

Rock-Cut Hiding Complexes from the Roman Period in Israel¹

Preface

Throughout ancient Israel, and especially in the Judean Shephelah, rock-cut underground chambers were created in antiquity as part of the economic and physical infrastructure of villages and towns. The hewing technique was refined in the Hellenistic and early Roman periods. The results can be seen in their full magnificence at the Hellenistic city of Maresha (Kloner 2003; Kloner and Zissu 2013). In hundreds of sites throughout the Judean Shephelah, man-made underground facilities have been discovered that fell into disuse when they were linked to form ramified complexes with narrow, winding burrows. Many of these complexes contained dating material, enabling the scholars to establish their main period of use to the Second Jewish Revolt against the Romans. One of the characteristics of this revolt, known also as the Bar Kokhba Revolt (132-136 CE), is the extensive use of underground cavities for hiding, escape and refuge purposes. Scholars are distinguishing between two main groups of cavities: **hiding complexes and refuge caves**.

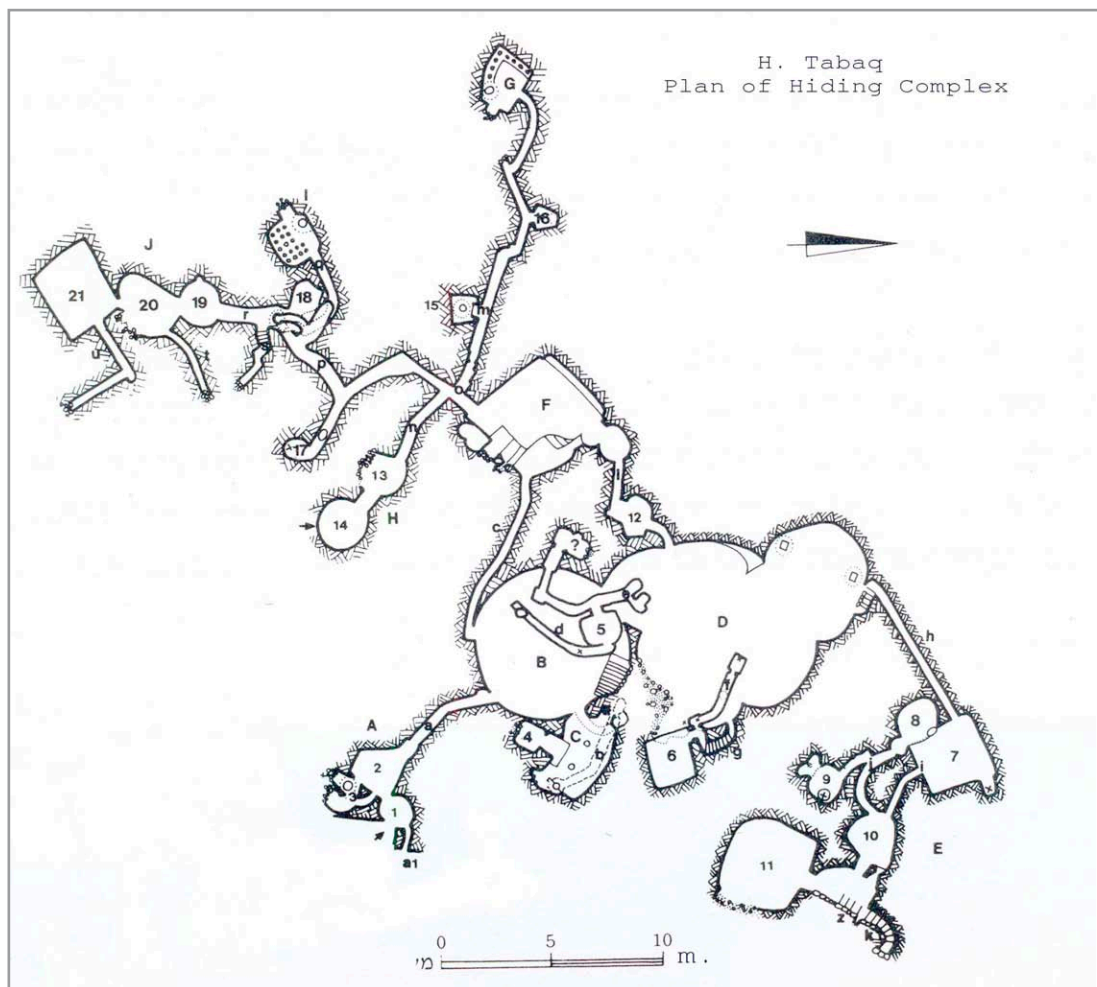
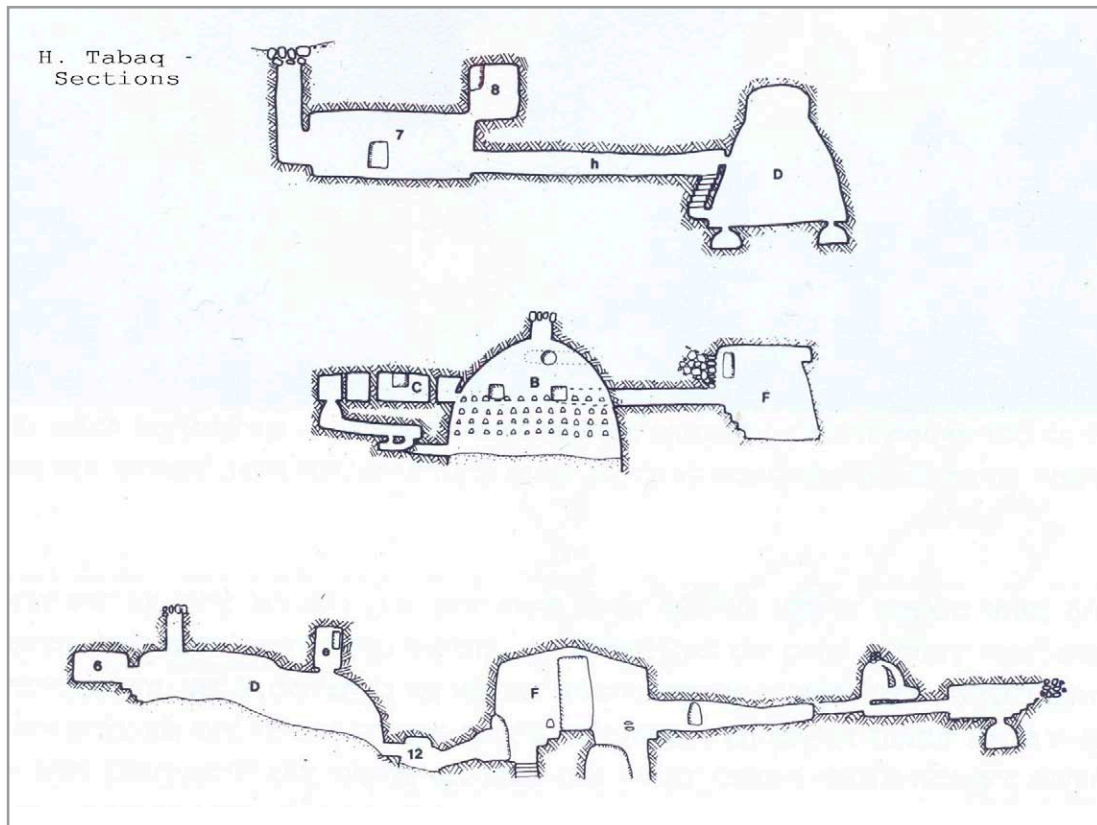


fig. 1A Plan of hiding complex at H. Tabaq (drawing: Yair Tsoran)

¹ This article is an expanded and improved version of Kloner and Zissu 2009. We are grateful to the Krauthammer and Moskowitz chairs at the Land of Israel and Archaeology Department, Bar Ilan University, for their support.



figs. 1b Sections of hiding complex at H. Tabaq (drawing: Yair Tsoran)



fig. 2a: Shaft cut into floor of room T4, leading to Complex XIV at H. 'Ethri (photo by Avram Graicer).



fig. 2b: Typical burrows cut through earlier underground quarry, converting it into a burrows-junction at Maresha-West Site. (photo by B. Zissu).



fig. 3 Entrances to a group of typical refuge caves in the cliffs of Ketef Jericho, overlooking the city of Jericho; in the foreground, the Monastery of Qarantal (photo: A. Graicer)



fig. 4 Cliff and entrances to the refuge caves in Wadi Murraba'at, Judean Desert (photo by Zissu)

Most of the **hiding complexes** were hewn artificially under or near residential buildings in ancient settlements (figs. 1, 2A). They include a maze of rock-cut chambers connected to each other by low and narrow passages, referred to here as burrows (fig. 2B). Passage through the burrows requires one to kneel down, crawl and sometimes even to creep. The burrows are the typical feature that identifies a rock-cut system of underground cavities as a hiding complex. The openings into chambers are always small and low, and require one to kneel down in order to enter. Many rooms, storerooms, halls and burrows could be sealed from the inside. Thus, the complexes were designed so that the occupants could defend themselves from within, against an enemy attempting to enter. The hiding complexes are found mainly in the Judean Shephelah, an area located west of the Jerusalem and Hebron mountains, known also as the Judean Foothills. Additional complexes were discovered in the mountainous regions of Jerusalem, Beth El, Hebron and the Galilee. Complexes were cut in the soft limestone, which is common in the Foothills but also in harder formations of limestone, found in the mountainous regions. The hiding complexes were prepared mainly before and during the Bar Kokhba Revolt. Some systems—mainly small, unsophisticated ones—should be dated to the first half of the first century CE - clearly preceding the Jewish War against Rome (66-70 CE).

The **refuge caves** are found mainly in the Judean Desert, in the steep cliffs overlooking the Dead Sea and the Jordan Valley (figs. 3, 4). These caves are basically natural, and the rich archaeological assemblages found in them make it evident that they served as places of refuge for people from the Judean Mountains and the Jordan Valley when they fled for their lives at the end of the Bar Kokhba Revolt (Eshel and Amit 1998; Eshel and Porat 2009). Recently we have been able to identify and explore refuge caves situated in the western part of the Judean and Benjamin Mountains (Zissu et al. 2011).

Ramified underground rock-cut complexes with narrow, winding burrows, were first surveyed and documented by the British explorer Robert Alexander Stewart Macalister at Tell Zakariah (Biblical 'Azeqa), at Kh. el-'Ein, and at Tell Gezer in the late nineteenth and early twentieth centuries during excavations of these sites on behalf of the Palestine Exploration Fund. At the time the connection between the discovery and the Bar Kokhba Revolt was not yet understood (Bliss and Macalister 1902: 204–213, 254–270; Kloner and Tepper 1987: 30–36).

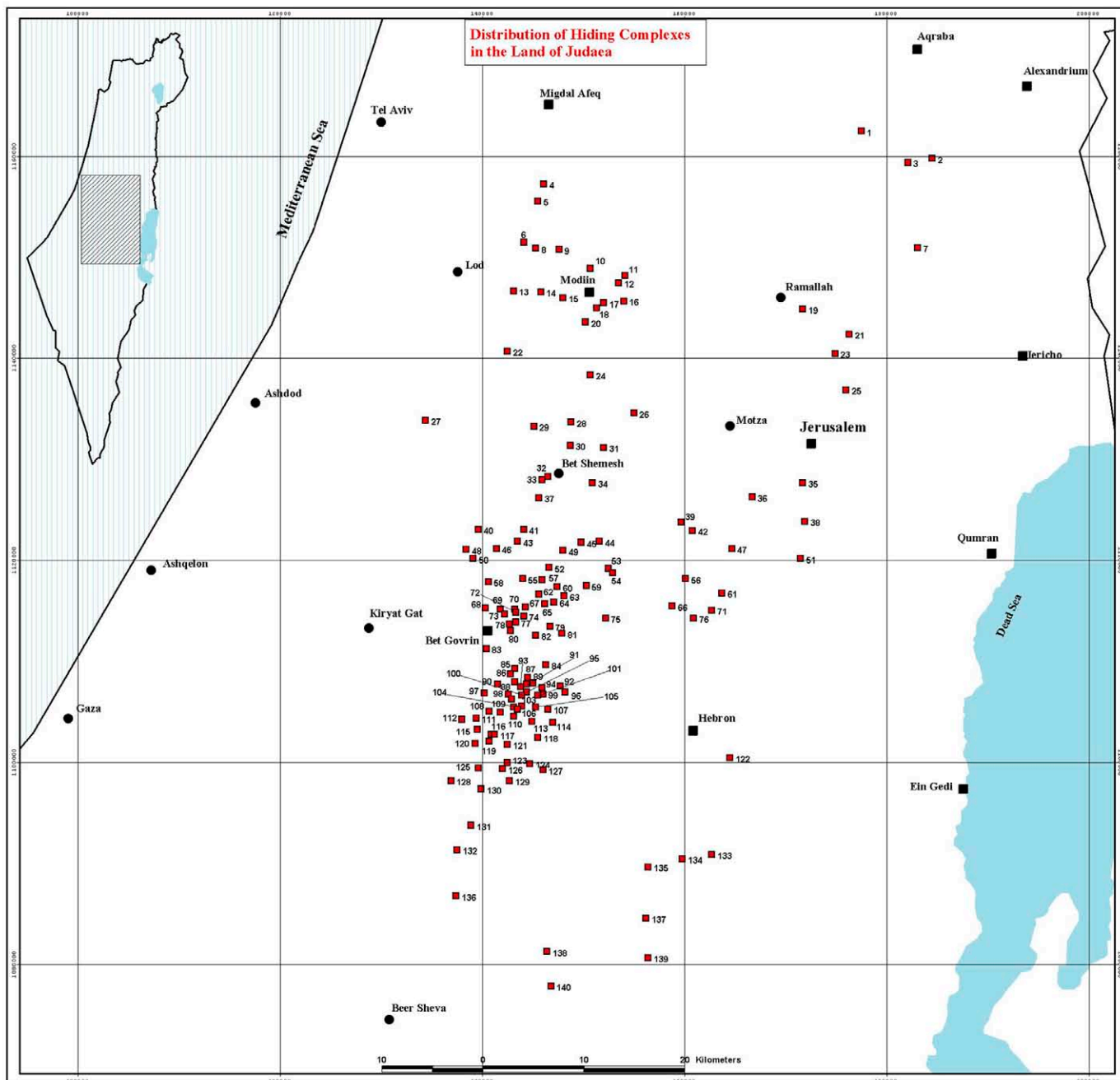
Exploration of the hideouts resumed in the 1970s with Yoram Tsafrir's excavations at 'Ein Arub (Tsafrir and Zissu 2002) and David Alon's discovery of hideout complexes in the southern Judean Shephelah; Alon was also the first to point out that such complexes were a widespread phenomenon. After a comprehensive survey in the Judean Shephelah in the late 1970s, Amos Kloner and Yigal Tepper identified the rock-cut complexes of underground chambers and narrow burrows as a phenomenon,



fig. 5 Columbarium chamber at H. Tabaq. The original entrance to this facility, hewn during the Second Temple period, was blocked. Burrows cut two of its walls, and the columbarium turned into an underground shelter during the Bar Kokhba revolt (photo by Zissu)



fig. 6 H. 'Ethri – plan of village. The ancient buildings are marked in black. Man-made underground cavities marked in orange (drawing T. Kornfeld, IAA)



שם המצודה	מספר
Kh. Seilun	1
Kh. Jib'it	2
Kh. Kulasun	3
Kh. al Birnat - Sc	4
Shoham Bypass	5
Ben Shemen Junction	6
Kh. en-Najama	7
Modiin T.P. 149	8
Kh. Harmush	9
el-Midyeh	10
Kh. Badd 'Isa	11
Kh. Kureikur	12
El Khirbe	13
Kh. Rajjaba	14
Trig. Point 2.461	15
Kh. Kafr Rut	16
El Burj	17
Trig. Point 2.73	18
Kh. Nisieh	19
Kh. Umm el 'Amdan	20
Michmash	21
Tell Gezer	22
Jaba	23
Kh. El- 'Aged	24
Kh. 'Almit	25
Shmurat Shayarot	26
el Maghara	27
Kh. Deir Shubeib	28
Kh. Kefr Urieh	29
Sar'a	30
H. Hamada	31
H. Ganim	32

שם המצודה	מספר
Unnamed site	33
Deir Aban	34
Sur Baher	35
Nahal Gillo	36
Kh. el Kheishum	37
Beit Sahur	38
Wadi Fukin	39
H. Atraba	40
Tel 'Azeqa	41
Kh. Sabur	42
Kh. er-Rasm	43
Kh. Ismailah	44
Kh. Judraya	45
Kh. Sufiya	46
Kh. Gharib	47
Kh. Dhakar	48
H. Sokho	49
Kh. Tuncifisa	50
Kh. e-Nahash (Natsh)	51
Kh. Qanya	52
Kh. Ghurabeh	53
Kh. 'Illin	54
H. Midras	55
Kh. Hillal	56
Kh. Umm e-Loz	57
Khallat Qeis	58
Adullam	59
H. 'Ethri	60
H. Berachot	61
Kh. Tel el Beida	62
H. Qerumit	63
Umm Burj	64
Kh. el Wawiya	65

שם המצודה	מספר
H. Gedor	66
Rujm Shi'b eth-Tha	67
Kh. Ilma	68
H. Tabaq	69
H. Rafi	70
'Ain 'Arrub	71
H. Rafi - Lower	72
Kh. el-'Ain	73
Kh. er-Rusum	74
Kh. Hattas	75
Kh. Kufin	76
Kh. el Fallah	77
'Iye Nakhash	78
H. Gibor	79
H. Barrak (N)	80
Kh. Kharuf	81
Kh. as-Sanabira	82
Maresha	83
Kh. Shibraga	84
Kh. Khoreisah	85
Kh. Umm el 'Amad	86
Rasm Umm el Jamajim	87
H. Beth Loya	88
Kh. Beit 'Alam	89
Kh. el Basha	90
Kh. el Beida	91
Idna	92
Kh. Taiyibat	93
Kh. er Ras	94
Rasm el Beida	95
Kh. Khalat el Raze	96
Kh. Hibra	97
Kh. el 'Adhra	98

שם המצודה	מספר
Kh. en Naqa	99
Kh. el Jozeh	100
Kh. Rasm Nofal	101
Kh. Bishr	102
Kh. Dahneh	103
H. Qatira	104
Kh. Bait al Ban	105
Rasm Dahna	106
Kh. Qusatin	107
H. Migdal Gad	108
ed Dawayimeh	109
H. Tut	110
Rasm Jibrin	111
Rasm er Rusum	112
Qasr Firjas	113
Kh. el-Muraq	114
H. Zeita	115
Esh. Sh. Abu Khash	116
H. Hazzana	117
Kh. Beit 'Awwa	118
Kh. Hazzaneh	119
Kh. Jenneta	120
Kh. er Raya	121
Kh. Bani Dar	122
Kh. 'Eitun	123
Kh. Sikka	124
H. Naqiq	125
Kh. Umm ash-Shaquf	126
Kh. Tawas	127
Kh. Deir al-Mus	128
H. Benaya	129
Kh. Jeimar	130
H. Moran 1	131

שם המצודה	מספר
H. Za'ac	132
Tell M'ain	133
Susiya	134
Eshtamoa	135
H. Rimmon	136
H. Anim	137
H. Tsalit	138
Kh. Rujm al Qitta	139
Nahal Yattir Site	140

fig. 7 Distribution map of hiding complexes in Judaea (prepared by L. Barda, IAA).

and designated it as „Hiding Complexes“. In their book *The Hiding Complexes in the Judean Shephelah* (Kloner and Tepper 1987), they investigated the significance, scope, and importance of the phenomenon and its historical connection with the Bar Kokhba Revolt. Their conclusions regarding the function, dating, and distribution of the hideouts were a breakthrough in our understanding of the revolt (Kloner 1983a; 1983b; Kloner and Tepper 1987: 361–380). By 2001, protracted research on this subject had added extensive information on hideout complexes in Judea (Kloner and Zissu 2003a, 2003b; 2009).

Literary Sources

We have no comprehensive, first-hand historical work describing the Bar Kokhba Revolt. The writings of Roman authors and the Church Fathers contain a few brief accounts of the revolt, some of which are tendentious and contradict one another. For this reason, the archaeological evidence is of great importance.

The Rabbinical literature contains several references to hiding in caves in connection with the Bar Kokhba Revolt (Kloner and Tepper 1987: 378–379; Oppenheimer 1982). These later references, however, have to do with the end of the revolt and the subsequent prohibition of Jewish religious practices, and they almost certainly refer to refuge caves.

According to most scholars, the account by the Roman historian Cassius Dio—in his *Roman History* (69, 12–14; trans. E. Cary), which was preserved in the eleventh-century abridgment by the Byzantine monk Xiphillinus—is a fairly comprehensive and reliable overview of the revolt from a Roman perspective (Eck 1999, Eck 2007; Schäfer 1981).

Aharon Oppenheimer analyzed Cassius Dio’s description in the context of the Bar Kokhba Revolt and the suppression of it, distinguishing between two stages of the revolt (Oppenheimer 1980: 9–21). The first part of Dio’s account describes how the Jews stored up arms while Hadrian was in the east:

„So long indeed, as Hadrian was close by in Egypt and again in Syria, they remained quiet, save in so far as they purposely made of poor quality such weapons as they were called upon to furnish, in order that the Romans might reject them and they themselves might thus have the use of them;“

Dio attributes the motivation for the Jews’ revolt to the conversion of Jerusalem into an idolatrous city, Aelia Capitolina and identifies the timing as when Hadrian left the area. Afterwards he reports on the reinforcement of militarily advantageous sites with fortifications, passages and underground networks, and the rebels’ tactic of avoiding head-on clashes with the Roman army:

„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. A map of the systems in Judea (fig. 7), also showing the distribution of Jewish settlements and coins from the revolt, can give us some indication on the geographical extent of the revolt (Mor 2003). An examination of the archaeological data (Eshel 2006: 111–122; Zissu 2001; Zissu and Eshel 2002) supports Dio’s quantitative report (although the report may be exaggerated) of the large scale destruction of Judean countryside during the suppression of the revolt:

„Very few of them [the Jews] in fact survived. Fifty of their most important outposts and nine-hundred and eighty-five of their most famous villages were razed to the ground. Five hundred and eighty thousand men were slain in the various raids and battles, and the number of those that perished by famine, disease and fire was past finding out. Thus nearly the whole of Judaea was made desolate [...]“

Architecture of the Hideouts

Typical Architectural Components

Rock-cut underground chambers were created in antiquity as part of the daily economic and physical infrastructure of towns and villages (fig. 5, 6). In hundreds of sites throughout the Judean Shephelah (fig. 7),



fig. 8 Quarry at 'Arak Halla The original entrance to the quarry was blocked. Burrows cuts one of its walls, and the quarry was incorporated into a hiding complex (photo by Zissu)

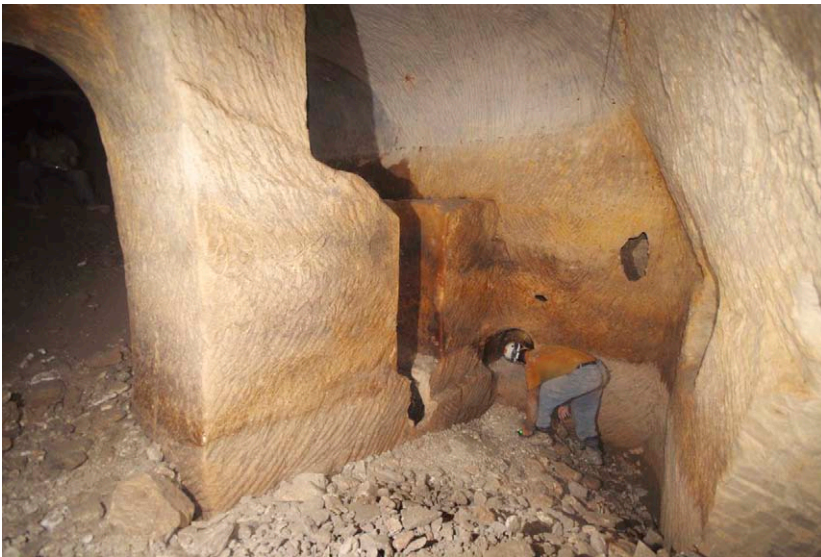


fig. 9A Burrow cutts wall of olive-press at 'Arak Halla. (photo by Zissu)



fig. 9B A burrow cuts wall of columbarium at H. Tabaq. (photo by Zissu)

fig. 10 Original entrance of rock-cut hall blocked with makeshift wall at 'Arak Halla. (photo by Zissu)



fig. 11 A typical burrow at 'Arak Halla. (photo by Zissu)



fig. 12 A change of angle along a burrow at H. Tabaq. (photo by Zissu)



man-made underground facilities - as cisterns, stone quarries (fig. 8), underground olive presses (fig. 9A), stables, *columbaria*, (fig. 9B), storerooms and granaries, ritual immersion baths, stables and other rock-cut features were intentionally put out of use when their original entrances were blocked (fig. 10) and they were interconnected to form ramified complexes with narrow, winding burrows, on several levels.

The fact that the owners of these rock-cut features were ready to eliminate their own settlement's infrastructure, attest to an increasing concern for survival during times of distress.

Certain architectural components in the hideout complexes constitute distinguishing marks of their function:

Burrows

The burrows link earlier rock-cut chambers; connecting them made the chambers unusable for their previous function and purposely impaired the local way of life and economy. The burrows are low and narrow and can only be traversed by walking on all fours, sliding on the knees, crawling or creeping; they tend to be around 0.6–0.7 m wide and 0.7-0.9 high (fig. 11). The burrows bend from time to time at various angles, forming various sharp turns (fig. 12); In some cases the level of the floor changes. The dimensions and special installations along the burrows made penetration and attack by an enemy difficult.

Sometimes, small side chambers were cut out of the walls of the burrows. In the floor of the burrows we sometimes find openings descending to rock-cut silos, which were used for storing grain and other solids or liquids; a stone lid of the right size closed the opening.

Vertical shafts connected burrows situated at different levels (fig. 13). Depressions were often cut

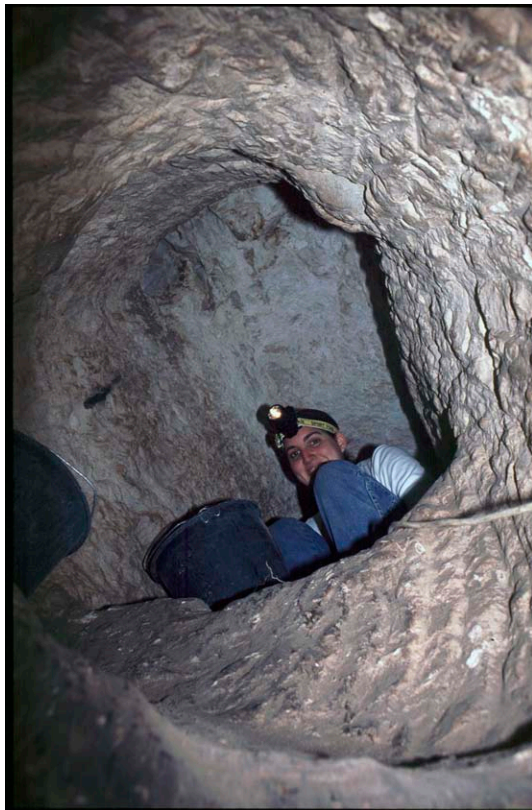


fig. 13 Vertical shaft connecting between two burrows, cut at different levels, within complex XIV at H. 'Ethri. Photo from bottom of shaft to its upper part (photo by Zissu)

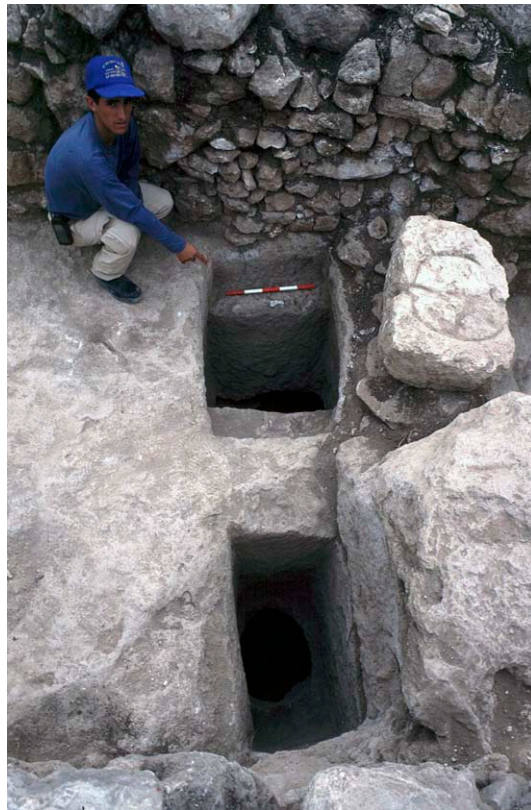


fig. 14 Entrance shafts to hiding complex XIV in room T3 at H. 'Ethri. The openings were sealed with closing slabs (photo by Graicer)

out of opposite walls of the shaft for use as footholds in climbing up or down.

The burrows were designed to serve a dual purpose: First, they provided access and connected various elements of the complexes; second, they could be blocked and completely sealed off, or subdivided into sections that could be closed off from the complex as a whole.

Entrances and vertical shafts

The entrances to the complexes were concealed and could be blocked and defended from the inside. The entrances were situated in a variety of locations: in irregularly shaped underground quarries which provided camouflage, in storerooms, olive presses, underground dovecotes, water reservoirs and in rare cases in elements of burial complexes, as courtyards, antechambers, and even burial chambers. Many complexes were entered through vertical shafts, hewn in the floors of private and public buildings for use as entrances or exits. The shafts had locks located at various levels, and their entrances



fig. 15 A and B: Blocking feature with blocking stone and device for beam at Khallat Qeis. (photo by Zissu)

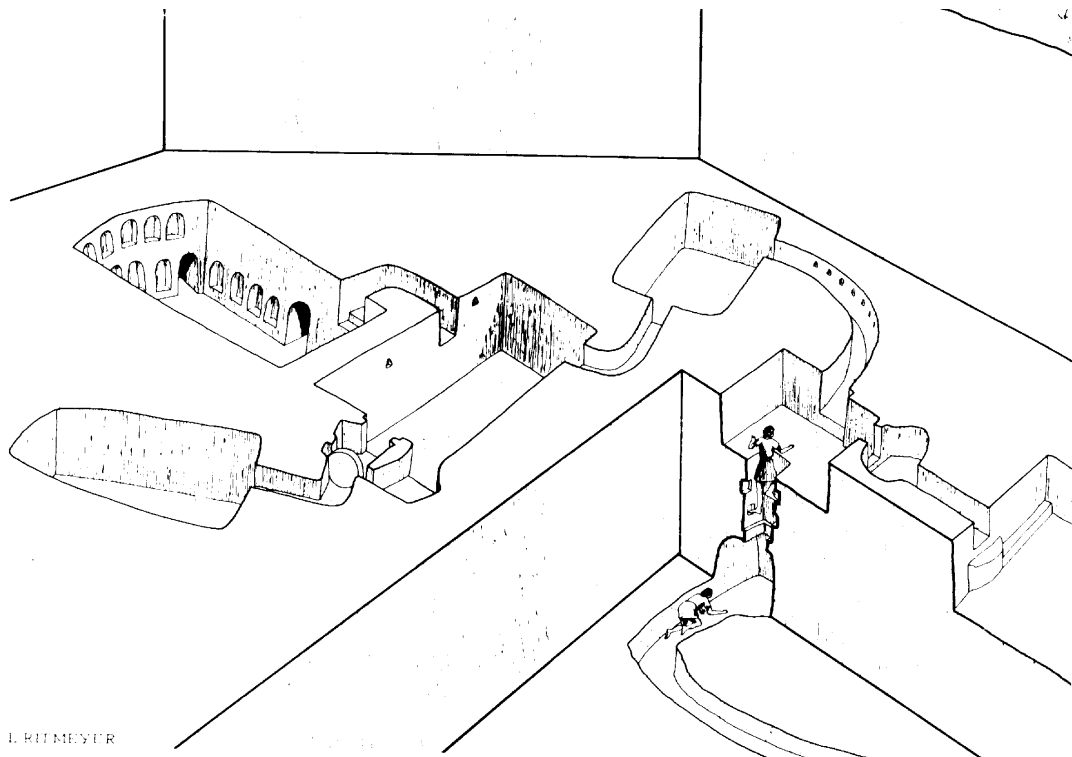


fig. 16 Axionometric cutting through different levels at the H. 'Eitun hiding system. Notice the round blocking stone, storage room with large niches in its walls, niches for oil lamps in side of burrow and shaft with climbing indentations (drawing by Leen Ritmeyer)

were camouflaged - usually inside a room or courtyard of a house in the aboveground locality (fig. 14). The shafts created obstacles for those traversing the burrow or entering the complex through them. Someone descending or ascending a shaft was very vulnerable: he may well be surprised by a person waiting at the other end, and this while his hands are occupied with climbing and thus unavailable for using weapons.

Closing and blocking devices

The narrow entrances to rooms and burrows were closed, blocked, or cut off with various kinds of locks, such as a rectangular stone slab fitting the opening (fig. 15), a large round stone the size of the average opening (fig. 16), beams and bars. Some sealing stones were found in the burrows or in the shafts; in other cases, their existence is indicated by niches cut in the walls, which held bolts and beams in their place. People hiding would lock the entrance behind them from the inside.

Air vents and openings for light

In the large subterranean chambers, halls and complexes in the Judean Shephelah, that were not designed for hiding purposes, such as those from the Hellenistic period (3rd-2nd centuries BCE) at Marissa (Kloner and Zissu 2013), the entrances were large and wide, providing a free flow of air. Consequently, there was no need for additional means of ventilation. The use of subterranean complexes for hiding, however, raises significant questions in regard to ventilation and air supply for those occupying them. Closure of the hiding places, or their blocking during a siege, could have been critical for those inside. In some places, burrows were cut whose function was essentially for circulation of air. Vertical shafts were hewn in the ceilings of the rooms for the removal of rubble from the hewing; once the complex was completed, they served as air vents and were camouflaged on the surface. Horizontal burrows cut



fig. 17 Water cistern at H. Tannim. The original entrance to the cistern, apparently hewn during the first century C.E., was blocked. A burrow cuts the upper part of one of its walls, and the cistern was used for collecting water secretly (photo by Ory Ainy)

into the walls of cisterns and other facilities admitted air and a little light into the hideouts. Sometimes air vents were used as alternate entrances. Some of the openings identified as vents may have been hewn when the hideouts were already in use in order to increase the air supply. A ventilation shaft was nonetheless a weak point in the system of hiding and defense.

Water supply

A regular supply of water was crucial for the people hiding, and indeed, water storage installations are found in all the complexes. Some water installations were located in rooms or cisterns quarried especially for this purpose. The water flowed through channels in which surface run-off water was collected, or which were filled with water originating in other rock-cut reservoirs. Many hiding complexes included actual cisterns; other included rock-cut containers of various shapes and sizes, cut in order to function as cisterns. Many water installations are integrated in the complexes, clearly indicating they were designed and constructed during the preparation of the complex as a whole (fig. 17).

In some cases, earlier water cisterns, dating either to the Hellenistic or Early Roman period were incorporated into the hiding complexes and served as such. Some of them were blocked from the inside in order to conceal them from external view. 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 secretly.

Storage rooms and granaries

Storage rooms, some with floors with depressions for holding jars were incorporated in the complexes (fig. 18A, B). Storage jars (or fragments thereof) are the most common find in the hiding systems. Jars were used for storing liquids such as oil and perhaps wine, as well as cereals and grains. The layout of the floors of some chambers (with slanted channels connecting the depressions) clearly indicates their planned use for holding oil jars (fig. 19). Oil was of utmost importance for those hiding in the systems. It was an essential food, and was the combustible of the oil-lamps.

Cereals, legumes and other solid foods were stored in jars as well, as a means of protection against



fig. 18A Typical storage room at H. Tabaq. (photo by Zissu)



fig. 18B: Niches in floor of storage room at H. Tabaq, used for holding storage jars. (photo by Zissu)



fig. 19 Niches connected by channels in floor of storage room at Ahuzat Hazan, used for holding storage jars. (photo by Kloner)

mold, rodents and insects. The storage rooms had usually small openings that were blocked by square stones, and in many cases camouflaged. The burrows and shafts leading to these rooms necessitated crawling, and one must realize that transporting a jar with a capacity of 15-20 liters required a great physical effort. If the purpose of these chambers was only hermetic closure, to produce wine for example, or to preserve other foods, small well-sealed openings at the end of a high corridor would have been sufficient. But as noted, these were places of hiding and refuge, planned to save human lives in time of distress.

The Hewing Method

Keeping the burrows small made it possible to save time on hewing and minimized the amount of debris and chips. The work proceeded fairly quickly in the soft limestone; the task of cutting in the harder types of limestone was much difficult. The various parts of the complexes were hewn in different ways, and sometimes from opposite directions, enabling greater efficiency. More than one man could work at the same time in an underground chamber. The burrow, however, could accommodate only one rock-cutter. He had to lie on his stomach or on his back while starting the quarrying, until he created a height enabling him to kneel or stand. Most probably, each rock-cutter had a group of assistants who cleared the debris which he left behind. We estimate that a group of workers would hew at least 1–5 meters of a standard-size burrow per diem in the soft limestone. We can identify the direction in which they proceeded by observing the arched cracks left by their tools in the walls of the burrow, as well as by the location of the oil-lamp niches - a common feature of the complexes. According to their location, two types of niches can be identified:

The first type include niches carved in the sides of the burrows, at a distance of 1–2 meters apart, generally near the ceiling and on the stone-cutter left. The stone-cutter, holding the chisel in his left hand and the hammer in his right, would have cut the niches on his left side. If the lamp were on the right side of the narrow burrow, the striking movements of the stone-cutter would have blocked the light. The chisel marks tend forward and downward in direction and are easily recognized. The workers usually hewed these niches quickly, without worrying about their shape. Usually the direction in which the burrows were quarried can be determined according to the location of the niches cut for the oil-lamps used during the stone-cutting process. While oil-lamps could have been placed in the burrows when they were used as a refuge, not as many would have been required as during the quarrying operation. The second type includes oil-lamp niches cut in the upper part of walls of chambers, halls and storerooms (fig. 18B). These niches were more carefully executed: usually they are triangular, and sometimes they are surrounded by a decorative frame.

The burrows linked underground chambers that were already being used by the local population, and their original function was eliminated. Blind burrows leading nowhere indicate mistakes in trying to link up with another burrow, a room, an underground facility, or an exit from the complex; these attempts were therefore abandoned. The advanced technique of hewing hideouts was the result of a long tradition of rock-cutting and familiarity with the properties of the local rock.

At several sites, earlier underground chambers were used for the disposal of rubble, perhaps in order to keep the hewing a secret. The people may have been in such a rush to create the burrows that they had to leave the rubble in unneeded chambers inside the complex instead of lifting it above ground at great effort and risk.

Typology of the Hideouts

There are a dozen main types of hideout complexes, which can be sorted into two main groups. (Kloner and Zissu 2003a: 183–186). Sometimes, when only some components of a complex are explored and many other elements remain blocked, the exact type cannot be identified without a proper archaeological excavation.

1. Family complexes were of three main types: storage complexes (fig. 20); hideout and storage complexes; and complexes for hiding and storage with water facilities (fig. 21). A family complex would be hewn underneath a house or yard; access was via a vertical shaft whose upper entrance was hidden or camouflaged. From the bottom of the shaft, burrows led to underground storerooms that could be used

fig. 20 Plan of hiding system IV, hewn at site west of Tel Bet Shemesh. (drawing by Kloner, IAA)

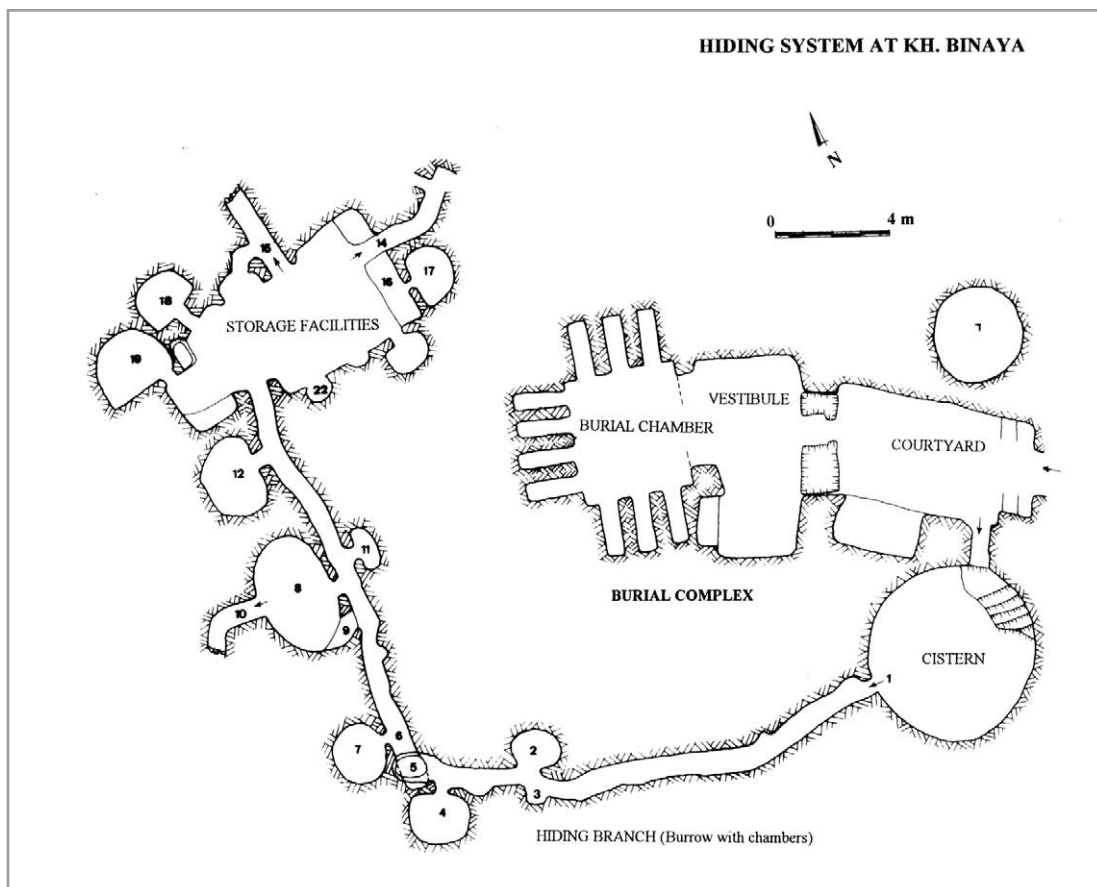
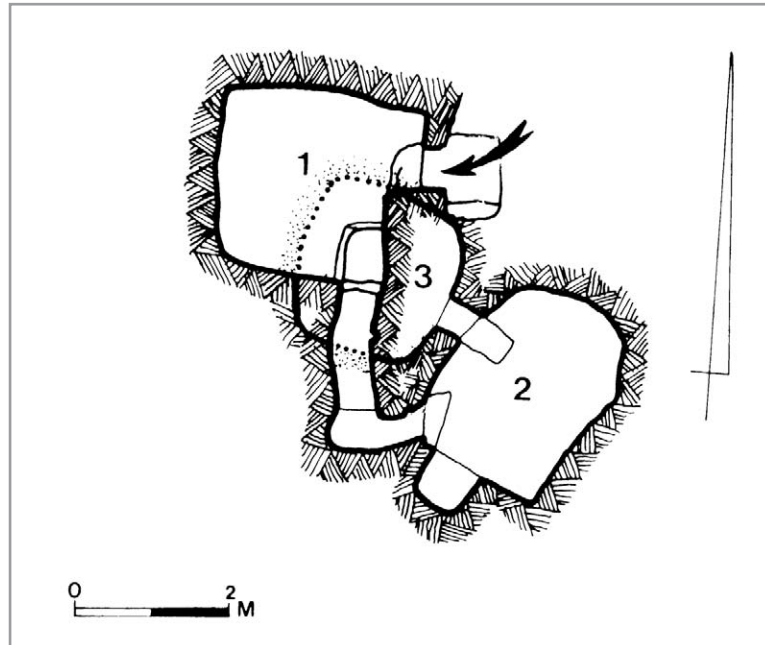


fig. 21 Plan of hiding complex at Kh. Binaya; the complex includes a cistern, a typical burrow with small storage chambers and a larger shelter or storage facility. The complex is connected to the courtyard of a burial cave – and outstanding feature (drawing by T. Krinkin-Fabian)

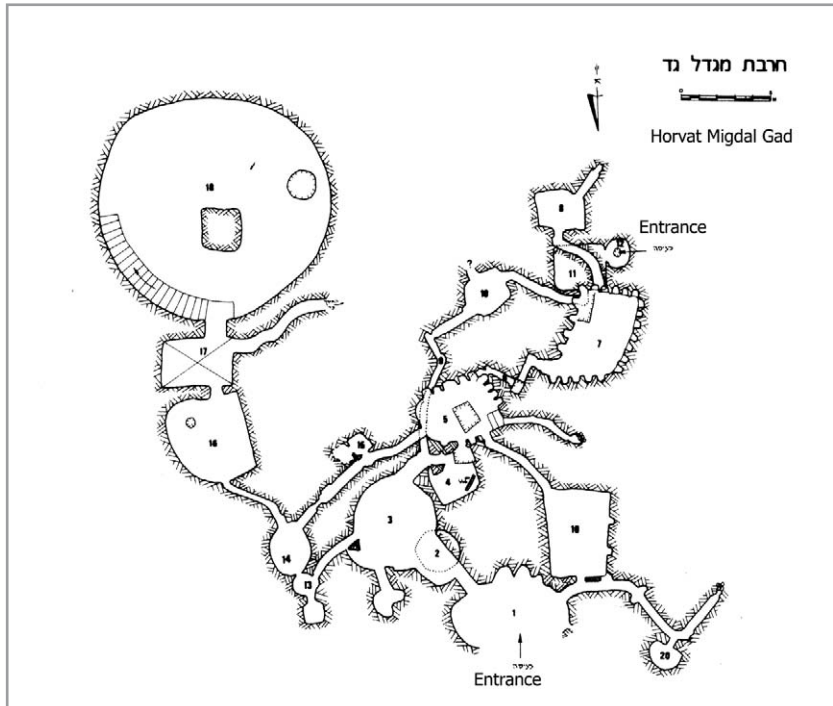


fig. 22 A public hiding complex at H. Migdal-Gad. (drawing by Yair Tzoran)

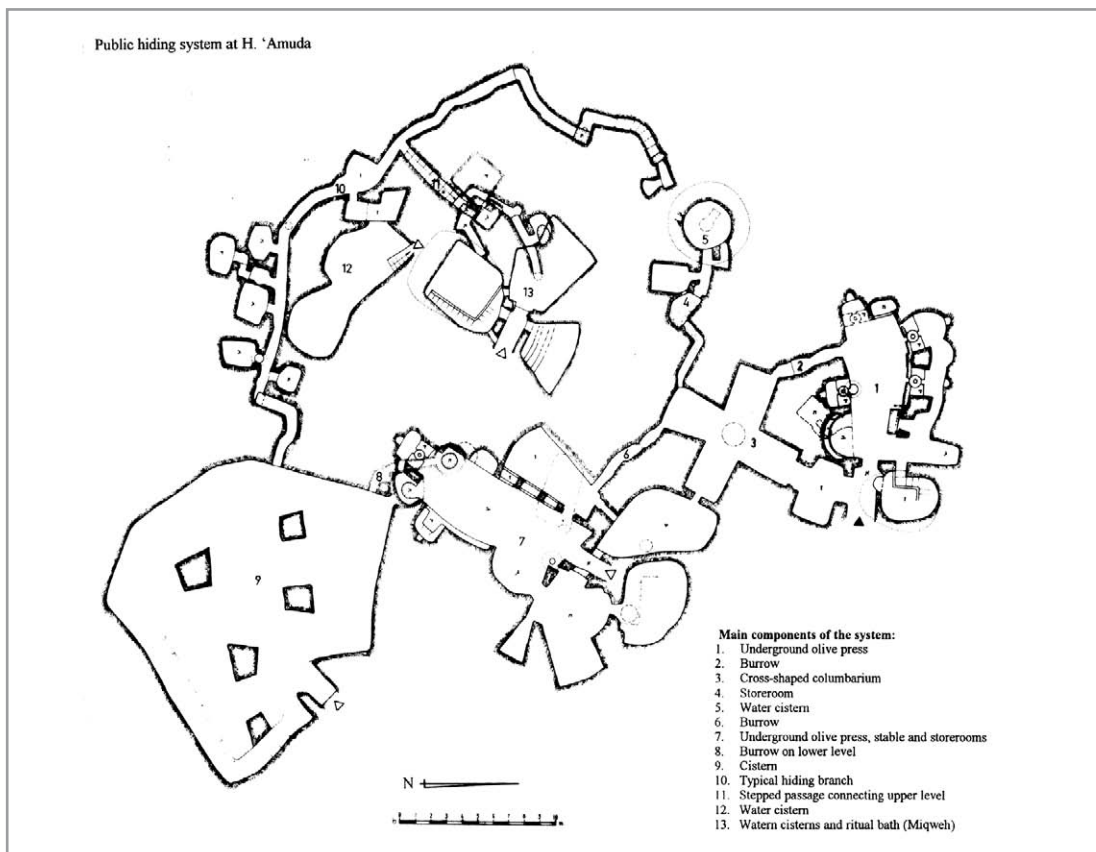


fig. 23 Public hiding system at H. 'Amuda; This complex contains earlier facilities as and underground olive press, stables, columbaria, storerooms, ritual baths, cisterns, and a limestone stone quarry. These were interconnected by a network of burrows on several levels (drawing by Giora Solar)

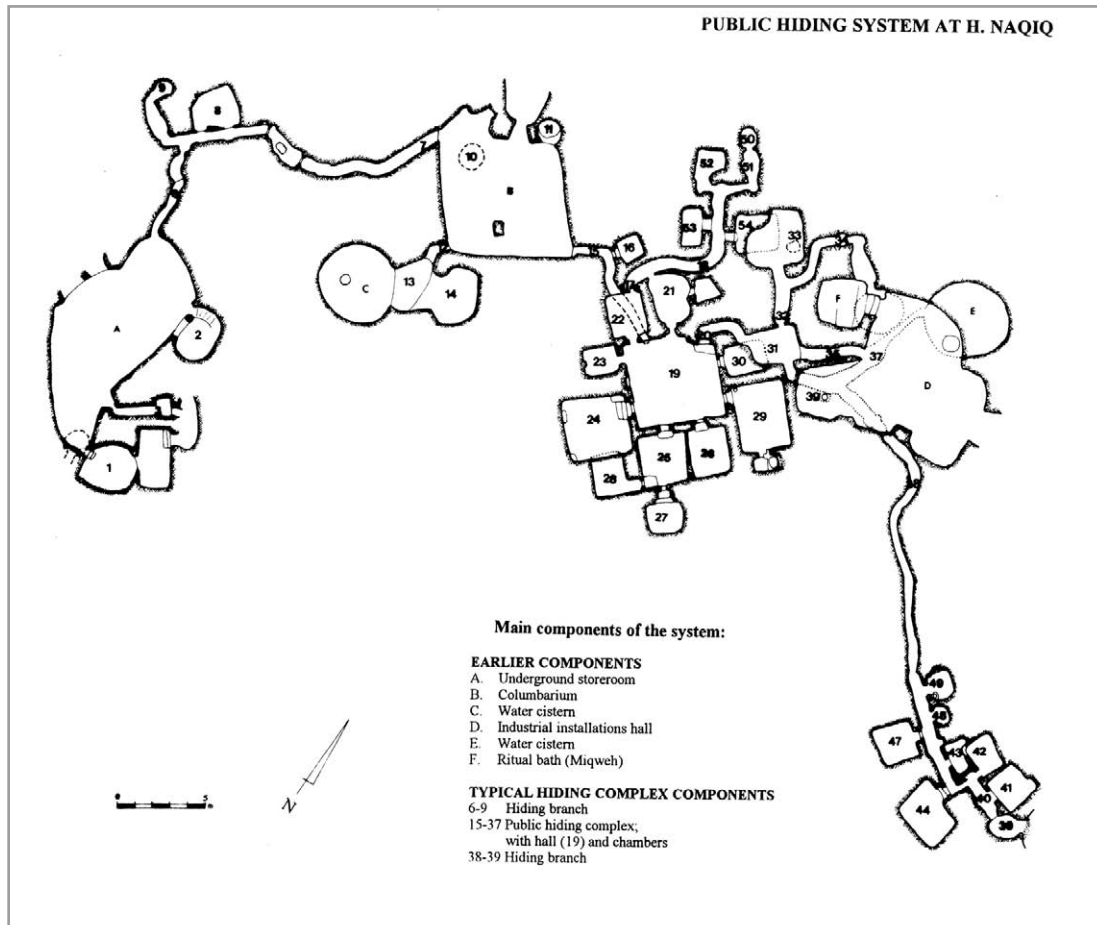


fig. 24 Plan of public hiding complex at H. Naqiq. Most of the components of this complex were originally hewn for hiding purposes (surveyed by Yigal Tepper and Yuval Shahar)



fig. 25 Tunnel at Herodium, the palace-fortress-burial monument built by King Herod and later converted into a headquarter during the Bar Kokhba revolt. The tunnels are unique in their shape and dimensions, allowing fighters to walk upright (photo by Zissu)

for food storage and hiding. Some of the family hideouts were connected to cisterns, so the people could remain in hiding for a long time.

2. **Public complexes** were of various types, including simple public complexes (fig. 22), public hiding complexes (fig. 23, 24), escape routes connected to public buildings, and complexes incorporating large natural chambers. In the public complexes, pre-existing underground rock-cut facilities were connected by means of branched burrows and their original function was eliminated. The public complexes had several camouflaged entrances, generally in houses at some distance from one another. They generally contained a cistern for use by the people hiding; this reflects an organized effort by the local po-

population. The public complexes had room for dozens of people; the largest could hold even more. There were also escape routes leading from these complexes out of the settlement.

The Herodium tunnels are unique in that their shape and the dimensions of the passages enable a person to walk upright (fig. 25). The tunnels were carved deep into the mountain, putting Herod's mountain fortress' cisterns out of use and turning them into underground junctions. The tunnels enabled large

numbers of people to move around easily and unseen underground, and they seem to have had a defensive-offensive military function. The E. Netzer's team (Netzer and Arazi 1985; Netzer et al. 2011) dated them to the time of the Bar Kokhba revolt.

Dating of the Hiding Complexes

Unfortunately, antiquities looters often find ancient villages, caves, and underground complexes and plunder them before archaeologists arrive. Many hiding complexes were looted systematically, usually



fig. 26 Oil-Lamps found in hiding complexes at H. 'Ethri. No. 1 is a Judean mould-made lamp typical to the years preceding the Bar Kokhba revolt and the revolt itself; Nos. 2, 3 are wheel-made and knife pared oil lamps typical to the first century C.E. Some of these lamps remained in use until the Bar Kokhba revolt (photo by Zissu)

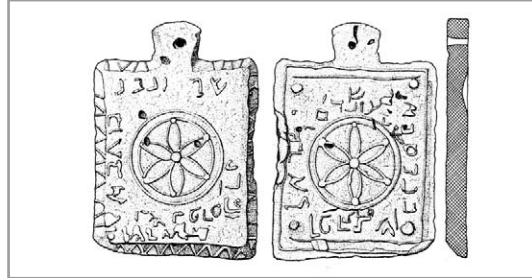


fig. 27 Drawing of a lead weight of the Bar Kokhba administration found in the hiding complex at H. 'Alim. The Hebrew text reads: „Shim'on ben Kosba, Prince of Israel and his administrator“ (Kloner and IAA)



fig. 28 Photo of bronze coin from year one of the Bar Kokhba Revolt (obverse shows a palm tree and the inscription „El'azar the Priest“; reverse shows a bunch of grapes surrounded by the inscription „Year One of the Freedom of Israel“. Found in Complex XIV at H. Ethri (photo by Zissu)



with the aid of metal detectors. Caves that remained in use in later periods were cleared of objects that the later inhabitants did not need. Only the few complexes that archaeologists found sealed can be dated by their content, although the absence of dated finds as pottery, oil lamps, glass vessels, etc. (fig. 26) in undisturbed contexts (i.e., rooms and facilities that were not excavated by antiquities looters) hinders the accurate dating of the hideout phenomenon.

Kloner came up with a relative chronology for the hiding complexes that distinguishes older underground complexes and facilities with prior functions from burrows, shafts, and air vents added around the time of the Bar Kokhba Revolt. When no clear chronology can be determined, burrows of the typical dimensions and shape are used as an archaeological indicator for identifying them as hiding complexes used during the revolt. Since the publication of Kloner and Tepper's book (1987), a great deal of evidence has been discovered that enables us to date the hiding phenomenon more accurately.

It seems that the hideouts reached their peak of sophistication during the Bar Kokhba Revolt; this claim is supported by objects discovered in the complexes, such as 25 coins struck by the rebels administration,

found by archaeologists at various sites (fig. 28); (for a summary of coins and their sites, see Zissu and Eshel 2002)¹ and a lead weight issued by the Bar Kokhba administration (fig. 27); (Kloner 1990), as well as potsherds, fragments of glass, and oil-lamps. Nevertheless, recent research has found indications of small, unsophisticated complexes from the beginning of the first century C.E. and perhaps even earlier (at Pissgat Ze'ev [Shukron and Savariego 1994]; H. 'Ehtri [Zissu and Ganor 2009])². But numismatic finds from the time of the Jewish War against the Romans have also been discovered in hideout XIII at H. 'Ehtri (half a sheqel from the third year of the Jewish War), at Susya (a sheqel from the second year of the Jewish War [Sar-Avi and Eshel 1998]) and at Kh. Zeita (a hoard of 755 perutot from the second and third years of the Jewish War [Kindler 2003–06])³.

The Function of the Hiding Complexes

Because the presence of hiding complexes in the Judean Shephelah is consistent with and corroborates Cassius Dio's account, they can reasonably be dated to the time of the Bar Kokhba revolt. The Roman historian's description should not be interpreted as an exaggeration meant to excuse the difficulty the Romans had in suppressing the revolt. The hideouts are tangible evidence of preparations for a revolt or for actions during the revolt, so that clandestine activity could be carried out when necessary. We should not assume that all the hideout complexes in the Judean Shephelah were hewn in the midst of the revolt; some were perhaps prepared earlier.

The architectural uniformity among many of the complexes seems to be evidence of orders from above, planning, and implementation in one short period of time, as a result of the military conception of the Bar Kokhba administration. Perhaps preparing the hideouts was part of the civilian population's role in getting ready for revolt, subversive activity, and hiding in various stages of the war. Creating the hiding complexes was a sophisticated way of overcoming the difficulty of a head-on clash with the Roman legions. The complexes were meant to serve as hideouts for weeks or even months and as bases for the rebels. Food, weapons, and other supplies could be stored there secretly.

The small, narrow, winding burrows were meant to make it difficult for the enemy to infiltrate and advance in the underground maze. The burrows could be blocked and locked easily and efficiently, and parts of the complex could be cut off from the outside. They surprised the intruder unacquainted with them and forced him to expose his unprotected side. As the intruder is forced to crawl or creep, he is denied free use of his weapons and defensive armor. He must carry some means of lighting, such as a torch or lamp, further limiting the free use of his hands. The inability of the intruders to move freely in the burrows, together with the need to climb shafts and navigate angles increased the ability of those hiding to defend themselves. Most complexes are entered through a narrow shaft or burrow. Therefore only one intruder at a time can enter the complex, and he exposes himself to hand-to-hand fighting in disadvantageous conditions. Thus, the superior fighting power of a trained army unit is lost under these circumstances.

Hiding Complexes in the Talmudic Literature

Several halakhic passages in the talmudic literature mention hideouts that served as long-term places of refuge for women and children from the time the locality was captured until the enemy left it. As we can see from these passages, the hideouts were safe and better hidden than just a pit or storeroom, and the likelihood of discovery by the enemy was low (Samet 1986; Safrai 2011).

1. M Ketubot 2:9: "If troops of siege have taken a town, all the priests' wives who are in it are unfit. If they have witnesses, even a slave, even a handmaid, they are believed. No one is believed as to himself." The Babylonian Talmud notes an exception to this law: "If there is there one hiding place, it protects all priests' wives" (Ketubot 27a, Soncino translation). Elchanan Samet and Zeev Safrai explain that the concern in the Mishnah is that the troops may have raped the women; consequently, the priests' wives are forbidden to their husbands by the Torah. The Amoraim added that if there is even "one hiding place" in that city, the women may remain with their husbands. Samet regards the "hiding place" as a known place where it was planned that women and others would hide during a war and the conquest of the city.

2. M Niddah 4:7: “But if the time of her fixed period was come and she had not examined herself, she is deemed unclean. R. Meir says: If she was in hiding and the time of her fixed period was come and she had not examined herself she may be deemed clean, since fearfulness suspends the blood-flow” (Danby translation). R. Meir disagrees with the original law in a case in which the woman was in a hiding place and was tense and afraid. Samet and Safrai believe that the opinion of R. Meir, who lived at the time of the revolt, reflects a situation that was familiar to him—hiding and the fear that went along with it. Even in hiding, the Jews were careful to observe the laws of ritual purity.

3. T Yebamot 12:4, 5: In a discussion of levirate marriage and halitza, hideouts are mentioned three times. The context concerns two women who gave birth in hiding; the children were mixed up and no one knew which woman was the mother of which infant. Samet presumes that these accounts refer to a hideout where the women stayed for some time and could give birth. This sounds like a hideout complex, where newborns could be mixed up due to crowding, darkness, and fear.

According to these sources, it seems that during the preparations for the Bar Kokhba Revolt or during the revolt itself, the Jews developed a concept of defense and hiding; the historical context of the exceptions to the law stated by the Mishnah regarding a besieged city is consistent with the time of the revolt. Physically and functionally, the talmudic “hiding place” is identical to a hiding complex: both are within a town or village, they are not suited for combat inside them and are intended for non-belligerents, their rooms are small and dark, they are crowded, and there is a lack of privacy. If the town was conquered, the people hiding were beset by fear and emotional stress.

Distribution of the Hiding Complexes in Judea

Most of the hiding complexes were discovered underneath Jewish settlements from the late Second Temple period and the time between the two Jewish revolts. They were identified by means of distinctly Jewish „ethnic“ finds such as ritual baths, stone vessels, ossuaries, Judean (“southern”) lamps, coins from the Jewish War and Bar Kokhba Revolt, and epigraphical finds (Zissu 2001, Raviv 2012).

The complexes were hewn by local residents who had knowledge, experience, and a long tradition of hewing. The systems are a physical manifestation of the preparation of an entire region for revolt, keeping in mind local conditions, the characteristics of the bedrock, and the military conception of the leadership of the revolt. The hiding complexes in the Judean Shephelah were hewn under an upper layer of nari (harder crust) in the soft limestone (kirton rock), which is stable and easy to hew. Those in the northern Negev were hewn in limestone conglomerate. The ones in the Hebron hills are in hard limestone and those in the Binyamin region and the Shephelah of Lod are in a friable limestone that is less stable than that of the southern areas of the Judean Shephelah. The complexes were created on farms and estates, in villages, and at fortified sites scattered throughout Judea, not necessarily controlling main roads.

Surveys and excavations in recent years have increased the number of known hiding complexes and expanded the map of their distribution. Today we know of more than 350 complexes in more than 140 Jewish localities, concentrated in the area from Nahal Shilo and Qanah in the north to Nahal Shiqma in the south, and from east of the central watershed in the east to the slopes of the Shephelah in the west. In view of the latest finds, we can delineate the boundaries of the settlement bloc in Judea between the revolts against Rome: from Antipatris in the northwest; eastward via Nahal Shilo and Qanah, the toparchies of Timna and Aqraba, and the Alexandrion fortress (Sartaba); then south along the Jordan Valley and Dead Sea and west to the area of Arad, Aro'er, and the Beersheba valley. The line of settlements in the west extends to the fringes of the Judean Shephelah where it meets the Coastal Plain. A single complex was found in the Coastal Plain. So far no hiding complexes with typical burrows have been discovered in non-Jewish localities.

Hiding Complexes in the Galilee

Yuval Shachar studied the hiding complexes discovered in 23 Galilee localities. Nineteen of these are in the Lower Galilee, including a few near Roman roads. Four were found in the Upper Galilee (Shachar 2003). In addition to those on Shachar's list is a complex discovered by Motti Aviam in Yodefah (Aviam 2005: 48–51, 129–130)⁴. This small complex contains a tunnel about two meters long and three small rooms. The entrance shaft to the complex was hewn in a floor of a casemate room, floor

in the western wall of the site; the entrance faces east, i.e., into the fortified area of the site (area VII, casemate room RC6). Human bones and a hoard of 25 coins from the first century CE (the latest of them from 64 CE) were found in the complex. It seems that this is a small family complex of a type familiar from Judea.

Yinon Shivtiel (2008; 2013) presented 35 sites in the Galilee at which 65 hiding systems have been found (including the systems listed by Shachar and Aviam). The methodological problem is that only few systems identified by Shivtiel can be archaeologically dated. Moreover, only 4 bear the typical Judean characteristics discussed above, while the other 61 lack most of the typological features found in Judea.

Shachar points out the typological similarity between some complexes in the Galilee and those in Judea, which ostensibly suggests preparations for the Bar Kokhba Revolt. However, the few published archaeological finds from Galilee complexes have not been dated to the time of the Bar Kokhba Revolt. Based on these data, Shachar believes that the Jews of the Galilee intended to revolt just like the Judeans. Nevertheless, the Galilee does not seem to have been included in the Bar Kokhba administration, as indicated by the total absence of Bar Kokhba coins in the region. In Shachar's opinion, the difference between Judea and the Galilee was that the center of the revolt was in Judea. After all, the motive for the war, as expressed in the war slogan "For the freedom of Jerusalem," directed the rebels' offensive toward Judea and Jerusalem.

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Notes

- ¹ We cannot rule out the possibility that some of the hoards mentioned by Leo Mildenberg in his book originate in hideout complexes looted since the late 1960s. The hoards were named for the village of origin of the thieves and merchants who reported them to him (Mildenberg 1984: 49–57); their exact place of discovery is unknown.
- ² At H. 'Ethri in the central Judean Shephelah, small hideout complexes (e.g., complexes VI and IV in fig. 6) were found. These contain typical components of hideouts: narrow, winding passages with floors at various heights, small rooms, camouflage arrangements, and means of blocking entry. The small complexes at H. 'Ethri were hewn in the early first century CE when the houses above them were built. The complexes were used in the Jewish War, as evidenced by a half-sheqel coin from year 3 of the revolt found in one of them. Several complexes ceased functioning when parts of the site were destroyed during the Jewish War.
- ³ For a summary of the numismatic finds in the hideout complexes, including additional evidence of the use of components of complexes prior to the Bar Kokhba Revolt, see Kloner and Zissu 2003a.
- ⁴ For an initial summary of Aviam's work in 1983 and a partial update, see Aviam 2004.

English Abstract

The Second Jewish revolt against Rome, commonly known as the Bar Kokhba Revolt (132-136 C.E.), was one of the most disastrous events in the history of the Jewish people. While the Jewish War was described in great detail by an eye-witness – Flavius Josephus, the Bar Kokhba Revolt lacks a contemporary, detailed chronicle. The scholars of this period are compelled to rely on the abbreviation of Cassius Dio's short account (Roman History 69, 12–14), and few brief and sometimes legendary descriptions transmitted in the rabbinic literature. Therefore, much of the scholars' knowledge of the period is based on archaeological, numismatic, epigraphic and papyrological material.

The paper gives an overview of one of the most important archaeological findings from the time of this revolt, made in the last years: the rock-cut hiding complexes and their contribution to the understanding of the character and geographical extent of the revolt.

One of the fascinating settlement-related aspects of the Bar Kokhba Revolt is the extensive use of underground cavities and installations as hiding complexes, escape routes, and places of refuge. We should distinguish between two main groups of caves: hiding complexes and refuge caves.

Most of the hiding complexes were rock-cut underneath the ancient settlements. They are found mainly in the Judean Shephelah (or Foothills, located west of the Jerusalem and Hebron mountains), and also in the Jerusalem and Hebron mountains, the Beth El mountains and the Galilee. The hiding complexes were prepared mainly before and during the Bar Kokhba Revolt. Few Judean systems—mainly small, unsophisticated ones—are dated to the time preceding the Jewish War against Rome (66-70 C.E.).

The refuge caves are found mainly in the Judean Desert, in the steep cliffs overlooking the Dead Sea and the Jordan Valley. These caves are basically natural, and the artifacts found in them make it evident that they served as places of refuge for people from the Judean mountains and the Jordan Valley when they fled for their lives at the end of the Bar Kokhba Revolt.

Throughout ancient Israel, and especially in the Judean Shephelah, rock-cut underground chambers were created as part of the economic and physical infrastructure of towns and villages, mostly during the Hellenistic and Early Roman periods. In many sites, man-made underground facilities have been discovered that fell into disuse when they were cut by man-made burrows and linked to form ramified underground complexes with narrow, winding burrows, designated as „Hiding Complexes“. Certain architectural components in the hiding complexes (as 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 external chambers used previously as cisterns, limestone quarries, ritual immersion baths, olive presses, storerooms 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 and 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 various angles and in some cases the height of the floor changes. Shafts were hewn 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 aboveground locality. Shafts connecting burrows whose floors were at different heights were hewn vertically from the top down.

The entrances to rooms and burrows were closed from inside, blocked, or cut off with various kinds of locks. Vertical shafts were hewn in the ceilings of the rooms for the removal of rubble from the hewing; once the complex was completed, they served as air vents and were camouflaged on the surface. A regular supply of water was crucial. Many complexes were connected to 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 secretly. A map of hiding complexes in Judea, also showing the distribution of contemporaneous Jewish farms, estates and villages and compared with the distribution map of coins minted by Bar Kokhba's administration and found in controlled archaeological explorations, can give some indication on the geographical extent of the revolt. An examination of the archaeological data supports Cassius Dio's quantitative

report (although the report may be somewhat exaggerated) of the large scale destruction of Judean countryside during the suppression of the revolt:

The complexes were generally made by local residents who had knowledge, experience, and a long tradition of hewing. The idea was not a foreign import; it was a physical manifestation of the preparation of an entire region for revolt, keeping in mind local conditions, the quality of the bedrock, and perhaps the military conception of the leadership of the revolt. The complexes were created underneath Jewish farms and estates, in villages, and at fortified sites scattered throughout Judea, not necessarily controlling main roads. Recent surveys and excavations have increased the number of known hiding complexes and expanded the map of their distribution. Today we know of more than 350 complexes, situated in more than 140 Jewish localities in Judea.