

The use of caves as security measures in the Early Roman Period in the Galilee: Cliff Settlements and Shelter Caves

O uso de cavernas como medida de segurança durante o início do período Romano na Galileia: assentamentos em penhascos e cavernas-abrigo

Yinon Shvitziel

Membro do Centro de Pesquisas em Cavernas de Israel

Professor das Universidades Zefat e Ohalo

yinon1950@gmail.com

Amos Frumkin

Unidade de Pesquisas em Cavernas

Professor do Departamento de Geografia da Universidade de Jerusalém, Israel

msamos@mscc.huji.ac.il

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Abstract

From the standpoint of archaeological and historical research, the caves in the Galilee (northern Israel) are less well known than those in the Judean Desert in central Israel and in the rest of Judea. Studies and surveys have been conducted in the Judean Desert ever since the discovery of the first Dead Sea Scrolls in 1947. The caves there have been surveyed systematically, and the finds shed light on many details about the region's history. Gradually, a particular pattern of natural karst caves containing networks of crawlways and chambers was discerned and is the main object of this paper.

Keywords: Caves, Shelters, Galilee, Israel.

Resumo

Do ponto de vista da pesquisa arqueológica e histórica, as cavernas na Galiléia (norte de Israel) são menos conhecidas do que aqueles no deserto da Judéia, no centro de Israel e no resto da Judéia. Pesquisas têm sido realizadas no Deserto da Judeia, desde a descoberta do primeiro Manuscritos do Mar Morto, em 1947. Lá, as cavernas foram pesquisadas de forma sistemática e os achados lançam luz sobre muitos detalhes a respeito da história da região. Gradualmente, um determinado padrão de cavernas naturais que apresentam redes de interconectadas e câmaras foi identificado e é o principal objetivo deste trabalho.

Palavras-chave: Cavernas, Abrigos, Galiléia, Israel.

1. INTRODUÇÃO

The Galilee in northern Israel is a rugged zone, ranging in altitude from 213m below Mediterranean Sea level (msl) at the Sea of Galilee, to 1208m msl at Mt. Meron. The outcropping rocks are mainly carbonates of the

late Mesozoic to early Cenozoic age, with some volcanics and clastics. Hard compact limestone and dolomite were formed in shallow seas. Regression of the sea during the Eocene age was followed by intensive karstification of the harder carbonates, by hypogenic and epigenic water. The region was subsequently uplifted and

deformed by tectonic movements of the late Cenozoic age. These were followed by river incision, creating cliffs in the hard carbonates. Caves were often breached by faults and river incision, leaving cave openings in cliff faces.

Two kinds of caves were exploited by Jews as places of refuge in times of desperation. One method of defense and survival was the digging of tunnels and burrows for the inhabitants to hide in. This method was chosen in settlements with a suitable geological structure. The burrows were complicated and tortuous, with few entrances and exits. They were designed for underground concealment for a limited period, and offered the possibility of temporary escape.

The distinctly defensive use of these concealment caves decreed the use of camouflage for entrances and exits. Therefore, we sometimes come across burrows entered via wells or shaped like bottles, well camouflaged with bushes or trees. The burrows of Khirbet Roma in the Galilee are typical of many in the region, and are remarkably similar to those in Judea.

The first author's doctoral dissertation presented 65 such concealed systems, primarily in the Lower Galilee, an area in which the rock formation is soft and easy to hew (SHIVTIEL, 2009, p. 73-191). However, this article will deal only with the second kind, which are naturally formed caves used for security.

In 63 BCE, the Hasmonean kingdom was conquered by Pompey, and Roman rule was

imposed throughout the Land of Israel.¹ The country - including the Galilee was divided into proconsulates and was renamed Provincia Syria Palaestina.

After the conquest, conditions for the Jewish population deteriorated (RAPPAPORT, 1983). Relations with the Roman government were problematic, and conflicts over social, religious, and national issues emerged, especially in the Galilee and Golan Heights, where radical groups who believed that the Roman occupation and the occupiers' activity jeopardized the survival of the Jewish people, organized themselves into some form of resistance for the first time (RAPPAPORT, 2006).

As the Romans tightened their grip, the Jews felt more and more vulnerable, and clashes with the Romans and the gentiles in Palestine seemed inevitable (COHEN, 2002). Relations between the Jewish and non-Jewish populations had been strained since long before Herod, and the sense of a stranglehold led to hostile acts against anyone who represented the non-Jewish world in general and the Roman world in particular (RAPPAPORT, 2006, p. 19-54). The Jewish historian Josephus - the commander of the Galilee during the Jewish War in 66-67 CE - describes at length in *The Jewish War* and *The Life* the sense of danger and insecurity felt by the Jews as they faced hardship and hopelessness.

¹ For the significance of the Roman conquest of the Galilee see Schwartz, 1994, 290 - 306

His descriptions reflect the situation in Judea, and especially in the Galilee, from the Hasmonean period until the outbreak of the Jewish War. He documents the course of events that led to the revolt, and particularly notes the events in the Galilee. But despite the extensive detail in his books, he does not share with readers the methods by which the Jews defended their lives during the various times of trouble. However, one can find in these writings many direct and indirect references to the preparation of caves as shelters (*Josephus the Jewish War II*, 569-574; *Josephus The Life*, 185-190).

In both of these works, he describes the defensive methods used by the Jews in the Galilee in extremely vague terms, always attributing them to his skill as a military commander. His reliability has been examined in many studies and has been put to the test of scholarly criticism from various perspectives (e.g.: RAPPAPORT, 1994, p. 279-289; SCHWARTZ, 1994, p. 291). There is no doubt, however, that we know relatively little about the preparations and readiness of the Galilee for hard times in general and for the Jewish War in particular. This paper will attempt to trace and describe the security measures that Josephus attributes to himself, but from which we can learn about preparations made by the Jews of the Galilee in other times of trouble as well.

2. THE CAVES

The existence of intricate systems of interconnected shelter caves in the cliffs of the Judean Desert has long been known and has been the subject of a number of publications. The majority of these systems have been dated by scholars to the time of the Bar Kokhba Revolt².

Just as in the Judean Desert, cave systems exist to this day in the Galilee. The purpose of the present article is to show that the cave systems in the Galilee served not only as places of refuge, but also as escape routes or refuges for local villagers. The common denominator of these Galilean systems was the extreme difficulty entailed in reaching them, and, just as in ancient times, they are today accessible only by rappelling. It would appear that the inhabitants of many cliff-top Galilean villages prepared escape routes and shelter caves for use in times of need. They descended into these natural caves by ropes, and enlarged and adapted them for survival in times of danger. In this article, we will define such caves as “shelter caves”.

A survey of these shelter caves indicates common methods and planning, raising the question of whether there was a central authority directing operations in a specific time period, in preparation for possible future wars, or whether one village simply learned and copied from another, leading to the adoption of

² See the comprehensive books by Kloner and Tepper (1987) and by Eshel and Amit (1998) and Eshel and Porat (2009).

similar methods throughout the region. Both the time span and the similarity of preparations of the caves for shelter suggest that the methods of enlarging and preparing these caves were passed down for many generations. We can only give a rough estimate of the period, (probably from the Hasmonean period to the Late Roman) since pottery fragments do not give a clear enough answer to this question, bearing testimony to a very long time span (from the Hellenistic to the Late Muslim period). Numismatic evidence is generally regarded as a more reliable guide for dating; unfortunately, however, the caves explored by the author failed to reveal coins, with the exception of two “Sepphoris” coins from 115–117 CE, found in a cave in the Akhbarah cliff (Fig. 1). These indicate that the cave system was in use during the reign of Trajan (SHIVTIEL; ZISSU, 2007-2008, p. 112-117).



Figure 1 - Dor and Sepphoris coins from Trajan's period found in the cliff shelter at the rock of Akbara

The similarity between the shelter caves in the Galilee and those in the Judean Desert attributed to the time of Bar Kokhba (regardless of whether the first stages of planning and preparation were at the time of Bar Kokhba or much earlier), does not help us date the Galilean caves; the work and building methods are characteristic of the entire region in ancient times.

For these reasons, we have neither a reliable key for dating, nor the background for the initial preparation of the Galilean caves. They can be equally attributed to the Herodian period, the Jewish War, or the Bar Kokhba Revolt (132-136 CE) and references to the use of caves in these periods can be found in various sources.³ If they were used for shelter in one period, it stands to reason that they probably served a similar purpose later, and in fact it is clearly evident from the Muslim period that this was the case.

Therefore, we can only present the data as found: the location of the caves, their proximity to settlements, and the geological conditions. In certain places, both the shape and dimensions of the natural cave and the manmade extension and supply routes can be discerned, and there is evidence of daily life (especially purification rites), of storage methods for food and water, and of ways of harassing the enemy, preventing capture by the enemy, and camouflaging the site.

³ Josephus, *The Jewish War*, I, 304, 307, 309–313; II, 573; III, 27, 334, 341; *Dio's Roman History*, VIII, 12, 69.

All technical questions regarding the means of achieving these ends - access to the shelter community, its size, plans for living quarters, the question of whether the first caves were all started in the same period, and above all dating the earliest preparation of the caves – remain unanswered until a definitive find settles the matter one way or another (Fig. 2).

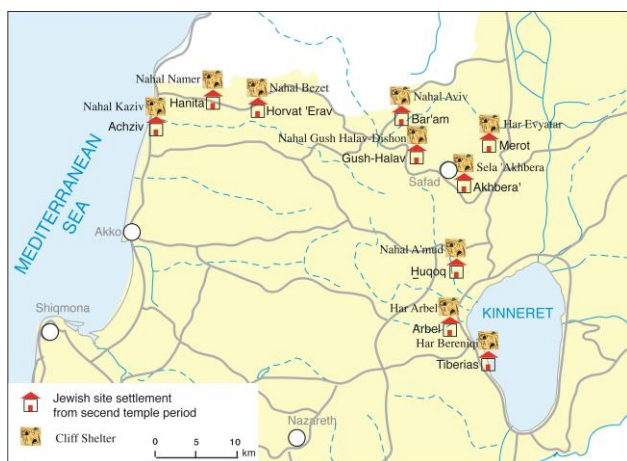


Figure 2 – Simplified location map of the cliff shelter in the Galilee.

Mt Berenice

Mt. Berenice is situated at the southwest corner of the Sea of Galilee, about 2 km south of the modern Jewish city of Tiberias, overlooking ancient Tiberias, which is presently being excavated. This imposing mountain, a steep limestone cliff with a precipitous eastern flank, stands out from the surrounding countryside. Soaring to a height of 190 meters above the lake, its entire eastern side is dotted with caves. Thirty of these caves were explored by the Israel Cave Research Center involving a group of cave explorers and the author (TEPPER; SHAHAR, 1987, p. 318; SCHWAGER; MIRON, 1990, p.61-84). The

caves are within dolomite and limestone of late Cretaceous Sakhnin-Bina formations. They were formed by hypogenic hydrothermal water, presently emerging at Hamei Tiberias, at the base of Mt. Berenice (FRUMKIN, 1991). However, several caves have been artificially enlarged for human habitation. The Jerusalem Talmud relates how Rav Huna (fourth century CE) and his friends used to hide “for days and nights in the caves above the Great Beit Midrash.”⁴ Finds in the caves include shards and pottery from the Early to Late Roman and from several other periods.

Mt Arbel

North of Tiberias, at the top of the path leading down from the peak of Mt. Arbel to the dry riverbed of Wadi Hammam, excavations of an area of 10 hectares (25 acres) uncovered the ruins of the Jewish settlement of Arbel, with its ancient synagogue overlooking a gorge separating Mt. Arbel from Mt. Nitai. Both mountains have been associated with ancient Arbel ever since the discovery of a widespread system of shelter caves used by besieged Jews in the period preceding the Jewish War. Standing opposite these two imposing cliffs, one can easily see the mouths of dozens of caves; Josephus Flavius’s account of Herod’s campaign against the Jewish villagers near the Sea of Galilee clearly refers to Arbel (Josephus *The Jewish War*, II, 572-576; Josephus *The Life*, ch.37).

⁴ The reference is probably to the period of the Gallus Revolt 115-117 CE; see J Pesahim 1:1, 27:1.

Josephus states that Herod's conquest of the Galilee was complete except for Arbel, which was surrounded by caves. He emphasizes Herod's ingenuity as well as the tremendous challenges he met in the Arbel campaign, such as having to lower his warriors to the cave mouths by rope inside wooden crates (Josephus, *Antiquities*, XIV, 417–430) and mentions in particular “the length of time” that elapsed until the king finally settled on “this sophisticated and dangerous stratagem” (Josephus, *The Jewish War*, I, 309–313). All this is readily understood by anyone investigating these caves, and finding himself dangling at the end of a rope in front of the mouth of one of them (Fig.3).



Figure 3 – A) A four-featherarrowhead from a cliff shelter in Mt. Nitay. B) A hiding tunnel in a cliff shelter in Mt. Nitay.

Josephus's description of building walls in caves near the Sea of Galilee (*The Jewish War*, II, 569 – 574) was until recently not fully appreciated, but now takes on greater significance. The description of the building of walls above the Arbel caves fits in well with the theory of Yigal Tepper and Yuval Shahar that the Mt. Nitai cliff caves on the northern side of Wadi Hammam, opposite the cliff today known as Arbel, are the “Arbel caves” referred to by Josephus (SHAHAR; TEPPER, 1991).

The distance from Mt. Nitai to Mt. Arbel as the crow flies is not more than 300 meters. Arbel was a Jewish settlement situated at a height of between 80 – 100 meters on both sides of Wadi Hammam. The Hammam springs produce about 80 cubic meters of water per hour (as of December 1992) - an excellent source of water used by the Bedouin to this day. In 2007, Dr Uzi Leibner dug out an early synagogue at the entrance to Wadi Hammam.

An extensive survey of the Arbel caves carried out by the late Zvi Ilan provided details of the system for the first time.⁵ In 2005-07, a renewed survey was carried out by the first author and Vladimir Buslov from the Cave research Center of the Hebrew University. The shelter cave network that was discovered, was explored and found to be most impressively

⁵ This survey of the caves of Arbel and Mt. Nitai was headed by. Z. Ilan, and the first author participated in it. The caves were explored by the Israel Cave Research Center. The results of the survey appear in an internal report published by the Israel Cave Research Center and the Nature Protection Society in December 1992 (in Hebrew). The earliest survey was by Y. Tepper and Y. Shahar in 1984, but the results were only partially published.

developed and organized. Fifty hewn water cisterns, five ritual baths, arrow heads and hewn loops for rope tying were discovered. From the fortress familiarly known as “Kalaat Abu-Ma’an” after a Druze revolutionary who, according to local history, entrenched himself there against a seventeenth-century Turkish sultan (VILNAI, 1977, p.287), the explorer enters the central cave system. The limestone (Bar Kokhba Formation, Eocene age) has been subject to widespread karstic dissolution that has formed numerous natural caves. The cave entrances resemble a dovecote and attracted many species of birds, especially pigeons and doves, to nest there; hence the origin of the Arab name, Wadi Hammam (“Dove Gorge”). The nineteenth-century English scholar Henry Baker Tristram mentions the abundance of fauna in the gorge and the surrounding cliffs, particularly the Syrian bear. He relates how his team descended by rope to the Dove Caves, just as Josephus describes Herod’s soldiers doing in the first century (Josephus, *Antiquities*, 14, 417–427).⁶

About 120 meters down the northern face of the cliff, where the slope flattens out, a path leads to a “cave-village (the name given by Ilan to the site), the first of eight clusters found within the cliff. The caves, some of them natural, were enlarged and made suitable for human habitation, with several floor levels, and protected on one side by a rocky outcrop. In the center of the complex there is a ritual

purification bath (*miqveh*) in a two-roomed cave. On the western side of the cave-village, remains of a water cistern were found, fed by winter rains permeating the cliff and perhaps used to fill the *miqveh*. On the eastern side of the cave system is a circular cistern, apparently fed via the ancient path. The discovery of coins, pottery shards, and plaster indicate that the complex was first used in the Hellenistic period. (ILAN, 1992; ILAN; IZDAREHET, 1988).

The path continues eastward past other cave systems, which can be seen when facing the cliff, until it reaches a manmade staircase leading to the Ma'an fortress. On the wall east of the steps are remains of caves, with an additional *miqveh* and a plaster-lined water cistern (ILAN, 1992, p.12-14). At the side, a dug-out channel leads down to another well-developed cave system, built along the cleft running down from the cliff top (ILAN, 1992, p.14). The caves are on six different levels and contain numerous spacious rooms with dressed-stone walls. Passages and installations make the entire cave system reminiscent of a giant beehive. There are remains from various periods, some with signs of reuse or recycling. Pottery shards and, more importantly, plaster from the water cisterns are indicative of the Roman period, but the complex was used well into Byzantine and Ottoman times. The elaborate network of this cave shelter system, together with its excellent state of preservation, reveals a clear picture of planning for times of trouble.

⁶ The plunder of eagles’ nests is described in Tristram 1865, 446-447.

The wall built to shield the caves is about 300 meters in length and traverses Mt. Nitai. There are nine towers along its length (Fig.4). These faced west in the direction of the only possible Roman attack. The area they guarded was accessible only from the north between the cliff top and the ninth tower, and from the southwest between the cliff top and the wall section south of the first tower, because the area between them was a sheer precipice. Between the towers, the height of the wall varied: the northern side, whose base abutted the rugged slope, rose to 4.5 meters, whereas on the southern side it topped 8 meters.

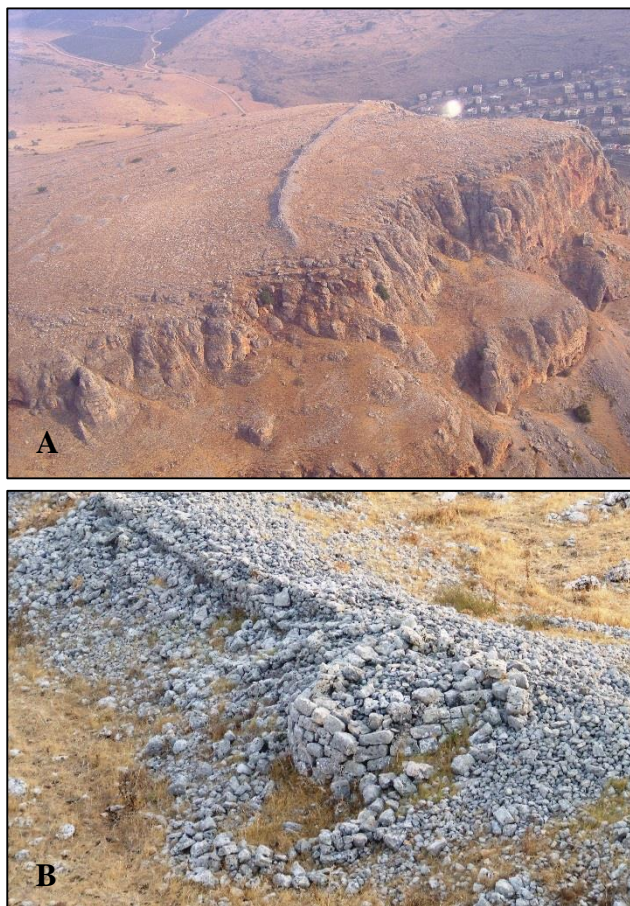


Figure 4 – A) The wall on Mt. Nitai. B) Guard tower in the wall of Mt.Nitai.

The top part of the wall, 2.2 meters thick, was designed as a guard and patrol route. This impressive wall demanded many stages of preparation: the stones had to be quarried, dressed, fitted, and raised to the height of the cliff; building materials had to be transported; and manpower had to be found for all these activities. All this work was necessary to create a complex whose purpose might have been to provide long-term shelter for the local villagers. Such a towering wall would have acted as a first line of defense. In April 2010 an archaeological survey and diggings, in which the present writer participated, were conducted at this wall for the first time, when two defense towers and part of the northern wall were uncovered.

In addition, all the Mt. Nitai cliff caves were explored, including those accessible only by rappelling. The artifacts found here differed from those of the early Roman period. Notable finds were arrow heads typically used by the Roman army, plaster cisterns and coins from different periods (results from this survey have not yet been published). The Mt. Nitai cave system spreads along the whole cliff face, and is conspicuous on the mountain. The typical signs of preparation for defense in war are still visible.

The Amud Gorge

About 1.5 km northwest of Kibbutz Huqoq, rich remains of a settlement were found: burial caves, pottery shards from the Second Temple period, a complete underground shelter

complex (KLONER; TEPPER, 1987, p.311; SHIVTIEL, 2009, 53 - 57), a natural spring, and even remains of an ancient Roman road connecting the Huqoq hills with the main Amiad-Acre highway. It has been suggested that this settlement was Kfar Icho (DAMATI, 1986), one of the fortified settlements listed by Josephus.⁷ There may be more foundation for this theory than might first appear likely, notwithstanding the erroneous transcription of the name (ROMANOFF, 1937, p.171-173). The Jewish settlement is situated at the Huqoq ruins on a high hill, from which we can see Arbel in its entirety. Recently, in 2011, a synagogue dating to the fifth century C.E. was excavated by Prof. Jodie Magness. In 2012, the first author and Vladimir Buslov surveyed all the cliff shelters caves (more than 300 caves) and verified that all the features that characterize other sites previously examined existed here as well.

The craggiest part of the Amud Gorge (*nahal amud*) just 2.5 km north of the settlement, is characterized by extremely steep cliffs forming a gorge visible from the plain above. From this vantage point one can see a series of shelter caves in these cliffs. These limestone caves (Bar Kokhba Formation, Eocene age) were originally formed by karst dissolution. In two of them were found 2 pithoi of the type GCW (Galilean coarse ware) dating from the end of the Hasmonean / beginning of

the Roman period.⁸ In addition, arrow heads were found at the bottom of the cliff, as well as dug out cisterns inside the cave. Most significant of all, a coin from the period of the Jewish Revolt against the Romans which accrued between 66 – 73 CE, was found on the hewn stairs leading to the top of the cliff. The entire region has long since been classified as a nature reserve, and due to the management controls subsequently established, further research into the seventy-five caves is impossible at present. With the aid of binoculars, the caves appear to be identical to those of Mt. Arbel-Nitai. This cave system seems similar to the two aforementioned complexes in that it appears to be a complete settlement - and specifically in caves in the steep cliff face - made suitable for habitation and shelter, and inaccessible by foot or military force. The line of settlements with similar typology continues northwards. North of Huqoq, one can see the cliff of Akhbarah, at whose foothills the remains of the Jewish settlement of Akbari are located. This cliff is also composed of Eocene limestone (Bar Kokhba Formation).

Akhbarah Cliff

Josephus says that this settlement was also fortified, but he mentions additional information with regard to the topology that has been overlooked by scholars (Josephus *The*

⁷ On Josephus's list of fortifications in the Galilee, see Aviam 2004, 92–105.

⁸ With acknowledgement to Dr. Moti Aviam for dating the pithoi.

Jewish War, 573). Klein, for instance, surmised that Akhbarah is situated “east of Kfar Hananya” (KLEIN, 1954, p. 129). While the location of Akhbarah 2 km south of Safed (modern day Zefat), within Nahal Akhbarah, does in fact match Klein’s description, it seems illogical that Josephus’ description of a “fortified settlement” refers to a low-lying village with easy access both from the direction of Safed and from the Roman road traversing

nahal amud and leading to present-day Amiad Junction. Josephus emphasizes the fortification of Akhbarah Crag, and not Akhbarah alone. However, a 135-meter-high vertical cliff towers above the foothills of the Akhbarah settlement. The cliff contains one hundred and twenty nine caves, some natural and others enlarged or manmade (Fig.5).



Figure 5 – Panorama of the Akhbarah cliff shelter caves

Access to these caves is solely by rope descent or climbing. The caves are hidden in the rock crannies of the Akhbarah cliff and the cave system resembles those of Mt. Arbel and Nahal Amud. A survey carried out in 2009 covered all of the caves, being artificially-cut or enlarged split-level caves with connecting passages. The caves vary in size from 1.5 x 2 meters to 2 x 5 meters diameter.⁹ Once again, ritual baths, arrow heads and coins from the Trajan period (115 -117 CE) were found; most interestingly,

two plastered cisterns were found which collected water from stalactites and served some of the caves. Other caves received water from hollowed-out water channels which followed the lines of the vertical walls and apparently served as gutters for collecting and distributing rainwater, that was collected in other cisterns. Most of the cave floors were covered in layers of guano, greatly hindering the search for pottery shards. Nevertheless, certain objects were found and dated as Early Roman. Here, too, there are clear signs of hammer and chisel

⁹ The survey was carried out by the first author and Vladimir Buslov of the C.R.C.

work and square openings, which in some instances served as passages between rooms.

The distance of Akhbarah Crag from the settlement identified as Akhbarah is no more than 150 meters; the following description by Victor Guérin, who identified Akhbarah and visited the site in 1870, is therefore of particular significance.

East of Wadi Akhbarah, and above it, lies the village of the same name, comprising a mere twenty humble dwellings. Above the village lies a plain, where we can see the baseline of walls defining a rectangular compound called to this day “Al-Knisa” [...] but perhaps before this building a synagogue stood there.¹⁰

On the southern side the wadi is bounded by a huge wall of quarried cliffs. This is the site referred to by Josephus as “Akhbarah Crag” fortified by him in the rebellion of the Jews against the Romans. (GUÉRIN, 1969, p.351)

A reference consistent with the idea that shelter caves in the Akhbarah cliff were used by the besieged Jewish population for shelter at various times appears in the diary of a Turkish traveler by the name of Tshelebi, who visited the Galilee in 1648. He visited Akhbarah (“the Ruins of Ukebeh”), saw the cliffs towering above him, and wrote in his journal: “The children of Israel escaped the plague and hid in these caves. Then Allah sent them a bad spirit which caused them to perish within the caves.

Their skeletons, heaped together, can be seen there to this day” (TSHELEBI, 1980, p.28).

Mt Eviatar

From Akhbarah (following the order of the settlements as described by Josephus), we must examine Merot, considered to be the northernmost Jewish settlement in the Galilee (Josephus, *Jewish War*, III, 40). The identification of Merot with the Jewish settlement of Mero (as it appears in the *Jewish War*), or Amerot (in *Life of Josephus*) is accepted without question today. The village of Merot is situated at Khirbet Maros, 3.5 km west of Tel Hazor, and overlooks the Huleh Valley. Mt. Eviatar rises above the western face of *nahal hazor* (the Hazor Gorge), at a distance of 2 km from the village. On the northern cliff face of Mt. Eviatar, there are about thirty caves, some manmade and some artificially enlarged natural ones. The caves are situated at different levels and can only be accessed by rope and alpine climbing equipment. The caves occur in Cenomanian (late Cretaceous) dolomite on Sakhnin Formation.

In 1988, during excavations at Merot, Zvi Ilan speculated that these caves may have been designed for shelter for the inhabitants of Merot in times of war.¹¹ On June 30, 1988, the author rappelled down to the caves from the summit of Mt. Eviatar,¹² and carried out a survey. Thirty-five caves on three levels were

¹⁰ A synagogue was discovered at Khirbet Akhbarah in 1988 by A. Damati (Ilan 1991, 51).

¹¹ Personal communication to the first author during the 1988 season of excavations at Merot.

¹² Coordinates 1980-2705, about 2 km southwest of Merot.

examined. The caves are about 100 meters above the riverbed. The first cave is about 25 meters below the ledge at the top of the steep cliff. The caves have been hewn or broadened using simple mechanical tools, and clear signs of chiseling were found in most of the rooms. The dimensions of the rooms varied from 1.5 x 2 meters to 5 x 5 meters; the different levels were connected by passageways. (We thus understand why the Arabs named it Wadi Shbabik [“Window Gorge”].) Three of the rooms show signs of plastering. Many small drinking vessels were found (ILAN, 1990, p.17).

In 1988, during excavations at Merot, Zvi Ilan speculated that these caves may have been designed for shelter for the inhabitants of Merot in times of war.¹³ On June 30, 1988, the author rappelled down to the caves from the summit of Mt. Eviatar,¹⁴ and carried out a survey. Thirty-five caves on three levels were examined. The caves are about 100 meters above the riverbed. The first cave is about 25 meters below the ledge at the top of the steep cliff. Most of the caves contained pottery shards from various periods, especially the Hellenistic and Early Roman; also found was a strip of processed leather dating from the Early Roman period.¹⁵ Some of the caves had been dug out in ancient times in a manner completely unlike anything we had seen previously. They had been hewn in such a way that their walls and

ceilings met at right angles rather than being roughly arched. The appearance of the caves, the style of rock-cutting, and their adaptation for human habitation certainly add credence to the theory that these cave systems were meant to provide shelter for the villagers of Merot and surrounding settlements at one time or another. Moreover, the three conditions for deciding to fortify a settlement existed in Merot: an elevated location; proximity to a river ford; and the presence of a spring 1 km south of the settlement, providing a convenient nearby water source. The Palestine Exploration Fund reported the existence of this spring and its strong flow of water (CONDER; KITCHENER, 1881, p.242). Large cisterns in Merot provided additional sources of water. One cistern near the Merot synagogue measures 16.75 x 4 meters by 5 meters in depth (ILAN; DAMATI, 1987, p.21).

Aviv Gorge

The village of Bar'am to the north (apparently unknown to Josephus) is next in the line of shelter cave systems. No Jewish settlement of this name is known before the twelfth century, but the remnants of its two ancient synagogues indicate the existence of a first-century Jewish settlement (AVIGAD, 1992, p. 256). Aviv Gorge (*nahal aviv*) is a mere 3 km away, and its steep walls are dotted with natural and man-made caves, some of which probably served as shelter caves. This

¹³ Personal communication to the first author during the 1988 season of excavations at Merot.

¹⁴ Coordinates 1980-2705, about 2 km southwest of Merot.

¹⁵ Personal communication to the first author by Z. Ilan.

gorge is formed in Eocene limestone of the Bar Kokhba Formation.

The vast number of pottery shards from the Byzantine period suggests that some of them were used by hermit monks (AVIAM; AHALL, 1980). However, the two surveys carried out in these cave systems also revealed artifacts from periods when the people enlarging the natural caves would have considered them suitable as shelter caves in times of rebellion.¹⁶ Some of the pottery shards discovered in the caves overhanging the gorge were from the Early Roman period. Needless to say, the caves were only accessible by rappelling. Because of their proximity to the settlements of Bar'am and Gush Halav, the caves at the Aviv Gorge may very well have been part of the chain of shelter caves for the Jewish inhabitants of the area (prepared and fitted out against a possible attempt by a foreign power to conquer the Galilee).

Kziv, Namer and Betzet Gorges

The next three Jewish settlements in the chain (or at least the next three with an ancient Jewish majority) were Akhziv (Kziv, Gziv), Hanot (Hanita), and Rosh Maya. These actually extend over the border of the Kingdom of Tyre, and they all show signs of having been outside the known region of Jewish settlement of the Second Temple period. Undoubtedly, the

important halakhic (religious) discussion regarding "the forbidden towns in the Domain of Tyre" and the appearance of the names of permitted and forbidden towns in the Rehov inscription prove that these settlements, which appear in both sources, were "forbidden" (SUSSMAN, 1974). In other words, they were Jewish settlements liable for tithe and septennial taxes.¹⁷ These settlements also appear frequently in Talmudic literature in these and other contexts.¹⁸

For our purposes, the settlement of Achziv is situated at the mouth of the Achziv River, in the middle of which, on the steep southern cliff face, are dozens of hanging shelter caves, which vary in size from 1.5 x 2 meters to 2 x 5 meters. It should be noted that the distance between Achziv settlement and the caves is the furthest found so far (about 11 km), and thus it is possible that the shelter caves of the Achziv River were used by Jews who lived close to the caves in a place known then as Katstra Degalila (ILAN, 1986). In the 1980s survey, thirty-five caves were explored that did not require rappelling (BE'ER, 1990, p.35). In 2009, the first author and Vladimir Boslov from C.R.C. (Israel Cave Research Center) conducted a comprehensive survey in caves of the Kziv Gorge including those accessible only by rope (Fig.6). The caves occur along the outcrops of

¹⁶ A preliminary survey of these caves was carried out in 1979 by teams from the Akhziv and Mt. Meron field schools. Another survey was carried out in 2000 by a team from the Cave Research Center, headed by the first author.

¹⁷ T Shevi'it 4:2 (Zuckerman ed.); J Shevi'it 6:1, 36:2; Sifrei Deuteronomy, Ekev. See also the discussion of the possible presence of Jewish settlements in the western Galilee in Frankel et al. 2001, 110–112.

¹⁸ Klein 1939, 90, 160, 186; T Demai 1:1 (Zuckerman ed.); J Demai 2:1, 22:4.

late Cretaceous dolomite and limestone of Deir Hanna, Sakhnin, Bina and Yanuh Formations.

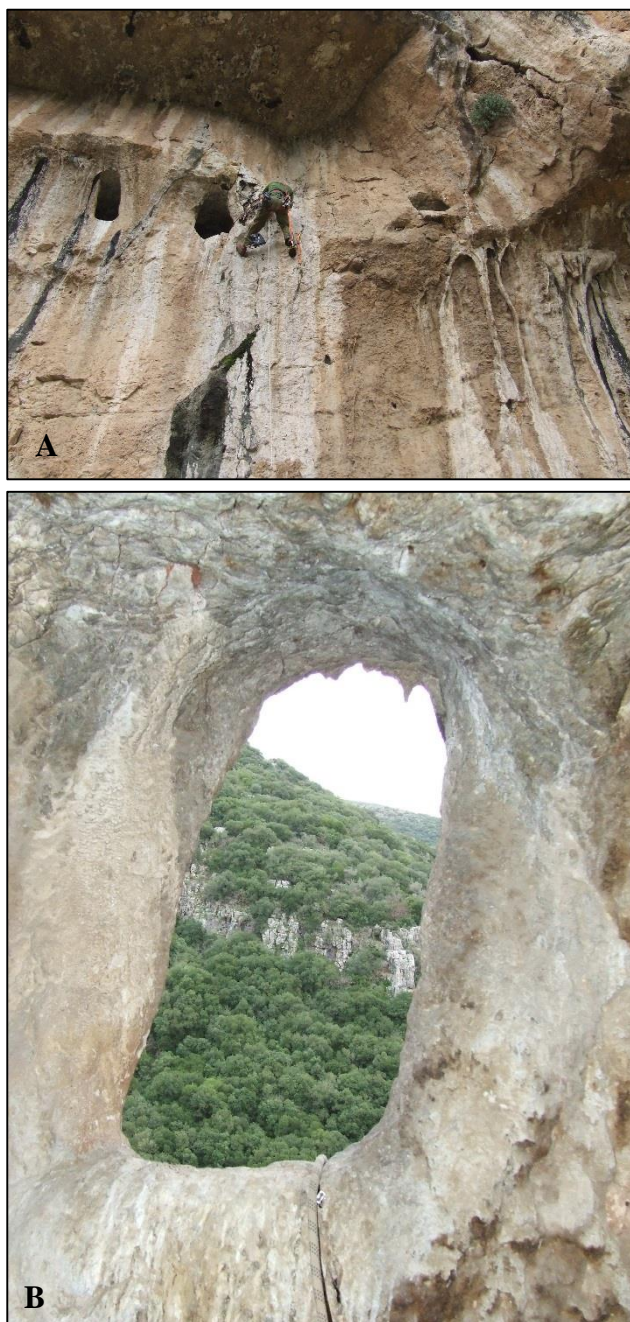


Figure 6 - A) Rock climbing to a cave shelter in Kziv gorge. B) The view from inside a cliff shelter on Kziv gorge.

Ceramic fragments from the Hellenistic and early Roman periods were found here. No Byzantine ceramics were found notwithstanding the area's association with a dominant Christian population. However, the most impressive find

by Be'er, in 1990, was on the northern bank of the Kziv River, exactly opposite the cluster of shelter caves: the life-size figure of a man was found carved into the rock. Frankel (1986) suggested that this is a divine figure but admitted that there is no evidence for this suggestion because no parallel exists anywhere in the areas under discussion (TAL, 2007, p.219). Recently, when the author re-examined the figure, he discerned that it was dressed in the familiar style of the Roman army - skirt, belt, and sword, and further observed that it was wearing a helmet. It is difficult to imagine who could have carved such a bas-relief, other than a soldier belonging to an army unit carrying out surveillance of the caves or besieging them (STIEBEL, 2007, p.107) (Fig.7).

The Jewish settlement of Hanot - or Hanita - lies to the west of a branch of the stream within the boundaries of Kibbutz Hanita. Southwest of the settlement, a graveyard used in the Roman and Byzantine periods was discovered. Again, not surprisingly, we find the flowing stream of nahal namer (Namer Gorge) and the shelter cave system surveyed in the 1980s by Frankel and Getzov, 1.5 km to the east of Hanita. The caves occur in the limestone cliffs of the Turonian Bina Formation. Now, as then, in the dozens of caves dotting the steep cliffs, evidence of human habitation can be found, including manmade plastered cisterns, gutters, and channels for water collection dug out along the cliff all the way to the cave entrance. Many pottery shards were also found, as were vessels apparently dating from the time

of the settlement in Hanita. The museum in Hanita is graced with a lintel similar to those of Galilee synagogues (PRAUSNITCH, 1986, p.461).

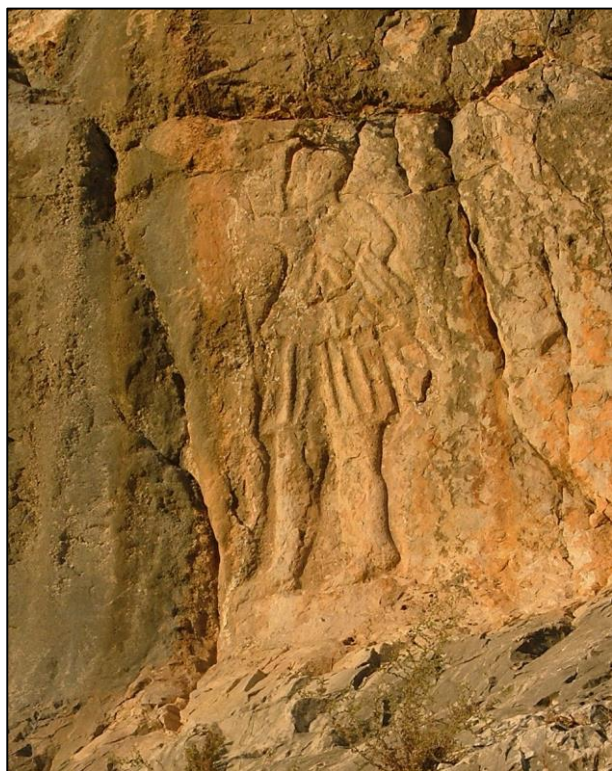


Figure 7 - The figure of a Roman soldier at the entrance to a cave in the Kziv gorge

The last settlement on the list, Rosh Maya, has not yet been indisputably identified (FRANKEL; GETZOV, 1997, p. 22), although Ilan (1986a) posited that it was where Khirbet Erav once stood. This settlement, the remains of which are known today as Khirbet Erav/Irbín, is close to the chain of shelter caves along the cliffs of *nahal betzet* (the Betzet Gorge). The caves occur in dolomite cliffs of the Cenomainan Sakhnin Formation. It can be assumed that, just as every other Jewish settlement made use of the shelter caves during the frequent emergencies of the Roman period, the Jewish inhabitants of Rosh Maya would

have regarded the caves of *nahal betzet* as their own local place of shelter.¹⁹ Perhaps the shelter caves of *nahal betzet* should be attributed to the Jewish inhabitants of Betzet, which also appears on the list of “forbidden settlements”; yet the distance of the caves from the settlement is too great and does not fit with previous evidence indicating close proximity between settlements and shelter caves (FRANKEL; GETZOV, 1997, p. 91).²⁰

3. FINAL CONSIDERATIONS

This article gives a glimpse into the ongoing research on besieged settlements and their defenses which are assumed to be from the time of the rebellion against Herod, the Jewish War, and the Bar Kokhba Revolt. While accurate methods of dating may not yet have been established, one thing is clear: these shelter caves were systematically prepared against the hour of need. Many questions remain to be answered, but we can now present certain observations that have come to light:

Preparations were made for various rebellions, at the strategic level, in accordance with the specific conditions of the Galilee region (just as they were made in the Judean Desert) and in consideration of the simple fact that the inhabitants of the Galilee never had offensive capabilities against the Roman invaders, but always planned for fortification and defense. (SHIVTIEL, 2009, p.6).

¹⁹ A dipper juglet was recently found by the author in a cave in the cliff below Khirbet Erav/Irbín. It has not yet been dated (Fig. 3).

²⁰ The site is near the Shlomi Industrial Zone.

The evidence shows that two criteria formed the basis of the plans:

1. Some settlements were fortified with walls, as on Mt. Nitai (Arbel) - solid, well-planned, and well-designed walls built as reliable barriers to those attempting to destroy the settlement. In the words of John of Gischala, such walls brought about the attrition of those well-practiced in the art of destruction (Josephus, *The Jewish War* IV, 121 – 127).
2. The shelter caves method discussed in this article was used in ten early Galilean settlements. These settlements commonly have shelter cave systems within a distance of 2 km, with natural defenses provided by steep cliffs towering above a riverbed (Mt. Berenice towers above the Sea of Galilee). The cliffs are formed of hard limestone and dolomite of late Cretaceous to Eocene age. Rainfall and groundwater caused the slow but steady dissolution and erosion of the rocks, resulting in natural hollows, which in time became karstic caves. The steepness of the vertical cliffs meant that human access was possible only by ropes or ladders (assuming that there have been no dramatic morphological changes in the rock face during the last 2000 years or so).

Although the technique of rope descent from cliff tops is considered to be modern and daring, it was certainly used in ancient times, albeit in a more primitive fashion. It was used by Herod's soldiers on Mt. Arbel and by Bar Kokhba's rebels. More recently, in the 19th century, Tristram descended Mt. Arbel by rope to collect eagles' eggs (TRISTRAM, 1865, p.335). In fact, rope descent is a simple technique, that would have been learnt quickly by people who were trying to survive an invasion by the Roman army. The cliff caves near the settlements provided shelter, and

particularly shelter for the besieged Jews who had had the foresight to prepare them in good time. These underground concealed systems added to the inventory of hiding places in times of tribulation.

These preparations included obtaining the equipment needed for access and arranging means of tying the ropes, rope ladders, and crates. The defenders were then able to reach (by abseiling?) the mouths of the natural caves. With hammer and chisel, the cave mouths were broadened or additional entrances were made, and connecting passages opened between the different levels and cave systems. The hollowed-out spaces were made fit for human habitation; some of the caves were prepared and plastered to serve as cisterns, and channels were dug out of the rock to transport the rainwater through them. Caves containing drip water were exploited as a further source of cistern water. Ritual purification baths were also hewn, thus demonstrating the deep spiritual need of the besieged defenders to abide by their religious laws even in difficult times. Food supplies were transported into the caves, as were all other supplies needed to survive a long, drawn-out siege.

We believe that when the enemy approached these settlements, the inhabitants packed up their most important belongings, reached the caves by rope, detached the ropes from their anchorage, hauled in the ropes, and prepared themselves for life in the safe environment of the cave. The absolutely defensive nature of this method reinforces the

theory that from the very start the Galileans' preparations were primarily aimed at avoiding clashes with the enemy and maneuvering the besiegers into a situation where they would be forced to confront the defenders in the complex shelter cave systems.

Knowing or assuming that the Roman army would not leave an unliquidated enclave behind, the Galileans could presume that their chosen method of defense would only delay the Roman invaders, blocking their progress until they had eliminated the last of the defenders in the shelter caves. Perhaps their goal was merely to put obstacles in the way of the invading army, and to delay it as long as possible from advancing on further targets - the main one being Jerusalem.

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