SUBTERRANEAN COMPLEXES AT MARESHA AND ADDITIONAL NOTES ON THE JUDEAN SHEPHELAH HIDING COMPLEXES

Boaz Zissu and Amos Kloner

J. Bliss and R. A. S. Macalister conducted archaeological explorations at four main sites in the Judean Shephelah during 1898–1900 on behalf of the Palestine Exploration Fund (Bliss and Macalister 1902). They spent in the field more than thirteen months (out of twenty-two months), at Tell Zakariya (ancient Azekah), Tell es-Safi (Tel Safit, ancient Gat), Tell ej-Judeideh (Tel Goded), and Tell Sandahannah (ancient Maresha). Bliss, who was in charge of the expedition, took care of the excavation duties, while Macalister, his assistant, served as a surveyor, draughtsman, and was responsible for the survey of the rock-cut caves. Macalister explored the concentrations of the artificial caves rock-cut underneath or near the ancient sites. He provided data on three major concentrations of artificial caves:

- At Tell Zakariya, he documented 'The Great Souterrain', nowadays understood as a typical hiding complex. He also mentioned briefly additional rock-cut chambers (Bliss and Macalister 1902, 213-223).
- 2. At Khurbet el-'Ain, east of Tell ej-Judeideh, he documented three subterranean complexes, two of which include typical details of the hiding complexes phenomenon (Bliss and Macalister 1902, 224–237).
- 3. Tell Sandahannah his major work, to be described below (Bliss and Macalister 1902, 238–252).

In the preface of the report, Bliss mentions the survey executed by Macalister in the following words:

Mr. Macalister took charge of the measurements and drawings and made a special, detailed study of the rock-cuttings' [Bliss and Macalister 1902, 2]. 'During the last season, while I was superintending the work above ground, Mr. Macalister was deep in the bowels of the earth, conducting the first systematic examination ever made of these wonderful mysterious *souterrains*. This work was by no means easy, involving the passing of long consecutive hours in stifling air, creeping on hand and knees through long passages and ascending steep slopes of chalky débris in order to secure measurements. (Bliss and Macalister 1902, 11)

Later, as part of his excavations of Tell Gezer (1902–1909) Macalister excavated an additional hiding complex (Macalister 1912, 1, 111–141; III, pls XXX–XLIII). This complex and its context will be discussed below.

The authors have been involved in studying artificial (manmade caves) in the Judean Shephelah for the last forty years, following closely in Macalister's steps in the exploration of the subterranean complexes at Maresha and examining various hiding complexes (Kloner and Tepper 1987; Kloner and Zissu 2002). We are very appreciative of Macalister's measurements and attention to details, especially since he had undertaken the difficult task alone, using primitive lighting equipment (i.e., torches).

SUBTERRANEAN COMPLEXES AT MARESHA

During the survey of subterranean complexes, Macalister described most of them in general outlines, without referring to details regarding quarrying and use. He numbered them from 1 to 63 (Fig. 1) and published a map of their location (Bliss

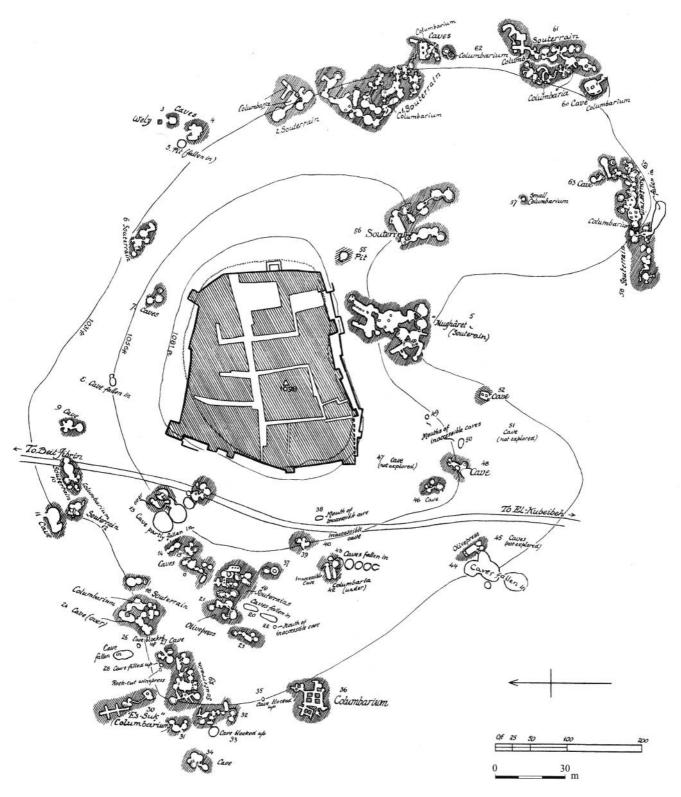


FIGURE 1. Plan of the underground complexes underneath the Lower City of Maresha. (Bliss and Macalister 1902, pl. 15)

and Macalister 1902, pl. 15). He pointed out that many of them had not been surveyed and only their positions were indicated. Some complexes were defined as 'unpenetrable' or 'unreachable'. He numbered a group of interconnected rooms of complexes as one complex, even though it was obvious that some complexes were later breaches or damages in the side-walls of rooms or chambers and that their original function had been abandoned. Some of the complexes included only a few rooms and pits, while others consisted of several dozen chambers and rooms which clearly served different functions: for example, olive presses, cisterns, storage pits, quarries, large halls, baths and filtering chambers. The various installations, such as the olive presses, filtering chambers and baths, were located in rooms or in small groups of chambers. Only at a later stage breaches — mainly horizontal — allowed passage between the rooms within a system and also between systems. These additional and new passages were not part of the original cave cutting and constructions. The interconnections between and among the systems created the subterranean complexes (Fig. 2, upper part; Fig. 3). Macalister's numbering began at the eastern side of the Tell and continued counterclockwise to the north, west and south, reaching no. 63.

Macalister was apparently not aware of the fact that the site of Maresha includes an Upper City (the mound, the acropolis) and a Lower City. He also did not realize that in antiquity, and especially during the Hellenistic period, the subterranean complexes belonged and were accessed through the mansions of the extensive Lower City. Only renewed examinations, carried out during the 1970s and 1980s, led to the conclusion that these were not just underground complexes or mysterious *souterrains*, but artificially created spaces that formed an integral part of the Lower City (Figs 4, 5; Kloner 2003, 18–20; Kloner and Zissu 2013).

In the 1902 report Macalister gives details on the underground survey undertaken at Maresha (Bliss and Macalister 1902, 238–252). He describes it at length, adding plans and sections of few subterranean complexes he had documented: 18, 30, 34, 36, adding a few schematic details on other subterranean complexes as well (Fig. 2, lower part). With the renewal of systematic explorations at Maresha and its subterranean complexes, Kloner decided to continue Macalister's numbering system. The complex east of the tell, discovered and studied in 1980, is no. 70 (Kloner 2003, 31–39). In order to distinguish between the old and the new excavations, nos 64-69 were not used. New subterranean complexes, unknown to Macalister, were designated 71-94, following the order of their discovery. Numbers 95 to 156 were numbered and ordered in concentric manner around the mound of the upper city, counterclockwise from the east. Those discovered during the excavations in the mid-1990s, nos 157-170, were again enumerated in the order of their discovery (departing once again from the concentric pattern; Fig. 4).

Following his survey and study, Macalister established a typology of the subterranean complexes in the Judean Shephelah (Bliss and Macalister 1902, 204–213). This typology is basically still in effect today. Subsequent studies undertaken by the present writers sorted the subterranean complexes of Maresha into ten main types of systems (Kloner and Zissu 2013).

A comparison of the documentation of the columbarium in Subterranean Complex 30 prepared by Macalister and the new plan prepared during the recent explorations — which included excavations — clearly illustrates Macalister's achievements despite the extremely difficult underground conditions (Figs 6, 7).

Macalister was the first to identify the Hellenistic period rock-cut olive presses in the lower city of Maresha. He has mentioned three such installations (nos 21, 44, 61) incorporated in the subterranean complexes (Bliss and Macalister 1902, 241, 248, 251). Renewed surveys and excavations identified at least twenty-seven olive presses (Kloner and Sagiv 1993).

THE JUDEAN SHEPHELAH HIDING COMPLEXES

Throughout the Judean Shephelah, rock-cut underground chambers were created as part of the

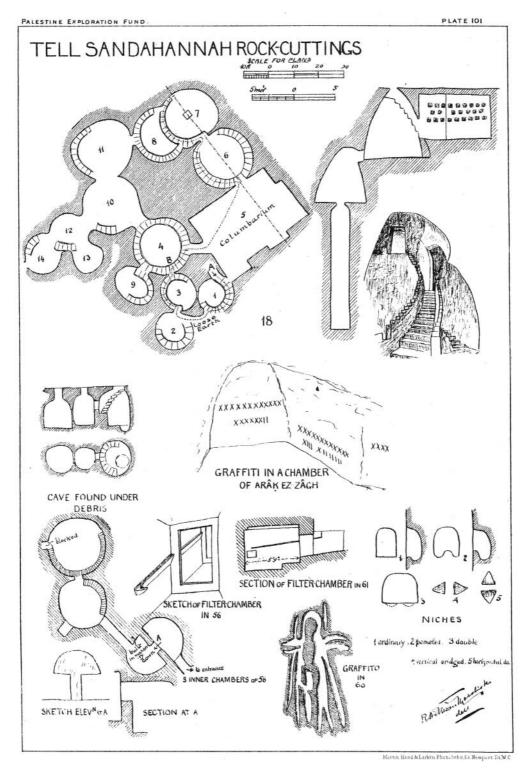


FIGURE 2. The upper part of this plan, published by Bliss and Macalister (1902, pl. 101) shows a rather schematic plan, section and drawing of System 18. The lower part of the plan shows various details, including from System 58.

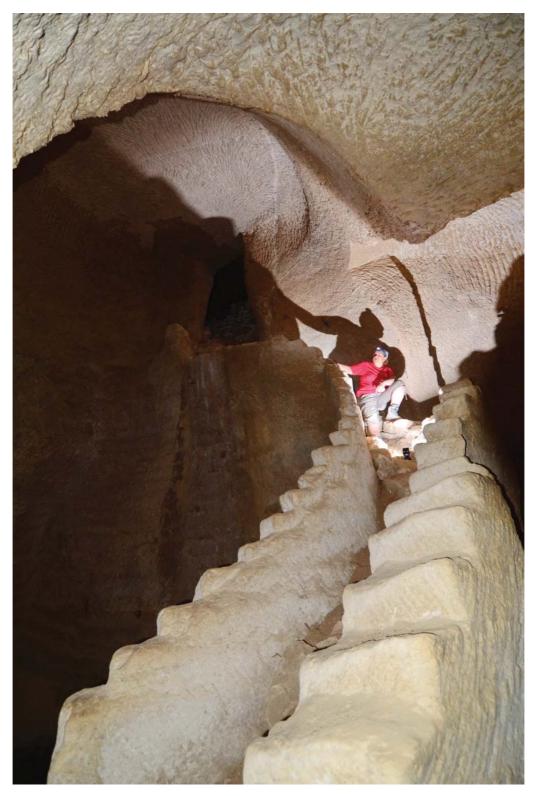


FIGURE 3. Photo of the staircase, taken from the same angle as the drawing made by Macalister in System 18 (upper right part of Fig. 2). (*Photo by B. Zissu*)

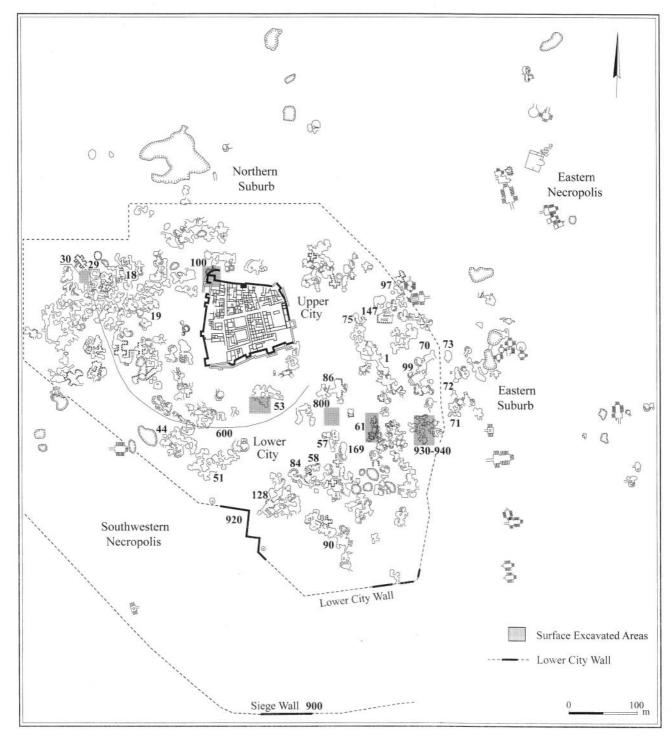


FIGURE 4. General plan, showing the Upper City with Bliss and Macalister excavations, the Lower City encompassed within a wall and the underground complexes hewn underneath the residences. (Kloner 2003, pl. 1.1)

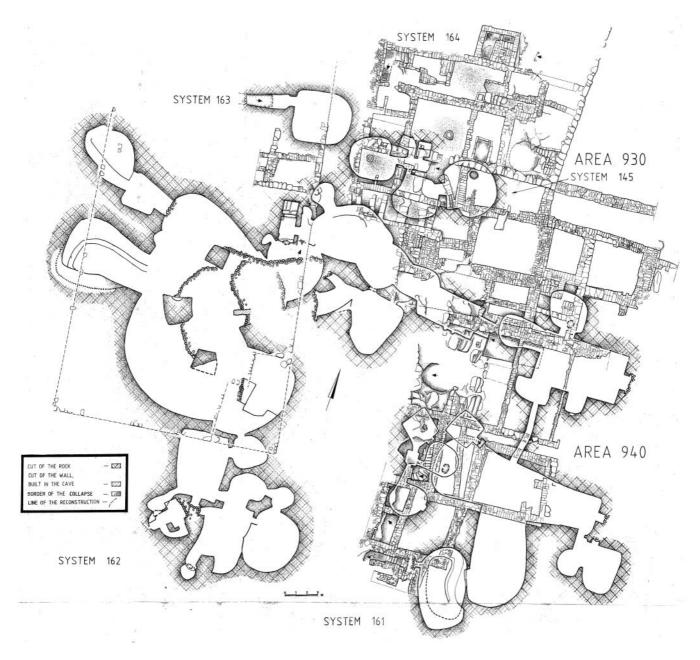


FIGURE 5. Plan showing buildings of the Lower City (Excavations Areas 930, 940) and a maze of subterranean chambers, some forming part of vast complexes (marked as 'systems' on the plan). (Source: A. Kloner and IAA)

economic and physical infrastructure of towns, villages and farms. The hewing technique in the soft chalk typical to this region was refined in the Hellenistic and early Roman periods. At many sites these manmade underground facilities changed their

original function when they were included in ramified underground complexes designated as 'hiding complexes'.

The 'hiding complexes' are ramified rock-cut systems located underneath ancient settlements.

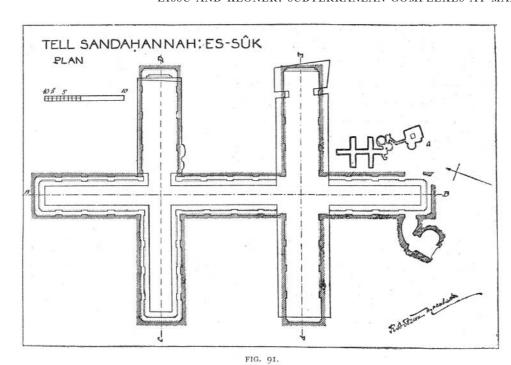
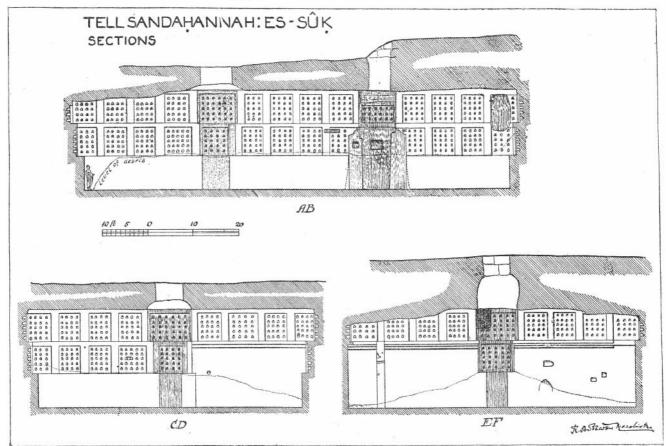


FIGURE 6. Detailed documentation of the columbarium in subterranean complex 30 prepared by Macalister. (Bliss and Macalister 1902, figs 91, 92)



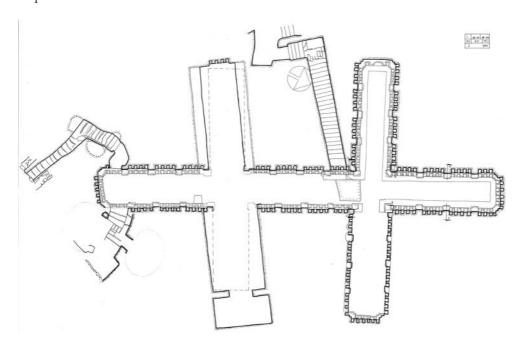


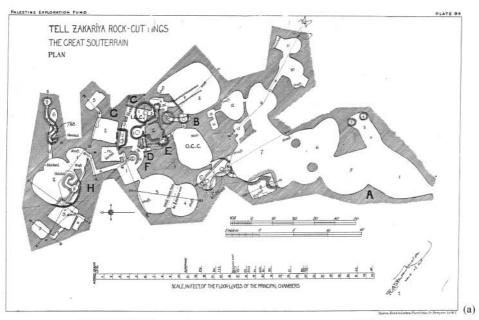
FIGURE 7. New plan prepared of the columbarium in complex 30. (A. Kloner and IAA)

Certain rock-cut features of the hiding complexes (i.e. narrow tunnels ('burrows', vertical shafts, locking and blocking devices) constitute distinguishing marks of their function, and enable the identification of the phenomenon. The burrows link earlier rock-cut chambers used previously as cisterns, limestone quarries, ritual immersion baths, olive presses, store rooms and granaries, stables and rooms for raising animals, columbaria, and so on; connecting them made the chambers unusable for their previous function and purposely impaired the local way of life and economy. The burrows are low, narrow and can only be traversed by walking on all fours, sliding on the knees, or crawling. The burrows bend from time to time at diverse angles and in some cases the level of the floor changes. Small side chambers were hewn in the walls of the burrows for various purposes. Shafts were cut out in the complexes for use as entrances or exits. The shafts had locks and their entrances were camouflaged, usually inside a room or courtyard of a house in the above-ground settlement. The entrances to rooms and burrows were closed, blocked or cut off with various kinds of devices such as a stone slab the same size as the burrow, a large round stone the size of the average opening, beams, and bars. The people

hiding would lock the entrance behind them from the inside. A regular supply of water was vital. Many hiding complexes incorporated earlier cisterns. A burrow opened into the upper portion of the cistern a few meters above its floor so that water could be stored up to that point; thus the people hiding in the complex had a steady supply of water that could be drawn clandestinely.

Most hiding complexes were prepared before and during the Bar Kokhba Revolt (132–136 cE). Few Judean systems — mainly small, unsophisticated ones — are dated to the time precede and were used during the Jewish War against Rome (66–70 cE).

A survey of the main hiding complexes was carried out by teams headed by Kloner and Tepper, who published the basic research on the subject (1987). They were aware of about 280 hiding complexes, hewn underneath approximately 100 settlement sites in the Judaean Shephelah (Kloner and Tepper 1987, 76–79). Renewed surveys and excavations have uncovered additional hiding complexes. We are now aware of approximately 350 hiding complexes located at about 140 sites in the Judean Shephelah. Hiding complexes are currently known also in the mountainous areas of Jerusalem, Judea and



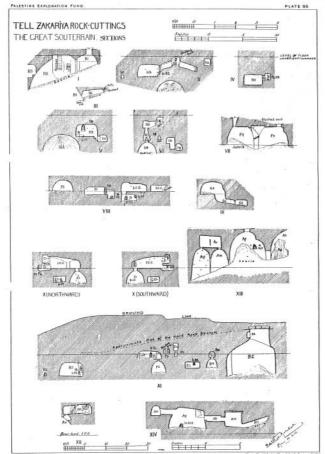


FIGURE 8. Plan (a) and sections (b) of the hiding system at Tell Zakariya (ancient Azekah). (Bliss and Macalister 1902, pls 94, 95)

Benjamin, the southern Hebron mountains, Galilee and Transjordan (Kloner and Zissu 2009; Shahar 2003; Shivtiel 2008; Raviv 2012).

According to most scholars, the account by Roman historian Cassius Dio (69, 12–14), is a fairly comprehensive and reliable overview of the Bar Kokhba Revolt from a Roman perspective (cf. Eck 1999). Part of this account relates to the rebel's fortifications and tactics:

To be sure, they [the Jews] did not dare try conclusions with the Romans in the open field, but they occupied the advantageous positions in the country and strengthened them with mines and walls, in order that they might have places of refuge whenever they should be hard pressed, and might meet together unobserved under ground; and they pierced these subterranean passages from above at intervals to let in air and light.

This account is consistent with the finds of the Judean hiding complexes, which were prepared as secret bases for the rebels. The distribution of the hiding systems in Judea mark the boundaries of the area that was under the control of Bar Kokhba, an area whose population participated in the struggle

against the Roman army, and which was destroyed at the end of the Revolt.

The first hiding complexes were documented by Macalister at Tell Zakariya, Khurbet el-'Ain and Tel Gezer. Macalister was very impressed by the complexes, documenting them in great detail. Without comparative material and chronological indicators, he was not able to ascertain their purpose and significance (Bliss and Macalister 1902, 213–223, 267–270).

The system at Tell Zakariya was presented in a very meticulous fashion, including a detailed plan and sections (Fig. 8). It was a pioneering work; for the first time an artificial underground system was documented, and the care for detail is impressive. We should note that this system is located on the upper part of the north-eastern slope of the tell; nowadays it is clear that it was connected in antiquity to residences built above it. The existence of an additional system at this site was mentioned briefly by Macalister, who observed only its entrance; this system was documented in detail in the 1980s.

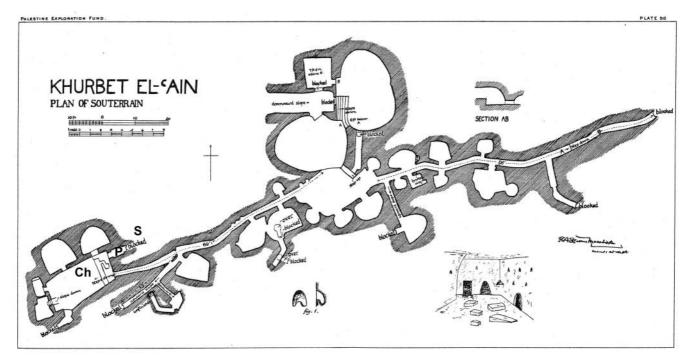


FIGURE 9. Plan of the first hiding system at Khurbet el-'Ain. (Bliss and Macalister 1902, pl. 98)



FIGURE 10. Photo of a shaft (marked 'S' on Fig. 10) descending into the hiding system at Khurbet el-'Ain. The shaft was described as blocked by Macalister, but was recently opened by illegal excavators. (*Photo: B. Zissu*)

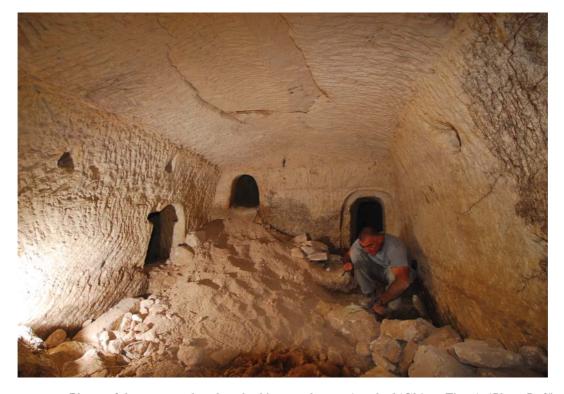


FIGURE 11. Photo of the storage chamber, looking south-west (marked 'Ch' on Fig. 9). (Photo: B. Zissu)

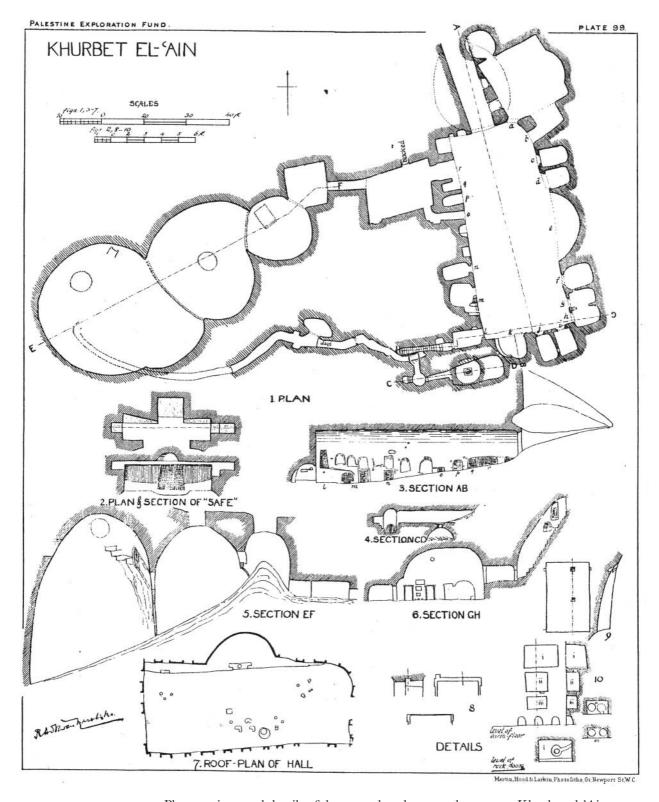


FIGURE 12. Plan, sections and details of the second underground system at Khurbet el-'Ain. (Bliss and Macalister 1902, pl. 99)

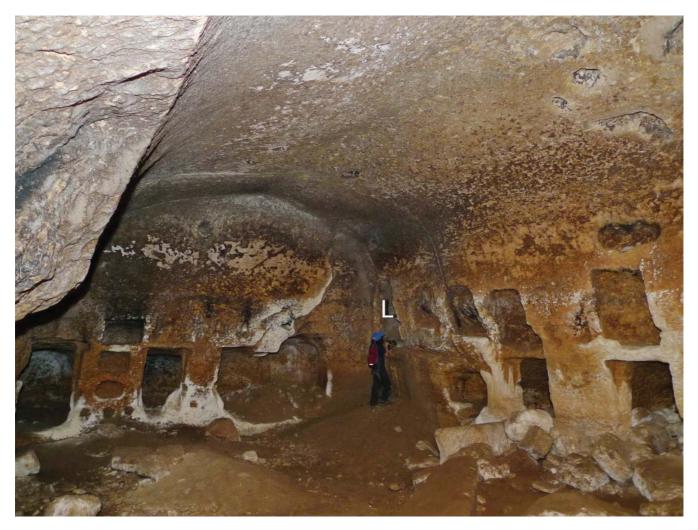


FIGURE 13. Photo of south-western corner of harge hall incorporated into the second underground system at Khurbet el-'Ain. The letter 'L' marks entrance to chamber marked by the same letter on Macalister plan, Fig. 12, above.

At Khurbet el-'Ain, Macalister surveyed two (or perhaps three, see below) underground systems and a single cave. Two of them include typical hiding complex elements. The first one was re-examined recently by Zissu following clandestine excavations which penetrated into a shaft described as blocked by Macalister (Bliss and Macalister 1902, 228–229, pl. 98) (Fig. 9). This shaft (Fig. 10, marked 'S' on Fig. 9) descends from the surface into a wide tunnel (marked 'P' on Fig. 9) which served as a concealed entrance to a storage chamber (Fig. 11, marked 'Ch'

on Fig. 9). On the southern wall of the wide tunnel, a schematic depiction of a ship and a few Greek letters were documented.²

The second system (Bliss and Macalister 1902, 229–237, pl. 99) was documented in great detail, including a long description, plan and sections (Figs 12, 13). In our opinion, at least three main stages of development and use can be identified:

1. A huge underground hall, with small storage chambers along its walls, features also an olive press.

- 2. A typical hiding complex with shaft and burrows, connecting the hall from storage chamber 'L' to the surface (This chamber is marked 'L' by Macalister on Fig. 12; is marked 'L' by authors on Fig. 13).
- 3. Three bell-shaped quarries were added in the last stage.

The third system was presented in a very schematic fashion. We were not able to relocate this system in the field. We do not exclude the possibility that the plan published is a preliminary, field draft of the second system, and not a third, additional system (Bliss and Macalister 1902, 237).

The single cave, which was presented only in a three-dimensional drawing, should be understood as a Hellenistic period cistern. Some crosses were incised on its walls in the Byzantine period. Columbaria niches were added at a later stage (Early Islamic period?), clearly obliterating at least two crosses (Bliss and Macalister 1902, 224–227, pl. 97).

In his conclusions, Macalister discussed the phenomenon of artificial caves in the Judean Shephelah, and attributed the phenomenon to an alleged ancient population of horites and troglodytes. He based this conclusion, among other observations, on 'the fact that certain doorways in the great *souterrain* at Zakariya are arranged to be bolted on the inside', thus indicating 'that people were temporarily or permanently established inside the cave' (Bliss and Macalister 1902, 267). Only since 1978 have scholars discussed the significance and importance of the phenomenon and its historical context and connection to the Bar Kokhba Revolt, as explained above.

The final hiding complex to be discussed here is from Tel Gezer, which Macalister excavated on a large scale from 1902 to 1909. He documented a typical hiding complex (28II) but did not identify it as such, and could not point to its connection to residences above (Macalister 1912, I, III–I4I; III, pls XXX–XLIII). We should note here that L.-H. Vincent re-examined this typical hiding system, compared it with a tomb at Byblos (Phoenicia), and suggested an unsubstantiated identification as a

royal tomb ('l'hypogée royal de Gézer'; Vincent 1924; Fig. 14).

Macalister was not aware of the existence of an early Roman period stratum at Gezer, despite various hints that such a layer existed, as a large (fortification?) wall (Dever 1993, 506), seven ritual immersion baths, some related to architecture (Reich 1981, 48–52), and small finds as stone vessels (Macalister 1912, III, pl. XXXII, 6, XLII). Zissu (2001, 142–143) discussed several burial caves excavated by Macalister which contained ossuaries (some inscribed) and assemblages of finds dated to the first and second centuries CE. The caves served most probably the inhabitants of Gezer.

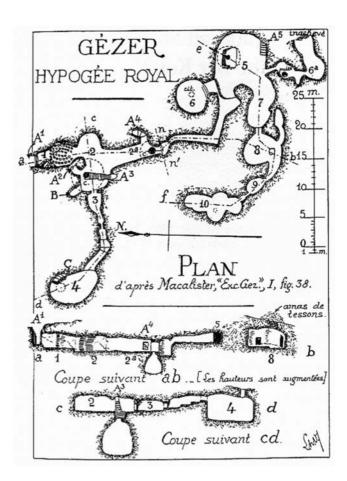


FIGURE 14. Plan of a typical hiding complex discovered by Macalister at Gezer (28II). H. Vincent identified it as a royal tomb 'l'hypogée royal'. (After Vincent 1924)

NOTES

1. Tell Zakariya (ancient Azekah), from 24 October-21 December 1898, 20 March-22 April 1899, and 8 September-2 October 1899; Tell es-Safi (Tel Safit, ancient Gat), 4 May-15 July 1899, 9 October–22 November 1899; Tell ej-Judeideh (Tel Goded), 27 November–16 December 1899, 19 March–1 June 1900; Tell Sandahannah (ancient Maresha), 5 June–28 August

2. Additional ships, recently found in rock-cut chambers elsewhere in the Shephelah, will be discussed in a forthcoming

BIBLIOGRAPHY

Cassius Dio, Roman History, trans. E. Cary, Loeb Classical Library, 1914 (Cambridge: Harvard University Press).

Bliss, F. J., and Macalister, R. A. S. 1902. Excavations in Palestine 1898–1900 (London: Palestine Exploration Fund).

Dever, W. G. 1993. 'Gezer', in E. Stern (ed.), The New Encyclopedia of Archaeological Excavations in the Holy Land (Jerusalem and New York: Israel Exploration Society/Simon and Schuster), 496–506. Eck, W. 1999. 'The Bar Kokhba Revolt: The Roman Point of

View', Journal of Roman Studies 89, 76–89.

Kloner, A., 2003. Maresha Excavations Final Report I: Subterranean Complexes 21, 44, 70, IAA Reports 17 (Jerusalem: Israel Antiquities Authority).

Kloner, A., and Sagiv, N. 1993. 'The Olive Presses of Hellenistic Maresha, Israel', in M. C. Amouretti and J. P. Brun (eds), Oil and Wine Production in the Mediterranean Area, Bulletin de Correspondance Hellenique Supplement 26 (Athens: Ecole française d'Athènes), 119-136.

Kloner, A., and Tepper, Y. 1987. The Hiding Complexes in the Judean Shephelah (Tel-Aviv: Ha-Kibbutz HaMeuchad, Hebrew).

Kloner, A., and Zissu, B. 2009. 'Underground Hiding Complexes in Israel and the Bar Kokhba Revolt', Opera Ipogea, Journal of Speleology in Artificial Caves 1:2009, 9–28.

Kloner, A., and Zissu, B. 2013. 'The Subterranean Complexes of Maresha: An Urban Center from the Hellenistic Period in the Judean Foothills, Israel', Opera Ipogea, Journal of Speleology in Artificial Caves 2:2013, 45-62.

Macalister, R. A. S. 1912. The Excavation of Gezer 1902–1905 and 1907–1909, Vols I–III (London: John Murray).

Raviv, D. 2012. 'The Jewish Settlement in the Toparchy of Timna from the Late Second Temple Period to the Bar Kokhba Revolt', MA thesis, Bar-Ilan University, Ramat Gan (Hebrew).

Reich. R. 1981. 'Archaeological Evidence of the Jewish Population at Hasmonean Gezer,' Israel Exploration Journal

Shahar, Y. 2003. 'The Underground Hideouts in Galilee and Their Historical Meaning', in P. Schäfer (ed.), The Bar Kokhba War Reconsidered: New Perspectives on the Second Jewish Revolt against Rome (Tübingen: Mohr Siebeck), 217–240.

Shivtiel, Y. 2008. 'Cliff Settlements, Shelters and Refuge Caves in the Galilee', in S. Bar (ed.), In the Hill-Country and in the Shephelah and in the Arabah (Joshua 12, 8): Studies and Researches Presented to Adam Zertal in the Thirtieth Anniversary of the Manasseh Hill-Country Survey (Jerusalem: Ariel), 223-235.

Vincent, L.-H. 1924. 'Le nouvel hypogée de Byblos et l'hypogée royal de Gézer', *Revue biblique* 33, 161–185.

Zissu, B. 2001. 'Rural Settlement in the Judaean Hills and Foothills from the Late Second Temple Period to the Bar Kokhba Revolt', PhD dissertation, The Hebrew University, Jerusalem (Hebrew).