Feature	Measurements
Al-'Obeidat structure 3	Window 50	0.30 × 0.26 m
Al-'Obeidat structure 3	Window 50, lintel (interior)	0.50 × 0.08 m
Al-'Obeidat structure 3	Window 51	0.30 × 0.30 m
Al-'Obeidat structure 3	Window 51, lintel (interior)	0.50 × 0.04 m
Al-'Obeidat structure 3	Window 52	0.33 × 0.28 m
Al-'Obeidat structure 3	Window 52, lintel (exterior)	0.50 × 0.10 m
Al-'Obeidat structure 4	Feature 62	0.58 × 0.68 m
Al-'Obeidat structure 4	Feature 62, lintel (interior)	0.70 × 0.08 m
Al-'Obeidat structure 4	Feature 63	0.48 × 0.48 m
Al-'Obeidat structure 4	Feature 63, lintel (interior)	0.70 × 0.07 m

Table 1. Dimensions of select architectural features

The interior face of wall 34 is covered with straw-tempered mud plaster. In the southern end of wall 34, there is a window currently positioned 1.20 m above ground level. The face of this aperture that fronts the exterior of the building is framed with a large stone lintel. The roof and the building materials used to construct it are not preserved.

There is a light scatter of Black Gaza Ware pottery to the east of walls 32 and 36. The only diagnostic form is a rim sherd from a water jar (*jarrah*)



Fig. 6. Room A in al-'Obeidat structure 3: view to the north; scale measures 3 m (photograph by B.A. Saidel)

(fig. 7). This form was in use from 1700–1948 CE and is commonly found at Ottoman and British Mandate period sites (Ustinova and Nahshoni 1994: 173, 174, fig. 14:13; Israel 2006: 102, subtype 11B; Nikolsky 2011: fig. 5:4).

Al-'Obeidat structure 3 is a skeuomorph of the two-room Bedouin tent (e.g., Musil 1928: 72; Layne 1987: 352). Bedouin tents often face east 'to take advantage of the heat of the sun' (Jabbur 1995: 252). The doorways into rooms A and B also open to the east, allowing the sunlight to provide

Fig. 7. Rim sherd of *jarrah* found at al-'Obeidat structure 3; coin measures 23 mm in diameter (photograph by B.A. Saidel)



warmth for the structure's inhabitants during the winter months. The interior of the Bedouin tent is divided into men's and women's quarters by a cloth partition wall known as a gati<sup>c</sup> (Al-Sekhaneh 2016: 20). Wall 37 functions as a gati<sup>c</sup> as it divides the interior of Al-Obeidat structure 3 into two compartments, rooms A and B. This dividing wall also extends beyond the eastern façade of this building (fig. 2), thus mimicking in mud and stone the function of the *qati* (Al-Sekhaneh 2016: 20): 'This main divider is extended outside the front of the tent and separates the female (mahram) from the male domain (mag'ad) or (rubaa) which means 'one fourth'. Among the Bedouin in the southern Levant the men's room is often on the right side of the tent while the women's compartment is on the left (e.g., Amiran, Ben-David and Shanir 1976: 30; Cataldi and Pizziolo 1988: 22; Al-Sekhaneh 2016: 20). Room A is most likely the mag'ad as the location of the windows (features 50 and 51) in wall 35 provide ventilation, but their elevation does not provide the requisite privacy required for women's compartments. In contrast, the window in room B, feature 52, is positioned at a height that provides light, ventilation and privacy. Room B is larger than room A, and it is most likely the women's quarters as household impedimenta are stored in this part of the tent (e.g., Musil 1928: 66-67; Amiran, Ben-David and Shanir 1976: 31). The basis for the gendered division of space inside the Bedouin tent is attributed to Islamic beliefs and customs (Lancaster 1997: 61; Insoll 1999: 62-63, 72-73, 90).

Al-'Obeidat structure 4 is located c. 280 m to the southwest of al-'Obeidat structure 3. A working hypothesis is that this well-preserved structure is contemporary with al-'Obeidat structures 1–3. Al-'Obeidat structure 4 measures  $4.60 \times 5.85$  m and the extant walls stand to a height of almost 3 m (figs. 3 and 8), which was probably the original height of this construction. The western wall (44) has collapsed. The exterior walls are made of densely packed unhewn fieldstones bonded with mud plaster (e.g., Canaan 1933: 31). In turn, the stones were covered with a layer of straw-tempered mud plaster that has eroded and the sediments have accumulated at the foot of the walls (fig. 8). In the eastern wall there is a doorway that measures 1 m in width. Today the southern doorjamb comprises only one course of cut stones. Fallen hewn stones lie on the ground in front of the entrance. The northern side of the doorway is preserved to a height of 1.60 m, and it is made of nicely hewn stones that measure  $0.35 \times 0.20$  m (figs. 8–9). These stones are set in mud mortar, and small thin stones ( $0.04 \times 0.08$  cm) were used to level the larger cut stones.

In this building the bottom of the walls is made of small stones laid in courses. For example, the base of wall 45 is made of small stones, while progressively larger stones were used to build the upper portions of this feature (fig. 9). As

<sup>7</sup> Sherds of Black Gaza Ware were used to level the cut stones that framed the doorways in some of the Mandate period architecture located on map 97 (Ruhamma) (Saidel: personal observation).

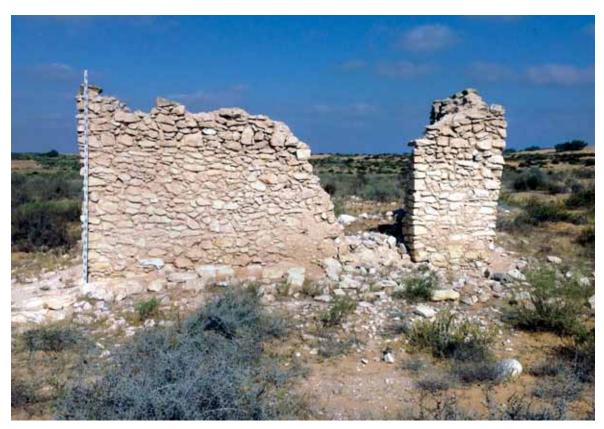


Fig. 8. Al-'Obeidat structure 4: view to the west; scale measures 3 m (photograph by B.A. Saidel)



Fig. 9. Interior of wall 45 and feature (Ftr) 62: view to the north; scale measures 3 m in length; doorway to al-'Obeidat structure 4 visible to the right (photograph by B.A. Saidel)

a result, the top of wall 45 is beginning to spall. In the centre of this wall, c. 1.20 m above ground level, a built-in niche (feature 62) is supported by a large stone lintel (table 1) (fig. 9). A similar recessed space (feature 63), with a large stone joist, is in the opposite wall, Wall 43 (table 1). Based on analogy with Arab Palestinian domestic architecture, these spaces were most likely used for storing various household items. (e.g., Canaan 1933: 35–36).8

At the entrance to this structure there is a wooden branch (0.30 cm in length and 0.14 cm in width). This was probably used, among others, to assemble the roof of this building. Near this piece of wood there was a diagnostic sherd of a Black Gaza Ware kettle, ranging in date from 1700 to 1800 (Israel 2006: 131, fig. 101) (fig. 10). The presence of this sherd in al-'Obeidat structure 4 may be coincidental or may, alternatively, be evidence that this vessel type remained in use until the early twentieth century.



Fig. 10. Fragment of Black Gaza Ware kettle found at al-'Obeidat structure 4; coin measures 22 mm in diameter (photograph by B.A. Saidel)

<sup>8</sup> Arab villagers in the highlands stored their bedding in niches 2–3 m in length and 0.40–0.60 m in depth (Canaan 1933: 35).

The Bedouin built similar one-room structures (*baika*) that were used for multiple purposes (Havakook 1986: 171–172). When this building functioned as a dwelling, men and women used it at different times of the day. In the daylight hours this shelter functioned as the men's part of the tent, and in the evening it became the family's sleeping quarters (Havakook 1986: 172). Al-'Obeidat structure 4 may have been built to accommodate a second wife. Ethnographic research indicates that additional Bedouin wives tend to have their own residence (e.g., Amiran, Ben-David and Shanir 1976: 31, stage A; Layne 1987: 351–352). The storage niches and hewn stone doorway may be interpreted as evidence for a domestic function. Alternatively, the lack of windows in the three extant walls and presence of niches for holding household impedimenta may be viewed as evidence that this building functioned as a store house. In sum, this construction might have been used for various purposes (e.g., Diqs 1967: 17); however, excavation is needed to shed light on the function of this building.

## MATERIALS FOR ASSEMBLING THE STRUCTURES

The Tarabin spent considerable time and effort to acquire the materials necessary to assemble these buildings. For instance, at Al-'Obeidat structures 1–3 Gazit identified shallow quarries that measured 2 m in depth. The Tarabin had to remove at least a metre of sand before they could cut and remove the stone. <sup>10</sup> The cut stone doorway in Al-'Obeidat structure 4 demonstrates that some Bedouin were competent stone masons. <sup>11</sup>

The building materials required to plaster and roof these constructions had to be brought to each location. There are, for example, no visible pillar bases inside al-'Obeidat structures 3 and 4. Therefore, wooden branches measuring 3.5–4.5 m in length were needed to roof these shelters. However, since large trees were not prevalent in the Ḥaluṣa dunes, these beams had to be acquired from another location and transported to each building site.

The stones used to build both buildings were bonded with mud mortar. There is no evidence for the use of mudbrick. The water needed for making the mud plaster had to be transported to each location. Today the nearest known water sources for structures 3 and 4 were located c. 3 km to the east in Naḥal Besor/Wadi Imʻalaga and 5 km to the north in Naḥal Besor/Wadi el-Esani. The water was probably transported between the wells and building sites in Black/Grey

<sup>9</sup> Havakook (1986: 172) maintains that the *baika* in the Negev were used primarily for storage, but this interpretation is not supported by quantifiable data.

<sup>10</sup> http://www.antiquities.org.il/survey/new/default\_en.aspx#Appendices (accessed June 2018).

<sup>11</sup> A leader of the 'Ayāyda Bedouin in the Sinai was named 'Ar-Raḥḥāy, which is translated as 'the grindstone maker' (Bailey 1985: 48).

Gaza water jars. A donkey could carry two *jarrah*s while a camel could convey four (e.g., Israel 2006: 95, fig. 49). The straw used in the mud plaster could have been acquired when the Tarabin threshed their barley (below).

## SUBSISTENCE

The construction of the al-'Obeidat buildings coincides with changes in subsistence patterns and land use. Gazit's ethnographic informant noted that in the interdune basins the Tarabin grew cash crops such as barley and watermelons. 12 The al-'Obeidat also planted other cash crops, such as plum trees, date palms and sycamore fig trees. Plum trees (Prunus domestica L.) stand less than 10 m in height and their fruit ripens over a period of five to six months (Charles 1987: 14, table 1). A date palm (*Phoenix dactylifera* L.) produces its first fruit after an initial interval of three to seven years. Dates ripen over a period of seven to ten months, and individual trees can yield fruit for up to 70 years (Charles 1987: 2, 18–19, table 5; Al-Khayri 2005: 309). 13 Sycamore fig trees (Ficus sycomorus L.) vary between 8-20 m in height and their 'umbrella-like' foliage (Zohary 1966: 38) provides shade for humans and livestock alike.<sup>14</sup> Sycamore trees can yield several crops of figs throughout the year (Zohary 1966: 38), and their leaves can be used as fodder for ruminants (Kassa, Tadele and Mekasha 2015). The sap from Ficus sycomorus L. is also used as medicinal treatment for livestock that are afflicted with undifferentiated scabies (Landau et al. 2014: 163, table 1). By planting fruit trees in this part of map 129 the Bedouin most likely expected to have access to these resources for a considerable period.

## DISCUSSION AND CONCLUSION

Bedouin have camped in the environs represented in map 129 for approximately 250 years. Their abandoned camp sites, 42 in number, are scattered throughout this survey universe. The al-'Obeidat buildings provide archaeological evidence for the sedentarization of this clan during the Mandate period. These constructions also functioned as a means of demarcating their tribal territory. Among the Bedouin in southern Sinai they 'consider the building of a house as the exclusive right of tribesmen and do not permit outsiders to build houses on tribal territory' (Marx 2006: 69). When this norm is violated the offending structure is torn down

<sup>12</sup> http://www.antiquities.org.il/survey/new/default\_en.aspx#Physical\_Geography\_ and\_Ecology (accessed June 2018).

<sup>13</sup> We thank Laura Mazow for bringing this reference to our attention.

<sup>14</sup> http://www.worldagroforestry.org/treedb2/speciesprofile.php?Spid=864 (accessed June 2018).

(Marx 2006: 59). <sup>15</sup> The construction of the al-'Obeidat buildings coincided with their decision to grow cash crops, such as barley, dates and plums. By assembling these structures, the al-'Obeidat were not only demarcating their land but also protecting their cash crops.

The al-'Obeidat buildings also provide data that is typically not mentioned in historical sources or studies pertaining to the Mandate period. In his recollection of Bedouin life in the environs of Tell el-Ḥesi, Diqs (1967: 71) mentions that some members of the Jabarat tribe own 'mud' houses. Various scholars have acknowledged that during this period the Negev Bedouin also used storage structures known as *baika*. Furthermore, topo-cadastral maps issued by the Mandatory government demarcate the locations of 'isolated structures' in Bedouin territories. Although these sources provide important information, none of them describe the nature of Bedouin architecture, such as the size of the buildings, the types of construction materials used, or the location/s of cupboards, windows and doorways. As demonstrated above, these limitations are remedied through archaeological research. The documentation of Mandate remains from the Negev is essential for providing a material culture perspective on tribe-state relations.

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<sup>15</sup> While outsiders are not permitted to build shelters of durable materials, they can pitch their tents in another tribe's area (Marx 2006: 59).

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